

DRAFT

JARBIDGE

RESOURCE

MANAGEMENT

PLAN

AND

ENVIRONMENTAL

IMPACT

STATEMENT

AUGUST 1984



NOTICE TO READER

Please retain your copy of this draft RMP/EIS for future reference. The final document may be published in an abbreviated form, including only corrections and/or additions to this draft and public comments with BLM responses.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Boise District
3948 Development Avenue
Boise, Idaho 83705

IN REPLY
REFER TO: 1616.7 JRMP

September 21, 1984

Dear Reader:

This draft Resource Management Plan/Environmental Impact Statement (RMP)/(EIS) for the Jarbidge Resource Area is presented for your review and comment. This document outlines four major alternatives for managing the public land in the Jarbidge Resource Area. These alternatives are designed to resolve ten land use issues that were identified during the early stages of the planning process.

Comments on this RMP/EIS must be received by January 4, 1985. Questions or comments should be directed to Gary Carson, Jarbidge Area Manager, Boise District Office, BLM, 3948 Development Avenue, Boise, Idaho 83705.

Two informal Open House sessions have been scheduled to give you an opportunity to discuss the draft RMP/EIS with the resource specialists who participated in its development. The Open House sessions will be held as follows:

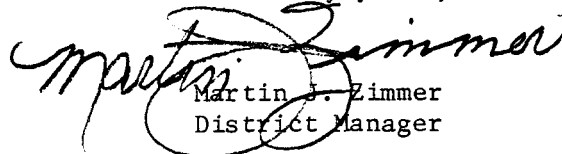
<u>Date</u>	<u>Location</u>	<u>Time</u>
November 14, 1984 (Open House)	Co. Planning & Zoning Bldg., Conference Room 634 Addison Twin Falls, Idaho	1:00-4:00 p.m.
November 16, 1984 (Open House)	Boise District Office 3948 Development Ave. Boise, Idaho	1:00-4:00 p.m.

Three public hearings have been scheduled to receive oral testimony on the draft RMP/EIS. These hearings are required for the wilderness suitability recommendations contained in this document, but testimony on all portions of the plan is encouraged.

The dates and locations of the hearings are shown on the attached sheet. Individuals wishing to testify at one of the hearings should submit the pre-registration form to the Boise District Office.

All written comments and hearing testimony will be given equal consideration in the preparation of the proposed Resource Management Plan and final EIS.

Sincerely yours,


Martin J. Zimmer
District Manager

Enclosure



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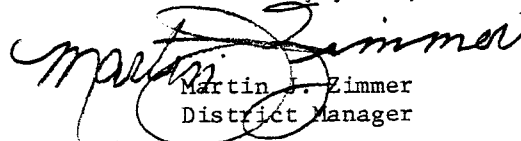
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District Manager

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DRAFT JARBIDGE RESOURE MANAGEMENT PLAN (RMP)/
ENVIRONMENTAL IMPACT STATEMENT (EIS)

PUBLIC HEARINGS

The public hearings are required for the wilderness suitability recommendations addressed in the draft RMP. However, testimony on other resource recommendations and the adequacy of the draft EIS is encouraged. Individuals giving testimony will be limited to ten minutes. The hearings will be held as follows:

<u>Date</u>	<u>Location</u>	<u>Time</u>
November 28, 1984 (two sessions)	Boise Public Library Auditorium 715 S. Capitol Blvd. Boise, Idaho	2:00 p.m. and 7:00 p.m.
November 29, 1984	Holiday Inn, Blue Lakes Room 1350 Blue Lakes Blvd. N. Twin Falls, Idaho	7:00 p.m.

Detach and submit to the Boise District BLM, 3948 Development Avenue, Boise, Idaho 83705 at least one day prior to the hearing at which you wish to testify.

Jarbidge RMP/EIS Hearings Registration Form

From: Name _____/Representing _____
Address _____
City, State _____ Zip Code _____

Please check the hearing at which you wish to testify. Individuals may testify at one hearing only.

	<u>Date</u>	<u>Time</u>	<u>Location</u>
<input type="checkbox"/>	9/28/84	2:00 p.m.	Boise Public Library
<input type="checkbox"/>	9/28/84	7:00 p.m.	Boise Public Library
<input type="checkbox"/>	9/29/84	7:00 p.m.	Holiday Inn, Blue Lakes Room, Twin Falls

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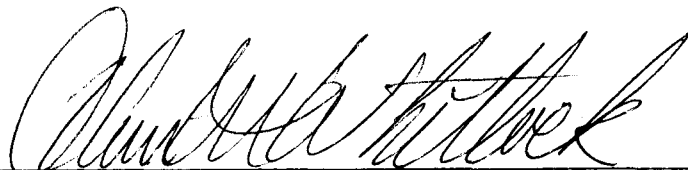
JARBIDGE RESOURCE MANAGEMENT PLAN

AND

ENVIRONMENTAL IMPACT STATEMENT

Prepared By

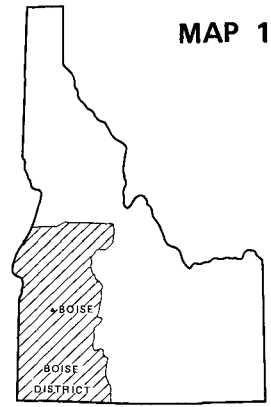
Bureau of Land Management
Department of the Interior

A handwritten signature in cursive script, appearing to read "David H. H. H.", is written over a horizontal line.

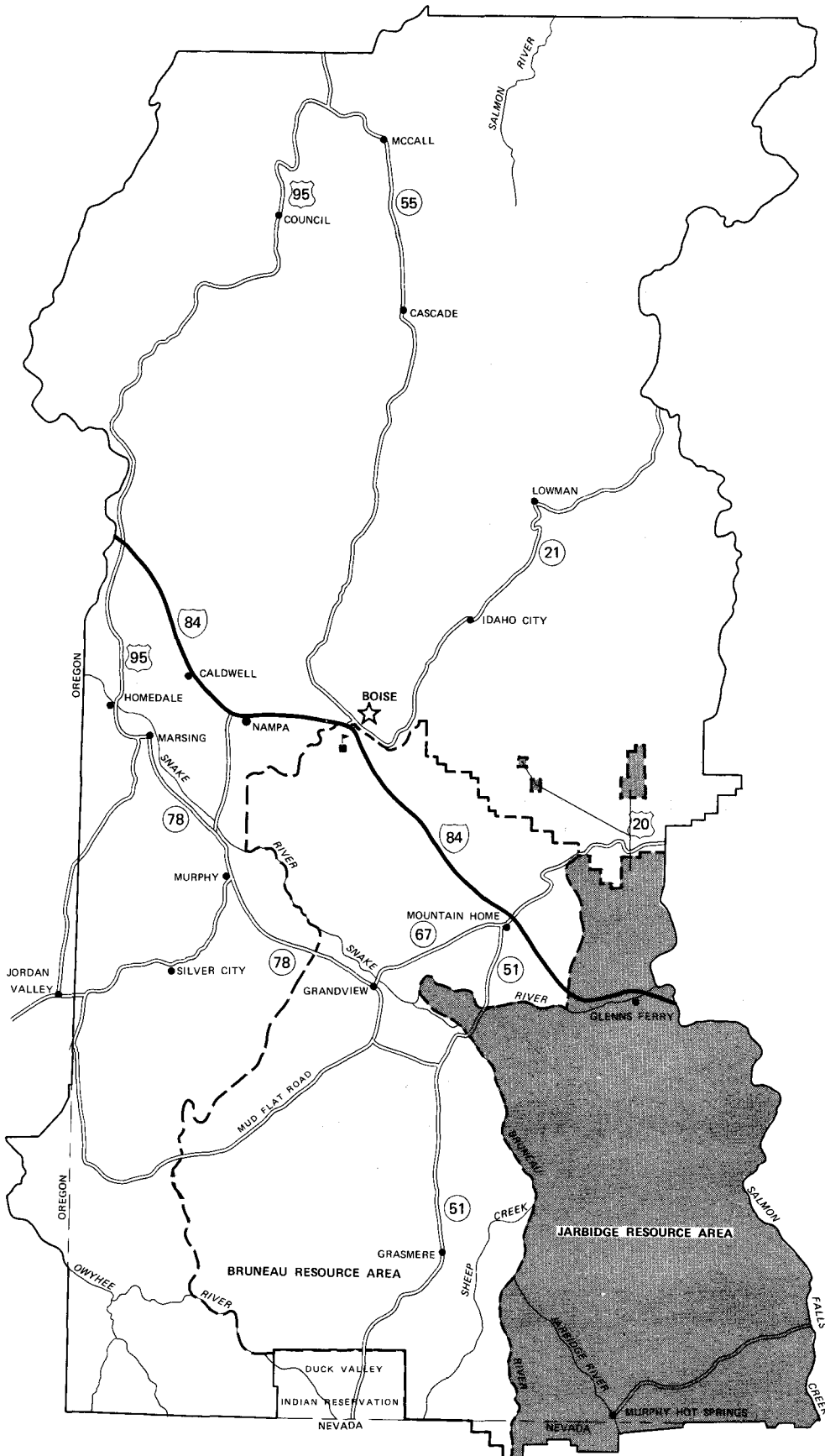
Idaho State Director, Bureau of Land Management

JARBIDGE RESOURCE AREA GENERAL LOCATION MAP

MAP 1



IDAHO KEY



- ☆ STATE CAPITOL
- BLM DISTRICT OFFICE
- 84 INTERSTATE HIGHWAY
- 95 U.S. HIGHWAY
- 67 STATE HIGHWAY
- DISTRICT BOUNDARY
- - - RESOURCE AREA BOUNDARY

READERS GUIDE TO DOCUMENT ORGANIZATION

This document is structured into two basic sections. Part I is the Draft Resource Management Plan (RMP) for the Jarbidge Resource Area and was selected from the four alternative plans identified in the draft environmental impact statement, or Part II of the document.

After consideration of public comments on this draft document, a final Resource Management Plan and EIS will be prepared. A Record of Decision will implement the final resource management plan in the fall of 1985.

PART I

The Resource Management Plan (RMP), or Part I, begins with a discussion of the purpose of the plan, the planning process, issues and management concerns addressed in the plan, and the criteria for plan development and selection (pages 1 to 7). The Bureau's rationale for selecting this alternative plan is given on pages 7 through 15. An explanation of Multiple Use and Transfer Areas begins on page 15.

The specific management objectives and actions required to implement the proposed management are then given for each of sixteen multiple use areas (MUAs) (pages 15-61). The three Areas of Critical Environmental Concern (ACECs) proposed in the draft RMP are discussed on pages 61-71. The standard management guidelines for each resource or activity is discussed on pages 71 through 93.

Part I concludes with a discussion on support needs, the consistency of the RMP with other land use plans, and finally, a short summary of implementation and monitoring actions (pages 93-97).

A summary of the draft RMP (Part I) is located on pages iii and iv.

The Location Map for the draft plan is found on the opposite page. All other maps referenced as part of the draft plan are found at the end of Part I.

PART II

The Draft Environmental Impact Statement (EIS), or Part II, describes and assesses the environmental impacts of four alternative plans (plus one sub-alternative plan) for managing the 1,690,473 acres of public land resources in the Jarbidge Resource Area.

Chapter 1 discusses the purpose and need of the proposal. Chapter 2 outlines the management goals, objectives, and required actions for each alternative land use plan. The management proposals for each alternative

are grouped by resource activity (range, wildlife, etc.) rather than by geographical area (or MUA) as was done in Part I. However, references are made in Chapter 2 to various tables and appendices which give the management actions of each alternative plan by MUA. An impact summary of each of the alternatives is presented in Table 2-5 (page 2-25).

Chapter 3 is the description of the affected environment; Chapter 4 documents the environmental consequences of each alternative plan; and Chapter 5 outlines the public consultation and coordination which has occurred throughout the planning process to date, and the list of preparers.

The document concludes with a list of references, a glossary, and several appendices that provide support data for each of the alternative plans and/or resource activities.

The Location Map for the Draft EIS is found at the beginning of Part II. All other maps referenced as part of the DEIS are found at the end of Part II.

PART I

SUMMARY

DRAFT PLAN (PREFERRED ALTERNATIVE)

This Resource Management Plan (RMP) is developed to guide the management of public land resources in the Jarbidge Resource Area and to ensure that the public lands and resources are managed in accordance with the principles of multiple use, and sustained yield. The plan focuses on resolving the following ten key issues identified by the public: land tenure and adjustment; livestock grazing; management of wildlife resources (including riparian and aquatic habitats); wilderness management; recreation; soil, air, and water; fire management; and special designation. Special management concerns also addressed in the plan include cultural and paleontological resource protection, timber management, and social and economic changes.

Goal

The goal of this plan is to provide a balance of commodity resource uses (renewable and nonrenewable) and development within the framework of maintaining or enhancing the natural resource base. Livestock grazing, timber harvest, agricultural development, and mineral uses would be managed at levels that would support and strengthen present industries where they would have limited adverse impact to the current environment. Fragile resources would be protected from irreversible decline. Conflicts and trade-offs among resource uses would guide management activities.

Plan Summary

For land tenure adjustment, 91,446 acres would be made available for transfer from federal ownership. Of this, 74,561 acres would be for potential agricultural development under the DLE/CA programs; 1,200 acres would be made available for sale, 9,605 acres for sale or exchange, and 6,080 acres for exchange only. Utility rights-of-ways (ROWs) would be restricted on 12% of the Jarbidge Resource Area. There would be 96% of the area closed to DLE/CA application during the life of this plan.

Livestock use would initially be stocked at 172,493 AUMs, a 6% increase over current levels with the long-term goal of stocking at 271,425 AUMs. Range improvements would include 107 miles of pipeline and 98 miles of fence. Vegetative treatments would include 23,936 acres of brush control, 3,600 acres of brush control and seeding, and 30,440 acres of seeding only (no brush control need). Vegetative treatments would be conducted with methods and seed mixtures of grasses, forbs, and shrubs that benefit both wildlife and livestock. Limited fire suppression management would be applied to 388,730 acres. The Saylor Creek wild horse herd would be maintained and 600 AUMs provided to support 50 head.

Wildlife populations would increase for mule deer, elk, antelope, and bighorns, and a total of 3,877 competitive AUMs would be provided to support them. Approximately 81,000 acres of existing and potential

bighorn sheep habitat would be included in the Bruneau/Jarbidge River ACEC. Habitat improvement projects would be done on 18,200 acres. Sage grouse habitat would be improved through decreased livestock use in crucial areas and inclusion of wildlife needs in range improvement projects.

Riparian habitat improvement projects would be initiated along 53 miles and aquatic habitat improvement projects would be initiated along 51 miles of streams.

Prescribed burning would be applied to 15,536 acres of rangelands.

Over 86% of the resource area would be open to leasable mineral exploration and development and 84% open to locatable entry. Withdrawals totaling 263,399 acres would be in effect.

There are 94,199 acres recommended as suitable for wilderness designation (45% of the WSA acreage). Areas recommended as suitable include most of the King Hill WSA, the rim to rim portion of the Bruneau River-Sheep Creek WSA, and portions of the Jarbidge River WSA. These areas would be withdrawn from mineral entry and avoided by linear ROWs.

Salmon Falls Creek Canyon (lower) would be managed as an Outstanding Natural Area and along with the Salmon Falls Creek reservoir and the upper canyon would be a SRMA. The Hagerman Fossil Beds and the Hagerman ORV (Owsley Bridge Hills area), the Oregon Trail, the Upper Jarbidge River Canyonlands, Bennett Hills, and Cougar Canyon would be designated SRMAs. The Bruneau/Jarbidge River would be managed for white water recreation. The plan supports the National Park Service's recommendation that the Bruneau and Jarbidge Rivers be designated as wild and scenic rivers. Motorized vehicle recreation would be unrestricted on 72% of the resource area, limited on 14%, and closed on 14%. ORV use would be limited to designated routes in the Hagerman Fossil Beds.

Special designation (national register) and management of three major cultural resource complexes/areas (Oregon Trail, Devils Creek, Dry Lake Beds) with several enlarged boundaries would be sought. ACEC designation would be applied to the Cougar Canyon complex as part of the Bruneau/Jarbidge River ACEC. Special management would be applied to Pot Hole Creek, Dove Springs, Clover Creek, Juniper Ranch, and Post Office to protect these cultural sites.

ACEC designation and management would be given to the Sand Point and Hagerman Fossil Beds paleontological sites.

An allowable cut level would be applied to 1,086 acres in the Upper Bennett and Anderson Ranch/Boise River areas. Cutting would permit a harvest of 1,454 MbdFt. Recreational wood cutting would continue.

PART I

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PART I

DRAFT RESOURCE MANAGEMENT PLAN

Introduction

The Jarbidge Resource Management Plan (RMP) is being prepared to provide the Bureau of Land Management, Boise District Office with a comprehensive framework for managing 1,690,473 acres of BLM-administered public land over the next 15 to 20 years.

The Jarbidge Resource Area encompasses 2,100,519 acres of land located from the South Fork of the Boise River and Anderson Ranch Reservoir to the Humboldt National Forest boundary and Nevada state line (Map 1). Of this area 81% (1,690,473 acres) is public lands administered by the BLM, 5% (102,509 acres) is state lands and 14% (307,537 acres) is private lands. The public land holdings are generally in a solid block pattern (Map 2) and are located in Elmore, Owyhee, and Twin Falls Counties in Idaho and in Elko County, Nevada.

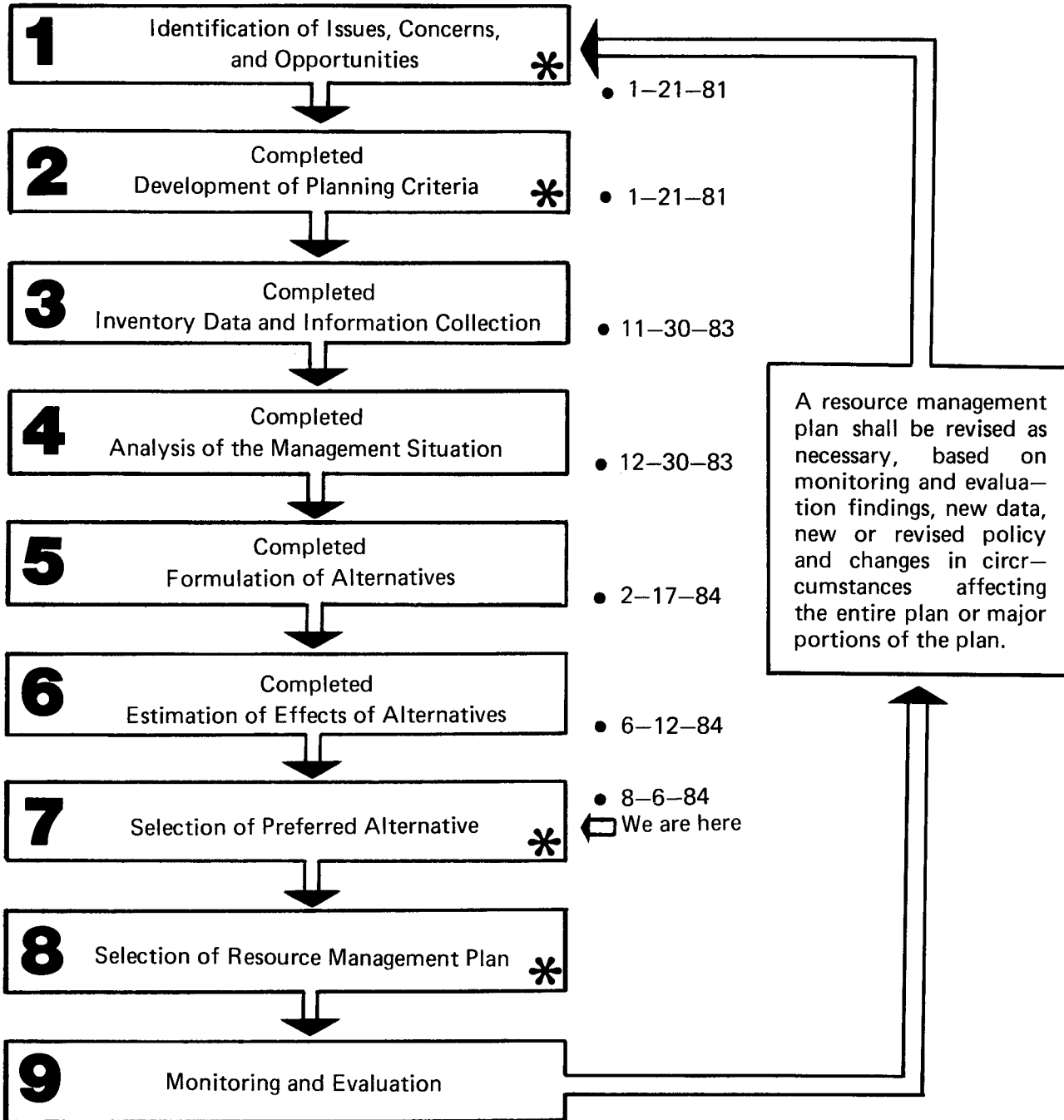
The basic purpose of this plan is to ensure that public lands will be managed in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA), under the principles of multiple use and sustained yield and other principles as outlined in BLM planning regulations. A second purpose is to ensure that the plan is responsive to the major issues and achieves an equitable and proper balance of resource use and protection as determined through public participation, consultation, coordination, and cooperation. Thirdly, as required under Section 603 of FLPMA, this document analyzes preliminary wilderness suitability recommendations for three wilderness study areas (WSAs) located within and adjacent to the planning unit. For these WSAs, this document makes preliminary recommendations as to their suitability or nonsuitability for inclusion into the National Wilderness Preservation System. These recommendations will be reported through the Director of the BLM, the Secretary of Interior, and the President to Congress. The final decision on suitability or nonsuitability of the WSAs will be made by Congress.

Planning Process

The planning process described in BLM Planning Regulations 43 CFR 1600 and used for the JRA contains nine steps. These steps and the dates they were completed are shown in Figure 1. The planning process started in October 1981 and will be completed by October 1985. The process was driven by planning issues identified by the BLM and the general public. These issues are discussed in detail in the following section and addressed in all alternatives.

Figure 1

STEPS IN THE RESOURCE MANAGEMENT PLANNING PROCESS



* Steps Requiring Public Participation

• Date Completed

Issues and Planning Questions

Livestock Grazing

Issue

A concern of the livestock industry is that grazing be kept available on public lands, developed to the highest potential and that current stocking rates be increased. They feel this should be accomplished through more range improvements and management developed cooperatively between BLM and permittees.

Others are concerned that "Multiple Use" concepts be assured and applied and that livestock not monopolize available forage, water and living space on public lands as well as funding allocations.

Planning Questions

How much forage should be made available for livestock? Are there areas where livestock grazing should be reduced or eliminated? Are there areas where livestock use can be increased? Should seasons of use be adjusted?

What areas should be intensively managed under Allotment Management Plans? What major types of improvements are needed?

What areas are suitable for less intensive management or a custodial type management.

What areas should be managed as they currently are?

How many and where should wild horses be managed? How much forage is required to satisfy their needs?

Wilderness Management

Issue

Some individuals and groups seek broad and representative wilderness areas on the public lands and support additional wilderness recommendations. Others are opposed to further wilderness designation because they feel some multiple use activities would be limited or precluded.

Planning Questions

What study areas should be recommended to Congress as suitable for wilderness?

Wildlife Management

Issue

Draft Resource Management Plan

The resource area contains important wildlife habitat as well as threatened, endangered and sensitive species that must be protected. Many people are concerned that not enough emphasis is being placed on wildlife habitat management. Others feel that too much emphasis is being given to the protection and management of wildlife habitat. This is particularly true in cases where livestock grazing or agricultural use is limited or restricted in order to improve wildlife habitat.

A proper balance between resource use and wildlife habitat management that does not eliminate important economic or recreational use needs to be developed.

Planning Questions

Should BLM support reintroduction of elk into the Jarbidge Mountains? How much forage should be provided for elk?

Should bighorn sheep be reintroduced into the East Fork of the Bruneau River. How much forage should be provided for their needs?

How should livestock grazing be managed to improve riparian areas?

Lands

Issue

Realty actions on lands administered by BLM are sometimes in conflict with some other use or demand on the same parcel of land. Which requested use should have preference or to what degree should one use be allowed to affect other uses or the environment is an issue.

Planning Question

What lands are suitable for transfer from federal ownership?

Recreation

Issue

Some types of recreational activity conflict with other historic uses. Various recreational enthusiasts favor increased opportunity to pursue their interests. Other groups are opposed if the recreational opportunity interferes with their ability to pursue economic gains.

Planning Questions

How should the Oregon Trail and the immediate adjacent lands be managed?

What areas are available to meet the increasing public demand for recreation opportunities?

Should management of ORV use in the Hagerman Fossil Bed Area be changed?

What guidelines should control other activities in the Hagerman Fossil Area?

What areas should be open, limited or closed for off road vehicle use?

Soil, Water and Air Resources

Issue

Loss of soil and general degradation of air and water quality is a concern of many. Some individuals favor complete conservation and protection while others favor resource production to conservation and/or environmental quality.

Planning Questions

What areas are currently experiencing air, soil and/or water quality problems? What should be done to correct identified problems?

What are the areas of high erosion hazard which could be affected by management actions?

Energy and Mineral Exploration and Development

Issue

Keeping as much land area as possible available for mineral exploration, with minimum reasonable constraints on economic development, is a concern of some, while others favor limiting available areas and providing rigid controls to ensure the protection of other resources.

Planning Questions

What areas have potential for energy development?

In what areas should mineral and energy development be restricted?

Fire Control and Management

Issue

Many favor a reduction of expense and effort in controlling range fires while at the same time reseeding all those areas burned. Others believe burned acreage should be kept at an absolute minimum.

Planning Questions

Should areas currently identified for limited or full suppression activities be changed?

What areas should prescribed burning be used as a land treatment method to improve range condition?

What should be the guidelines for rehabilitation of burned areas?

Draft Resource Management Plan

Special Designation

Issue

Most protection oriented comments favor special designation to provide for more protective leverage. Others favor fewer designations or smaller areas that include only the most critical areas.

Planning Questions

What areas should be identified for special designation and management (ACEC, National Register, Wilderness, Wild and Scenic Rivers, Special Recreation Management Areas, etc.)?

If Congress does not include the Bruneau and Jarbidge Rivers within the National Wild and Scenic River System, or WSAs into the National Wilderness System, how should they be managed?

Management Concerns

Cultural Resources - Protection and management of historic and prehistoric resources was identified as a concern of many individuals. The resource management plan will address how cultural resource values can be managed and protected.

Timber - The management of a small stand of timber located on Bennett Mountain will be considered during the development of the plan.

Social and Economic - Public lands within the resource area have important economic and social impacts to individuals and local communities. Social and economic concerns will be considered during all phases of the planning process.

Paleontologic Resources - The protection and management of paleontologic resources is an increasing concern as the Hagerman locality continues to be destroyed and the public becomes more aware of the paleontologic resource that exists throughout the area. The Resource Management Plan will address how paleontologic values can be managed and protected.

Questions and Concerns Not Addressed

The following questions and management concerns which were originally developed for analysis in the planning process were dropped.

"What opportunities exist for blocking state and federal lands?"

"Should bighorn sheep be reintroduced in Salmon Falls Creek?"

"Access - There were numerous individuals who were concerned with access to public land. Generally, the public wants "access" to all

public lands. Conflicts exist where roads to public lands cross private land. The plan will identify where easements to public lands area needed."

The current Idaho BLM policy and directives are to develop a statewide program to coordinate with the State of Idaho the identification of opportunities and the process for the blocking of both State and BLM lands. An amendment will be prepared on this action and incorporated into those plans in effect at the time of approval. The USFS boundary adjustment will also be a statewide effort coordinated by the Idaho State Office (BLM) and the two Regional Forests affected.

The Idaho Fish and Game Department has not yet determined whether Salmon Falls Creek Canyon has sufficient habitat to support a viable herd of bighorn sheep. Further analysis of this area will occur after Fish and Game completes its studies and during the next planning cycle for the Jarbidge Resource Area.

The access concern cannot be addressed in alternative levels (proposed levels of management actions). The resource area staff will continue to work with those landowners who own lands which block access to large parcels of public land. Negotiations to obtain an access easement where needed to manage the public lands will be sought. In some cases, the guarantee of total public access onto or through private lands may not be possible.

Planning Criteria

The following general criteria were used to prepare this plan:

1. Social and Economic Values;
2. Plans, programs, and policies of other Federal agencies, State and local government, and Indian tribes;
3. Existing laws, regulations, and BLM policy;
4. Future needs and demands for existing or potential resource commodities and values;
5. Public input.
6. Public welfare and safety;
7. Past and present use of public and adjacent lands;
8. Public benefits of providing goods and services in relation to costs;
9. Quantity and quality of noncommodity resource values; and
10. Environmental impacts.

Draft Resource Management Plan

More detailed planning criteria developed to guide each step of the planning process can be obtained from the Idaho Guidebook and the Jarbidge Resource Area Planning Criteria. Both documents are available for review at the Boise District Office.

Selection of Preferred Alternative – Rationale

Four alternatives and one subalternative are analyzed in the Jarbidge Resource Management Plan/EIS. All of the alternatives are designed to be fully implementable and are based on resource management philosophies that range all the way from maximum development of resources to full protection of resources. Impact assessment of these four alternatives has identified the magnitude of impacts associated with each proposed land use plan. A preferred alternative has been selected based on the planning criteria described on page 7.

Alternative C has been chosen as the preferred alternative. The rationale for selecting Alternative C is discussed as follows:

Livestock Grazing Management

The preferred alternative would make 1,594,566 acres available for livestock grazing. These lands are proposed for retention and management for multiple use (including grazing) under Alternative C. Forty-five allotment management plans would be initiated and twenty coordinated resource management plans would be implemented. All management plans would be multiple use oriented and consideration for other resource needs and capabilities would be considered. Livestock stocking rates would be increased about 5% above current levels at the end of five years under this alternative. These increases would occur primarily on ungrazed seeded areas in the Saylor Creek West and Saylor Creek East multiple use areas (MUAs 6 and 7). Over a twenty year period, stocking levels would be increased about 55% over current stocking levels. These increases would occur predominantly as a result of reseeding areas currently in poor range condition with high production potential and by providing livestock water on existing seedings that are not being used because of lack of water. About 40,000 acres of fair condition native range and 63,000 acres of poor condition native range would be improved under this alternative.

Range proposed vegetation manipulation would occur on 57,976 acres under this alternative.

Rationale - Livestock grazing constitutes a major component of the local economy. The Jarbidge Resource Area currently provides about 164,000 AUMs of forage for the livestock grazing program. In addition, the area contains significant acreage of rangeland with high potential for improvement through vegetation manipulation and improved livestock management techniques. The preferred alternative would initially stock the area at 172,00 AUMs, and would gradually increase livestock use to 271,631 AUMs over the next twenty years. These increases in livestock grazing would occur primarily on existing or proposed seedings. On poor

condition ranges livestock use would be adjusted to levels that would allow for improvement in plant vigor and reproduction and ultimately, improvement in range condition. In most instances grazing pressure on lands in poor condition will be reduced because of availability of additional forage and improved livestock distribution in seeded and/or improved areas. Some increases in grazing use would occur on poor condition ranges that are adjacent to or intermingled with seeded areas that are proposed for additional livestock water development and use. These would be smaller in size than the areas from which grazing use was shifted and there would be a net reduction in use levels on poor condition range. These increases would occur on less than 5% of the native range acreage.

The proposed increases in livestock grazing will be phased in over a 20-year period of time. Soil and range conditions will be carefully monitored prior to authorizing higher grazing levels to ensure that the basic soil and vegetative resource is protected or improved. Future project developments will be implemented under multiple use philosophies and will be designed to protect or enhance the soil and watershed resource, fish and wildlife habitat, and other resource uses.

Wild Horse Management

106 → 82000

One wild horse area would be managed under the preferred alternative. The Saylor Creek herd area would be about 82,000 acres in size (about 24,000 acres less than current area) and would be managed to support 50 wild horses.

Rationale - Wild horses would be managed in accordance with the Wild Horse and Burro Act. The Saylor Creek wild horse herd area would be reduced in size to allow agricultural development to occur. The remaining 82,000 acre wild horse area has sufficient size and available forage to support 50 horses (the number that has been running in the area since the passage of the Wild Horse and Burro Act).

Wildlife Management

The impact assessment of the preferred alternative concludes that wildlife numbers will be maintained or increased over the long term, and that total acres of unsatisfactory crucial habitat will be reduced over the long term. Localized adverse impacts will be avoided or reduced through interdisciplinary project planning and wildlife input into the development of allotment management plans and other specific resource activity plans. The plan addresses the wildlife issues by providing forage for elk should they be reintroduced in the Jarbidge Mountains and by establishing an ACEC for existing and potential bighorn sheep habitat on the Jarbidge and Bruneau Rivers (including approximately 6 miles on the East Fork of the Bruneau River). Wildlife proposed vegetative treatments (reseeding native range, interseeding crested wheatgrass seedings, rehab of existing burns) would occur on 18,200 acres.

Rationale - The quality of specific wildlife habitat receives adequate consideration in the preferred alternative. Detailed standard operating procedures are an integral part of the Proposed Action in Alternative C.

Draft Resource Management Plan

Future activity planning will increase wildlife considerations based on accepted Bureau habitat management standards as outlined in the Proposed Action of Alternative C.

Riparian and Fisheries Management

The preferred alternative will manage seventy (70) miles of stream primarily for fisheries or riparian habitat improvement. Riparian habitat will receive priority consideration in all project proposals and/or developments.

Rationale - The value of riparian and fisheries habitat is recognized in the Proposed Action of Alternative C. Standard operating procedures are incorporated into all proposals to insure adequate protection and/or development for fisheries and riparian habitat.

Minerals Management

The preferred alternative maintains 1,433,458 acres open for mineral leasing. Withdrawal from mineral entry would apply to 286,582 acres. Restrictions on mineral development would apply predominantly in those areas proposed for wilderness or other special designation such as Wild and Scenic River. The existing Saylor Creek Gunnery Range is withdrawn from mineral entry and applies to 102,746 acres.

Rationale - No significant constraints are imposed on the availability of leasable minerals in areas where high values have been identified. Locatable minerals such as Bruneau Jasper will have some constraints applied in the preferred alternative because of conflicts with wilderness proposals and other special designations such as Wild and Scenic River proposals. All existing local demands for minerals and/or materials can be satisfied in the preferred alternative. Surface occupancy restrictions only apply to about 10% of the mineral leases in the preferred alternative.

Lands and Realty Transactions

The preferred alternative identifies 91,446 acres of public land for possible transfer out of Federal ownership. Detailed analysis will be conducted on a case by case basis before decisions are made to transfer these lands through sale, exchange, or through appropriate agricultural entry laws. The lands designated for transfer under DLE/CA would be designated for retention if there were no DLE/CA applications because the public lands applied for are well blocked and suitable for retention. Those lands classified as unsuitable for DLE/CA would generally be retained. However, any of these lands not needed for a public purpose may be disposed of through sale or exchange. The remaining 1,599,027 acres of public land in the Jarbidge Resource Area would be proposed for retention in Federal ownership. Under the preferred alternative, there would be 1,426,141 acres of public land open to rights-of-way application for utility lines or other projects needed for public or private use. A total of 264,332 acres would be identified for protection against issuance of rights-of-ways.

Selection of Preferred Alternative

Rationale - The preferred alternative is designed to be responsive to public and private needs to acquire Federal lands. Those lands identified for disposal for agricultural development would be subjected to further detailed analysis before the actual transfer is completed. Other resource uses and needs would be a primary consideration in those detailed analysis. Provisions for livestock grazing, the management of an established herd of wild horses, and the protection of significant cultural and paleontological resources are important factors included in the preferred alternative insofar as agricultural development is concerned.

Lands identified for sale or exchange have been screened to meet a specific set of criteria in the preferred alternative and adequate provisions have been incorporated to protect other resource uses and needs.

The preferred alternative makes provisions for public and private needs for rights-of-ways. Major corridors are maintained for linear rights-of-ways. Nine major areas with significant public values are protected through the following special designations and are identified as avoidance areas.

- 1) Wilderness Study Areas
- 2) Wild and Scenic River designation
- 3) Birds of Prey (essential nesting habitat)
- 4) Oregon Trail
- 5) Hagerman Fossil Beds
- 6) Sand Point Paleontological site
- 7) Salmon Falls Creek Canyon
- 8) Saylor Creek Gunnery Range
- 9) Suitable Bighorn Sheep Habitat

Recreation Management

Portions of the planning area are experiencing significant recreation demands because of their proximity to heavily populated areas of southern Idaho. These demands are increasing each year and the need for significant expansion in planning and development is inevitable. Several areas have high potential to meet these future needs. The preferred alternative provides 1.2 million acres open to off road vehicle use. About 248,000 acres would be closed to ORV use and 260,000 acres would be available for limited ORV use. Six Special Recreation Management Areas would be established by the preferred alternative as follows:

- 1) Salmon Falls Creek SRMA
- 2) Hagerman SRMA
- 3) Bruneau/Jarbidge Rivers (Wild and Scenic Rivers)
- 4) Jarbidge Forks SRMA
- 5) Bennett Hills Winter SRMA
- 6) Oregon Trail SRMA

The preferred alternative also identifies considerable recreation demands associated with hunting, fishing, sightseeing, camping, and river boating.

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Rationale - The preferred alternative includes provisions to accommodate increased demands for recreational resources. It also resolves several conflicts where heavy recreation use is not compatible with other resource uses and/or needs. Anticipated future needs for recreation use are provided for in the preferred alternative without incurring unacceptable environmental impacts.

Wilderness Management

There are currently 208,833 acres of public land being considered for wilderness designation within the planning area. The preferred alternative proposes adoption of 94,199 acres. Of the 94,199 acres, 73,177 acres lie within the Jarbidge Resource Area and comprise 4.3% of the resource area.

Rationale - The preferred alternative proposes to recommend as suitable about 45% of the lands currently in Wilderness Study Area status. This recommendation would create a well rounded representation of wilderness values within the planning area. The preferred alternative includes a wilderness proposal that compliments other high resource values such as wild and scenic river designation, suitable habitat for bighorn sheep, and areas of critical environmental concern. Specific WSA recommendations and rationale are summarized below:

WSA	Recommendation	Rationale
King Hill	Suitable - 26,389 ac Nonsuitable -2,920 ac	The majority of this WSA exhibits quality wilderness characteristics. A small portion (2,160 ac) in the north-west corner has low quality values and would create manageability problems in the form of access, range improvements, and solitude. An additional 760 acres along the northern boundary are recommended as nonsuitable because they are bordered on 3 sides by private land.
Bruneau/ Sheep Creek	Suitable - 17,929 ac Nonsuitable - 86,477 ac	The preferred alternative proposes a rim to rim wilderness designation on the Bruneau and Sheep Creek Canyons. The plateaus are not recommended for designation because of manageability problems in the form of access and conflicts with other resource uses.
Jarbidge River	Suitable - 49,881 ac Nonsuitable - 25,237 ac	The preferred alternative proposes to include the canyon complex and the plateau areas on the west side of the Jarbidge River as part of the wilderness designation. These areas exhibit good wilderness characteristics with limited access, fair and good ecological condition, and few imprints of man. No plateau areas are proposed for

Selection of Preferred Alternative

WSA	Recommendation	Rationale
Jarbidge River (con't.)		wilderness on the east side of the Jarbidge River. The wilderness quality of these plateau areas is relatively low and these areas would have manageability problems. The plateau area on the east has little topographic variation and is primarily in poor ecological condition. The potential for improvement in vegetative conditions is low. The plateau also contains several imprints of man. The eastern boundary of the plateau is a road that receives vehicle use and has few natural barriers that would prevent off road vehicle use. This road, coupled with the presence of existing vehicle ways to several livestock improvement projects would make this area difficult to manage as wilderness.

Special Designations

The preferred alternative designates three Areas of Critical Environmental Concern; 1) Hagerman Fossil Beds, 2) Sand Point Paleontological site, and 3) Bruneau/Jarbidge River. Salmon Falls Creek would not be designated as an ACEC under the preferred alternative but would receive an Outstanding Natural Area designation.

The Snake River Birds of Prey Area would encompass 49,286 acres in the preferred alternative and there would be 14,111 acres of essential nesting habitat protected. Wild and Scenic River designation will be made on 29 miles of the Jarbidge River and 92 miles of the Bruneau River under the preferred alternative.

Rationale - The preferred alternative includes provisions to protect all sensitive resource values identified in the planning area. These resources would be protected and managed through appropriate special designation. The Hagerman Fossil Bed Area and the Sand Point Area offers highly valued paleontological areas. The Hagerman Area has already been established as an area of national significance. The preferred alternative outlines broad land use objectives for the development and protection of these two areas.

The Bruneau and Jarbidge River System offer unique ecological systems that have essentially been protected from extensive alteration by human presence in the past. The preferred alternative sets out goals for future management of these areas. Salmon Falls Creek also exhibits unique ecological characteristics that would receive special management attention in the preferred alternative through designation as an Outstanding Natural Area.

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The Birds of Prey Area would continue to be managed in accordance with PL 5777. Selected reaches of the Bruneau and Jarbidge River Systems would be designated and managed as Wild and Scenic Rivers under the preferred alternative.

Fire Control Management

The preferred alternative is designed to use fire management as a tool to accomplish natural resource objectives in the most economical fashion possible. Full suppression on wild fires would be taken on 1,301,743 acres and limited suppression would be applied to 388,730 acres under the preferred alternative. Wildfires in the limited suppression areas would be evaluated on a case by case basis prior to making suppression decisions. Factors such as wildlife habitat values, private property values, range improvement projects, and burning conditions will be factors influencing the decision to suppress fires within the limited suppression area.

Rationale - The preferred alternative incorporates the management of wildfires and prescription burning into the overall resource management scheme and as a result the number of acres in the limited suppression category is reduced from current management. Provisions for all resource values and needs will be a primary consideration in planning wildfire rehabilitation and prescription burning.

Cultural Resource Management

The preferred alternative would protect forty-five miles of the Oregon Trail through special "no surface disturbance" stipulations. Forty-seven cultural sites associated with dry lake beds between the Bruneau and Jarbidge Rivers would receive protection through special management considerations. The dry lake bed area is proposed as a National Register District in the preferred alternative.

The preferred alternative identifies special management considerations for seven areas where cultural values are found in concentrated numbers. These areas and the known number of sites are as follows:

<u>Name of Area</u>	<u>Number of Sites</u>
1) Dove Springs Complex	2
2) Pot Hole Complex	5
3) Juniper Ranch Complex	4
4) Clover Creek Complex	2
5) Devil Creek Complex	230
6) Cougar Creek Complex	7
7) Post Office Complex	2

Rationale - The preferred alternative identifies and protects cultural resource values in accordance with existing laws and regulations. Proposals for protection of cultural resources does not preclude the use and development of natural resources that share areas where cultural resources are found. Special standard operating procedures and clearance procedures apply in critical protection areas.

Paleontological Resource Management

The preferred alternative recommends protection for 4,394 acres within the Hagerman Fossil Bed Area and 815 acres in the Sand Point Paleontological Site. A total of 431 individual sites are identified for special management consideration in the preferred alternative.

Forest Land Management

The preferred alternative identifies 2,371 acres of commercial forest lands. Because of timber production restrictions, wildlife set asides, and deferrment because of economic conditions, 1,086 acres are available for harvest.

Rationale - The preferred alternative identifies all available forest lands. The twenty year production plan in the preferred alternative is designed to develop timber production to the extent possible, recognizing other resource uses and needs. Past interest in forest products has been relatively low in the planning area. The preferred alternative includes provisions to respond to increased interest and/or demands for forest products in the future.

Multiple Use Areas

The Jarbidge Resource Area is divided into sixteen multiple use areas (MUAs) for purposes of organizing and presenting the planning decisions. A multiple use area generally contains lands having similar resource features and characteristics (Table 1). It can effectively be managed as a unit.

This section describes each multiple use area and identifies resource management objectives and required actions. The description identifies the major natural, physical, and cultural features of the multiple use area. The resource management objectives set priorities for managing the various resources in the area. Required actions identify the management actions, limitations, and other provisions which are needed to accomplish the objectives.

The multiple use areas are delineated on Map 3 and are described in detail beginning on page 20.

Multiple Use and Transfer Classes

Each multiple use area in the Resource Area is assigned to one or more multiple use or transfer classes: moderate use class, limited use class, intensive use class, or transfer class.

Multiple use and transfer classes serve two purposes in this plan. The first is to describe overall resource opportunities and constraints by indicating what level of resource production and use is appropriate, what intensity of management is needed, whether there are sensitive and

Draft Resource Management Plan

significant resources which must be protected, and whether BLM would consider transfer of public lands from its jurisdiction. The second is to provide a basis for considering unexpected proposals by supplementing the detailed resource management objectives and required actions established for the multiple use area with general purpose and policy statements. This feature is intended to help keep the plan responsive to demands and to reduce the number of future plan amendments needed.

Prior to undertaking or approving any proposed resource management action on public lands in the Resource Area, BLM will ensure that such action is consistent with the purposes and policies of the multiple use or transfer class or classes involved.

The multiple use or transfer class assigned to each management area are shown on Map 4 and identified in the management area descriptions beginning on page 20. Public lands are placed in the multiple use or transfer class that best reflect the specific resources and management priorities for the area. A description of these classes and their purposes and policies is as follows:

Moderate Use Class

Purpose - The purpose of a moderate use class is to delineate public lands which are suitable for a wide variety of existing and potential uses.

Policy - The first priority for managing a moderate use class is to provide for the production and use of forage, timber, minerals and energy, recreation, or other consumptive resources while maintaining or enhancing natural systems. These areas will be managed for a moderate intensity of use. These areas will generally be available for production and use of consumptive resources, subject to BLM standard operating procedures and other controls as needed. Sensitive and significant resource values, however, will be protected consistent with federal and state law. Public lands in a moderate use class are to be retained in federal ownership.

Limited Use Class

Purpose - The purpose of a limited use class is to delineate public lands where strict environmental controls are required to protect sensitive and significant resources.

Policy - The first priority for managing a limited use class is to protect and enhance key wildlife habitat, wild horse habitat, scenic values, wilderness, cultural resources, watershed, and other sensitive and significant resources, while providing for other compatible uses. These areas will be managed for relatively low intensities of use and with strict environmental controls to protect sensitive and significant values. A limited use class may be closed to or contain restrictions on ORV use, mineral and energy exploration and development, forest management practices, location of utility corridors and installations, livestock grazing, or any potentially conflict use. Because of the relatively significant environmental considerations in these areas, some uses may not be permitted. Special attention will be given to finding appropriate locations for compatible uses. Public lands in a limited use class will be retained in federal ownership.

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Intensive Use/Development Class

Purpose - The purpose of an intensive use/development class is to delineate areas suitable for large scale, intensive use and development.

Policy - The first priority for managing an intensive use/development class is to provide for existing and projected demands for large scale intensive use and development. These areas will be managed for a high intensity of use. These areas will generally be reserved for major recreation sites or facilities, ORV intensive use areas, large scale mineral or energy extraction operations, military use areas, or major utility installations. Because of the potential for conflict with other uses in these areas, some uses may not be permitted. Protection of sensitive and significant resources, however, will be ensured consistent with federal and state law. Public lands in an intensive use/development class will be retained in federal ownership.

Transfer Class

Purpose - The purpose of a transfer class is to delineate public lands which may be considered for transfer out of federal ownership.

Policy - A transfer class is the only class in which public lands may be transferred out of federal ownership under this plan. Public lands declared eligible for transfer by their inclusion in this category are subject to detailed consideration prior to the final decision regarding transfer. Transfer classes are delineated in response to specific demands and needs identified during the planning process, such as agricultural development, community expansion, and other transfers, including transfers to the State of Idaho. Transfer classes will be managed on a custodial basis until transferred from federal jurisdiction. New public investments in these lands will generally be kept to a minimum.

Description of Planning Area

The Jarbidge Resource Area encompasses 2,100,519 acres of land located from the South Fork of the Boise River and Anderson Ranch Reservoir to the Humboldt National Forest boundary and Nevada state line (Map 1). Of this area 81% (1,690,473 acres) is public lands administered by the BLM, 5% (102,509 acres) is state lands and 14% (307,537 acres) is private lands. The public land holdings are generally in a solid block pattern (Map 2) and are located in Elmore, Owyhee and Twin Falls Counties in Idaho and in Elko County, Nevada.

Significant natural, scenic, recreation, paleontological, and cultural resources found within the area include the South Fork of the Boise River, Anderson Ranch Reservoir, Bennett Hills, Snake River, Salmon Falls Canyon and Reservoir, C.J. Strike Reservoir, 44 miles of the Oregon Trail, the Birds of Prey Natural/Withdrawal Area, the Bruneau and Jarbidge Rivers, the Hagerman Fossil Beds, and 3 State Parks (Bruneau Dunes, Three Island

Table 1
Multiple Use Area (MUAs) Boundary Criteria and Related Issues

MULTIPLE USE AREA (MUA)	Size (Acres)	Criteria for Boundaries*	Issues Pertinent
1. Anderson Lake/Boise River	11,086	Physical separation of units from RA	3,4,7,8,10a,10c
2. Upper Bennett	62,228	Winter range limits for deer & elk (crucial)	1,2,3,7,8,9,10a,10c
3. Lower Bennett	49,791	RxR to winter range; E-W utility corridor concentration	1,3,4,5,8,10b,10d
4. Snake River Riparian	9,068	RxR to bluff line - veg. zone, river influenced	1,3,4,5,6,7,9,10a,10b
5. Snake River Birds of Prey	49,286	Legal BOP boundary for prey zone	1,3,4,5,6,7,8,9
6. Saylor Creek West	176,859	Western common use allotment	1,3,4,5,6,7,8,10b,10d
7. Saylor Creek East	347,530	Eastern common use allotment	1,3,4,5,6,7,8,10b,10d
8. Hagerman Fossil Beds	4,394	Designated boundary of Pleistocene Fossil Beds	5,6,9,10b
9. Hagerman ORV	2,901	Designated ORV Area (concentrated use)	5,6,8
10. Bruneau-Jarbidge Sheep Ck. Area	95,639	WSA boundary	1,2,3,8,9,10b
11. Inside Desert	211,571	Physiographic area between two canyons	1,3,6,8,10b
12. West Devils	255,919	Highway and canyon boundarys	1,3,6,8,10b
13. East Devils	108,036	River canyon & foothills bound area	1,3,4,8,10b
14. Salmon Falls Creek Canyon	2,947	River canyon rim to rim (RA eastern boundary)	2,3,9
15. Jarbidge Foothills	205,238	Lower boundary of winter range to Forest Service boundary	1,3,4,8,9,10d
16. Diamond A	97,980	WSA boundary canyons, USFS boundary	1,3,4,8,9,10d
TOTAL ACRES	1,690,473		

* RxR = Railroad.

Issues & Concerns

- | | |
|--|---|
| 1. Livestock Grazing | 8. Fire Control & Management |
| 2. Wilderness Management | 9. Special Designation (ACEC, WSA, NR, SRMA, W) |
| 3. Wildlife Management | 10. Concerns |
| 4. Lands (sales, exchanges, DLA/CA) | a) Access |
| 5. Recreation (Oregon Trail, Hagerman ORV, etc.) | b) Cultural Resources/Paleontological Resources |
| 6. Soil, Water, Air (erosion hazard, quality) | c) Timber |
| 7. Energy & Mineral (E&D) | d) Social & Economic Impacts |

Each multiple use area has a specific set of management objectives with a defined set of actions that will be required to meet those objectives.

The Management Prescription

Crossing and Hagerman Horse Quarry). The city of Glenns Ferry and the town of Hammett are located just north of the Snake River. The Saylor Creek Gunnery Range, a military training area, is also within the area.

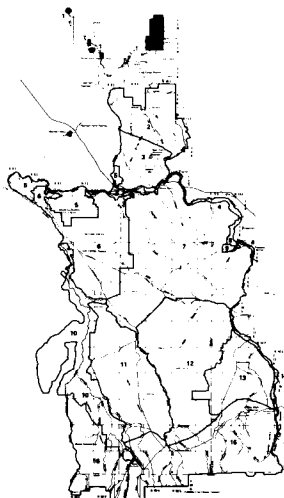
The Jarbidge Resource Area originally consisted of the Bennett Hills, the Saylor Creek, the Three Creek and the Diamond "A" Planning Units. The Jarbidge Resource Management Plan has divided the Area into 16 Multiple Use Areas (MUAs) as shown in Map 3. These 16 MUAs form the plan. Each MUA contains the description of the area, the management objectives, classes (intensity of management) and actions.

Goal

The goal of this plan is to provide a balance of commodity resource uses (renewable and nonrenewable) and development within the framework of maintaining or enhancing the natural resource base. Livestock grazing, timber harvest, agricultural development, and mineral uses would be managed at levels that would support and strengthen present industries where they would have limited adverse impact to the current environment. Fragile resources will be protected from irreversible decline. Conflicts and trade-offs among resource uses would guide management activities.

The Management Prescription

The preferred management plan (draft) selected to guide management in achieving this goal is illustrated on Map 4. Specific objectives and actions are described by the 16 Multiple Use Areas (MUAs) that follows. A location illustration appears at the beginning of each MUA section to show its location in the Jarbidge Resource Area. The identification of ACEC recommendations, ORV designation and utility avoidance are illustrated for the resource area on Maps 5 and 6 respectively and appear at the end of the draft plan. Map 2-2 appears at the end of the EIS. The implementation actions taken to achieve plan objectives would be monitored as outlined in Appendix D.



MUA-1

Anderson Ranch/Boise River

Description

The Anderson Ranch MUA is located 25 miles NE of the city of Mountain Home. The area contains 11,086 acres of public lands. It is mostly surrounded by land administered by the USFS (Boise National Forest). The dominant land form is steep south and west facing ridges between the Anderson Ranch Reservoir at the lower elevations (4200') and the National Forest boundary at the higher elevations (7000'). Vegetation is mountain big sage with perennial bunchgrass with areas of mixed mountain shrubs and Douglas fir. There are 3 grazing allotments in the MUA used mainly by trailing sheep owned by 3 permittees. No determination of range condition has been made.

The seven scattered parcels of public lands (720 acres), found along the South Fork of the Boise River, are bordered by USFS/Powersite Withdrawals and are important winter habitat for mule deer. The Boise River (S.F.) from Anderson Ranch Dam to Arrowrock Reservoir has scenic and recreational qualities which are recognized in existing State/Federal plans and studies for possible wild and scenic river designation.

The 10,366 acres of public lands around Anderson Ranch Reservoir are popular for scenic and outdoor recreation opportunities. The USFS manages camping and fishing access sites. BLM lands are important winter habitat for deer and elk, and supports a high density of nesting and breeding habitat for bluegrouse, and contains 850 acres of commercial timber.

Objectives

Issue 545 AUMs of forage for livestock through 2005.

Maintain existing wintering habitat to support current levels of 250 mule deer and 200 elk.

The Management Prescription

Protect the scenic and recreation values of the parcels along the Boise River (S.F.) and public lands around the reservoir but under custodial type management.

Maintain the current condition of riparian habitat.

Make available 9,128 acres (83%) of the area for energy minerals exploration and development and 9,522 acres (86%) for non energy minerals.

Manage 142 acres of suitable commercial forest lands to maximize timber productivity; manage 465 acres of non commercial forest land and 350 acres of unsuitable commercial forest land to maintain productivity through salvage and incidental harvest.

Multiple Use and Transfer Area Classes

Acres classified -- 11,086 Moderate, 0 Intensive,
0 Limited, 0 Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>545</u>	Livestock initial	<u>91</u>	Elk
<u>545</u>	Livestock 20 year	<u>54</u>	Mule Deer
<u>0</u>	Wild horses	<u>0</u>	Pronghorn
<u>0</u>	Bighorn Sheep		

B) Preliminary Wilderness Recommendation: Not Applicable (N/A) to this MUA.

C) Lands

1. Utility (overhead, surface, underground) avoidance/restricted area - none.
2. Closed to agricultural entry -- 11,086 acres.

D) Motorized Vehicle Management (Acres)

11,086 open; 0 limited; 0 closed.

E) Minerals Management

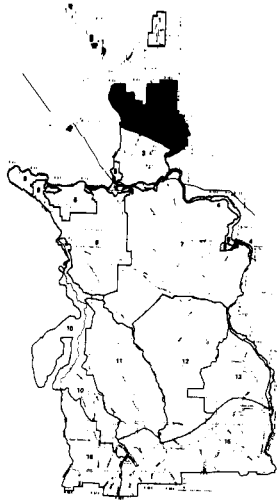
9,128 acres open to entry
+ acres limited (Area & Type) - No occupancy within 500 feet of perennial or intermittent streams or edges of reservoirs.
1,564 acres closed

F) Fire Management

Suppression - 11,086 acres full; 0 acres limited
Special actions: See Appendix I

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- G) Activity Plans - Timber Management Plan (TMP)
- H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian: None proposed
- I) Special Designations: N/A
- J) Other Special Actions (critical watershed, timber, etc.)-
 1. Recommend South Fork of the of Boise River for study under the National Wild, Scenic and Recreation River System.
 2. Develop timber sale plans.
 3. Continue to work with USFS on boundary adjustment proposals to improve management of public lands.



MUA-2

Upper Bennett Hills.

Description

The Upper Bennett Hills area is bordered by the Bruneau R.A. (BLM) on the west, Boise NF (USFS) on the north and Shoshone District BLM on the east. The southern boundary is determined by the lower range of wintering mule deer. Elevation ranges from 3000-7000'. Dominant vegetation is mountain big sagebrush and bluebunch wheatgrass grading into big sage and cheatgrass on the southern end. The area is important elk and mule deer winter range, and all or portions of nine grazing allotments are used primarily by cattle owned by 12 permittees. The area contains about 1,415 acres of commercial timber with a potential harvest of 1,000 MBF. Land ownership is 62,228 acres BLM, 11,663 acres state, and 37,383 acres private.

The MUA contains the King Hill WSA (28,987 acres). King Hill Creek and Thorn Creek are important streams in the area.

Objectives

Consider for transfer 40 acres of public lands via sale (T1) and retain 62,188 acres of public lands in federal ownership.

Improve ecological condition of rangelands on allotments in poor condition.

Issue 5,913 AUMs of forage for livestock by the year 2005.

Manage big game habitat to support 3,350 mule deer and 250 elk.

Improve 10.6 miles of fisheries habitat and 6.7 miles of riparian habitat by 2005.

Designate 56,680 acres as the Bennett Hills Winter Recreation Area (SRMA).

Preserve and manage the King Hill WSA (19-2) as a roadless backcountry area for its primitive recreation values and carry forward a suitability recommendation for wilderness designation of 21,095 acres in the Boise District and 5,294 acres in the Shoshone District.

Make available 35,276 acres (58%) for both energy and nonenergy mineral exploration and development.

Manage 944 acres of suitable commercial forest lands to maximize timber productivity; manage 880 acres of non commercial forest lands and 415 acres of unsuitable commercial forest land to maintain productivity through salvage and incidental harvest.

Multiple Use and Transfer Area Classes

Acres classified -- $\frac{41,133}{21,095}$ Moderate, Limited, $\frac{0}{40}$ Intensive, Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>4,928</u>	Livestock initial	<u>398</u>	Elk
<u>5,913</u>	Livestock 20 year	<u>670</u>	Mule Deer
<u>0</u>	Wild horses	<u>0</u>	Pronghorn
<u>0</u>	Bighorn Sheep		

B) Preliminary Wilderness Recommendation:

21,095 acres recommended suitable: WSA area--King Hill WSA (5,294 acres in Shoshone District is also recommended suitable)
2,720 acres recommended nonsuitable: WSA area--King Hill WSA

Draft Resource Management Plan

C) Lands

1. Utility avoidance/restricted area-King Hill WSA (21,095 acres Boise District, 5,294 acres Shoshone District) to overhead, surface, and underground.
2. Closed to agricultural entry - 62,188 acres

D) Motorized Vehicle Management (Acres)

0 open; 41,133 limited; 21,095 closed.

Type of limitation - Seasonal, may be placed on over the snow vehicles on big game crucial winter range if F&G determines harassment is occurring.

Areas closed - King Hill WSA (21,095 acres)

E) Minerals Management

41,113 acres open to entry
21,095+ acres limited (Area & Type)-No surface occupancy (seasonal) on deer winter range (12-1 through 4-30); & within 500 ft of perennial, intermittent streams or edges of reservoirs and King Hill WSA.
21,095 acres closed (Area) - King Hill WSA (19-2)

F) Fire Management

Suppression - 62,228 acres full; 0 acres limited

Special actions: Special fire suppression techniques required in WSA (no mechanical equipment) & consider role of fire as natural process in Fire Plan. See Appendix I.

G) Activity Plans-RAMP for Bennett Hills Winter Play Area SRMA; TMP; Fire Plan; AMPs for Allotments 1033, 1036, 1037, 1038, 1039, 1101, 1130.

H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian.

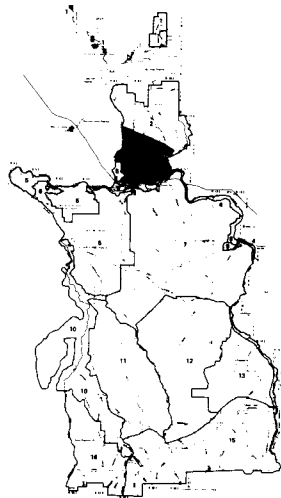
1,300 acres of brush control
3,600 acres reseeding (mixture/type)-(1) Interseed 200 acres on existing seedings with grass, forbs & shrubs for benefit of mule deer; (2) rehab 400 acres of burns with mixtures in 1; replant 3,000 acres to native condition.
0 miles of pipeline and 0 watering areas
0 reservoirs
5 miles of fence to provide separation of spring & fall ranges plus gap fencing to improve 6.7 stream miles of riparian habitat and 11.6 stream miles of fish habitat.
0 wells

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Bennett Hills Winter Rec Area	SRMA	56,680
King Hill Wilderness	Wilderness	21,095-Boise District 5,294-Shoshone District

J) Other Special Actions (critical watershed, timber, etc.) -

1. Change seasons of use on allotments that have greater than 50% of use made in the spring to 50% fall use.
2. Develop timber sales plans.



MUA-3

Lower Bennett

Description

The Lower Bennett area consists of 49,791 acres of public lands, 2,404 acres of state lands and 24,068 acres of private lands. It is bordered on the north by the lower boundary of winter deer range, on the south by the Snake River and the boundaries of the Bruneau R.A. and the Bennett Hills R.A. (Shoshone District) on the west and east respectively. Elevation ranges from 2900-4000'. Vegetation is primarily big sage- cheatgrass in poor condition with several large crested wheatgrass seedings. The terrain is predominantly low rolling foothills and flat- lands. The area includes all or portions of twelve grazing allotments used primarily by cattle owned by 17 users. Some 142,194 acres of public land have been applied for through the DLE/CA process. A number of utility lines (gas and power) are dispersed through a 10-12 mile wide NW to SE corridor. The city of Glens Ferry is located, in part, along the southern portion of the area, and portions of the Oregon National Historic Trail cross the area from SE to NW.

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Objectives

Consider for transfer from federal ownership 380 acres through sale (T1); 558 acres for exchange (T3), and 6,323 acres of suitable agricultural land for potential DLE/CA development (T4). Retain 42,530 acres of public lands in federal ownership.

Continue soil stabilization practices on areas receiving critical erosion damage.

Maintain existing range vegetative improvements.

Improve the range condition in the area through range land improvement projects on 5,040 acres.

Issue 7,652 AUMs of forage for livestock by the year 2005.

Manage big game habitat to support 600 mule deer and 25 antelope. Improve sage grouse brood nesting habitat by 2005.

Maintain the current condition of stream habitat and improve 2.2 miles of riparian habitat by 2005.

Protect and manage all remaining ruts and trail features of the Oregon Trail, the Sugar Bowl, Glenns Ferry and McGinnis Ranch Paleo sites and develop interpretive marker programs for the Oregon Trail.

Make available 49,631 acres (99+%) of the area for energy leasing exploration and development and 43,247 acres (86%) for nonenergy minerals. Maintain 40 acres as a material use site.

Multiple Use and Transfer Area Classes

Acres classified -- $\frac{42,530}{0}$ Moderate, $\frac{0}{7,261}$ Intensive, Transfer

Actions

A) Forage Use Levels (AUMs) -

$\frac{6,763}{7,652}$	Livestock initial	$\frac{0}{70}$	Elk
$\frac{0}{0}$	Livestock 20 year	$\frac{4}{}$	Mule Deer
	Wild horses		Pronghorn
	Bighorn Sheep		

B) Preliminary Wilderness Recommendation: N/A

C) Lands

- Utility avoidance/restricted area - 3 Paleo Areas (Sugar Bowl, Glenns Ferry, & McGinnis Ranch) & Oregon Trail Ruts (6,464 ac/ 20.2 mi) to overhead & surface disturbance and underground utilities.

2. Closed to agricultural entry - 42,530 acres; Oregon Trail & 3 paleo areas (consisting of 38 sites).

D) Motorized Vehicle Management (Acres)

43,327 open; 0 limited; 6,464 closed.

Type of limitation -
Areas closed - Oregon Trail

E) Minerals Management

49,631 acres open to entry

6,460+ acres limited (Area & Type)-No surface occupancy on Oregon Trail corridor; Sugar Bowl; Glenns Ferry and McGinnis Ranch Paleo sites. No surface occupancy within 500 ft of stream banks of perennial or intermittent streams or edges of reservoirs.

6,544 acres closed (Area) - Oregon Trail (6,464 acres/20.2 miles), seek withdrawal; and other (80 acres).

F) Fire Management

Suppression - 49,791 acres full; 0 acres limited
Special actions: No mechanical equipment (wheeled) on Oregon Trail or 3 paleo sites; no fire lines (mechanized) across Trail segments or paleo sites.

G) Activity Plans - Cultural & RAMP-Oregon Trail; Fire Mgt.; AMPs for Allotments 1033, 1034, 1036, 1124, 1129, 1130

H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian.

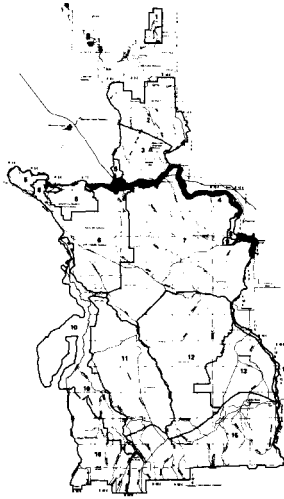
2,400 acres of brush control (method-prescribe burn (400); spray 2,000)
3,040 acres reseeding (2,640 acres to benefit livestock and wildlife; 300 acres interseed for wildlife and rehab 100 acres of burns)
0 miles of pipeline and 0 watering areas
0 reservoirs
8 miles of fence for additional livestock control plus gap fencing to improve 2.2 stream miles of riparian habitat.
0 wells

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Oregon Trail	Nat'l Historic Trail & Nat'l Register, SRMA	6,464/20.2

Draft Resource Management Plan

- J) Other Special Actions (critical watershed, timber, etc.) - Improve sage grouse brood rearing habitat (removal of sagebrush in small irregular areas and reseed) where canopy cover exceeds 20%.



MUA-4

Snake River Riparian

Description

The Snake River Riparian area occupies the lowland river corridor from Indian Cove on the west to the confluence of Salmon Falls Creek on the east. The northern boundary is the Union Pacific railroad line and the south boundary is near the 3000' elevation contour on the bluff near Salmon Falls Creek, and near the 2700' contour line at Indian Cove. The 51 mile long corridor contains important wildlife habitat for waterfowl, upland game and mule deer and the best known habitat for white sturgeon above Hells Canyon. The islands provide important waterfowl nesting habitat. The area includes portions of two grazing allotments in which the vegetation is primarily big sage-cheatgrass in poor condition. Grazing use in this MUA is mainly by cattle owned by 10 users. The area contains 9,068 acres of BLM, 152 acres of state and 9,419 acres of private land, used primarily for agriculture. The city of Glens Ferry is located in part of this area. The Oregon National Historic Trail crosses the area at Three Island Crossing State Park about 1 1/2 miles west of Glens Ferry.

Objectives

Consider for transfer from federal ownership 40 acres of public land through sale (T1), 558 acre through exchange (T3) and make available 182 acres of land for potential DLE/CA development (T4). Retain 8,728 acres of public land.

Maintain current ecological condition with emphasis on fall and winter use season only disemphasize spring and summer use.

Issue 402 AUMs of forage for livestock by the year 2005.

Manage big game habitat to support 75 mule deer.

Protect and manage the Oregon National Historic Trail to preserve all remaining ruts and trail features (2.0 miles), and three major paleo areas consisting of about 75 sites.

Maintain 34 miles of riparian habitat along public lands in current condition.

Make available 5,826 (64%) of the area for energy minerals exploration and development and 7,790 acres (86%) for nonenergy minerals.

Manage 65 acres for material use sites.

Multiple Use and Transfer Area Classes

Acreeage classified -- 0 Moderate, 0 Intensive,
8,728 Limited, 340 Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>402</u>	Livestock initial	<u>0</u>	Elk
<u>402</u>	Livestock 20 year	<u>24</u>	Mule Deer
<u>0</u>	Wild horses	<u>0</u>	Pronghorn
<u>0</u>	Bighorn Sheep		

B) Preliminary Wilderness Recommendation: N/A

C) Lands

1. Utility avoidance area - Paleontological sites at Glenns Ferry, Pasadena Valley and Sand Point (surface and underground), and all rutted segments of Oregon Trail (overhead, surface and underground).
2. Closed to agricultural entry - 8,728 acres

D) Motorized Vehicle Management (Acres)

7,993 open; 0 limited; 1,075 closed.

Areas closed-Oregon Trail (640 acres/2.0 miles); Sand Point Paleo (435 acres)

E) Minerals Management

5,826 acres open to entry
2,978 acres limited (Area & Type)-No surface occupancy on Oregon Trail, Paleo sites & within 500 ft of stream banks of perennial or intermittent streams or edges of reservoirs.
1,278 acres closed (Area)-Paleontological sites at Sand Point (435 acres) & Oregon Trail (640 acres); 203 acres other.

Draft Resource Management Plan

F) Fire Management

Suppression - 9,068 acres full; 0 acres limited
Special actions: No mechanized equipment (wheeled) and no fire lines across Oregon Trail segments or the 3 paleo sites found in the area.

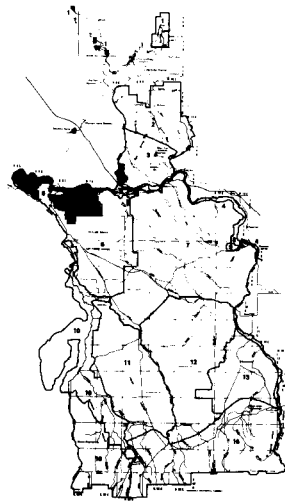
G) Activity Plans - Cultural and RAMP for Oregon Trail; Fire Mgt. Plan; Paleo Mgt. Plan-Sand Point

H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian: None proposed

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Oregon Trail Sand Point	Nat'l Historic Trail & Nat'l Register, SRMA ACEC	640/2.0 435

J) Other Special Actions (critical watershed, timber, etc.)-Develop grazing systems to maintain condition.



MUA-5

Snake River Birds of Prey

Description

The Snake River Birds of Prey (BOP) area consists of two segments. One is located 2 miles north of Hammett and the other is bordered in the south by the Snake River from Indian Cove downriver to the confluence with the Bruneau River and upstream to the confluence of Buckaroo ditch and the northern boundary of the Saylor Creek Gunnery Range (the larger segment of the BOP is found down river in the Bruneau and Owyhee Resource Areas).

The Management Prescription

There are 49,286 acres of public land, 6,116 acres of state land, and 10,873 acres of private land contained within the area. The terrain is rolling lowland and flat agricultural land and contains habitat for numerous raptors including several endangered/sensitive species (bald eagle, ferruginous hawk and burrowing owl) and important wetland/riparian areas along C.J. Strike Reservoir. The area includes portions of 2 grazing allotments grazed by cattle owned by 6 users. The vegetation is primarily big sage-cheatgrass in poor condition. The rim area contains a remnant population of salt shrubs. The Bruneau Dunes State Park, the Oregon National Historic Trail and important cultural resource sites also lie within this area.

Objectives

Retain all public lands in federal ownership (49,286 acres).

Improve the ecological condition of rangelands by changing grazing use seasons.

Issue 5,098 AUMs of forage for livestock in 5 year increments by the year 2005.

Maintain existing range vegetative condition and improvements and initiate vegetative manipulation on 1,000 additional acres.

Manage big game habitat to support 150 mule deer.

Maintain current condition of riparian habitat along the Snake River (12 miles) and C.J. Strike Complex (9 miles).

Protect the scenic and natural values surrounding the Bruneau Sand Dunes State Park.

Protect and preserve all remaining ruts and trail features of the Oregon National Historic Trail.

Make 49,286 acres (100%) of area available for energy mineral exploration and development and 33,671 acres (68%) for nonenergy minerals. Manage 50 acres as materials use sites.

Multiple Use and Transfer Area Classes

Acres classified -- 0 Moderate, 0 Intensive,
49,286 Limited, 0 Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>4,856</u>	Livestock initial	<u>0</u>	Elk
<u>5,098</u>	Livestock 20 year	<u>32</u>	Mule Deer
<u>0</u>	Wild horses	<u>0</u>	Pronghorn
<u>0</u>	Bighorn Sheep		

Draft Resource Management Plan

B) Preliminary Wilderness Recommendation: N/A

C) Lands

1. Utility avoidance/restricted area - Rutted portions of Oregon Trail (1,504 acres) (overhead, surface, underground), and visual area around Bruneau Dunes State Park (overhead, surface).
2. Closed to agricultural entry - 49,286 acres

D) Motorized Vehicle Management (Acres)

0 open; 47,782 limited; 1,504 closed.

Type of limitation-No ORV activity around raptor nesting sites during nesting/fledging seasons and to designated roads and trails.

Areas closed-Oregon Trail (1,504 acres)

E) Minerals Management

49,286 acres open to entry
15,615+ acres limited (Area & Type)-No surface occupancy around raptor nesting sites (14,111 acres); Oregon Trail-4.7 mi (1,504 acres) or within 500 feet of stream banks of perennial or intermittent streams or edges of reservoirs
15,615 acres closed (Area)-Oregon Trail (1,504 acres) & raptor essential nesting habitat (14,111 acres)

F) Fire Management

Suppression - 49,286 acres full; 0 acres limited
Special actions: No mechanical equipment or fire lines in Oregon Trail and no fire lines around Bruneau Dunes State Park (visual area of park). See Appendix I.

G) Activity Plans - RAMP for SRBOP & Oregon Trail, Fire Mgt. Plan. AMP for Allotments 1056,1137

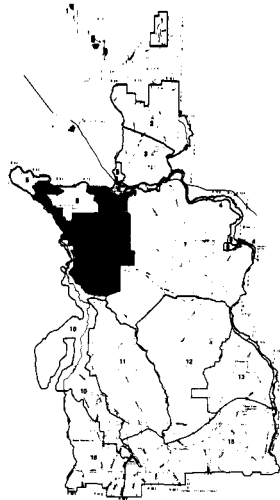
H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian.

0 acres of brush control
1,000 acres reseeding
0 miles of pipeline and 0 watering areas
0 reservoirs
0 miles of fence
0 wells

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Snake River Birds of Prey Area	Withdrawal Area	49,286/
Oregon Trail	Nat'l. Register, SRMA	1,504/4.7

J) Other Special Actions (critical watershed, timber, etc.)-Deemphasize spring/summer use period and emphasize fall/winter grazing use.



MUA-6

Saylor Creek West.

Description

The Saylor Creek West area is bordered by the Snake River BOP and Snake River Riparian zone on the north, the Bruneau River and respective WSA boundary on the west, and the allotment boundary to the east and south. The area is generally flat to gently rolling hills with a few canyon areas. Elevation throughout the area averages around 3500'. The Saylor Creek Gunnery Range (102,746 acres) is located in the middle of the area. Vegetation is predominantly crested wheatgrass seedings with pockets of big sage. A large part of the area has been burned and is presently in annual grass. All or portions of 17 grazing allotments are contained within the area, used by cattle and sheep. The Pothole Cultural Resource Site complex is located in the northern part of this area. There are 176,859 acres of public lands, 9,226 acres of state lands, and 10,199 acres of private lands contained within the area.

Objectives

Consider for transfer from public ownership 120 acres through sale (T1), 80 acres through sale or exchange (T2), and make available 5,033 acres of public lands for potential DLE/CA development (T4). Retain 171,626 acres of public lands in federal ownership.

Draft Resource Management Plan

Issue 46,922 AUMs of forage for livestock (in increments) by the year 2005.

Maintain current ecological condition class.

Maintain existing range manipulation improvements.

Manage big game habitat to support 40 mule deer. Maintain present levels of upland game nesting and cover habitat.

Maintain current condition of riparian habitat.

Make 73,733 acres (42%) of the area available for energy minerals exploration and development and 73,733 acres (42%) for nonenergy minerals. Retain all public lands in the Bruneau KGRA. Manage 28 acres for materials use.

Multiple Use and Transfer Area Classes

Acres classified -- 68,880 Moderate, 102,746 Intensive,
0 Limited, 5,233 Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>12,136</u>	Livestock initial	<u>0</u>	Elk
<u>46,922</u>	Livestock 20 year	<u>29</u>	Mule Deer
<u>0</u>	Wild horses	<u>0</u>	Pronghorn
<u>0</u>	Bighorn Sheep		

B) Preliminary Wilderness Recommendation: N/A

C) Lands

1. Utility avoidance/restricted area - 102,746 acres in Saylor Creek Gunnery (overhead, surface, underground) and Sand Point Paleontological Area (380 acres) (surface and underground).
2. Closed to agricultural entry-171,626 acres.

D) Motorized Vehicle Management (Acres)

73,733 open; 0 limited; 103,126 closed.

Areas closed-Saylor Creek Gunnery Range and Sand Point Paleo Area.

E) Minerals Management

73,733 acres open to entry
103,126+ acres limited (Area & Type) - No surface occupancy in Saylor Creek Gunnery Range, Sand Point, or within 500 feet of stream banks of perennial or intermittent streams or edges of reservoirs.

The Management Prescription

103,126 acres closed (Area) - Saylor Ck. Gunnery (102,746); Sand Point Paleo Area (380/18 sites)

F) Fire Management

Suppression - 176,859 acres full; 0 acres limited

Special actions: The 102,746 acres in the Gunnery Range will be managed under contracted service with MHAFB.

G) Activity Plans - Fire Mgt. Plan, Management Plan for Sand Point, AMPs for Allotments 1056, 1137; Cultural Plan for Pot Hole Complex.

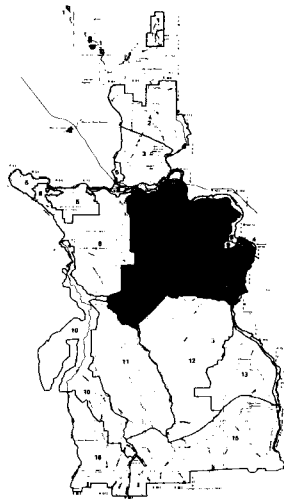
H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian.

0 acres of brush control
150 acres reseeding (rehab existing burns)
25 miles of pipeline and 12 watering areas
0 reservoirs
25 miles of fence for livestock mgt. control to use underused areas
0 wells

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Sand Point	ACEC	380/

J) Other Special Actions (critical watershed, timber, etc.) - Protection of critical erosion hazard area in the Narrows CA area that could create erosion of the Sand Point Paleo deposits. Special water runoff (return irrigation flows) stipulations on transferred lands to protect public lands adjacent to and downslope of transfer lands.



MUA-7

Saylor Creek East.

Description

The area contains 347,530 acres of public lands, 14,356 acres of state lands and 82,211 acres of private lands. It is bordered on the west by the Saylor Creek West allotment, by the riparian zone of the Snake River to the north and northeast, Salmon Falls Creek on the east and Balanced Rock/Clover Road and Clover Creek Canyon on the south and southwest. This MUA contains the 106,469 acre Saylor Creek Wild Horse Herd Area. Topography is generally flat to gently rolling hills with significant amounts of developed agricultural land (farms in the north and eastern parts of the area). A number of DLE/CA applications have been filed on potentially suitable agricultural lands. The soils show significant potential for agricultural productivity. Vegetation is predominantly cheatgrass, crested wheat and big sage grazed by sheep and cattle belonging to 24 permittees in one allotment. A substantial part of the area has been burned with the biggest burn occurring in 1976. Mule deer, antelope, sage grouse, and upland game are found in the area. Wildlife tracts have been developed in the farming area to provide cover, nesting habitat, and food for upland game. Fifteen thousand acres have been set aside thus far under Sikes Act for this purpose. Significant paleontological and cultural resource sites in Pasadena Valley, Dove Springs, and Roosevear Gulch have been recorded and the Oregon National Historic Trail traverses the northern portion of the area.

Objectives

Consider for transfer from public ownership 380 acres through sale (T1), 8,122 acres through sale or exchange (T2); 85 acres through exchange (T3); and 63,023 acres of public land for potential DLE/CA development (T4). Retain all remaining lands, 275,920 acres.

Issue 72,739 AUMs of forage for livestock by the year 2005, and provide forage to support a herd of 50 wild horses in the 83,540 acre Saylor Creek Wild Horse Herd Area.

Improve the ecological condition through the development of grazing systems and range improvements.

Manage big game habitat to support 100 mule deer and 30 antelope. Maintain existing upland game nesting and cover habitats. Manage 3,990 acres of the cheatgrass study area for curlews.

Maintain current condition of riparian and fish habitat.

Manage the Oregon Trail to preserve remaining ruts and trail features and nominate to national register of historic places and develop interpretive signing and facilities to serve trail users and protect Dove Spring complex.

Protect the 96 paleontological sites in Pasadena Valley, Roosevear Creek and Gulch, Dove Springs, Deep Gulch, Pilgrim Spring and Stage, and Glens Ferry.

Make 329,164 acres (95%) of the area available for energy minerals exploration and development and 336,090 acres (97%) for nonenergy minerals. Manage 24 sites containing 524 acres as material use sites.

Multiple Use and Transfer Area Classes

Acres classified -- 192,338 Moderate, 0 Intensive,
83,582 Limited, 71,610 Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>39,046</u>	Livestock initial	<u>0</u>	Elk
<u>72,739</u>	Livestock 20 year	<u>32</u>	Mule Deer
<u>600</u>	Wild horses	<u>4</u>	Pronghorn
<u>0</u>	Bighorn Sheep		

B) Preliminary Wilderness Recommendation: N/A

C) Lands

- Utility avoidance/restricted area - Oregon Trail 4,864 acres (overhead, surface, underground); Dove Springs (160 acres) and 96 paleo sites (surface and underground).
- Closed to agricultural entry - 275,920 acres (96 paleontological sites and Dove Springs Cultural site; 83,540 acres wild horse habitat area).

D) Motorized Vehicle Management (Acres)

342,666 open; 0 limited; 4,864 closed.

Areas closed-Oregon Trail 4,864 acres

Draft Resource Management Plan

E) Minerals Management

329,164 acres open to entry
18,364 acres limited (Area & Type)-No surface occupancy on cultural & paleo sites or within 500 feet of stream banks of perennial or intermittent streams or edges of reservoirs.
11,440+ acres closed (Area) - Oregon Trail (4,864 acres) & 96 sites located in 9 Paleontological Areas & Dove Springs (160 acres) cultural resource site, and 6,416 other acres currently withdrawn.

F) Fire Management

Suppression - 347,530 acres full; 0 acres limited

Special actions: No mechanized equipment (wheeled) on Oregon Trail; no fire lines (mechanical) surface disturbing across trail segments.

G) Activity Plans - Cultural (Dove Springs), RAMP for Oregon Trail; Fire Mgt. Plan, Wild Horse Management Plan, AMP for Allotment 1056.

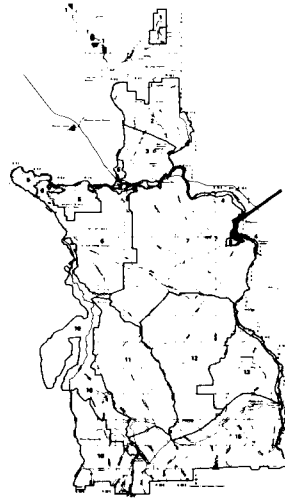
H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian.

0 acres of brush control
0 acres reseeding
50 miles of pipeline and 25 watering areas
0 reservoirs
60+ miles of fence for livestock mgt.
0 wells

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Oregon Trail	Nat'l Historic Trail & Nat. Register, SRMA	4,864/15.2
Saylor Creek	Wild Horse Herd Area	83,540
Wild Horse		

J) Other Special Actions (critical watershed, timber, etc.)-Design fences so as to minimize wild horse movement conflicts.



MUA-8

Hagerman Fossil Beds.

Description

The Hagerman Fossil Beds are located along the western bank of the Snake River, and extend westward to the rim of the Snake River Canyon, approximately 2 miles west of the town of Hagerman. The southern boundary of the area adjoins the Hagerman ORV area and the northern boundary is adjacent to the Saylor Creek East area. This area also bisects a part of the Snake River Riparian MUA 4. Terrain is extremely steep and soils are poorly formed and highly erodable. Vegetation is cheatgrass and sagebrush but also contains similar riparian values as described for MUA 4. The fossil area is a National Natural Landmark and an internationally recognized paleontological area with over 300 fossil sites identified. The area contains 4,394 acres of public lands and 499 acres of state lands. Wildlife values include upland game, raptors, and mule deer.

Objectives

Retain 4,394 acres of public lands in federal ownership.

Issue 143 AUMs of forage use on upper benches (plateau) only, for livestock by 2005. Exclude livestock grazing on all areas below plateau.

Maintain current ecological condition.

Manage big game habitat to support 5 mule deer.

Maintain present upland game nesting and cover habitat.

Preserve 2 miles of the Oregon Trail (remaining ruts and trail features) and nominate to National Register.

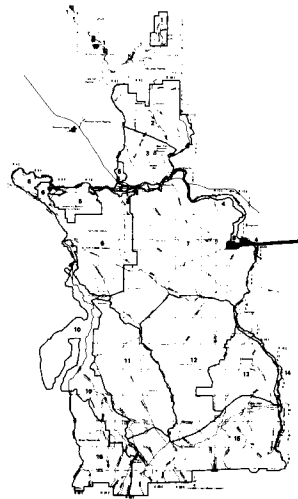
Protect and manage the area for its paleological values through designation as an ACEC.

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Hagerman Fossil	ACEC/SRMA	4,394
Oregon Trail	Nat'l Historic Trail & Nat'l Register, SRMA	640/2

J) Other Special Actions (critical watershed, timber, etc.) - Work with National Park Service in possible designation as a National Monument.

Eliminate grazing use on portions of fossil bed that are on critical watershed hazard areas.



MUA-9

Hagerman ORV (Owsley Bridge).

Description

This area contains 2,901 acres of federal land abutting the southern boundary of the Hagerman Fossil Beds and extending south to the Crows Nest Road and west to the Saylor Creek East MUA boundary. The terrain is rolling hills dissected by gullies and dry washes. Elevation ranges from 3000' to 3500'. Vegetation consists of sagebrush and grass. The area is used by ORV recreationists (trail bikes) throughout the year.

Objectives

Manage the area for its recreational and off-road vehicle values and designate a SRMA.

Retain 2,901 acres of public lands in federal ownership.

Issue 140 AUMs forage use levels for livestock by the year 2005.

Draft Resource Management Plan

Maintain existing ecological condition.

Manage existing game habitat to support 5 mule deer.

Make available 2,621 acres (90%) for energy mineral exploration and development and 2,901 acres (100%) for nonenergy minerals.

Multiple Use and Transfer Area Classes

Acres classified -- 0 Moderate, 2,901 Intensive,
0 Limited, 0 Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>140</u>	Livestock initial	<u>0</u>	Elk (winter)
<u>140</u>	Livestock 20 year	<u>1</u>	Mule Deer
<u>0</u>	Wild horses	<u>0</u>	Pronghorn
<u>0</u>	Bighorn Sheep (yearlong)		

B) Preliminary Wilderness Recommendation: N/A

C) Lands

1. Utility avoidance area - 0
2. Close to agricultural entry - 2,901 acres

D) Motorized Vehicle Management (Acres)

2,901 open; 0 limited; 0 closed.

E) Minerals Management

2,621 acres open to entry
280 acres limited (Area & Type) - Power site and areas within 500 feet of stream banks of perennial or intermittent streams or edges of reservoirs.
0 acres closed (Area) -
0 acres withdrawn from entry

F) Fire Management

Suppression - 2,901 acres full; 0 acres limited

Special actions:

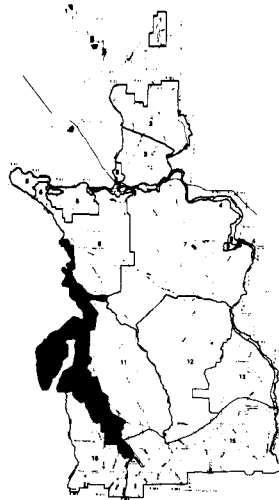
G) Activity Plans - RAMP for Owsley Bridge & Hagerman SRMA (7,074 acres).

H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian: None proposed

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Hagerman/Owsley Bridge	SRMA	2,680

J) Other Special Actions (critical watershed, timber, etc.)-None proposed.



MUA-10

Bruneau-Jarbidge-Sheep Creek.

Description

The Bruneau/Sheep Creek WSA (111-17; 79,537 acres BRA and 28,869 acres JRA) and the Jarbidge WSA (17-11; 8,348 acres BRA and 66,770 acres JRA) form Multiple Use Area (MUA 10). MUA acreage includes 95,639 acres of federal land, 3,519 acres of state land, and 161 acres of private land.

The area extends from about Indian Bathtub on the west side of the Bruneau River south to Winter Camp and the East Fork of the Bruneau, to the James Places about 3 1/2 miles south of Mary's Creek on Sheep Creek, to the Bedal Homestead about six miles upstream of the Bruneau/Jarbidge confluence on the W.F. Bruneau and to the confluence of the East Fork and West Fork of the Jarbidge.

The topography of the plateau lands is generally flat to rolling. Vegetative cover consists of different mixes of big sage, shadscale, forbs, and grasses.

The tableland serves as crucial winter habitat for hundreds of mule deer. Antelope are found yearlong on the east and west side of the Jarbidge River. This management unit provides the key habitat for the reestablishment of bighorn sheep in the Jarbidge/Bruneau River complex. Upland birds are also an important resource in the unit.

Draft Resource Management Plan

The Bruneau River Canyon is one of the deepest gorges in North America. The canyons are rich in wildlife, including bighorn sheep, cultural and geological history, scenery, cold and warm water game fisheries, and wild river recreation opportunities.

Objectives

Retain all federal lands in public ownership (95,639 acres).

Issue 6,178 AUMs of forage use for livestock by the year 2005.

Maintain existing ecological condition.

Manage big game habitat to support 1,440 mule deer, 191 antelope, and 208 bighorns and protect existing and potential bighorn habitat through special designation and management.

Improve sage grouse nesting through seeding and rehabilitation. Maintain current upland game nesting and cover habitat.

Improve 4.7 miles of riparian habitat and 11.1 miles of fisheries habitat by 2005.

Protect the cultural values of the dry lakes area and Cougar Canyon through special designation and management.

Manage for wilderness 52,022 acres of the MUA.

Make available 20,168 acres (21%) for energy mineral exploration and development and 20,168 acres (21%) for nonenergy minerals.

Multiple Use and Transfer Area Classes

Acres classified -- 20,168 Moderate, 0 Intensive,
75,471 Limited, 0 Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>6,046</u>	Livestock initial	<u>0</u>	Elk Deer (winter)
<u>6,178</u>	Livestock 20 year	<u>356</u>	Mule Deer
<u>0</u>	Wild horses	<u>15</u>	Pronghorn
<u>312</u>	Bighorn Sheep (yearlong)		

B) Preliminary Wilderness Recommendation:

52,022 acres recommended suitable: Bruneau River-Sheep Creek WSA
4,633 acres; Jarbidge River WSA 47,389 acres
43,617 acres recommended nonsuitable: Bruneau River-Sheep Creek WSA
24,236 acres, Jarbidge River WSA 19,381 acres

C) Lands

1. Utility avoidance/restricted area - Recommended suitable wilderness area (93,047 acres); 121 miles of Wild, Scenic River area; and Cougar Canyon (overhead, surface, underground).
2. Closed to agricultural entry (Area)--95,639+ acres.

D) Motorized Vehicle Management (Acres)

20,168 open; 0 limited; 75,471 closed.

Type of limitation-

Areas closed-River canyons, wilderness areas, bighorn sheep habitat

E) Minerals Management

20,168 acres open to entry
75,471+ acres limited (Area & Type)-No surface occupancy in wilderness area, river canyons or on rim when within view of river & in bighorn habitat on plateau & Cougar Canyon, or within 500 feet of stream banks of perennial or intermittent streams or edges of reservoirs.
75,471 acres closed (Area) - Wilderness, river canyon; Cougar Canyon and bighorn habitat (ACEC area).

F) Fire Management

Suppression - 95,639 acres full; 0 acres limited

Special actions: No mechanical equipment in wilderness areas or river canyons or ACEC & special attention to bighorn needs.

G) Activity Plans - RAMP (Bruneau-Jarbridge Rivers); WMP; Fire Mgt.; Cultural Plan (Dry Lake Beds); AMP for Allotments 1021, 1050, 1099, 1137.

H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian.

0 acres of brush control (method-burns in poor condition & reseed for livestock and wildlife)
1,150 acres reseeding (mixture/type 250 acres interseed existing seeding for bighorns; 900 ac (plowing & seeding burn areas).
0 miles of pipeline and 0 watering areas
0 reservoirs
+ miles of fence (gap fence needs to improve 4.7 miles of riparian & 11.1 miles of fisheries)
0 wells

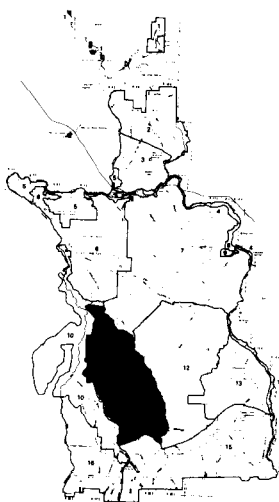
Draft Resource Management Plan

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Bruneau, Sheep Ck & Jarbidge River Canyon	Wilderness & Wild Scenic River; SRMA	52,022/121
Bighorn habitat (includes Cougar Canyon)	ACEC	75,471
Dry Lake Beds	National Register	24,000*

*6,000 other acres in MUA 11 for a total of 30,000 acres.

J) Other Special Actions (critical watershed, timber, etc.)-None proposed.



MUA-11

Inside Desert.

Description

The Inside Desert Area consists of 211,571 acres of federal land, 12,938 acres of state lands, and 844 acres of private land. The area is bordered on the west by the Bruneau-Sheep Creek-Jarbidge WSAs, to the north and east by the East Fork of the Bruneau River (Clover Creek) and to the south by the boundary of the antelope winter range of the Lower Jarbidge Foothills area. The terrain is flat to rolling hills, averaging 5000' elevation. Vegetation is Wyoming big sage with several large crested wheatgrass seedings. All or part of 5 grazing allotments allocated to 7 permittees are included in the area. These are grazed by cattle and sheep. The area also contains important yearlong antelope range and sage grouse nesting areas. Several important resource sites are also located within the area.

Objectives

Consider for transfer from public ownership 1,277 acres for exchange only (T3) and retain 210,294 acres of public lands in federal ownership.

Issue 29,661 AUMs of forage use for livestock by the year 2005.

Maintain existing range vegetative manipulated improvements; and initiate vegetative manipulation on 14,600 additional acres.

Improve the ecological condition of 10,000 acres of rangelands by 2005.

Improve big game habitat to support 350 mule deer and 400 antelope. Improve, through improvements, 2,500 acres of habitat by 2005.

Improve 26.1 miles of riparian habitat and 21.6 miles of fish habitat by 2005.

Protect significant cultural resources through special designation and management.

Make available 211,571 acres (100%) for energy mineral exploration and development and 203,163 (96%) acres for nonenergy minerals.

Multiple Use and Transfer Area Classes

Acres classified -- 210,294 Moderate, 0 Intensive,
0 Limited, 1,277 Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>18,989</u>	Livestock initial	<u>0</u>	Elk
<u>29,661</u>	Livestock 20 year	<u>73</u>	Mule Deer
<u>0</u>	Wild horses	<u>54</u>	Pronghorn
<u>0</u>	Bighorn Sheep		

B) Preliminary Wilderness Recommendation: N/A

C) Lands

1. Utility avoidance/restricted area-Portion of 24,080 acres of the Dry Lakes & Post Office Cultural areas (surface & underground).

2. Close to agricultural entry - 211,571 acres.

D) Motorized Vehicle Management (Acres)

202,513 open; 0 limited; 9,130 closed.

Type of limitation-

Areas closed-Dry Lake Beds & Post Office Cultural areas, Bighorn Sheep Habitat.

Draft Resource Management Plan

E) Minerals Management

211,971 acres open to entry
8,480 acres limited (Area & Type) - No surface occupancy on dry lakes or Post Office or within 500 feet of stream banks of perennial or intermittent streams or edges of reservoirs.
8,480 acres closed (Area) - Dry Lakes & Post Office

F) Fire Management

Suppression - 53,320 acres full; 158,251 acres limited

Special actions: Post Office Historical Site and crucial wildlife habitat within limited suppression areas will receive full suppression efforts.

G) Activity Plans -Fire Mgt.; Multiple Use Activity Plan; AMP for Allotments 1031, 1050, 1065, 1067, 1099, 1118, 1119; Cultural Plans (Post Office and Dry Lakes Complexes).

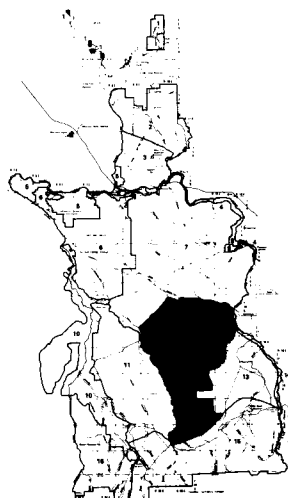
H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian.

2,000 acres of brush control (method-burning 5,600 ac of big sage & reseed for livestock & rehab 800 acres of burns for benefit to pronghorns & 23,000 of burns for sage grouse)
11,500 acres reseeding (brush control and seed 3,600 acres plus seed an additional 5,400 acres of native range (no brush control needed) with mixtures to benefit livestock and wildlife; interseed 500 acres of existing seedings with mixtures of grasses, forbs, and shrubs for wildlife; rehab 2,000 acres of existing burns for livestock.)
12 miles of pipeline
0 reservoirs
+ miles of fence-gap to improve 26.1 stream miles of riparian habitat and 21.6 stream miles of fish habitat.
0 wells

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Dry Lake Beds	Nat'l Register as a Special District	6,000

J) Other Special Actions (critical watershed, timber, etc.) - Develop grazing management systems on fair condition range to improve to good or better condition. *To include grazing, wildlife and fire management coordination (Set up Adhoc technical/user/conservation group interests to provide input into plan).



MUA-12

West Devils.

Description

The West Devils area is bordered on the north by the Saylor Creek East area (the Balanced Rock and Crows Nest Roads), to the west by the East Fork of the Bruneau River (Clover Creek), the Salmon Falls Creek Canyon and Devils Creek to the east, and the Lower Jarbidge Foothills area to the south. The area contains 255,919 acres of federal, 13,789 acres of state, and 13,919 acres of private land. The topography is rolling to flat high desert country with an elevation average of 4500'. Vegetation is Wyoming big sage with burned areas reseeded to crested wheatgrass. Thirteen permittees graze cattle and sheep in all or part of 18 grazing allotments. Antelope and sage grouse are found throughout the area with mule deer utilizing the canyon areas. The southern half of the unit is key yearlong antelope habitat and important sage grouse brood rearing and nesting habitat. The area is crisscrossed with numerous roads and trails, and several significant cultural resource complexes are found in the area.

Objectives

Consider for transfer from federal ownership 120 acres by sale (T1), and 1,280 acres for exchange (T3). Retain 254,519 acres of public lands in federal ownership.

Issue 41,780 AUMs of forage for livestock by the year 2005.

Maintain existing range vegetative manipulated improvements; and initiate vegetative manipulation on 15,800 additional acres for livestock.

Maintain existing ecological condition.

Manage big game habitat to support 225 mule deer and 270 antelope.

Improve wildlife habitat on 3,000 acres by the year 2005.

Draft Resource Management Plan

Maintain current condition of riparian habitat and improve 2.0 miles of fisheries habitat by 2005.

Protect 3,480 acres in 3 significant cultural resource complexes through special designation and management.

Make available 255,439 acres (99+%) for energy mineral exploration and development and 252,439 acres (99%) for nonenergy minerals. Make 80 acres available for materials use.

Multiple Use and Transfer Area Classes

Acres classified -- 251,639 Moderate, 0 Intensive,
0 Limited, 4,280 Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>31,966</u>	Livestock initial	<u>0</u>	Elk
<u>41,780</u>	Livestock 20 year	<u>52</u>	Mule Deer
<u>0</u>	Wild horses	<u>33</u>	Pronghorn
<u>0</u>	Bighorn Sheep		

B) Preliminary Wilderness Recommendation: N/A

C) Lands

1. Utility avoidance/restricted area - Portions of 3,480 acres of 3 cultural resource complexes - Juniper Ranch, Clover Ck., Devils Ck.-(surface, underground).
2. Close to agricultural entry - 255,919 acres.

D) Motorized Vehicle Management (Acres)

252,439 open; 3,000 limited; 480 closed.

Type of limitation-Devils Creek (portions where trail bike use will adversely impact cultural resources)

Areas closed-Juniper Ranch and Clover Creek Cultural areas

E) Minerals Management

255,439 acres open to entry

3,480+ acres limited (Area & Type) - No surface occupancy on 3 cultural resource complexes or within 500 feet of stream banks of perennial or intermittent streams or edges of reservoirs.

3,480+ acres closed (Area) - Cultural complexes at Juniper Ranch, Clover Creek & Devils Creek.

F) Fire Management

Suppression - 25,440 acres full; 230,479 acres limited

Special actions: Fires on crucial wildlife habitats will be treated under full suppression.

G) Activity Plans - AMP for Allotments 1029, 1031, 1046, 1050, 1067, 1070, 1092, 1095, 1102, 1120, 1121, 1122, 1132, 1133, 1134, 1135, 1136; Cultural Management Plan for Juniper Ranch, Clover Creek, Devils Creek; Multiple Use Activity Plans.

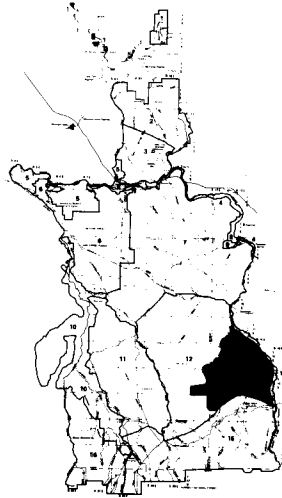
H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian.

<u>4,748</u>	acres of brush control (method - burning)
<u>14,000</u>	acres reseeding (mixture/type - 11,000 ac suitable forage species for livestock & rehabilitate 2,500 ac of burns & reseed with mixtures to benefit sage grouse & interseed an additional 500 ac of existing seedings to benefit sage grouse)
<u>4</u>	miles of pipeline
<u>0</u>	reservoirs
<u>+</u>	miles of fence (gap fencing as needed to improve 2.0 miles of fisheries habitat)
<u>0</u>	wells

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Devils Creek Complex	Nat'l. Register	3,000

J) Other Special Actions (critical watershed, timber, etc.)-None proposed.



MUA-13

East Devils.

Description

The East Devils area is bordered by Devils Creek and the Grassy Hills to the west, Salmon Falls Creek Canyon to the east and the Lower Jarbidge Foothills to the south. Topography is varied, with flat to rolling terrain cut by canyons. Elevation averages 5000'. Vegetation consists of big sage and desert grasses in the flats and riparian habitat in the canyon bottoms, with numerous crested wheatgrass seedings in burned areas. Twelve permittees graze cattle and trail sheep in all or part of 13 grazing allotments. Several large private land blocks in the northern and southwestern parts of the area are in agricultural use. Antelope, mule deer, and sage grouse are found throughout the area and numerous significant cultural resource complexes are found in the area, with major concentrations along Devils Creek.

Objectives

Consider for transfer from federal ownership 120 acres of public lands through sale (T1). Retain 107,916 acres of public lands in federal ownership.

Issue 18,919 AUMs of forage for livestock by the year 2005.

Maintain existing range vegetative manipulated improvements and manipulate 4,900 additional acres. Continue to improve the range condition in the area through the development of grazing systems, range improvements and reseed 3,400 acres.

Manage big game habitat to support 175 mule deer and 50 antelope.

Maintain present areas of sage grouse nesting habitat.

Maintain the current condition of riparian habitat and fisheries habitat.

Make available 108,036 acres (100%) available for energy mineral exploration and development and 105,036 acres (97%) for nonenergy minerals.

Multiple Use and Transfer Area Classes

Acres classified -- 107,916 Moderate, 0 Intensive,
0 Limited, 120 Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>18,031</u>	Livestock initial	<u>0</u>	Elk
<u>18,919</u>	Livestock 20 year	<u>37</u>	Mule Deer
<u>0</u>	Wild horses	<u>8</u>	Pronghorn
<u>0</u>	Bighorn Sheep		

B) Preliminary Wilderness Recommendation: N/A

C) Lands

1. Utility avoidance/restricted area - Portions of Devils Creek Complex-(surface, underground).
2. Close to agricultural entry - 108,036 acres.

D) Motorized Vehicle Management (Acres)

105,036 open; 3,000 limited; _____ closed.

Type of limitation-Devils Creek Complex (portions where trail bike use will adversely impact cultural resources)

E) Minerals Management

108,036 acres open to entry
3,000 acres limited (Area & Type) - No surface occupancy within 500 feet of stream banks of perennial or intermittent streams or edges of reservoirs.
3,000 acres closed (Devils Creek Complex)

F) Fire Management

Suppression - 108,036 acres full; 0 acres limited

Special actions:

G) Activity Plans - Cultural Management Plan for Devils Creek, AMP for Allotments 1022, 1092, 1096, 1125, 1126.

Draft Resource Management Plan

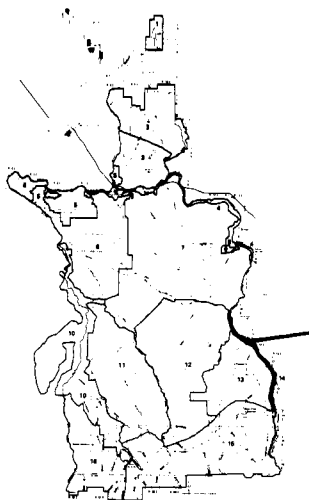
H) Proposed Projects/actions for range, wildlife, cultural, fisheries, riparian.

<u>4,848</u>	acres of brush control (method - burn 848 ac & spray 4,000 ac to benefit livestock)
<u>4,550</u>	acres reseeding (3,400 acres seeding, 1,000 acres interseed, 150 acres burn rehab)
<u>6</u>	miles of pipeline
<u>0</u>	reservoirs
<u>+</u>	miles of fence (gap fence to improve fisheries habitat)
<u>0</u>	wells

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Devils Creek Complex	Nat'l. Register	3,000

J) Other Special Actions (critical watershed, timber, etc.)-None



MUA-14

Salmon Falls Creek.

Description

The Salmon Falls Creek area is a 30 mile long canyon on the eastern boundary of the resource area. The Balanced Rock Road forms the boundary of the area on the north and the Salmon Falls Creek Dam/Reservoir determines the southern boundary. The area consists of 2,947 acres of federal lands. The canyon offers a unique natural ecosystem.

Objectives

Retain all federal lands in public ownership (2,947 acres).

Draft Resource Management Plan

Special actions: No mechanical equipment in canyon.

G) Activity Plans - RAMP

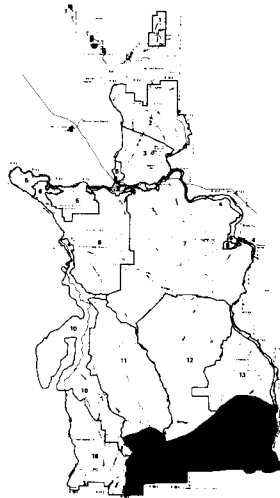
H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian:

Gap fences are proposed to improve 4.0 miles of riparian habitat.

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Salmon Falls Ck & Canyon	SRMA-Outstanding Natural Area	2,947

J) Other Special Actions (critical watershed, timber, etc.) - Work with Department of Fish and Game to determine if the canyon contains possible bighorn sheep habitat.



MUA-15

Jarbidge Foothills.

Description

The Jarbidge Foothills area is located in the far southeastern portion of the resource area and is bordered by the Humboldt National Forest to the south, Salmon Falls Reservoir and Upper Salmon Falls Creek to the east, the East and West Devils Creek and Inside Desert MUAs to the north and the Jarbidge River (East Fork) on the west. The area contains 205,238 acres of public lands (182,962 acres in Idaho, 21,829 acres in Nevada); 13,063 acres state lands (Idaho), and 71,942 acres private lands (58,663 acres Idaho, 13,279 acres Nevada). The terrain is mountainous, with elevations ranging from 5500' to 7000'. Vegetation varies from low sage at the lower elevations to aspen/mahogany and big sage at the higher elevations. All or part of 24 allotments are grazed by cattle and sheep belonging to 18 users.

The lower elevation areas consist of the crucial winter ranges for mule deer and antelope while the upper elevations serve as key habitat for summering mule deer. In addition, sage grouse use this area extensively for summer and fall use. The uplands provide abundant forbs and insects for sage grouse chicks. The area also contains the bighorn sheep habitat in the Jarbidge River (East Fork) Canyon.

Objectives

Consider for transfer from federal ownership 1,005 acres through sale or exchange (T2). Retain all remaining public lands (204,233 acres).

Issue 24,805 AUMs of forage for livestock by the year 2005.

Improve the ecological condition in the area on 1,640 acres through the development of range improvements.

Manage big game habitat to support 1,500 mule deer, 1,170 antelope, and 56 bighorn sheep. Protect crucial winter big game habitat.

Improve 4,900 acres of wildlife habitat by the year 2005.

Improve 4.7 miles of fisheries habitat and 9.6 miles of riparian habitat by the year 2005.

Designate and manage 2,653 acres of Salmon Falls Creek as an SRMA and 4,320 acres of Jarbidge River (all forks) as an SRMA.

Make available 199,148 acres (97%) available for energy mineral exploration and development and 197,230 acres (96%) for nonenergy minerals. Retain subsurface ownership.

Multiple Use and Transfer Area Classes

Acres classified -- $\frac{204,233}{0}$ Moderate, $\frac{0}{1,005}$ Intensive, Limited, Transfer

Actions

A) Forage Use Levels (AUMs) -

$\frac{24,456}{24,805}$	Livestock initial	$\frac{*}{439}$	Elk
$\frac{0}{49}$	Livestock 20 year	$\frac{132}{}$	Mule Deer
	Wild horses		Pronghorn
	Bighorn Sheep		

B) Preliminary Wilderness Recommendation: N/A

C) Lands

1. Utility avoidance area/restricted - Portions of Devils Creek - 1,000 acres - (surface, underground).
2. Close to agricultural entry - 205,238 acres.

Draft Resource Management Plan

D) Motorized Vehicle Management (Acres)

122,355 open; 75,563 limited; 5,320 closed.

Type of limitation-seasonal on crucial mule deer & antelope winter range and in portions of Devils Creek.
Areas closed-Bighorn sheep habitat.

E) Minerals Management

199,355 acres open to entry
88,856 acres limited (Area & Type) - No surface occupancy of crucial mule deer & antelope winter range from 12-1 to 4-30, antelope fawning range through 6-30; on 1,000 ac of Devils Creek complex year round & 2 SRMAs (7,973 ac) or within 500 feet of stream banks of perennial or intermittent streams or edges of reservoirs; bighorn habitat yearlong.
8,008 acres closed (Area) - Devils Creek (1,000 ac); bighorn habitat/E.F. Jarbidge (4,320 ac); other (2,688 ac).

F) Fire Management

Suppression - 205,238 acres full; 0 acres limited
Special actions:

G) Activity Plans - Multiple Use Activity Plan; RAMP-Jarbidge Forks; RAMP-Salmon Falls Creek & Reservoir; AMP for Allotments 1024, 1027, 1047, 1050, 1067, 1070, 1071, 1084, 1088, 1092, 1094, 1096, 1118, 1125, 1131.

H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian.

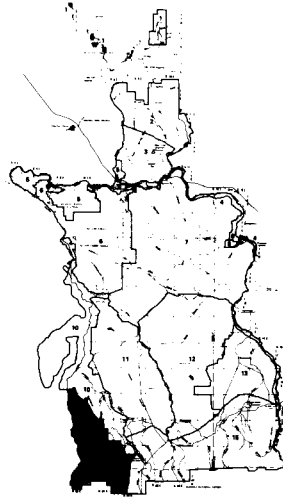
640 acres of brush control (prescribed burn)
5,900 acres reseeding (1,000 acres seeded with grasses, forbs & shrubs for livestock; 3,750 acres interseed to benefit big game habitat; and rehab 1,150 ac of existing burns with grass, forbs & shrub mixture for mule deer)
0 miles of pipeline and 0 watering areas
0 reservoirs
+ miles of fence (up to 9.6 stream miles of gap fencing for riparian and 4.7 stream miles for fisheries).
0 wells

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Devils Creek Complex	Nat'l. Register	1,000
E.F. Jarbidge (bighorn habitat)/River	ACEC/SRMA	4,320
Salmon Falls Upper Ck & Canyon	SRMA	2,653

J) Other Special Actions (critical watershed, timber, etc.)-

- * AUMs To be provided if elk herd (introduced from Nevada) becomes established in the MUA (see page 84).



MUA-16

Diamond A.

Description

The Diamond A area consists of 97,980 acres (74,561 Idaho, 23,246 Nevada) federal; 5,786 acres state (Idaho), and 15,867 acres (2,937 Idaho, 12,930 Nevada) private lands. The area is bordered by the Bruneau River to the west, the Bruneau-Jarbridge WSA to the north, the East Fork of the Jarbridge River to the east and the Humboldt National Forest boundary in Nevada to the south. Average elevation is 5300' with higher elevations in the southern portion of the area. Vegetation is big sage/bluebunch wheatgrass over most of the area.

The area contains 3 allotments grazed by cattle belonging to 6 users and also contains bighorn sheep habitat.

Objectives

Consider for transfer from public ownership 280 acres through sales or exchange (T2). Retain all remaining public lands (97,700 acres) in federal ownership.

Issue 9,734 AUMs of forage for livestock by the year 2005.

Implement vegetative manipulation on 14,000 acres.

Improve the ecological condition in the area on 10,000 acres through the development of grazing systems and range improvements by 2005.

Draft Resource Management Plan

Manage big game habitat to support 2,677 mule deer, 151 antelope, and 100 bighorns. Protect all crucial big game winter habitat.

Improve 1,350 acres of bighorn habitat.

Maintain current condition of riparian habitat.

Make available 97,926 acres (99+%) available for energy mineral exploration and development and 93,606 acres (96%) for nonenergy minerals. Permit no surface occupancy during winter periods.

Multiple Use and Transfer Area Classes

Acreege classified -- 97,700 Moderate, 0 Intensive,
0 Limited, 280 Transfer

Actions

A) Forage Use Levels (AUMs) -

<u>7,473</u>	Livestock initial	<u>*</u>	Elk
<u>9,734</u>	Livestock 20 year	<u>541</u>	Mule Deer
<u>0</u>	Wild horses	<u>15</u>	Pronghorn
<u>107</u>	Bighorn Sheep		

B) Preliminary Wilderness Recommendation: N/A

C) Lands

1. Utility avoidance/restricted area - bighorn sheep habitat - 4,320-(surface, underground).
2. Close to agricultural entry - 97,980 acres.

D) Motorized Vehicle Management (Acres)

14,267 open; 67,626 limited; 4,320+ closed.

Type of limitation - No over the snow on crucial deer winter range.
Areas closed - bighorn sheep habitat

E) Minerals Management

97,926 acres open to entry
83,713 acres limited (Area & Type) - No surface occupancy on crucial deer/antelope habitat from 12-1 to 4-30, antelope fawning range through 6-30; or within 500 feet of stream banks of perennial or intermittent streams or edges of reservoirs; bighorn habitat yearlong.
4,374 acres closed (Area) - bighorn habitat (4,320 ac); other areas (54 ac).

F) Fire Management

Suppression - 97,980 acres full; 0 acres limited

Special actions: See Appendix I.

G) Activity Plans - RAMP-Jarbidge Fork, AMP for Allotments 1021, 1077, 1102.

H) Proposed projects/actions for range, wildlife, cultural, fisheries, riparian.

<u>8,000</u>	acres of brush control (method - 2,000 burn, 6,000 spray)
<u>7,350</u>	acres reseeding (mixture/type - 6,000 ac suitable forage species for livestock & rehabilitate 1,350 ac with grasses, forbs & shrubs that benefit bighorns).
<u>4</u>	miles of pipeline
<u>0</u>	reservoirs
<u>0</u>	miles of fence
<u>0</u>	wells

I) Special Designations

<u>Area</u>	<u>Type of Designation</u>	<u>Acres/Miles</u>
Jarbidge Forks/bighorn habitat	ACEC/SRMA	4,320

J) Other Special Actions (critical watershed, timber, etc.)-None

*AUMs To be provided if elk herd (introduced in Nevada) becomes established in the MUA (see page 84).

Areas of Critical Environmental Concern

This plan recommends ACEC designation for three of the four areas which met the criteria (of relevance and importance) to be considered for ACEC designations (Hagerman Paleontologic Area; Sand Point Paleontologic, Geologic, and Cultural Area; and the Bruneau/Jarbidge River ACEC). The fourth area, Salmon Falls Creek and Canyon is recommended to be a Special Recreation Management Area - Outstanding Natural Area. The ACECs are shown on Map 5. The following summarizes the description and special management requirements for the three ACECs proposed in the RMP. Additional information and detailed writeups are available at the Boise District BLM Office.

NAME: THE HAGERMAN PALEONTOLOGIC AREA OF CRITICAL ENVIRONMENTAL CONCERN

Management Objectives

The primary objective of the ACEC is to protect the paleontologic resources and their associated geologic setting from destruction and loss and to allow for professional research and collecting.

The secondary objective is to insure that the scenic, cultural, and wildlife values are maintained.

Description (Including Relevance and Importance)

Site Description

The Hagerman Paleontologic ACEC would encompass 4,394 acres that are located in southwestern Idaho along the west side of the Snake River approximately 2 miles west-southwest of Hagerman, Idaho. All of the lands involved are public domain administered by the Bureau of Land Management (BLM) except one section which is state land managed by BLM. The Hagerman Local Fauna consists of diatom, mollusk, fish, amphibian, reptile, bird, and mammal fossils of Pliocene age (5.3 to 1.67 Mybp) (GSA, 1983). More specifically, they are the Blancan Land Mammal Age (3.5 to 1.9 Mybp) (Kurten and Anderson, 1980). The fauna assemblage present is one of "the most nearly complete successions of Blancan Local Fauna known..." (Kurten and Anderson, 1980). It is also considered to be the richest locality known. Materials recovered from Hagerman can be measured in terms of tons and thousands of specimens. Other resource values include a portion of the Oregon Trail which crosses the southern part of the area. The adjacent Snake River is habitat for the white sturgeon, a "species of concern" and the shoshone sculpins, the only fish species in Idaho that has been nominated for federal protection as a rare and endangered species. This section of the river is also an important resting and nesting area for waterfowl and other bird species such as the Canada goose. This locality also has special scenic values, and is managed as a Class I visual area.

Relevance

The Hagerman ACEC is considered relevant as part of a natural system of process based on the existence of an exceptionally rich deposit of fossils of scientific interest that record past natural systems and earth processes and have high value for expanding scientific knowledge and education. The paleontologic specimens and sites at Hagerman meet the "scientific values" criteria of Section 102 of FLPMA and the "natural system or processes" criteria of Section 103 of FLPMA.

Importance

The Hagerman fossils and fossil localities have a highly significant scientific interest as evidenced by the extensive literature published. Vertebrate fossils in general are unique and rare in the fossil record. Certain fossils found at Hagerman are even rarer (complete "horse skeletons", fossil bird bones, an almost complete fossil Emydid Turtle, and others). The materials present are in general particularly well preserved specimens of a fragile, rare, and irreparable resource that is sensitive and vulnerable to loss and destruction. The fossil assemblage is unusual in its quality, quantity, and diversity when compared to other major fossil localities of Blancan Age. Important new data on evolutionary trends, the development of biological communities in the history of life and the interaction between organisms has been obtained from the study of Hagerman and its associated fauna. The site has international significance because of the information gained on cenozoic biostratigraphy, paleoclimatology, paleozoography, paleoecology, and the understanding of evolution of certain lineages. The site has been designated as a National Natural Landmark and qualifies as a Research Natural Area.

Causes for Concern

Various forces are presently adversely impacting this internationally significant paleontological area. These include grazing, private collecting, off road vehicle (ORV) use, farming trespass including road building and irrigation lines, and severe erosional problems related to the irrigation practices and poor road design.

Special Management Requirements

Prevent agricultural trespass including irrigation lines.

No surface disturbing activities will be allowed unless they are directly related to studies or research pertinent to the Paleontologic Resource and its associated geologic setting, or, unless they can be mitigated in such a way as to maximize the information gained on the Paleontologic Resource and its associated geologic setting.

Any surface disturbance allowed must be mitigated to blend with the existing topography and visual aspects of the site so as to be substantially unnoticeable. If this is not economically or practically feasible, the surface disturbance will not be allowed.

Withdraw the lands from all types of land disposals.

Stop the water related erosion now occurring, prevent further water related erosion and insure that the vegetative cover is maintained to minimize wind erosion.

Prevent sediment discharge into the Snake River.

Disallow any new buildings on the site unless they are directly related to the preservation or interpretation of the site.

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Disallow any use that causes the destruction of paleontologic specimens.

Obtain those lands necessary to insure that the paleontologic resource is maintained and managed in a secure setting.

Compatible Uses

The existing use of the site for hunting and fishing are compatible uses. The use of the area for paleontologic materials collection by professionals is also compatible.

The ORV use of the site is a compatible use only if it can be shown that the present destruction of paleontologic sites and materials and the use of non designated trails will be stopped and will not occur in the future.

Cattle grazing on the site is compatible so long as no sites or specimens are being adversely impacted and the site is not developed to attract the public.

NAME: THE SAND POINT PALEONTOLOGIC, GEOLOGIC AND CULTURAL RESOURCE AREA
OF CRITICAL ENVIRONMENTAL CONCERN

Management Objectives

The primary objective of this ACEC is to protect the paleontologic and cultural resources on the site from destruction and loss.

The secondary objective is to protect the geologic features present and to insure that the scenic and wildlife values are maintained.

Description (Including Relevance and Importance)

Site Description

The Sand Point Paleontologic, Geologic, and Cultural Resource ACEC will consist of 814.5 acres located in southwestern Idaho along the Snake River, one mile south of Hammett, Idaho. While the ACEC will be managed primarily for its paleontologic, geologic, and cultural resource values, it also includes habitat for the long-billed curlew, a state classified sensitive species, and the bald eagle, an endangered species. The adjacent section of the Snake River is prime white sturgeon habitat, a "species of special concern" for the Idaho Department of Fish and Game. The Sand Point locality is also quite scenic and is managed as a Class I visual area. All of the lands involved are public domain administered by the Bureau of Land Management.

Relevance

The proposed Sand Point ACEC is considered to be relevant as part of a natural system or process, based on the existence of an important geologic feature of the Glenn's Ferry Formation and the existence of important paleontologic localities and materials. The site is also relevant based on the presence of important cultural values. This is based on the presence of an archaeologically significant area of prehistoric Indian habitation (that is presently being endangered by mining activity) the presence of the Historic Medbury Ferry crossing and a section of the Oregon Natural Historic Trail.

Importance

Paleontologic Resource - The Sand Point Local Fauna consists of mollusk, fish and mammal fossils three million years old (Conrad, 1980). Minnows and mammals are common (Smith et al., 1983). The mammal assemblage present includes muskrat, horse, proboscidian, pocket gophers, rabbits and voles (Smith et al., 1983). The fish species is in itself highly relevant and significant as it represents the most advanced and last occurrence of a diversity of minnows, suckers, sculpins, catfish and sunfish never again seen in western North America (Smith et al., 1983). Sand Point is the type locality for a new species of microtine rodent first reported by Hibbard in 1959. The locality also represents the easternmost occurrence of fossil fish of Mylocheilus spp., Idadon spp., and the sculpin species (Smith, 1975). The locality is stratigraphically 180 meters above Hagerman and is stratigraphically below such faunal localities as Chalk Flat, Flat Iron Butte, and Grand View which are all located further to the west and are considered to be younger faunal assemblages. This intermediate stratigraphic, geographic and paleontologic position is an important aspect of Sand Point (Conrad, 1980). Many different paleontologic articles have been published which deal with the Sand Point local fauna.

Geologic Resource - Within the Hagerman-Glenns Ferry area there are only two localities which have fluviatile sediments primarily composed of brownish gray, thick bedded sands with minor amounts of interbedded silt and clay. The Sand Point fluviatile facies, and the fluvial depositional environment in general, has the smallest areal extent within the region of the Glenns Ferry Formation. An integral part of the study of any sedimentary formation is the development of stratigraphic sections, paleomagnetic sections, fossil localities and the dating of ash beds if present. The Sand Point locality has been used for all of the above purposes and is therefore an important and relevant part of the study of the Glenns Ferry Formation.

The study of the Glenns Ferry Formation is important and relevant with more than local significance because of its use in determining the drainage of this part of western North America previous to the capture of the Snake River through Hells Canyon and in determining cenozoic paleogeography and biogeography (Taylor, 1980).

Cultural Resource - Sand Point contains a prehistoric habitation site which stretches approximately 1/2 mile along the bank of the Snake River. The site has been identified as significant by the State Historic

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Preservation Officer. A section of the Oregon Trail traverses the area and a historic ferry crossing (Medbury Ferry) is also located within the proposed ACEC.

These resources are important because they are located on one of the very few stretches of BLM managed land in the resource area on the Snake River Terrace, and therefore represent one of the few opportunities for federal protection of a type which has been destroyed in other locales through agricultural, domestic and livestock use.

The cultural resources are critical because of their susceptibility to damage by vandalism, erosion and mineral extraction.

Causes for Concern

Two mining claims affect the cultural site located within the ACEC. A mining notice directly endangers the site. If mining activity continues in this area, the site may be completely destroyed.

The fossil localities are located in sediments that are unconsolidated, on oversteepened slopes and subject to the water related problems presently occurring at Hagerman. The lava flow near the top of the rim may act as a collector for the excess water applied to the proposed farm project on the tableland above this area. If this occurs, the water may discharge over the lava flow where it outcrops at the rim. Severe erosion could occur as it has at Hagerman. Direct surface discharge of irrigation lines could also cause severe gullying.

Special Management Requirements

Prevent agricultural trespass, including irrigation lines.

No surface disturbing activities on the site will be allowed unless they are directly related to studies or research on the cultural, paleontological, or geological resources present or, unless they can be mitigated in such a way as to maximize the information gained on the cultural, paleontological and/or geological resource impacted.

Any surface disturbance allowed must be mitigated to blend with the existing topography and visual aspects of the site so as to be substantially unnoticeable. If this is not economically or practically feasible, the surface disturbance will not be allowed.

Withdraw the lands from locatable mineral location and all types of land disposals.

Obtain an easement, through the private lands that the access road traverses, to insure access to the site.

Prevent water erosion on the site and insure that vegetative cover is maintained to minimize wind erosion.

Prevent sediment discharge from entering the Snake River.

Areas of Critical Environmental Concern

Do not allow any buildings on the site unless they are directly related to the preservation or interpretation of the site.

Compatible/Incompatible Uses

The existing mining claims are incompatible with the purposes of this ACEC. The BLM will continue to monitor the mining activity and work with the miners to mitigate the impacts. A determination of the miners valid existing rights will be made by the end of FY-87.

Any development on the tableland above the rim that would cause erosion on the site would be incompatible with the purposes of this ACEC. It is therefore recommended that the lands involved with this ACEC and already classified as suitable for Carey Act development be reclassified as unsuitable and the lands involved be retained in public ownership.

This recommendation is necessary to meet the requirement of having a boundary of adequate size and configuration to insure that the necessary special management attention can be provided in a secure setting.

Existing uses of the site for hunting and fishing are compatible uses. The use of the site for paleontological materials collection by professionals is also compatible.

NAME: BRUNEAU/JARBIDGE RIVER - AN AREA OF CRITICAL ENVIRONMENTAL CONCERN
FOR BIGHORN SHEEP HABITAT AND CULTURAL RESOURCES

Management Objectives

Protect and enhance 80,994 acres of California bighorn sheep habitat in the West Fork of the Bruneau River and the Jarbidge River system.

Protect, maintain, or improve bighorn sheep habitat to a good range condition class.

Protect and maintain the cultural, geologic, scenic, and natural values present in the area.

Description (including Relevance and Importance)

Site Description

This 84,111 acre area has numerous rugged, deep canyons which provide high quality habitat for California bighorn sheep, have exceptional scenic and natural qualities, and contain valuable cultural sites. This area is within portions of MUA 10, 11, 15, and 16 in the southwest part of the Jarbidge Resource Area. See Map 5 for location.

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The two river canyons and small side canyons offer rugged high quality habitat for California bighorn sheep. In December of 1982, 12 California bighorns were transplanted to the West Fork of the Bruneau River. This initial transplant consisted of 10 ewes and 2 rams. Five lambs were counted by Idaho Fish and Game in 1983. IDF&G has planned to supplement this initial transplant with 25 additional sheep in 1984.

During the same 1983 transplant, IDF&G delivered bighorns to the Nevada Department of Wildlife for transplant in Nevada on the East Fork of the Jarbidge River. Twelve sheep were released. Three or four of the original transplant were observed in the Jarbidge wilderness during the summer of 1983. An unknown number of these sheep were killed by mountain lions. One radio collared ewe with lamb moved to the mouth of the Jarbidge River.

One of the most interesting side canyons on the Jarbidge River is Cougar Canyon. It holds a variety of topographic features, numerous cultural sites, and a rich plant community. The lower part of the canyon bottom has never been grazed. Two natural stone arches and the high sculptured walls create a maze-like passage. Caves, large and small, are found along the cliffs. The canyon creates a cool shady microclimate that encourages ferns and mosses. The cool fern-covered walls are a striking contrast to the hot dry lands above. Cougar Canyon provides habitat for two sensitive species: California bighorn and Baley's Ivy. It contains some of the region's best stratified archaeological sites. Cougar Canyon, the East Fork Jarbidge River Canyon, and other side canyons offer outstanding scenic values, as well as being unique natural areas in their own right.

Relevance

The Bruneau/Jarbidge River ACEC is considered relevant as part of a natural system or process, based on the existence of bighorn sheep habitat, and important geologic, scenic, natural, and cultural values.

Importance

Bighorn Sheep Habitat - Fewer than 1,700 California bighorns exist in the United States. The entire world population of California bighorns is limited to about 3,500 animals. Maintenance of existing populations and the reestablishment of other populations is needed to ensure the continued existence of these bighorns. Protection of bighorn sheep habitat has been identified as a major concern by the Idaho Department of Fish and Game, various state and national environmental organizations as well as numerous individuals during the development of the Owyhee and Bruneau MFPs and associated grazing EISs, as well as the Jarbidge RMP/EIS.

Protection of bighorn habitat is dependent upon maintaining a separation of use between domestic livestock and the bighorn sheep. Bighorns generally avoid using areas where concentrations of other ungulates (cattle, horses, sheep, deer, antelope, etc.) occur. Bighorns restrict their habitat use to areas of less disturbance. This habitat restrictions can cause temporary forage overuse and intraspecific stress, or both. The result is a lower carrying capacity. If the carrying

capacity is reduced too far, the insidious effects of inbreeding can result in total loss of the population.

Bighorns also avoid contact with people. Close proximity to the population centers of southwest Idaho results in numerous and increasing human visits to the Bruneau/Jarbridge River area. Increasing numbers of humans rafting the river complex enlarge the chance of driving sheep from prime to marginal habitat. In addition to hunting, rafting, and fishing, there is a moderate amount of human activity tied to the bighorns themselves. Photographers interested in photographing bighorns hike and backpack into the area. This causes additional disturbance to the sheep. If the level of disturbance increases significantly above current levels, the sheep population may decline.

Maintenance of suitable bighorn habitat in this area is dependent upon maintaining an adequate high quality food supply and limiting the amount of disturbance from people, vehicles, livestock, or other activities.

California bighorn sheep have been designated as a "sensitive species." "Sensitive species" refers to wildlife species which have been officially designated by the BLM and Idaho Department of Fish and Game through a Memorandum of Understanding. They are species for which special management considerations are necessary to ensure their continued existence. Although these species are not in as much jeopardy as endangered or threatened species, further population declines or habitat determination may result in the more restrictive listings.

Cultural Resources - The entire river complex is rich in cultural resources. These resources are important because most are protected sites in rock shelters and caves which contain stratified deposits. This is in sharp contrast to the thin lithic scatters which amount for 99% of the sites in the region. Furthermore, the area includes one or two known undisturbed cave sites in the southwest part of the state. The cultural resources are critical because they are susceptible to damage by "potters," illegal artifact thieves. Special protective management is necessary because at present about 80% of the caves have been "potted" and partially damaged, and 20% of the values have been destroyed. If vandalism by potters continues, the destruction could be complete.

Geologic Values - Much of the river canyon complex, especially Cougar Canyon, is characterized by welded ash tuff. This material often forms tall thin spires of rock called hoodoos. To the east is the geologic boundary with deep layers of rhyolite flows. Cougar Point tuff is one of the thickest and most distinctive units in this zone of welded ash tuff. It has the capacity for the most scenic canyons. This tuff is best represented in the Jarbridge Canyon and its side drainage, Cougar Canyon. The welded ash tuff extends westward but because of different rates of uplift, frost action, and spalling, the canyons there are less spectacular. The West Fork Bruneau is the largest of these canyons. Its cross-section is wider, more open and somewhat less scenic. Thus, Cougar Canyon may hold the best example of the most distinctive tuff in a large regionally significant sequence of deposits.

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Scenic and Natural Values - Scenic values are recognized as important by the Department of Interior. Of the total 121 miles of the Jarbidge and Bruneau Rivers that is recommended for Wild and Scenic designation, approximately 90% is included within the proposed ACEC boundary. Most of the ACEC is within a wilderness study area which is managed as a Visual Class I area. The southern portion of the ACEC is managed as a Visual Class II area. As mentioned above, the natural geology of the area has created very distinctive and spectacular scenic canyons. In addition, the naturalness of many of these canyons contributes to the area's scenic quality. For instance, the maze-like canyon below the arches in Cougar Canyon represents a significant natural system. It has never been grazed and harbors sensitive plants. The unusual degree of solitude and naturalness found in this area is a significant factor in why the area is such a high quality habitat for bighorn sheep.

Cougar Canyon is also potential habitat for rare aquatic invertebrates. It is unique among the Jarbidge side canyons for its perennial water and cool moist exposures. Floods may eliminate rare species from similar habitat on the Jarbidge River. At those times Cougar Canyon may be the only foothold for certain populations.

There are three distinct vegetation types in the canyon. These are unusual fern-covered caves, the common sage-grass associations and areas of riparian vegetation. The fern-covered caves, located in the middle of the desert, are a disjunct community of regional significance. Thousand Springs previously was a larger example of this community but it is rapidly being eliminated by development. Two prominent species in Cougar Canyon are (1) Lady fern (Athyrium felix-famina (L.) Roth) and (2) a flowering plant on the Idaho list of sensitive species, Baley's ivy (Ivesia baleyii). By preserving this undisturbed area of prime habitat, detailed evaluation of effects of development in similar habitats may be unnecessary.

The East Fork of the Jarbidge River is also a unique natural area that is a good example of the transition zone between the Great Basin and Columbia Provinces. Much of this area is in good and excellent range condition.

Special Management Requirements

The following special management measures will be undertaken to protect the existing and potential bighorn sheep habitat areas and the scenic and natural values within the area.

1. The management priority for the canyons is for bighorns and other wildlife. Where necessary to prevent livestock access to canyons, livestock management measures (i.e., salting or fencing) will be implemented.
2. A separation of use between cattle and bighorn will be maintained by not developing livestock water sources within one mile of bighorn habitat.

Areas of Critical Environmental Concern

3. The conversion of cattle use to domestic sheep use will not be allowed unless the use will not be within one mile of the habitat and reasonably be guaranteed to be maintained by physical barrier.
4. Retain public lands within bighorn habitat, unless a proposed exchange results in the acquisition of higher quality habitat.
5. Maintain the current low level of human disturbance in bighorn habitat by not constructing or upgrading any roads that would lead to or encourage human disturbance in bighorn habitat.
6. No surface occupancy will be allowed for oil and gas and geothermal exploration or development within the habitat area.
7. The area will be recommended for withdrawal from the 1872 mining laws.
8. Activities or developments which would impair the scenic quality of the area would not be allowed. The area will be managed as VRM Class I or II with the canyon system as the Key Observation Point.
9. Motorized vehicle use would be allowed only on designated roads and trails.

Compatible and Incompatible Uses

Existing primitive recreation uses of the river canyon complex are compatible uses.

ORV use, livestock use, utility corridor use, mineral development, and hydro development are incompatible uses.

Resource Management Guidelines

The development of this plan and the implementation of the final decisions has been and will be guided by federal and state laws, federal rules and regulations, and cooperative and legal agreements. The following section describes the standard operating procedures, policies, and management guidelines which will be applicable regardless of which alternative plan (A, B, C, or D) is selected for implementation.

Public Land Management

The public lands will be managed under the principles of multiple use and sustained yield as required by FLPMA. Any valid use, occupancy, and development of the public lands, including, but not limited to those requiring rights-of-way, leases, and licenses will be considered, subject to applicable environmental review procedures, unless specifically excluded in the plan. In some areas, however, environmental values, hazards, or manageability considerations may require limitations on either the type or intensity of use, or both. Those limitations are identified in the plan's land use allocations and management objectives for specific

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areas within the public lands. BLM will include stipulations and special conditions as necessary in leases, licenses, and permits to ensure the protection and preservation of resources.

Lands

General

The public lands will be retained in Federal ownership and managed by BLM according to the principles of multiple use and sustained yield, except those lands specifically identified in the plan or amendment as transfer areas.

Withdrawals

It is BLM policy to review all withdrawals on and classifications of public lands by October 20, 1991, and to eliminate all unnecessary withdrawals and classifications. Reviews will be made following the land use planning process and will consider the following:

1. For what purpose were the lands withdrawn?
2. Is that purpose still being served?
3. Are the lands suitable for return to the public domain (e.g., not contaminated or "property" such as buildings)?

The environmental assessment or planning process will be followed to consider alternative methods of meeting the withdrawal/classification objectives (e.g., rights-of-way, cooperative agreements).

Withdrawal/classification modifications and extensions must provide for maximum possible multiple uses, with particular emphasis upon mineral exploration and development.

Transfers

Transfer areas are those public lands identified through the planning process which are available for transfer from federal ownership. Transfer of public land within a transfer area may be accomplished by any means authorized by law. Specific transfer methods may also be specified. Final transfer from BLM jurisdiction, however, is subject to a decision by the authorized officer, based on detailed analysis and such documentation as prescribed by law or regulation.

Mineral in character lands will not be identified as transfer areas.

Wilderness study areas (WSAs) and designated wilderness areas will not be identified as transfer areas.

Lands may be acquired by BLM as authorized by law, but only within retention areas (multiple use areas). Objectives for acquiring lands in connection with BLM programs may be established in the RMP.

BLM will manage transfer areas until transfer of title occurs. Management actions will be taken as necessary to meet resource or user needs. Public investments in transfer areas will be kept to a minimum.

Land disposal actions are, primarily, accomplished under sale, agricultural entry, exchange, and R&PP land laws. Miscellaneous transfers can also occur through Color of Title actions, airport conveyances, and State in lieu selections.

All disposals of public lands must be consistent with the planning requirements of FLPMA and must also be evaluated through the environmental assessment process. Public notice will be given on each disposal action and each action may be protested or appealed.

A preliminary consideration in all disposal actions is to provide protection for existing rights, access, and future anticipated needs. This protection is provided for through the issuance of rights-of-way to existing users or reservations to the Federal government in areas of anticipated needs.

General considerations for the major types of disposal actions are discussed below:

Agricultural - Consideration for allowing the use of public lands for agricultural development under the Desert Land and Carey Acts generally fall into four steps. They are:

1. The lands must be identified for disposal through the land use planning process.
2. The lands must be desert in character and physically suited for agricultural development by irrigation.

The following criteria are used to determine the suitability classification of potential agricultural lands:

- a. Any tract that contains 60% of Class IV or poorer soils will be classified unsuitable for disposal under the Desert Land or Carey Acts.

This is based on the Soil Conservation Service Soil Capability Classification System^{1/}.

- b. Any public lands containing known archaeological, paleontological, or historical values determined to be unique or possibly significant would be classified unsuitable for disposal pending further analysis.
- c. Any public lands where rare, endangered, threatened, or sensitive species of plants or animals are known to live (or nest) would be classified unsuitable for disposal, unless mitigation is possible.

^{1/} Agricultural Handbook No. 210.

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- d. Certain tracts of land identified for community needs such as landfills, gravel pits, sewage plants, schools, etc., would be classified unsuitable for disposal for agriculture.
 - e. Certain tracts of land identified as valuable for wildlife habitat would be classified unsuitable for disposal. The guidelines and analysis contained in the Environmental Statement (Agricultural Development for Southwest Idaho, February, 1980), Appendix 1-1, are used to select the wildlife leave areas.
 - f. Public land that does not qualify for agricultural use or disposal under Desert Land Act or Carey Act because of other existing uses will be classified unsuitable for disposal under these laws.
 - g. Certain tracts of land identified as having agricultural limitations based on slope and/or flood plain management will be classified unsuitable.
3. Post Classification (Allowance or Rejection)
- a. An economic analysis must show a high likelihood that the lands can be farmed at a profit over a long term.
 - b. Applicant must show a legal right to appropriate water including a permit to drill a well if part of the operation. Application that would contribute to the mining of groundwater will not be allowed. The Idaho Supreme Court Decision f13794 regarding use of Snake River water above Swan Falls Dam for agricultural development will be resolved before proceeding with most classifications.
4. Compliance
- a. The entryman must show compliance with cultivation, fund expenditure, irrigation system development, and publication requirements, and payment of required fees to obtain patent to the land.

Under Carey Act development, the Bureau's primary concerns are retention vs. disposal determination and physical suitability of the land. Application processing and feasibility study evaluations are the responsibility of the State of Idaho.

The BLM will continue to work closely with the Idaho Department of Water Resources under terms of a cooperative agreement to process existing Carey Act and Desert Land Entry applications.

Soil erosion which occurs on public lands as a result of excess irrigation flows from private agricultural lands will be treated as a trespass in order to stop the erosion and to rehabilitate the damage to public land.

Exchanges - Before an exchange can be consummated, the BLM must determine that the public interest will be well served by making the exchange. Full consideration will be given to improved Federal land management and the needs of State and local publics through an evaluation of the needs for lands for economic development, community expansion, recreation areas or opportunities, food, fiber, minerals, and wildlife. Another consideration is that lands must be equal in value, or, if not equal, a cash payment not exceeding 25 percent of the total value of Federal lands may be made by the appropriate party to equalize the values. Any lands delineated for transfer in the exchange only category but not needed to consummate the exchange, will be retained in federal ownership.

Sales - Sales of public lands can be made upon consideration of the following criteria:

1. Such parcel, because of its location or other characteristics, is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another Federal department or agency; or
2. Such parcel was acquired for a specific purpose and is no longer required for that or any other Federal purpose; or
3. Disposal of such parcel will serve important public objectives, including but not limited to, expansion of communities and economic development which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values. These include, but are not limited to, wildlife, grazing, recreation, and scenic values which would be served by maintaining such parcel in Federal ownership.

Sales may be made through (1) competitive bidding, (2) modified competitive bidding wherein some individual(s) may be given the opportunity to match the high bid, and (3) direct sale wherein the tract is sold at fair market value to a predetermined buyer. All sales must be made at no less than fair market value as determined by the approved procedure, generally an official appraisal.

Land Use Authorizations

Land use permits under Section 302 of FLPMA should be used as an interim management measure for resolving unauthorized use problems prior to a final land use/status determination, and for one time uses of short duration. Leases may be used as a longer term (5 to 10 years) interim management tool, particularly where future disposal or dedication to another particular land use is contemplated. The latter may allow for agricultural use on a site that may be needed in the future for communication purposes, materials source, or community expansion needs.

Land use permits (LUPs) for irrigated agricultural use of public land will be used sparingly and be restricted to resolve situations where other alternatives prove to be impractical, such as: 1) small areas of public land isolated between a farmed field and a canal, ditch, or road; and 2) renewal for an existing circular pivot already authorized by a LUP until

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the land is removed from agricultural production and rehabilitated or until the land is transferred from public ownership. In cases where a pivot must cross public land, the lands are to remain unfarmed and a LUP will be issued only for the crossing pivot.

Rights-of-way, under Title V of FLPMA, will be considered in the Jarbidge Resource Area except where specifically identified in the RMP for avoidance. Future communication site needs will be restricted to existing sites as much as possible. New sites will be considered if there is a demonstrated need and the resource conflicts are low or can be mitigated.

Cooperative agreements are to be used with other Federal entities for uses which are not appropriately covered by a right-of-way or a withdrawal. Flood control and aquifer recharge areas may be most appropriately covered by cooperative agreements.

Airport leases are considered only when a definite need has been shown, supported by a specific development and management plan, and a showing of financial capability to carry out the project.

Each action would require a site-specific examination. An environmental assessment would be prepared on the proposal with special emphasis placed upon identification and mitigation of adverse effects upon resource values such as rare, endangered, threatened, or sensitive species, cultural or paleontologic resources, wetland/riparian zones, and flood plains.

Unauthorized Use

It is BLM policy to identify, abate, and prevent unauthorized use of public lands. Trespass settlement is geared to recover at least fair market value for the unauthorized use and to require rehabilitation of the land and resource damaged by the unauthorized action. Settlements may be made through administrative action or through civil or criminal court proceedings.

Soil, Water, and Air

Soils

Soils will be managed to maintain productivity and to minimize erosion.

Project level planning will consider the sensitivity of soil, water, and air resources in the affected area or a site specific basis. Stipulations will ensure project compatibility with soil, water, and air resource management. All construction of management facilities and land treatments will be designed to minimize adverse impacts to the soil, water, and air resources. All areas disturbed during project construction will be reseeded with a mixture of grasses, forbs, and shrubs.

In agricultural development areas, maintain control of all lands necessary to prevent erosion resulting from irrigation and farming practices. These might include, but not limited to vegetation strips, slopes, drainage ways, flood plains, etc.

Minimize soil erosion by maintaining good, perennial vegetation cover on all sites. Manage native perennial range to attain good ecological condition. Rehabilitated or manipulated sites are considered to be in good condition from a watershed standpoint when at least 75% (by weight) of the sites potential for production is composed of perennial vegetation. Vegetation cover can be maintained or enhanced by monitoring grazing use based upon slope as follows:

<u>Slope</u>	<u>Utilization</u>
<20%	< 50%
20-35%	< 35%
35-50%	< 10%
>50%	0

Air

Under the Clean Air Act (as amended, 1977), BLM-administered lands were given Class II air quality classification, which allows moderate deterioration associated with moderate, well-controlled industrial and population growth. BLM will manage all public lands as Class II unless they are reclassified by the State as a result of the procedures prescribed in the Clean Air Act (as amended, 1977). Administrative actions on the public lands will comply with the air quality classifications for that specific area.

Water

A variety of methods may be employed to maintain, improve, protect, and restore watershed conditions. Priority will be given to meeting emergency watershed needs due to flooding, severe drought, or fire.

Water quality will be maintained or improved in accordance with State and Federal standards. State agencies will be consulted on proposed projects that may significantly affect water quality.

Facilities and structures designed to maintain or improve existing water sources, provide new water sources, control water level or flow characteristics, or maintain or improve water quality may be developed. BLM will work closely with the Idaho Department of Water Resources, Idaho Department of Health and Welfare, U.S. Army Corps of Engineers, and other local, state, and federal agencies to determine appropriate location and designs for such projects.

Management activities in riparian zones will be designed to maintain or improve riparian habitat condition.

Roads and utility corridors will avoid riparian zones to the extent practicable.

Water rights are administered by the Idaho Department of Water Resources. The Bureau complies with all State of Idaho water laws.

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Mitigation measures implemented because of SOPs or site specific analysis will be monitored for their effectiveness.

Range Resources

Allotment Categorization

All grazing allotments in the resource area have been assigned to one of three management categories based on present resource conditions and the potential for improvement (Appendix Table F-4). The "M" allotments generally will be managed to maintain current satisfactory resource conditions; "I" allotments generally will be managed to improve resource conditions; and "C" allotments will receive custodial management to prevent resource deterioration.

Allotment-Specific Objectives for the Improvement Category

Multiple-use management objectives will be developed by multiple use area. Future management actions, including approval of allotment management plans, will be tailored to meet these objectives.

Rangeland Management

Grazing Preference - Within each grazing allotment or group of allotments, a grazing preference is established at a level that will ensure that adequate forage is also available for wildlife and where present, wild horses. Sufficient vegetation is reserved for purposes of maintaining plant vigor, stabilizing soil, providing cover for wildlife, and other nonconsumptive uses.

Grazing decisions or agreements may be made for those allotments where adequate information exists. In the other allotments where there is inadequate information, additional data will be collected for up to five years to provide an adequate basis to begin implementation of any additional decisions needed. An initial stocking rate will also be established, which may be adjusted upwards or downwards in the final decision as a result of monitoring. All grazing decisions will be issued in accordance with applicable BLM regulations.

Implementing Changes in Allotment Management

Activity plans are commonly used to present, in detail, the types of changes required in an allotment, and to establish a schedule for implementation. Actions set for under the plan that affect the environment will be analyzed and compared to alternative actions. During the analysis, the proposal may be altered or completely revamped to mitigate adverse impacts. The following sections contain discussions of the types of changes likely to be recommended in an activity plan and the guidance that applies to these administrative actions.

Livestock Use Adjustments

Livestock use adjustments are most often made by changing one or more of the following: the kind or class of livestock grazing an allotment, the season of use, the stocking rate, or the pattern of grazing.

Forage use levels made from best estimates of forage available now and in 20 years (Appendix Table F-4) are guidelines to be used for the development of AMPs, CMAs, CRMPs, and for monitoring prioritization. Adjustments, up or down, from these estimates may be made as a result of monitoring.

All livestock use adjustments will be implemented through documented mutual agreement or by decision only after consultation, coordination, and cooperation with the affected livestock operators and other affected interests. Adjustments in grazing preference, either decreases or increases will be done in accordance with present Bureau policy and current grazing regulations (43 CFR 4100). Increases and decreases shown as initial stocking levels in Appendix Table B-4 and F-4 will be important guidelines in prioritizing the monitoring effort needed to gather additional data to support any needed allotment decisions. BLM policy emphasizes the use of a systematic monitoring program to verify the need for livestock adjustments, changes in season of use, management techniques, class of livestock, and similar actions.

Monitoring will also be used to measure the changes brought about by new livestock management practices and to evaluate the effectiveness of management changes in meeting stated objectives.

Range Improvements and Treatments

A variety of range improvements, grazing systems, and other range management practices may be considered in conjunction with livestock management on individual allotments. Such practices will be based on the range management category (maintain, improve, custodial) in which the allotment has been placed and will be formulated in consultation, coordination, and cooperation with livestock operators, and other interested parties.

The extent, location, and timing of improvements will be based on the allotment specific management objectives adopted through the resource management planning process; interdisciplinary development and review of proposed actions; operator contributions; and BLM funding capability.

Range improvement proposals will be shown by MUA or allotment group rather than specific location. Further site specific impact assessment will be necessary in many of the range developments when actual project layout and design has occurred. Cattleguards will be considered a part of the fence and will be installed as deemed necessary. Existing range improvements will be maintained in a current working condition as long as they are deemed necessary to management in all allotments.

All allotments in which range improvement funds are to be spent will be subjected to an economic analysis. The analysis will be used to develop a final priority ranking of allotments for the commitment of the range improvement funds that are needed to implement activity plans. The highest priority for implementation generally will be assigned to those improvements for which the total anticipated benefits exceed costs.

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Grazing Systems

There are existing grazing systems on eight AMPs. Additional grazing systems will be implemented. The type of system to be implemented will be based on consideration of the following factors:

- allotment-specific management objectives (multiple use area);
- resource characteristics, including vegetation potential and water availability;
- operator needs; and
- implementation costs.

Typical grazing systems available for consideration are described in Appendix F.

Wild Horses and Burros

A viable, healthy population of wild horses will be maintained in accordance with federal law. Where levels are to be adjusted, sufficient forage will be provided. Animals being collected for adoption or removed by other appropriate means will receive care and attention. Adopted animals will be monitored in accordance with BLM policy until title for the animal(s) is/are issued.

Terrestrial Wildlife

The guidance for wildlife cover (general and species specific), practices and procedures and are as follows:

General

Project clearances for threatened and endangered species would be conducted on all project proposals. The U.S. Fish and Wildlife Service will be consulted regarding actions that affect habitat of these species. All BLM management actions will comply with Federal and State laws concerning fish and wildlife.

In crucial wildlife habitats (winter ranges, raptor nest sites, strutting grounds, fawning habitat, etc.), major construction and maintenance work would be scheduled to avoid or minimize disturbance to wildlife. Areas disturbed during project construction will be reseeded with a mixture of grasses, forbs and shrubs to meet site specific needs or habitat requirements. Wildlife escape devices will be installed on all troughs and tanks. Range improvements will be designed to achieve watershed, wildlife and range objectives. All new fences will be built to standard Bureau wildlife specifications.

Forage/cover requirements will be incorporated into allotment management plans and will be specific to areas of primary wildlife use. Water will be provided in allotments (including rested pastures) during seasonal periods of need for wildlife. Vegetative manipulation projects will be designed to minimize impacts and improve wildlife habitat by including a variety of palatable shrubs, forbs and grass. The Idaho Department of Fish and Game will be consulted in advance on all vegetative manipulation projects.

Management actions within floodplains and wetlands will include measures to preserve, protect, and if necessary, restore their natural functions.

In crucial wildlife habitats (winter ranges, raptor nest sites, sage grouse nesting habitat, fawning habitat, etc.), occupancy for oil and gas activities and major construction and maintenance will be restricted as shown in Table 2. Note: These restrictions do not apply to oil and gas activities under Alternative B of the Draft Environmental Impact Statement.

Design all new spring developments and modify selected existing spring developments to protect wetted areas. Where possible, fence reservoirs and provide water for livestock away from the reservoirs. Wildlife habitat needs will be considered when reservoir size determinations are made.

Establish livestock grazing systems and practices that recognize the physiological requirements of forbs and shrubs.

Exchanges would be allowed within crucial wildlife habitat only if the wildlife value of the offered lands meets or exceeds the wildlife value of the selected lands. Crucial wildlife habitat will not be sold. Avoid constructing any roads within or closely adjacent to crucial wildlife habitat.

Manage all ecological sites on mule deer, pronghorn, elk, bighorn sheep and sage grouse habitat currently in fair or poor ecological condition, for good ecological condition. Monitor utilization of shrubs on crucial big game winter ranges.

Existing fences restricting wildlife movement will be modified to meet current specifications.

Protect and manage endangered, threatened and sensitive species habitats in order to maintain or enhance existing and potential populations within the planning area. Allow no adverse habitat alteration within 1/4 mile of any burrowing owl nest, 3/4 mile of any ferruginous hawk, golden eagle or prairie falcon nest, or within one mile of bighorn sheep habitat.

Improve raptor habitat by requiring all new power lines in raptor areas to be constructed to "electrocution proof" specification and that any problem lines now existing be modified to be "electrocution proof."

Maintain the short-grass habitats occupied by long-billed curlew.

Manage all wildlife habitat within the resource area to provide a diversity of vegetation and habitats.

Occupancy restrictions shown on Table 2 will be followed.

Sage Grouse

Where applicable, "Guidelines for Habitat Protection in Sage Grouse

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Range"-Western States Sage Grouse Committee, June 1974, will be followed. These include:

- No control work would be allowed where live sagebrush cover is less than 20%.
- Treatment measures should be applied in irregular patterns using topography and other ecological considerations to minimize adverse effects to the sage grouse resource.
- Where fire is used as a habitat management tool, it should be used in such manner as to result in a mosaic pattern of shrubs and open areas, within openings, optimally from 1 to 10 acres in size.
- Maintain the density of sagebrush canopy coverage at 20-30% within nesting habitats and at least 20% in wintering habitats.

Improve sage grouse brood rearing habitat where sagebrush canopy cover is greater than 20% by removing sagebrush in small irregular areas and then reseeding.

Mule Deer

Where applicable, "Mule Deer Habitat Guidelines" contained in Technical Note T/N 336 (USDI, BLM 1979) will be followed. These include:

- In range rehabilitation or manipulation projects, maintain a 60/40 ratio of forage area to cover area.
- Try to achieve a mosaic or mottled pattern of cover in prescribed burning and manipulation projects.
- Improve forage condition by establishing seedings or plantings of bitterbrush, four-wing saltbrush or other palatable shrub species on crucial mule deer winter range that presently has less than 30% palatable shrub composition by weight of the shrub component.

On crucial mule deer and elk winter ranges that do not have an adequate composition of early maturing grass, develop small seedings of Siberian wheatgrass and Russian wildrye to improve deer and elk nutrition in the early spring period.

Table 2
Wildlife Habitat Occupancy Restrictions

Species	No Occupancy Time Periods	Area
Game Species		
California Bighorn Sheep	Year Long	Entire Habitat Area
Yearlong Habitat		
Mule Deer		
Crucial 1/ Winter Range	12/1 - 4/30	Entire Habitat Area
Antelope		
Crucial Winter Range	12/1 - 4/30	Entire Habitat Area
Crucial Fawning Range	5/1 - 6/30	Entire Habitat Area

Table 2 (continued)

Species	No Occupancy Time Periods	Area
Elk		
Crucial Winter Range	12/1 - 4/30	Entire Habitat Area
Sage/Sharp-tailed Grouse		
Winter Range	12/1 - 2/15	Entire Habitat Area
Breeding Grounds	2/15 - 6/30	Entire Habitat Area
Nesting/Brood Rearing	4/15 - 6/30	2 mi. radius from lek
Sensitive Species		
Riparian Associated (River Otter, Mountain Quail)	Year Long	Within 500 ft. of riparian
Red-Band Trout/White Sturgeon/ Shoshone Sculpin	Year Long	Within 500 ft. of stream
Long-billed Curlew Nesting Areas	3/15 - 6/30	
Ferruginous Hawk Nests	3/15 - 6/30	3/4 mi. radius from nest
Osprey Nesting	4/15 - 8/31	3/4 mi. radius from nest
Western Burrowing Owl Nests	3/15 - 6/30	1/4 mi. radius from nest
White-faced Ibis Nesting Areas	3/15 - 6/30	
Endangered Species		
Bald Eagle/Peregrine		
Winter	12/1 - 3/31	
Nesting	Year Long	Within 1 mi. of nest
Species of Concern		
Golden Eagle Nest	2/1 - 6/30	Within 3/4 mi. of nest
Prairie Falcon Nest	3/15 - 6/30	Within 3/4 mi. of nest
Heron Rookeries	Year Long	Within 1/2 mi. of rookery
Special Habitats		
Reservoirs, ponds, lakes, streams, wetlands, marshes, riparian	Year Long	Within 500 ft.
BOP - Essential Nesting Habitat	Year Long	Entire Habitat Area

1/ Those areas where big game animals have demonstrated a definite pattern of use each year or an area where animals tend to concentrate in significant numbers (from Interagency Guidelines for Big Game Range Investigation - Idaho Department of Fish and Game, Bureau of Land Management, U.S. Forest Service).

Pronghorn

Where applicable, "Habitat Management Guides for the American Pronghorn Antelope" contained in Technical Note 347 (USDI, BLM 1980) will be followed. These include:

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- Grazing systems designed with the concept of key plant species, preferred pronghorn forage species for forbs and shrubs will be included as key species.
- Planting vegetative manipulation projects will include mixtures of grasses, forbs and shrubs.

Bighorn Sheep

Roads will not be built within one (1) mile of bighorn sheep habitat.

Conversion of cattle use to domestic sheep use will not be allowed within one mile of the identified bighorn sheep habitat.

Maintain a separation of use between cattle and bighorns by not developing livestock water sources within 1 mile of bighorn habitat.

Permit no adverse habitat alteration of potential bighorn sheep habitats.

Manage human use within bighorn habitat at levels which are not detrimental to the bighorn population.

Elk

If elk migrate onto BLM lands from adjacent land near the Idaho/Nevada border, provide forage and habitat for elk as follows:

- Provide forage and habitat for elk in areas where forage is available and plant communities would not be adversely impacted (based on current livestock use levels and projected mule deer population goals).
- Where overuse is identified, shift livestock use if excess forage is available elsewhere, or if possible, develop additional forage through habitat manipulation to accommodate both animals.
- If habitat use by elk is degrading the habitat or coupled with livestock grazing is resulting in overuse of the habitat or impacting the mule deer population through forage competition, coordinate with the Nevada Department of Wildlife to reduce elk numbers.

Any forest treatment which changes an area from cover to forage should be no more than 800 to 1,000 feet wide and be immediately adjacent to hiding cover. Design all logging sales to run the shortest period of time possible. Individual clearcuts should not exceed 40 acres in size. The last paragraph of mule deer guidance also applies.

Monitoring and coordination needs for elk are as follows:

- Identify elk use patterns as they occur on BLM lands in Idaho and Nevada.
- Identify areas of cumulative use due to elk and livestock.

- Monitor forage use to determine if overuse of plant communities is occurring.
- Coordinate elk management and the exchange of information with the livestock users in the area and other agencies including the N.D. of W., U.S. Forest Service, Soil conservation Service, and Idaho Department of Fish and Game.

Threatened, Endangered, and Sensitive Species

Priority for habitat management will be given to habitat for listed and candidate Threatened, Endangered, and Sensitive species. If any listed or candidate Threatened or Endangered species may be affected by BLM actions, the Fish and Wildlife Service will be consulted as prescribed by the Endangered Species Act.

Riparian and Aquatic Habitat

Riparian and wetland habitat will have a high priority for protection and improvement in accordance with national policy.

Provide a riparian buffer zone of sufficient width to protect riparian vegetation, fisheries, and water quality as determined by an interdisciplinary team of resource specialists, which includes fisheries and wildlife specialists. Utilize this zone for the general exclusion of the following activities:

- Limit new road construction that parallels streams - use best management practices when construction cannot be avoided,
- Fire (maintain full suppression),
- Timber harvest activities,
- Spraying of herbicides and pesticides, and
- Gravel extraction.

Utilize a 1,000 foot (500 feet each side) buffer zone for the total exclusion of the following activities:

- Oil and gas occupancy and/or surface disturbance (Boise District stipulations for oil and gas leases), and
- Introduction of chemical toxicants as a result of construction, mining, or agriculture.

Give special consideration for the mitigation of mining related activities i.e. tailing deposits, holding ponds, chemical dumps.

Maintain recommended instream flows (recommended by Idaho Department Fish and Game and BLM) for the maintenance and preservation of aquatic and riparian ecosystems. In all cases, allow no proposals that include dewatering of the streambed.

Design and establish grazing management practices including exclusion of livestock from stream systems to meet fisheries, riparian, and water quality needs. Allow no livestock related activity such as salting,

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feeding, construction of holding facilities, and stock driveways to occur within the riparian zone of a stream drainage system.

Avoid construction activities which remove or destroy riparian vegetation and instream fish cover. Monitor and implement periodic rest or non use when these stream systems do not show signs of adequate recovery.

In all activities including maintenance of roads, and other facilities follow the guidelines outlined in the best management practices manual for management and protection of western stream ecosystems (American Fisheries Society 1982).

All habitat improvement projects in riparian-stream systems will be coordinated and/or reviewed by the Idaho Department of Fish and Game.

The Snake River System (MUA-4) is a unique system. In all activities and proposed projects pertinent to the Snake River coordination with the Idaho Department of Fish and Game is recommended to establish joint objectives for protection of fisheries, riparian, and water quality.

Fire Management

Bureau Policy

The present Bureau policy is to aggressively suppress all new fires on or threatening public lands. Exceptions to this policy occur when management has analyzed alternatives to full suppression and prepared a written course of action prior to fire occurrences. These plans are termed Limited Suppression Plans and they establish criteria under which fires may be allowed to burn with little or no suppression action.

Less than full suppression also occurs whenever multiple fires ignite simultaneously. In these situations, priority is determined by value-at-risk. These values are predetermined by evaluating each resource separately to determine either beneficial or detrimental effects fire has on that resource. A numerical rating is given each resource, plus being detrimental and minus beneficial. After each resource has been evaluated individually, the totals are summarized to establish the values. Crews are dispatched to fires with the highest values until all crews are utilized. Fires with lower values may have delayed suppression times.

The Bureau cooperates with adjacent landowners on a case-by-case basis to reduce fire hazard where efforts are cost effective and the results will benefit BLM's fire management program. Cooperative efforts may range from consulting with private landowners on hazard reduction plans, to development of cooperative agreements and performance of hazard reduction.

Supplemental District Policy

The suppression policy of the Boise District is to extinguish fires with the least amount of surface disturbance possible. Whenever burning conditions and terrain are such that direct attack is not feasible, the suppression strategy is to burn out from existing natural barriers and established control points, such as roads.

Surface disturbing equipment, such as bulldozers, are utilized only with management approval. First priority is clearing of existing roads and second priority, when all other methods are exhausted, is construction of new control lines. Detailed specific guidance will be used for each MUA.

Cultural Resources

The Bureau of Land Management is required to identify, evaluate, and protect cultural resources on public lands under its jurisdiction and to ensure the Bureau-initiated or Bureau-authorized actions do not inadvertently harm or destroy non-federal cultural resources. These requirements are mandated by the Antiquities Act of 1906, the Reservoir Salvage Act of 1960 as amended by P.L. 933-191, the National Environmental Policy Act of 1969, the Archaeological Resources Protection Act of 1979, Section 202 of the Federal Land Policy and Management Act of 1976, and the National Historic Preservation Act of 1966 and amendments, together with 36 CFR 800.

Prior to commencement of any Bureau-initiated or authorized action, which involves surface disturbing activities, sale or transfer from Federal management, the BLM will conduct or cause to be conducted, a Class III (intensive) inventory as specified in BLM Manual Section 8111.4, supplementing previous affected areas. If properties that may be eligible for the National Register are discovered, the BLM will consult with the State Historic Preservation Officer (SHPO) and forward the documentation to the Keeper of the National Register to obtain a determination of eligibility in accordance with 36 CFR Part 63.

Cultural resource values discovered in a proposed work area will be protected by adhering to the following methods.

- Redesigning or relocating the project.
- Salvaging, through scientific methods, the cultural resource values pursuant to the SHPO agreement.
- Should the site be determined to be of significant value, and/or the above mentioned methods are not considered adequate, the project will be abandoned.

All cultural sites identified as special management areas in the RMP will be closed to ORV use and surface occupancy (applies to all alternatives in the DEIS).

All significant cultural sites (as determined by the SHPO and Advisory Council) will be retained in federal ownership.

All cultural sites known to be eligible for National Register nomination, or listed on the National Register will be protected from deterioration.

The existing ruts of the main route, north and south alternate routes of the Oregon Trail will be protected by not allowing use of a 1/2 mile corridor through which these routes pass.

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Mineral, Energy, and Geologic Resources

BLM will manage geological, energy, and minerals resources on the public lands. Geological resources will be managed so that significant scientific, recreational, and educational values will be maintained or enhanced. Generally, the public lands are available for mineral exploration and development, subject to applicable regulations and Federal and State laws.

Locatable Minerals

Areas within the resource area will be available for exploration and development of locatable minerals except where specifically restricted or excluded. Mineral activities will be conducted in accordance with 43 CFR 3802, 3809 or 3814 as appropriate.

Location of mining claims in accordance with the State and Federal mining laws and regulations is nondiscretionary. The public lands are available for location of mining claims unless withdrawn. Recommendations by BLM for withdrawal are subject to final consideration by the Secretary of the Department of Interior.

Saleable Minerals (Sand and Gravel)

All mineral disposals will be made in accordance with 43 CFR 3600. The general policy shall be to promote the use of existing sites. New sites may be set up if it is determined that an existing site will not meet the applicants needs and site impacts can be sufficiently mitigated.

Exploration for new sites will be the responsibility of the applicant. Exploration will be allowed where appropriate under a letter of authorization from the Area Manager.

Oil and Gas

Energy and mineral leasing and mineral material sales are discretionary actions. Approval of an application for lease or sale is subject to an environmental analysis and may include stipulations to protect other resources. Generally, the public lands may be considered for energy and minerals leasing and sale.

Lease Applications - Upon receipt of a lease application from the State Office, the District will review and make recommendations for stipulations in accordance with 43 CFR 3109 and the District Oil and Gas EA.

Application for Permit to Drill (ADP) and Notice of Staking (NOS) - Follow operating order f1 and 43 CFR 3160.

Geophysical Operations - Notices of Intent to conduct Oil and Gas Exploration Operations will be processed within 15 days of receipt. Stipulations and mitigation measures will be applied in accordance with 43 CFR 3109 and the District Oil and Gas EA.

Field examinations will be made to insure compliance with stipulations on Applications for Permits to drill, Notices of Staking, and Notices for Geophysical Operations.

Geothermal

Lease Applications - Upon receipt of a lease application from the State Office, the District will review and make recommendations for stipulations to protect resource values in accordance with 43 CFR 3204 and the District-wide Geothermal EA.

Exploration Operations - A notice of intent and permit to conduct exploration operations (geothermal resources) will be processed within 30 days of receipt. Stipulations and mitigation measures will be applied in accordance with 43 CFR 3209 and the District-wide Geothermal EA.

Field examinations will be made to insure compliance with approved notices.

Geologic

Unique geologic features of the district will be protected and interpreted to the public.

Wilderness

Preliminary Recommendations to Congress

Only Congress can designate an area as wilderness. BLM recommends areas suitable or unsuitable for preservation as wilderness. Those recommendations are preliminary and are subject to the findings of mineral surveys and final consideration by the Secretary of the Interior and the President before being submitted to Congress. Until Congress acts on the President's suitability recommendations, BLM will manage areas recommended as suitable or unsuitable in accordance with the Interim Wilderness Management Policy (IMP). After Congress acts, a different policy will apply, depending on whether or not Congress designates an area as wilderness.

Areas Designated Wilderness

Areas designated as wilderness by Congress will be managed in accordance with BLM Wilderness Management Policy. Specific management provisions will be formulated in a wilderness management plan developed for each area following designation.

Areas Not Designated Wilderness

Areas determined by Congress to be unsuitable for wilderness designation will be managed for other purposes. A tentative management scheme developed during the planning process will be given final consideration following Congressional action on the President's suitability recommendations.

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Recreation

Recreation Management

BLM will manage recreation on the public lands. A variety of means to maintain or improve recreation opportunities will be considered. Some areas may be subject to special restrictions to protect resources or eliminate or reduce conflicts among uses.

The Boise District will provide and maintain recreation opportunities and facilities on public lands, including campgrounds, picnic areas, boat launches, etc. Those recreation facilities are provided to meet existing or anticipated demand.

Oregon National Historic Trail

The Boise District will manage the Oregon Trail in accordance with guidelines established in the National Park Service Plan for the Trail.

Potential National Rivers

Federal land management agencies are responsible for evaluating rivers to determine if they are suitable for inclusion in the Wild and Scenic Rivers System. If they are determined to be suitable, the agencies will provide protection either by preparing recommendations to have them designated or by taking immediate action to protect them. Prior to the time they have been designated and when determined to be suitable, the rivers will be treated as though they were components of the National Wild and Scenic River system. The Bruneau and Jarbidge Rivers will be managed accordingly by the District until Congress acts.

Motorized Recreation Vehicle Access and Use

Through the planning process, public lands will be placed in one of three categories for purposes of controlling motorized vehicle access: open, limited, and closed. Guidelines for these categories are as follows:

Open - Motorized vehicles may travel anywhere.

Limited - Motorized vehicles are permitted, subject to specified conditions such as seasonal limitations, speed limits, and designated routes of travel as developed during subsequent activity planning.

- Closed - Motorized vehicles are prohibited.

Paleontologic Resources

Paleontologic resources will be managed to protect and maintain or enhance sites or areas for their scientific and educational values.

Visual Resource Management

The visual or scenic values of the public lands will be considered

whenever any physical actions are proposed on BLM lands. The degree of alterations to the natural landscape will be guided by the criteria established for the four Visual Resource Management Classes as outlined in current BLM manuals.

Forest Management

The public lands in the district containing commercial timber or other forest products such as firewood, posts and poles, and Christmas trees will be considered for harvest except where expressly closed by law or regulation. Some areas may also be subject to special restrictions to protect resources.

Areas of Critical Environmental Concern

Areas of critical environmental concern (ACEC) are established through the planning process as provided in the Federal Land Policy and Management Act for "... areas within the public lands where special management attention is required (when such areas are developed or used or where no development 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 safety from natural hazards." Management will be tailored to the specific needs of each ACEC.

Coordination With Other Agencies, State and Local Governments, and Indian Tribes

BLM will coordinate its review of detailed management plans (activity) and individual projects prepared in conjunctions with the RMP to ensure consistency with officially adopted and approved plans, policies, and programs of other federal agencies, state and local governments, and Indian tribes. Cooperative agreements and memoranda of understanding will be developed, as necessary, to promote close cooperation between BLM and other federal agencies, state and local governments, and Indian tribes.

Weeds (Control of Noxious)

BLM districts will work with their respective County governments to monitor the location and spread of noxious weeds and to maintain up-to-date inventory records. BLM will control the spread of noxious weeds on public lands where possible, where economically feasible, and to the extent that funds are prioritized for that purpose.

Where weed control is warranted, the Bureau will consider alternatives including herbicide applications, plow and seed, burn and seed, livestock grazing strategy, and biological controls. Coordination with adjoining landowners will be pursued if appropriate. If herbicide application is selected as the preferred method of control through the environmental analysis process, application will be made through the Idaho State Director to the BLM Director in Washington D.C. This application will indicate all pertinent data including chemicals, rate, and method of application and target plant species. Herbicide applications will be applied under the directions of a licensed pesticide applicator and every effort will be taken to assure public safety.

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Public Utilities

Generally, public lands may be considered for the installation of public utilities, except where expressly closed by law or regulation. Project approval will be subject to preparation of an environmental assessment or environmental impact statement. BLM will work closely with the Idaho Public Utilities Commission, other state and federal agencies, local governments, utility companies, and other interested parties to determine appropriate locations and environmental safeguards for public utilities involving public lands.

Economic and Social Considerations

BLM will ensure that any management action undertaken in connection with this plan is cost-effective and takes into account local social and economic factors. Cost-effectiveness may be determined by any method deemed appropriate by the Bureau of the specific management action involved.

Detailed Management (Activity) Plans

The RMP provides general guidance for the resource area. More detailed management plans, called activity plans, will be prepared to deal with areas where a greater level of detail is required. Activity plans will indicate specific management practices, improvements, allocations, and other information for a particular site or area. They will be prepared for most major BLM programs such as range (allotment management plans), recreation (recreation area management plans), wildlife (habitat management plans), wilderness (wilderness management plans), and cultural resources (cultural resource activity plans). Where two or more activities have activity plan needs in the same general area, a single consolidated activity plan may be prepared. Coordination, consultation, and public involvement are integral parts in the formulation of activity plans.

Environmental Reviews

The NEPA process will be followed on all projects prior to approval. This site-specific analysis will allow some projects to be considered under provisions of the categorical review process and others to be considered under the environmental assessment process.

Plan Maintenance

Resource management plans and supporting components shall be maintained as necessary to reflect minor changes in data. Such maintenance is limited to further refining or documenting a previously approved decision incorporated into the plan. Maintenance shall not result in expansion in the scope of resource uses or restrictions, or change the terms, conditions, and decisions of the approved plan. Maintenance is not considered a plan amendment and does not require formal public involvement and interagency coordination or the preparation of an environmental assessment or environmental impact statement.

Plan Amendments

A resource management plan may be changed through amendment. An amendment shall be initiated by the need to consider monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or a proposed action that may result in a change in the scope of resource uses or a change in the terms, conditions and decisions of the approved plan. An amendment shall be made through an environmental impact statement, if necessary, public involvement, interagency coordination and consistency determination and any other data or analysis that may be appropriate. In all cases, the effect of the amendment on the plan shall be evaluated.

Examples of actions which would require an amendment include disposal of land not identified for transfer, change in management objectives for an area or resource, changes in special designations, and additional land treatments, such as prescribed burning. Additional range improvement projects (fences, pipelines, reservoirs, spring developments) not originally identified in a plan, may be approved through the NEPA process without a plan amendment if the project is in conformance with the management objectives of the management area and is not in conflict with the management guidelines and objectives of other resource activities.

Support Requirements

Land Transfer and Utility ROWs

Cadastral survey services would be needed to locate public land boundaries and appraisal reports would be needed to estimate value of lands offered for sales and exchanges. Legal services to review legal real estate documents would also be needed. Engineering support would be needed to review design specifications (analysis) on utility ROW proposals (power lines, gas lines, phone lines, roads, etc.) Appraisal support for valuation of ROWs would be needed.

Water, Soil, and Air

Fire management support would be needed to reduce damage by wild fire and engineering services (operations) would be needed for fire rehabilitation (reseeding to reduce soil erosion). Legal support for enforcement and monitoring of runoff at Hagerman and protective language would be needed on Narrows DLE to cover protection of Sand Point ACEC.

Livestock and Wild Horse Management

Engineering and fire management support would be needed for project layout, design, and implementation. Idaho Department of Fish and Game coordination would be needed for prescribed burn projects in sage grouse habitat. Coordination with BLM wild horse distribution centers would be necessary prior to roundup.

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Wildlife (Terrestrial and Aquatic)

Close coordination with Idaho and Nevada Fish and Game agencies would be needed for big game reestablishment (bighorn sheep, elk) and habitat modification for sage grouse. Fire management support would be required to protect crucial habitats and to control prescribed burning projects. Engineering and operations support for gap fencing, aquatic habitat structures and riparian area improvement projects would also be needed.

Fire Management

Support for Boise Interagency Fire Center and other fire fighting units for presuppression and suppression planning and equipment would be needed.

Wilderness

Fire management support would be required to manage natural fires to meet resource objectives and protect wilderness values. USGS support for conducting mineral surveys would be required for all WSAs recommended as preliminarily suitable for wilderness designation.

Minerals (Energy and Nonenergy)

Cadastral services to locate public land boundaries and clearances (cultural and historical) would be needed.

Recreation

Fire management support would be needed for managing natural fire to protect significant resources. Engineering services support would be needed for the design and development of proposed facilities that would be identified from RAMPs. Cartographic services for information brochures and ORV plan maps would be needed.

Special Designations

Areas identified for special designations (ACECs, National Register, Wild and Scenic River, National Historic Trail, SRMAs, etc.) would need support of fire management to protect the significant resources and associated values. Coordination with the State Historic Preservation Office, Idaho Fish and Game Department, Idaho Parks and Recreation Department, and Idaho Department of Water Resources would be required.

Consistency with Other Plans

Land Transfer and Utility ROWs

Coordination and conferring with affected state and local governments would continue prior to final disposal decisions. The magnitude of DLE/CA acreages identified for transfer in the preferred plan, may not be in

total agreement (acreage available) with the Idaho Department of Water Resources (DWR) State Water Plan Objectives for agricultural development. The State Water Plan does specifically recognize the limitation of water availability from the Snake River Basin and that not all identified DLE/CA projects would have water.

The current Idaho Power Company lawsuit involving Swan Falls Dam (water rights) and legislative proposals to make hydropower water rights subordinate to agricultural water rights suggest that this case may not be resolved within the 20 year scope of this plan.

Secondly, the legal requirements of the Wild Horse and Burro Act requires that habitat to support a viable wild horse herd be protected. The wild horse objective of this plan is consistent with federal law but does reduce the availability of potential agricultural DLE/CA lands and the achievement of DWR objectives for agricultural development.

The concept of identifying sensitive areas to be avoided has received support from state and local governments and most utility companies. However, the location of some of these avoidance areas may be in conflict with the long term (40-year) implementation proposal to meet power needs identified by the Western Power Group. However, existing ROW locations and utility ROW routes identified in previous environmental impact statements still remain available for ROW developments.

Water, Soil, and Air

Action by BLM for protection of highly erosion hazard are consistent with federal (SCS), local (Soil Conservation District) and county plans.

Livestock and Wild Horse Management

Continuation of livestock grazing on the public lands is consistent with state and county goals for maintaining a healthy economy, a varied economic base and a quality of social well being.

Wildlife (Terrestrial and Aquatic)

The actions outlined in the plan are consistent with Idaho Fish and Game Department's big game population goals and the fisheries management plan.

Fire Management

The fire management concepts and actions are consistent with state and local government objectives.

Wilderness

Existing state plans do not address designation of specific wilderness areas. The Statewide Comprehensive Outdoor Recreation Plan (SCORP) supports a preservation of Idaho's Natural Heritage. The current Owyhee County Land Use Plan (1974) did not address wilderness.

Draft Resource Management Plan

Minerals (Energy and Nonenergy)

The local land use plan supports the development of mineral resources in a manner compatible with environmental goals (protect streams and minimize unfavorable visual impacts).

Recreation

The specific management of recreation on public lands was not addressed in the Idaho Statewide Comprehensive Outdoor Recreation Plan (SCORP) or in local plans. However, the recreation objectives of the RMP is consistent with the overall objectives of the SCORP and the Idaho State Water Plan (Bruneau River protection). ORV actions appear to be consistent with existent state and local government plans and ordinances.

Special Designations

The protection of resources with significant recreation, wildlife, cultural, historical, and paleontological values are consistent with the respective state agency plans, policies, and programs. Local agency plans do not address the protection of the specific sites identified in this plan.

Implementation

Land Transfer and Utility ROWs

Land reports and environmental assessments and required clearances for cultural and paleontological resources would be prepared for all proposals. Those projects identified to be in the public interests and that have minimal or no significant adverse impacts to other public resources would be approved.

Areas identified as sensitive (for wildlife, riparian protection, recreation, scenic beauty, cultural and paleontological) have been identified as avoidance areas. The remaining public lands in the resource area are available for possible location of ROWs. Environmental assessments and required clearances would be prepared for all projects.

Water, Soil, and Air

Site specific projects would be reviewed for compliance with laws, rules, and regulations. Particular attention to project design in areas of high erosion hazard potential.

Livestock and Wild Horse Management

Rangeland Program Summaries (RPS) would be issued to summarized grazing levels, show allotment categories and help establish project priorities for livestock improvements on public land. Site specific grazing use adjustments would be described in the RPSs developed.

Allotment management plans would be developed on specific allotments, and would include benefit/cost analysis and environmental assessments of specific facilities and management actions. The wild horse herd and its habitat would be monitored and round ups would be scheduled at intervals that ensure maintenance of objective numbers and habitat quality.

Wildlife (Terrestrial and Aquatic)

Crucial habitats (big game winter ranges) would be monitored to ensure maximum opportunity for survival to occur. ACEC designation and provisions would be applied to bighorn sheep habitat. Project development would be programmed.

Fire Management

District fire crews would be used for initial suppression efforts. Additional fire fighters and support services of BIFC would be called in to help suppress large uncontrolled fires. Fire management plans would be developed for each multiple use area.

Wilderness

A wilderness study report would be prepared along with a separate wilderness environmental impact statement for each Wilderness Study Area discussed in this RMP and draft EIS. The report would be forwarded to Congress through the Secretary of the Interior. Only Congress has the authority to add an area to the National Wilderness Preservation System.

Minerals (Energy and Nonenergy)

Procedures outlined in current laws and regulations (federal and state) would be applied to all applications. Mineral reports and environmental assessments would be prepared and appropriate clearances obtained. Standard and special stipulations would be followed.

Recreation

Projects identified through the RAMPs would be consistent with ROS management objectives. Individual site plans would be prepared for new facility developments. An ORV plan and maps covering the Resource Area would have to be prepared showing areas closed or with limitations.

Special Designations

Department of the Interior approval for administrative actions would be sought for National Register designation. Congressional action for wild and scenic river designation would be sought through the Secretary, Department of the Interior to Congress.

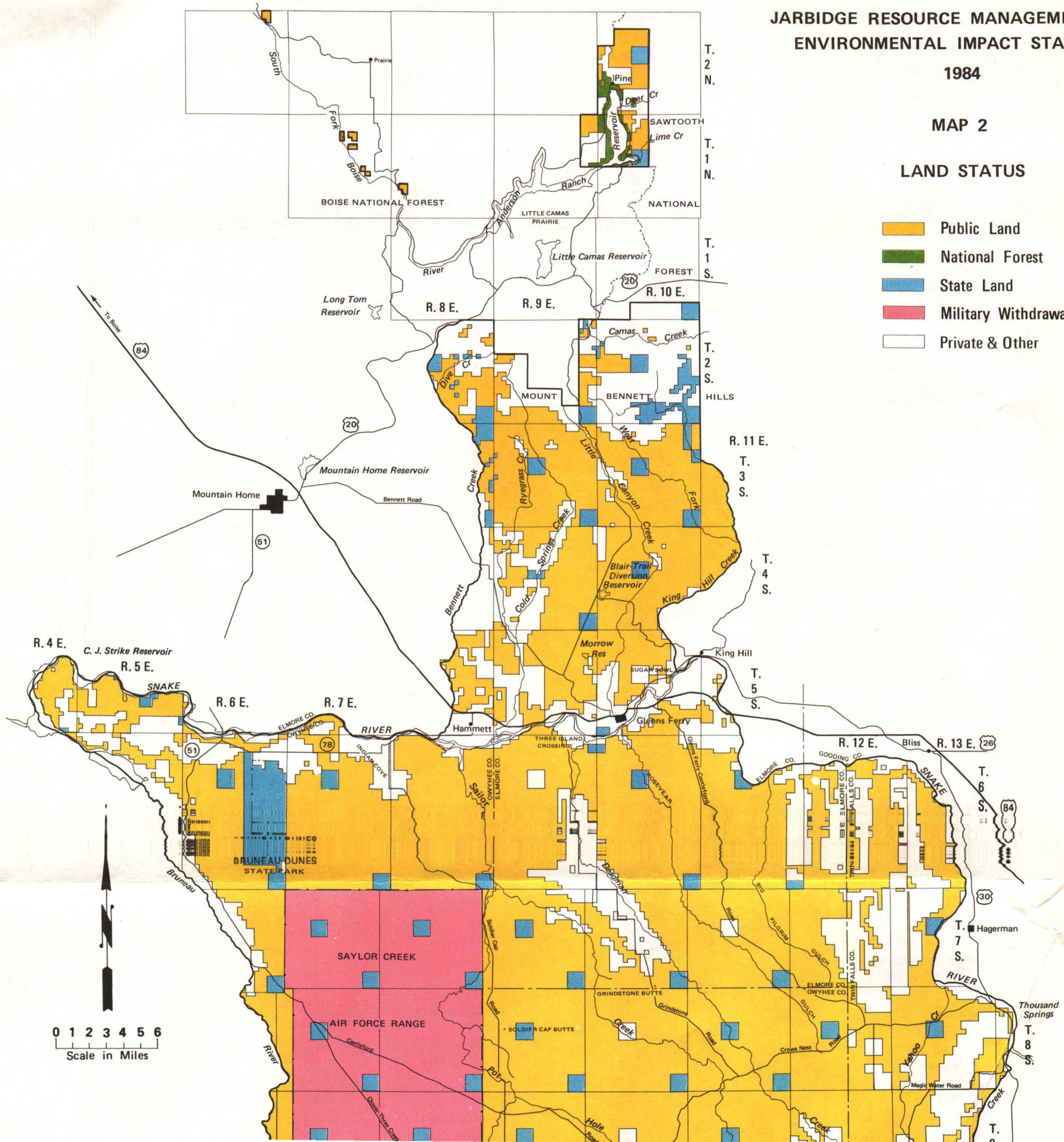
JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

1984

MAP 2

LAND STATUS

- Public Land
- National Forest
- State Land
- Military Withdrawal
- Private & Other



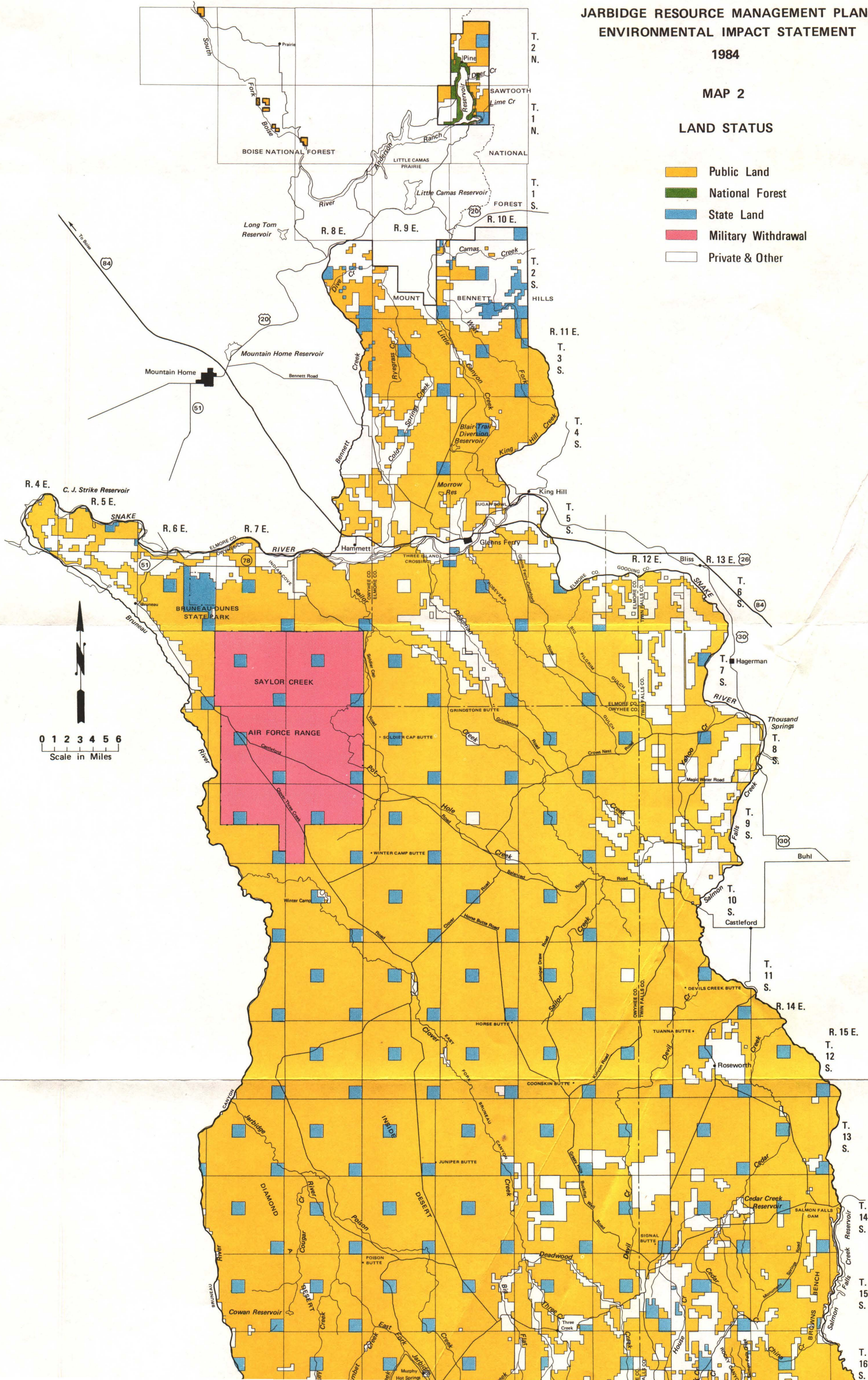
0 1 2 3 4 5 6
Scale in Miles

JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT
1984

MAP 2

LAND STATUS

- Public Land
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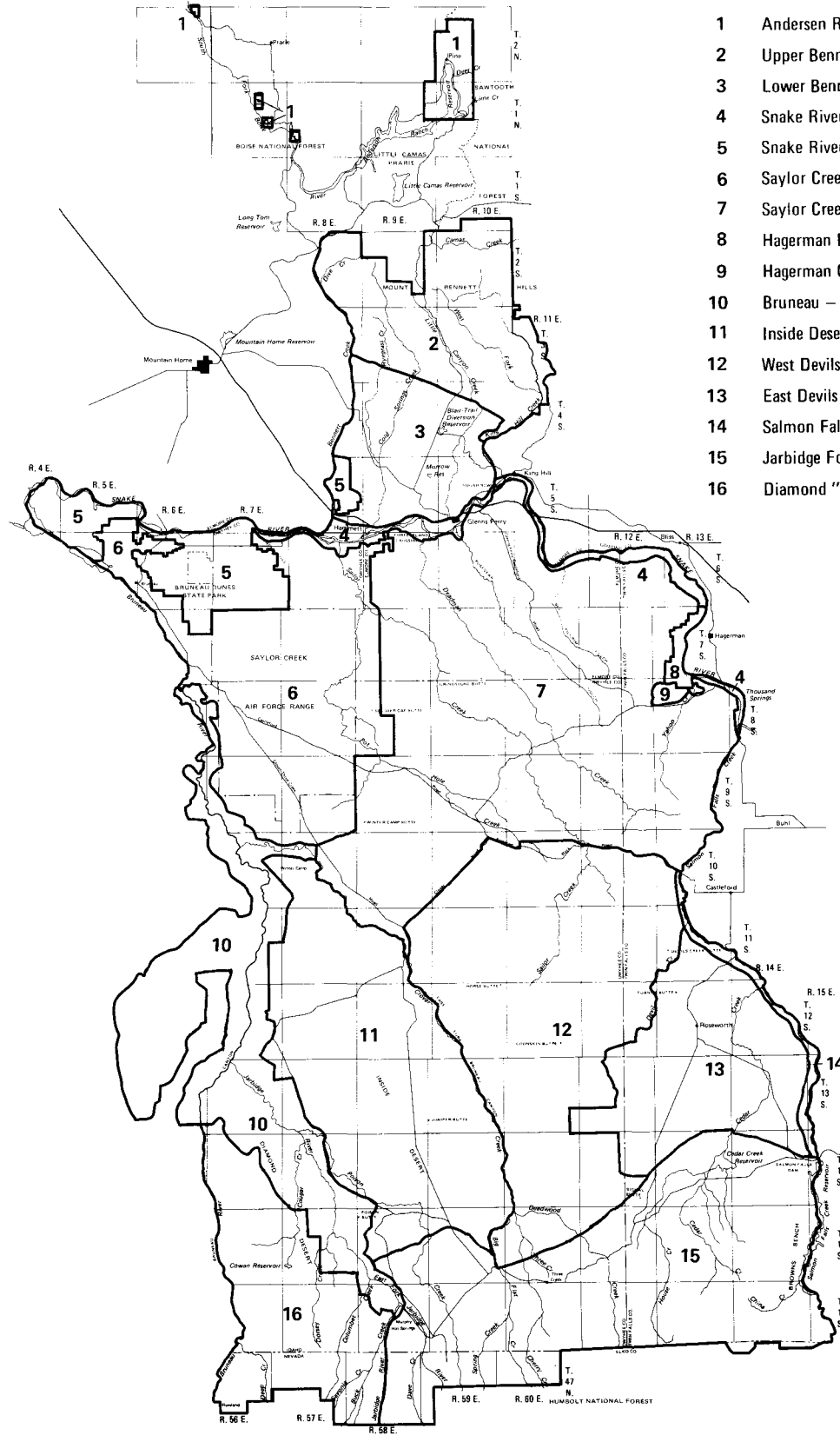


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MAP 3

MULTIPLE USE AREAS

- 1 Andersen Ranch – Boise River
- 2 Upper Bennett
- 3 Lower Bennett
- 4 Snake River Riparian
- 5 Snake River Birds of Prey
- 6 Saylor Creek East
- 7 Saylor Creek West
- 8 Hagerman Fossil Beds
- 9 Hagerman ORV
- 10 Bruneau – Sheep Creek
- 11 Inside Desert
- 12 West Devils
- 13 East Devils
- 14 Salmon Falls Creek
- 15 Jarbidge Foothills
- 16 Diamond "A"



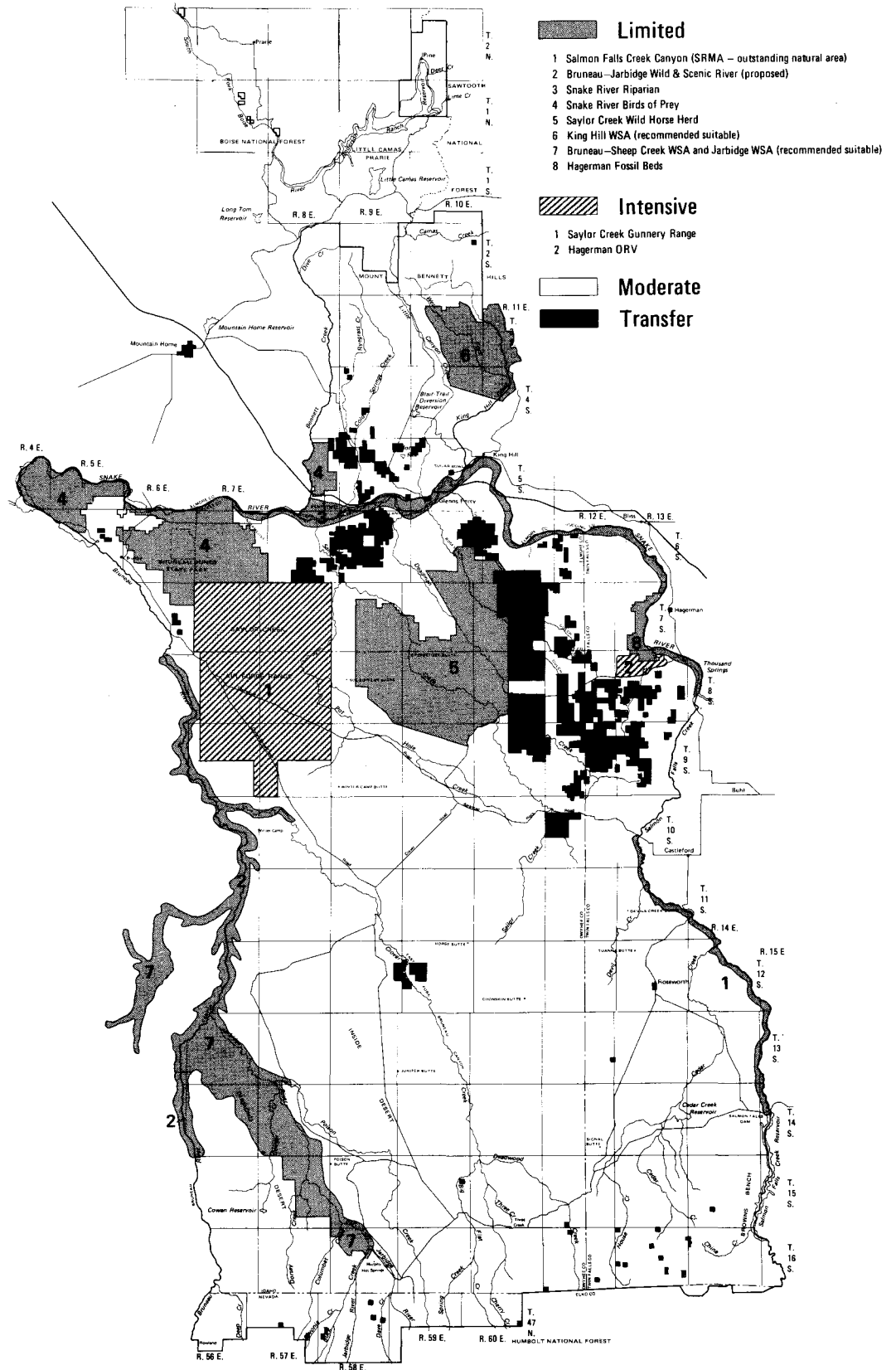
JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

1984

MAP 4

MANAGEMENT ALTERNATIVE

Alternative C



JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

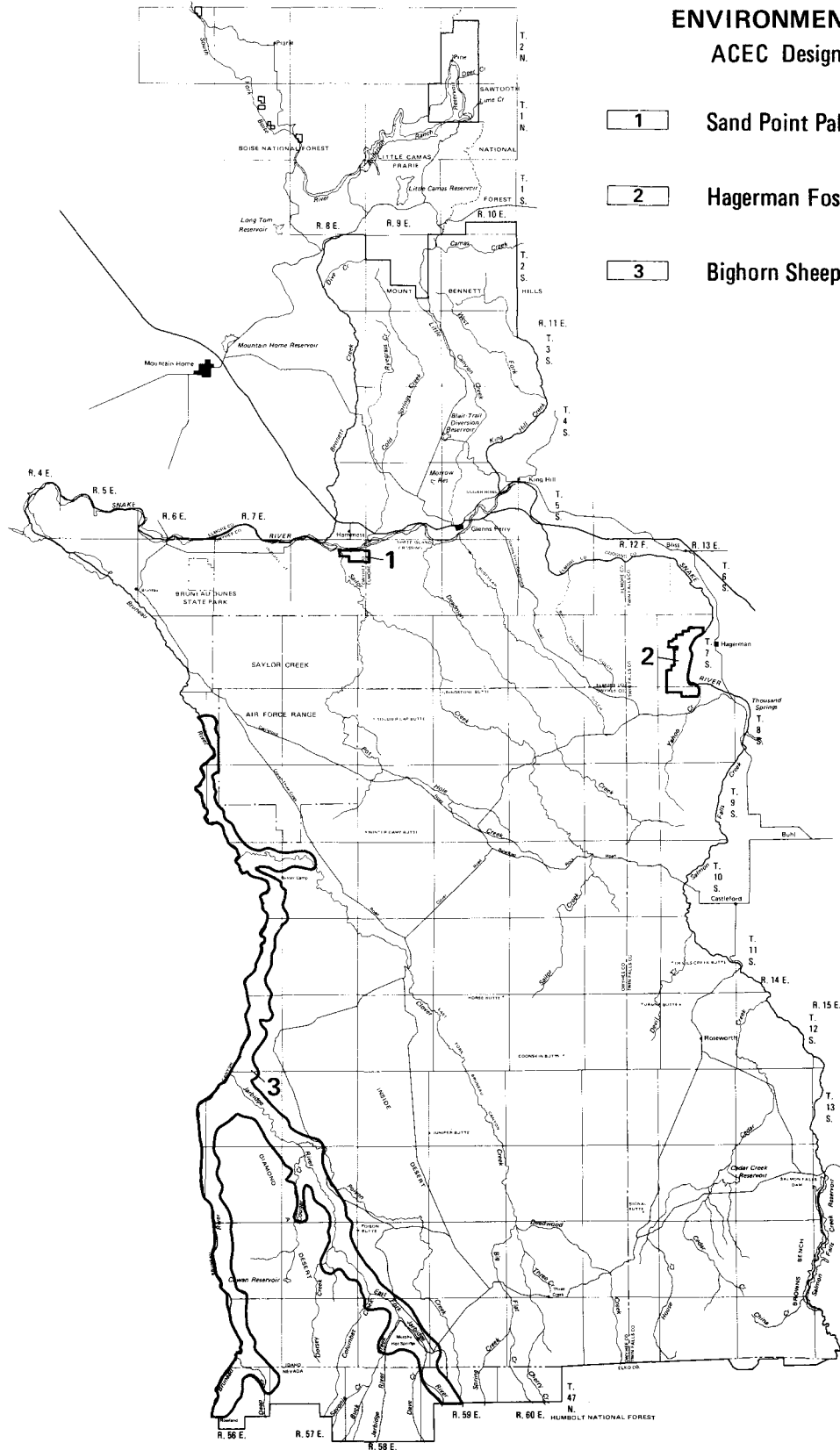
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MAP 5

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

ACEC Designation (proposed)

- 1 Sand Point Paleontological Site
- 2 Hagerman Fossil Area
- 3 Bighorn Sheep Habitat & Cougar Canyon



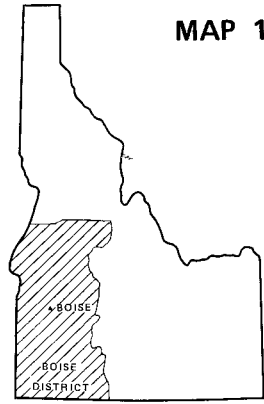
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ENVIRONMENTAL IMPACT STATEMENT

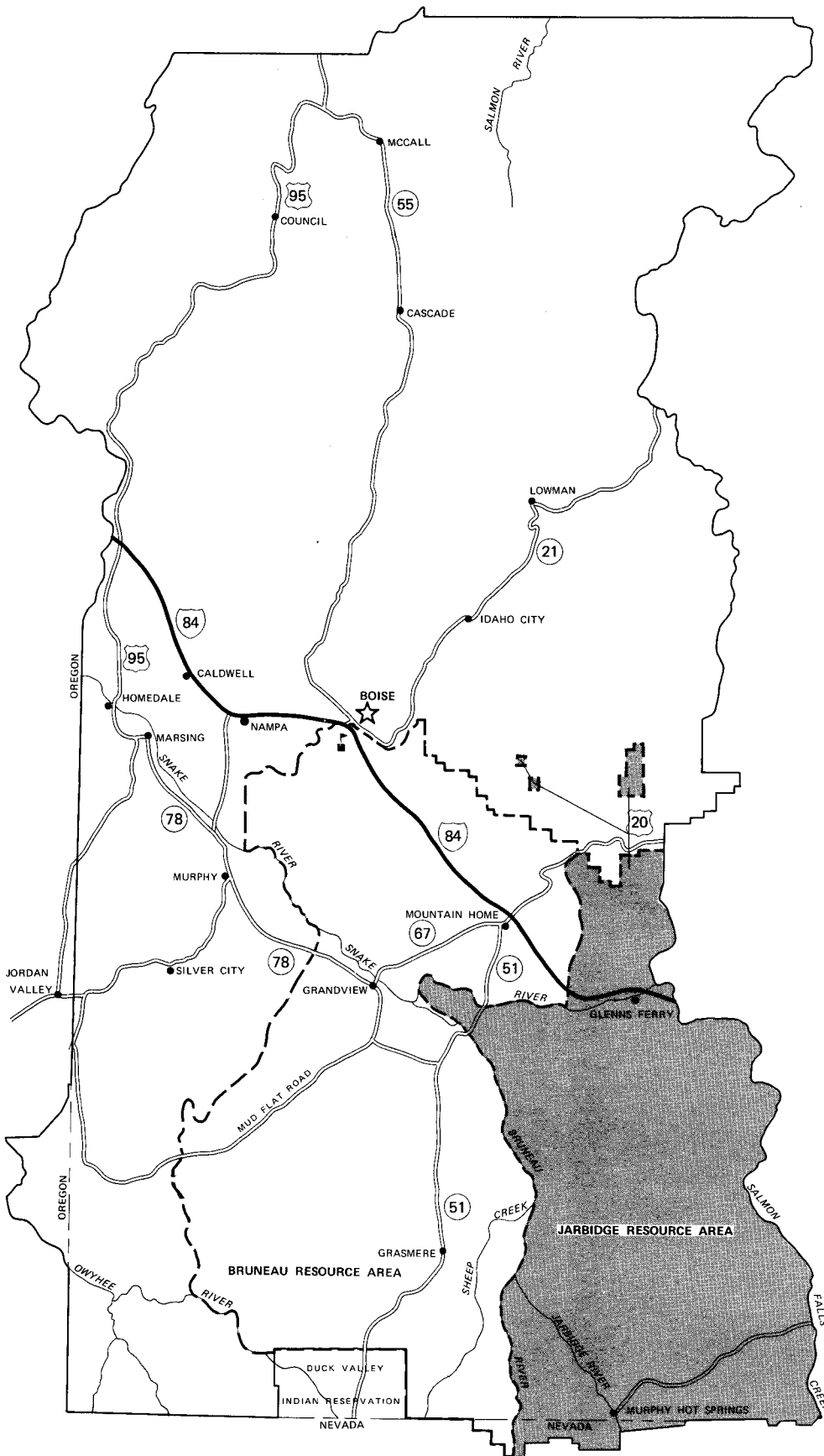
PART II

JARBIDGE RESOURCE AREA GENERAL LOCATION MAP

MAP 1



IDAHO KEY



- ★ STATE CAPITOL
- 🏠 BLM DISTRICT OFFICE
- 84 INTERSTATE HIGHWAY
- 95 U.S. HIGHWAY
- 67 STATE HIGHWAY
- DISTRICT BOUNDARY
- - - RESOURCE AREA BOUNDARY

PART II

SUMMARY

This draft Environmental Impact Statement (DEIS) describes four alternatives and one sub alternative for managing 1,690,473 acres of public lands in the Jarbidge Resource Area (JRA), Boise District. Each alternative provides a separate and different management prescription for managing the public lands and ranges from an overall production emphasis to overall protection emphasis.

The Resource Management Plan (RMP) is developed to guide the management of public land resources in the Jarbidge Resource Area and ensure that these lands and resources are managed in accordance with the principles of multiple use and sustain yield. To achieve this, the planning process must be responsive to the major issues identified by the public and within the boundaries of current laws, rules and regulations, and national and state policies. The contents of the four alternative plans are primarily focused on resolving the following ten key issues identified by the public: land tenure and adjustment; livestock grazing; management of wildlife resources (terrestrial, riparian and aquatic habitats); wilderness management; recreation; soil, water, and air; fire management, and special designations. Special management concerns addressed include access, cultural and paleontological resource protection, timber management, and social and economic changes.

The RMP is also the framework plan by which other, more specific, activity plans will be developed.

The four alternatives and one subalternative are summarized as follows:

ALTERNATIVE A

This alternative is the "No Action" alternative and proposes management of public resources at their current levels of use and production.

Land tenure adjustment would see a maximum of 89,575 acres considered for transfer from federal ownership. Of this, 71,615 acres would be considered for farm development under the Desert Land Act (DLE) and Carey Act (CA) programs. Utility ROWs would be restricted on only 10% of the JRA. There would be 74% of the JRA closed to DLE/CA application.

A significant (about ten fold) increase in soil erosion (wind blown) would occur on 58,489 acres of high erosion hazard classed lands identified for transfer. Additional erosion would result on the 1,143 acres identified for timber harvest.

Livestock grazing would be maintained at the current five year average of 163,477 AUMs. No new range improvement or land treatment projects would be initiated. Grazing management would remain unchanged. Grazing levels would be reduced to 148,395 AUMs over the 20 year period because of land transfer. Limited fire suppression management would continue on

499,712 acres. Native range condition would remain unchanged over time. Wild horse herd levels would be sustained and forage in the amount of 600 AUMs would be provided to support 50 head.

Wildlife populations would remain basically unchanged for mule deer and elk yearlong but would be reduced for wintering deer because of decline of quality habitat. Bighorn sheep populations would increase naturally from 15 to 365 and antelope would increase naturally from 660 to 1,340. Competitive forage use level of 2,769 AUMs would be provided. Sage grouse habitat conditions would remain unchanged while nesting complex would be reduced in size from expected wildfires.

Agricultural development would eliminate 25% of the native habitat adjacent to the Snake River. Major prey species would be reduced and the number and varieties of raptors would decline due to the elimination of their food supply. A nesting area containing 20-25 pairs of long-billed curlews would be lost.

Riparian habitat would improve slightly (1%) while aquatic habitat would remain unchanged.

There would be no prescribed burns used to improve rangelands. Fire management costs would be expected to increase \$20-25,000/year in full suppression areas (fires in agricultural development areas would be principle reason for increase) and 5-10% (\$1-2,000) in limited suppression areas.

Mineral activity shows that 87% of the JRA is open to leasables and 91% open to locatables. Sand and gravel for road construction in new agricultural areas would deplete sources in high use areas and decrease BLMs ability to provide for road districts needs after 20 years. Withdrawals totaling 158,886 acres would be in effect.

None of the three WSAs are recommended for wilderness. The 208,833 acres would be managed for a mixture of other multiple uses. The Bruneau/Jarbidge Rivers would be protected and managed as a SRMA unless Congress acts to designate them as National Wild and Scenic Rivers. The bighorn sheep habitat would receive limited protection.

The Salmon Falls Creek area would be designated an Outstanding Natural Area and along with Salmon Falls Reservoir would be a Special Recreation Management Area. The Bruneau/Jarbidge Rivers would be managed for white water recreation. Motorized vehicle recreation would be unrestricted on 88% of the JRA, limited on 5%, and closed on 7%. Recreation use would increase from 20,500 activity occasions to 35,000 activity occasions.

Cultural resource sites would be managed under standard operating procedures (SOPs). Although the Oregon Trail would receive special designation, other cultural sites would continue to deteriorate in value because of livestock trampling, erosion, and vandalism.

Paleontological resources would be protected only by SOPs. Ten known sites would be lost or severely damaged from land transfer. The Sand Point site would lose significant value. The Hagerman Fossil Beds would

continue to deteriorate by erosion caused by agricultural development on plateaus above and uncontrolled off road vehicle (ORV) use on the hills and gullies.

An allowable cut level would be applied on 1,143 acres in the Upper Bennett and Anderson Ranch/Boise River areas. Cutting would permit a harvest of 1,540 Mbdft. Recreation wood cutting would continue.

By the end of the 20 year period there would be a net increase of \$1.6 million in income per year and a net increase of 232 jobs resulting from transfers of land to agricultural development and increased livestock use of the public lands.

ALTERNATIVE B

This alternative emphasizes the production mode of public resource management. Agricultural land development, livestock grazing, land transfers, mineral exploration and development, and timber production receive management emphasis. Developed recreation, including the least amount on restriction on motorized vehicle recreation (ORVs), is also emphasized.

Land tenure adjustments would see a maximum of 160,154 acres analyzed for possible transfer from federal ownership. Of this 142,194 acres would be considered for for farm development under DLE/CA programs. Utility ROWs would be restricted on 10% of the JRA. There would be 87% of the JRA open to DLE/CA application.

A significant (about ten fold) increase in soil erosion (wind blown) would occur on 118,000 acres of high erosion hazard classed lands identified for transfer. Additional erosion would result on the 1,143 acres identified for timber harvest. Increased grazing levels would also cause some additional erosion. Erosion, soil compaction, etc. would be reduced on the 59 miles of stream excluded from grazing.

Livestock use would initially be stocked at 197,835 AUMs, an increase of 21%. Range improvements include 80 miles of pipelines and 154 miles of fencing. Land treatments would include 36,880 acres of brush control, 15,600 acres of brush control and reseeding and 80,140 acres of seeding only (no brush control needed). The long-term livestock use levels would be 327,140 AUMs. Limited fire suppression management would be applied to 388,730 acres. Native range condition in good or fair condition would decline slightly (3%) while poor condition would be reduced by 12%; burned and reseeded lands would be increased by 2% and 13% respectively. The Saylor Creek wild horse herd would be eliminated.

Wildlife populations would be reduced for mule deer (yearlong and winter) because of decrease on habitat quality and increase in livestock competition. Elk populations would decline as much as 72% (wintering elk) because of decrease of habitat carrying capacity from livestock grazing preventing improvement in habitat quality. Bighorn sheep populations would naturally increase to 365 sheep and antelope numbers would increase because of increases in low height structure in habitat. Competitive forage use level of 2,355 AUMs would be provided. Sage grouse habitat

conditions would decline in quality from increase in livestock use causing reduction in needed forbs by sage grouse chicks. Nesting complex would be reduced from wildfire.

Agricultural development would eliminate 26% of the native habitat adjacent to the Snake River. Major prey species would be reduced and the number and variety of raptors would decline. Habitat for 20-25 pairs of long-billed curlews would also be lost.

Riparian habitat would show an increase to 45% in good condition habitat from improvement along 37 miles of streams. Aquatic habitat would show an increase to 25% in excellent condition and 60% in good condition from improvements to 45 miles of streams.

Prescribed burning would be applied to 29,840 acres of rangelands. Fire may be used to maintain existing burns (former improvement projects) where sagebrush invasion is significant. Fire management costs would be expected to increase by \$20-25,000/year in full suppression areas (principally from increase of fires in new agricultural areas) and 5-10% (\$1-2,000) in limited areas.

Mineral activity would show that 86% of the JRA open to leasables and 88% open to locatables. Sand and gravel for road construction in new agricultural development would deplete sources in high use areas and decrease BLMs ability to provide for road districts needs. Withdrawals totaling 179,935 acres would be in effect.

Under this alternative, 57,799 acres of public lands would be recommended as suitable for wilderness and would include the King Hill WSA and rim to rim portions of Bruneau-Sheep Creek WSA and the Jarbidge River WSA. These would be withdrawn from mineral entry and avoided by linear ROWs. Most of the bighorn sheep habitat would be protected.

Salmon Falls Creek would be designated an Outstanding Natural Area and along with the Salmon Falls Creek reservoir and upper river canyon would be a SRMA. The Hagerman Fossil Beds and the Hagerman ORV (Owsley Bridge area), Oregon Trail, and the Upper Jarbidge River Canyonlands would be SRMAs. The Bruneau/Jarbidge River would be managed for white water recreation. Motorized vehicle recreation would be unrestricted on 87% of the JRA, limited on 3%, and closed on 10%. Recreation use would increase to 35,000 activity occasions.

Special designation (national register) and management of cultural resources would be sought for the remainder of the Oregon Trail, the Devils Creek Complex, and Dry Lake Beds. Other cultural sites would continue to deteriorate (those not fenced) from livestock trampling, erosion, and vandalism. Increased development and resource use from livestock and agricultural development would be the principal agent for these impacts.

The Sand Point and Hagerman Fossil Beds paleontological sites would be designated and managed as ACECs. Increased land transfer (agricultural development) would cause major deterioration and possible loss of 26 known paleontological sites located in transfer areas.

An allowable cut level would be applied on 1,143 acres in the Upper Bennett and Anderson Ranch/Boise River areas. Cutting would permit a harvest of 1,540 Mbdft. Recreation wood cutting would continue.

By the end of the 20 year period, there would be a net increase of \$5.5 million in income per year and a net increase of 790 jobs resulting from transfers of land to agricultural development and increased livestock use on the public lands.

ALTERNATIVE C

This alternative is the "Preferred Alternative" for managing the public lands in the Jarbidge Resource Area. The alternative optimizes the mixture of production (commodity) uses from the public lands (agriculture, livestock grazing, forest management, minerals, and ORV recreation) in concert with offering protection of non-commodity resources (cultural, paleontological, wildlife, primitive and semiprimitive recreation, and wilderness).

Land tenure adjustment would see 91,446 acres considered for transfer from federal ownership. Of this, 74,561 acres would be considered for farm development under DLE/CA programs. Utility ROWs would be restricted on 12% of the JRA. There would be 93% of the JRA closed to DLE/CA application.

A significant (about ten fold) increase in soil erosion (wind blown) would occur on 58,585 acres of high erosion hazard classed lands identified for transfer. Additional erosion would result on the 1,086 acres identified for timber harvest. Increased grazing levels would also cause additional erosion. Erosion would be reduced on 70 miles of stream excluded from grazing.

Livestock use would initially be stocked at 172,493 AUMs, a 6% increase over current levels with the long-term goal of stocking at 271,425 AUMs. Range improvements would include 107 miles of pipeline and 98 miles of fences. Land treatments would include 23,936 acres of brush control, 3,600 of brush control and seeding and 30,440 acres of seeding only (no brush control needed). Limited fire suppression management would be applied to 388,730 acres. Native range condition would remain unchanged for good/fair condition; poor condition would be reduced by 9%; while the acreage in burns and reseeded condition would be increase by 1% and 9% respectively. The wild horse herd would be maintained and 600 AUMs provided to support 50 head.

Wildlife populations would increase for mule deer, elk, antelope, and bighorns. These are due to reduction in competition with livestock during spring for deer and elk. Bighorns would naturally increase to 365. Existing and potential bighorn sheep habitat would be included in the Bruneau/Jarbidge River ACEC. Habitats would improve slightly for mule deer and antelope and more significantly for elk. Habitat improvement projects on 18,200 acres also contribute to improvement in populations. Competitive forage levels of 3,877 AUMs would be provided. Sage grouse habitat conditions would improve slightly from decreased livestock use and inclusion of wildlife needs in range improvement projects. Nesting complexes would be reduced in size from wildfires.

Agricultural development would result in the loss of 24% of the native forage habitat supporting prey for birds of prey adjacent to the Snake River. Birds of prey would decline due to the reduction of their food supply. Habitat for 20-25 pairs of long-billed curlews would also be lost.

Riparian habitat would show an increase to 49% in good condition from improvements along 53 miles of habitat and aquatic habitat would show an increase to 3% in excellent condition and 61% in good condition habitat from improvements along 51 miles of streams.

Prescribed burning would be applied to 15,536 acres of rangelands. Fire may be used to maintain existing burns (former improvement projects) where sagebrush invasion is significant. Fire management costs would be expected to increase by \$20-25,000/year in full suppression areas (principally from increase of fires in new agricultural areas) and 5-10% (\$1-2,000) in limited areas.

Mineral activity would show that 86% of the JRA open to leasables and 84% open to locatables. Sand and gravel for road construction in new agricultural areas would deplete sources in high use areas after 20 years and decrease BLMs ability to provide for road districts needs. Withdrawals totaling 263,399 acres would be in effect.

Under this alternative, 94,199 acres of public lands would be recommended as suitable for wilderness and would include the King Hill WSA, rim to rim on portions of the Bruneau-Sheep Creek WSA, and the entire Jarbidge River WSA minus plateau acreage on the east side of the Jarbidge River and the west side of the Bruneau River. These areas would be withdrawn from mineral entry and avoided by linear ROWs. Most of the bighorn sheep habitat would be protected.

Salmon Falls Creek would be designated an Outstanding Natural Area and along with the Salmon Falls Creek reservoir and upper river canyon would be a SRMA. The Hagerman Fossil Beds and the Hagerman ORV (Owsley Bridge area), the Oregon Trail, the Upper Jarbidge River Canyonlands, Bennett Hills Winter Recreation Area, and Cougar Canyon would be SRMAs. The Bruneau/Jarbidge River would be managed for white water recreation. Motorized vehicle recreation would be unrestricted on 72% of the JRA, limited on 14%, and closed on 14%. Recreation use would increase to 35,000 activity occasions.

Special designation (national register) and management of three major cultural resources complexes/areas (Oregon Trail, Devils Creek, and Cougar Canyon) with several enlarged boundaries would be sought. Fencing would protect some sites but several sites would still deteriorate. ACEC designation would be applied to the Cougar Canyon complex as part of the Bruneau/Jarbidge River ACEC.

ACEC designation and management of the Sand Point and Hagerman Fossil Beds paleontological sites would protect these significant areas. Increased land transfer (agricultural development) would cause major deterioration and possible loss of 10 known paleontological sites located in transfer areas.

An allowable cut level would be applied on 1,086 acres in the Upper Bennett and Anderson Ranch/Boise River areas. Cutting would permit a harvest of 1,454 Mbdft. Recreation wood cutting would continue.

By the end of the 20 year period, there would be a net increase of \$3.3 million in income per year and a net increase of 479 jobs from transfers of land to agricultural development and increased livestock use on the public lands.

ALTERNATIVE D

This alternative emphasizes the maximum protection of the non-commodity resources and would optimize the mixture of commodity oriented resource use, except agriculture, on the remaining resource base.

Land tenure adjustment would see 13,840 acres considered for transfer from federal ownership. None of these areas would be for farm development under DLE/CA programs. Utility ROWs would be restricted on 16% of the JRA. The entire area would not be open for DLE/CA application.

A significant (about ten fold) increase in soil erosion (wind blown) would occur on 11,524 acres of high erosion hazard classed lands identified for transfer. Erosion would be reduced on 75 miles of streams excluded from grazing.

Livestock grazing would initially be stocked at 119,827 AUMs, a reduction of 27%. The long-term stocking level would be 128,553 AUMs. This reduction is a result of changing stocking use levels in overused areas. Range improvements would include 41 miles of pipeline, and 75 miles of fencing. Land treatments would include 1,500 acres of brush control and 1,650 acres of seeding. The entire JRA would be under full suppression management. Native range in good/fair condition would increase slightly (1%), with poor condition reduced by 1%, and altered range condition would remain unchanged. The wild horse herd would increase to 175 head and 2,100 AUMs of forage provided.

Wildlife populations would increase significantly for all wildlife species (big game). Improvement in habitat condition would result from a decrease in spring livestock use, reduction in AUM for livestock, habitat improvement projects, and consideration of wildlife in range improvement projects. Competitive forage levels of 4,158 AUMs would be provided. Sage grouse habitat conditions would improve slightly from decreased livestock use and inclusion of wildlife needs in range improvement projects. Nesting complexes would be reduced in size from wildfires.

Riparian habitat would show an increase to 52% in good condition habitat from improvements along 55 miles of stream and aquatic habitat would show an increase to 3% in excellent condition and 64% in good condition habitats from improvements along 56 miles of streams.

There would be no prescribed burns used to improve rangelands. Fire management costs would remain at same levels (\$100,000 year) even under full suppression for the entire JRA.

Mineral activity would show that 84% of the JRA open to leasables and 82% open to locatables. Sand and gravel sources would be adequate to meet road district needs beyond 20 years. Withdrawals totaling 305,417 acres would be in effect.

Under this alternative, 208,883 acres of public land would be recommended as suitable for wilderness and would include the King Hill WSA, Bruneau-Sheep Creek WSA, and the Jarbidge River WSA. These areas would be withdrawn from mineral entry and avoided by linear ROWs. Most of the bighorn sheep habitat would be protected.

Salmon Falls Creek would be designated an Outstanding Natural Area and along with the Salmon Falls Creek reservoir and upper river canyon would be a SRMA. The Hagerman Fossil Beds and the Hagerman ORV (Owsley Bridge area), the Oregon Trail, the Jarbidge River Canyonlands, Cougar Canyon, and the Bennett Hills winter recreation area would be SRMAs. The Bruneau/Jarbidge River would be managed for white water recreation. Motorized vehicle recreation would be unrestricted on 70% of the JRA, limited on 14%, and closed on 16%. Recreation use would increase to 35,000 activity occasions.

Special designation (national register) and management of six major cultural resources complexes/areas (Oregon Trail, Devils Creek, Juniper Ranch, Clover Creek, Dry Lake Beds, and Cougar Canyon) with several enlarged boundaries would be sought. Fencing would protect some sites but several sites would still deteriorate. ACEC designation would be applied to the Bruneau/Jarbidge River to protect bighorn sheep habitat, as well as cultural, scenic, geologic, and natural values. A number of other cultural sites would receive greater protection as livestock use would be reduced and additional agricultural development would not occur.

Only one known paleontological site would be lost from land transfer. ACEC designation and management would protect the Sand Point and the Hagerman Fossil Beds paleontological sites. The other sites would be protected as lands would remain in public ownership.

Timber resources would not be available for commercial harvests but would be retained for their scenic and wildlife cover value. Recreation wood cutting would be permitted.

By the end of the 20 year period, there would be a net decrease of \$142,000 in income per year and a net loss of 20 jobs resulting from no land transfers for agricultural development and reduced livestock use on the public lands.

ALTERNATIVE D₁

This alternative would remove livestock from the public lands and is the "No Grazing" Alternative.

Land tenure adjustment would see 13,840 acres considered for transfer from federal ownership. None of these areas would be for farm development under DLE/CA programs. Utility ROWs would be restricted on 16% of the JRA. The entire area would not be open for DLE/CA application.

A significant (about ten fold) increase in soil erosion (wind blown) would occur on 11,524 acres of high erosion hazard classed lands identified for transfer. Elimination of livestock grazing would increase soil stability on public lands and reduce current erosion caused by trampling.

Livestock grazing would be eliminated on public lands in the JRA. Range improvements which impede wildlife movements would be removed. Native range condition in good/fair condition would increase by 2%; poor condition would be reduced 3%. The wild horse herd would be increased to 175 head and 2,100 AUMs of forage provided.

All wildlife populations (big game species) would be expected to exceed reasonable numbers. Lack of livestock competition would improve all habitats. Sage grouse populations would greatly improve.

Riparian habitat would show an increase to 6% in excellent condition and 56% in good condition from both habitat improvements and elimination of livestock grazing. Aquatic habitat would show an increase to 5% in excellent and 67% in good condition from habitat improvements and livestock elimination.

There would be no prescribed burns used to improve rangelands. Fire management costs would remain at present levels (\$100,000 year) even under full suppression for the entire JRA.

Mineral activity would show that 84% of the JRA open to leasables and 82% open to locatables. Sand and gravel sources would be adequate to meet road district needs beyond 20 years. Withdrawals totaling 305,417 acres would be in effect.

Under this alternative, 208,883 acres of public land would be recommended as suitable for wilderness and would include the King Hill WSA, Bruneau-Sheep Creek WSA, and the Jarbidge River WSA. These areas would be withdrawn from mineral entry and avoided by linear ROWs. Most of the bighorn sheep habitat would be protected. Natural successional processes would be maximized in wilderness as livestock would be eliminated.

Salmon Falls Creek would be designated an Outstanding Natural Area and along with the Salmon Falls Creek reservoir and upper river canyon would be a SRMA. The Hagerman Fossil Beds and the Hagerman ORV (Owsley Bridge area), the Oregon Trail, the Jarbidge River Canyonlands, Cougar Canyon, and the Upper Bennett winter recreation area would be SRMAs. The Bruneau/Jarbidge River would be managed for white water recreation. Motorized vehicle recreation would be unrestricted on 70% of the JRA, limited on 14%, and closed on 16%. Recreation use would increase by 35,000 activity occasions.

Special designation (national register) and management of six major cultural resources complexes/areas (Oregon Trail, Devils Creek, Juniper Ranch, Clover Creek, Dry Lake Beds, and Cougar Canyon) with several enlarged boundaries would be sought. Fencing would protect some sites but several sites would still deteriorate. ACEC designation would be applied

to the Bruneau/Jarbridge River to protect bighorn sheep habitat, as well as cultural, scenic, geologic, and natural values. As livestock grazing would be eliminated and additional agricultural development would not occur, all cultural sites would receive greater protection.

Only one known paleontological site would be lost from land transfer. ACEC designation and management would protect the Sand Point and the Hagerman Fossil Beds paleontological sites. The other sites would be protected as lands would remain in public ownership.

Timber resources would not be available for commercial harvests but would be retained for their scenic and wildlife cover value. Recreation wood cutting would be permitted.

By the end of the 20 year period, there would be a net decrease of \$1.8 million in income per year, and a net loss of 253 jobs resulting from no land transfers for agricultural development and the elimination of livestock grazing from the public lands.

PART II

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CHAPTER 1

INTRODUCTION

Purpose and Need

The Jarbidge Resource Management Plan (RMP) is being prepared to provide the Bureau of Land Management, Boise District Office with a comprehensive framework for managing 1,690,473 acres of BLM-administered public land over the next 15 to 20 years.

The public lands contain abundant natural resources and provide multiple benefits to the people of the United States such as: watershed, habitat of fish and wildlife, wild horses, cultural and paleontological resources, scenic and open space resources, opportunities for a wide variety of recreational activities, timber, minerals and energy, and forage for domestic livestock. The public lands also serve needs of local communities under the Recreation and Public Purposes Act, provide rights-of-way for public utilities, and may be available for agricultural development, as well as sales and exchanges when in the national interest.

Growing populations, advanced technology, and expanding economic demands are focusing increasing pressures on the public lands. Recognizing the need to respond to these pressures, Congress enacted the Federal Land Policy and Management Act of 1976 (FLPMA) directing the BLM to develop comprehensive land use plans for the management, use, and protection of the public lands (Sections 201 and 202).

The basic purpose of this plan is to ensure that public lands will be managed in accordance with FLPMA, under the principles of multiple use and sustained yield and other principles as outlined in BLM planning regulations (43 CFR 1600). A second purpose is to ensure that the plan is responsive to the major issues described in Part I and achieves an equitable and proper balance of resource use and protection as determined through public participation, consultation, coordination, and cooperation. Thirdly, as required under Section 603 of FLPMA, this document analyzes preliminary wilderness suitability recommendations for three wilderness study areas (WSAs) located within and adjacent to the planning unit. For these WSAs, this document makes preliminary recommendations as to their suitability or nonsuitability for inclusion into the National Wilderness Preservation System. These recommendations will be reported through the Director of the BLM, the Secretary of the Interior, and the President to Congress. The final decision on suitability or nonsuitability of the WSAs will be made by Congress.

This part of the document is the draft environmental impact statement (EIS) which addresses four alternative plans and identifies one alternative as the BLM's preferred alternative. The alternatives address key public land issues identified through public participation.

This document also serves as the instrument to satisfy the 1975 U.S. District Court approved agreement (Case #1983-73) between BLM and the Natural Resources Defense Council, et al., in which BLM agreed to consider the impacts of various intensities of livestock grazing in its decision making process.

This draft EIS is designed and intended to aid Bureau officials in the final selection of a resource management plan. The EIS further satisfies the intent of the Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act of 1969 (NEPA), 40 CFR Part 1500. The intent of the CEQ regulations is to "ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." When finalized, the EIS will provide an environmental analysis of the approved RMP which may be referenced for future activity planning and project implementation associated with the RMP.

Description of Planning Area

The Jarbidge Resource Area encompasses 2,100,519 acres of land located from the South Fork of the Boise River and Anderson Ranch Reservoir to the Humboldt National Forest boundary and Nevada state line (Map 1-1). Of this area, 81% (1,690,473 acres) is public lands administered by the BLM, 5% (102,509 acres) is state lands, and 14% (307,537 acres) is private lands. The public land holdings are generally in a solid block pattern (Map 2 - Part I) and are located in Elmore, Owyhee, and Twin Falls Counties in Idaho and in Elko County, Nevada.

Significant natural, scenic, recreation, paleontological, and cultural resources found within the area include the South Fork of the Boise River, Anderson Ranch Reservoir, Bennett Hills, Snake River, Salmon Falls Canyon and Reservoir, C.J. Strike Reservoir, 44 miles of the Oregon Trail, the Birds of Prey Natural/Withdrawal Area, the Bruneau and Jarbidge Rivers, the Hagerman Fossil Beds, and 3 State Parks (Bruneau Dunes, Three Island Crossing, and Hagerman Horse Quarry). The city of Glens Ferry and the town of Hammett are located just north of the Snake River. The Saylor Creek Gunnery Range, a military training area, is also within the area.

The Jarbidge Resource Area originally consisted of the Bennett Hills, the Saylor Creek, the Three Creek and the Diamond "A" Planning Units. The Jarbidge Resource Management Plan has divided the area into 16 Multiple Use Areas (MUAs) as shown in Map 1-2. These 16 MUAs will be used to analyze and portray data in this RMP/EIS. The description of the MUAs is included in Part I and the management proposals for each alternative are described in detail in the following chapter.

Description of Alternatives

indicating what level of resource production and use is appropriate, what intensity of management is needed, whether there are sensitive and significant resources which must be protected, and whether BLM would consider transfer of public lands from its jurisdiction. The second is to provide a basis for considering future proposals by supplementing the detailed resource management objectives and required actions established for the multiple use area with general purpose and policy statements. This feature is intended to help keep the plan responsive to demands and to reduce the number of future plan amendments needed.

Prior to undertaking or approving any proposed resource management action on public lands in the Resource Area, BLM will ensure that such action is consistent with the purposes and policies of the multiple use or transfer class or classes involved.

The multiple use or transfer class assigned to each management area are shown on Map 2-1 and on Appendix Table B-2. Public lands are placed in the multiple use or transfer class that best reflects the specific resources and management priorities for the area. These classes vary by alternative, depending on the major goals of each alternative. A brief description of each class follows. A detailed description of the purpose and policies of each class is included in Part I (page 15).

Moderate Use Class

Purpose - The purpose of a moderate use class is to delineate public lands which are suitable for a wide variety of existing and potential uses.

Limited Use Class

Purpose - The purpose of a limited use class is to delineate public lands where strict environmental controls are required to protect sensitive and significant resources.

Intensive Use/Development Class

Purpose - The purpose of an intensive use/development class is to delineate areas suitable for large scale, intensive use and development.

Transfer Class

Purpose - The purpose of a transfer class is to delineate public lands which may be considered for transfer out of federal ownership. The transfer class is divided into four categories: Sale (T1), Sale or Exchange (T2), Exchange (T3), and Agricultural Entry (T4).

CHAPTER 2

ALTERNATIVES INCLUDING THE PROPOSED ACTION

Introduction

A range of possible choices for resolving planning issues is examined in the planning process. These choices are consolidated into a number of complete resource management plan alternatives for consideration.

This chapter discusses the BLM's multiple use and transfer area designations used in describing alternative plans. Then the alternatives considered in the Jarbidge RMP are presented. The last section of this chapter describes additional alternatives considered but not addressed in detail for the Jarbidge RMP.

The planning criteria discussed in Part I (page 7) were used to guide the development of the Resource Management Plan (RMP) and all alternatives. Resource management guidelines and standard operating procedures (SOPs) were developed to serve as "sideboards" by which management occurs on the public lands. These guidelines include adherence to federal and state laws, federal rules and regulations, agency policies, state plans and policies, and local regulations.

These guidelines direct the BLM's management of the public lands and are described in Part I (page 71). These guidelines and standard operating procedures apply to all alternatives.

Multiple Use Areas

The Jarbidge Resource Area is divided into sixteen multiple use areas (MUAs) for purposes of organizing and presenting the planning decisions. A multiple use area generally contains lands having similar resource features and characteristics and it can effectively be managed as a unit.

The 16 multiple use areas are delineated on Map 1-2 and are described in detail in Part I (page 20).

Multiple Use and Transfer Classes

Each of the 16 multiple use areas in the Resource Area is assigned to one or more multiple use or transfer classes: moderate use class, limited use class, intensive use class, or transfer class.

Multiple use and transfer classes serve two purposes in this plan. The first is to describe overall resource opportunities and constraints by

Alternatives In Detail

Introduction

The following section describes the four alternatives and one sub-alternative (No Livestock Grazing) that are developed for the Jarbidge RMP/EIS. The format for presentation is as follows: The major goals for each alternative are presented first. Following the description of the goals, the management objectives and management actions for specific resources within the planning area are presented. The resources addressed correspond to the issues and management concerns described in Part I. This format is used to assist the reviewer in comparing and tracking the differences between the alternatives and to see how the issues are handled. Management actions for specific multiple use areas are presented in Appendix B. The preferred alternative (Alternative C) is also described in Part I.

Goals

Alternative A

The goal of Alternative A is to maintain current levels of management, resource allocations and investments. This is the "No Action" alternative. This alternative continues the management direction outlined in the Saylor Creek MFP (covering MUAs 6, 7, 8, 9 and portions of 4 and 5). The remaining MUAs would be managed under current SOPs, management agreements and national guidances. This alternative is the proposed action for livestock grazing.

Alternative B

The goal of Alternative B is to favor increased production and consumptive use of the natural resource base. Increased livestock production, agricultural development, timber harvest, mineral, and energy development would receive the greatest attention and widest latitude. Motorized vehicle access and related recreation use would receive priority over primitive/dispersed management. Management activities would contribute significantly to strengthening the local economic base. Management would comply with minimal standards accepted for environmental protection while still operating in the framework of multiple-use and sustained yield.

Alternative C (Preferred Alternative)

The goal of Alternative C is to provide a balance of commodity resource uses (renewable and nonrenewable) and development within the framework of maintaining or enhancing the natural resource base. Livestock grazing, timber harvest, agricultural development, and mineral uses would be managed at levels that would support and strengthen present industries where they would have limited adverse impact to the

Description of the Alternatives

environment. Fragile resources would be protected from irreversible decline. Conflicts and trade-offs among resource uses would guide management activities.

Alternative D

The goal of Alternative D is to place emphasis on ensuring that the natural environment receives priority consideration for protection and enhancement. Wildlife, waters, soils and wilderness values would be fully protected or would receive emphasis over other multiple resource uses. All cultural resources would receive emphasis over other multiple resource uses and receive full protection. Dispersed primitive recreation activities would be emphasized over developed/motorized recreation. Areas with unique values would receive special designation.

Alternative D₁

The goal of Alternative D₁ is the same as for Alternative D with the additional goal that livestock grazing would be removed from all public land.

The management emphasis (Moderate, Intensive, Limited and Transfer) for the Multiple Use and Transfer Areas (MUAs) is shown in Map 2-1 and Appendix Table B-2 for each alternative.

Objectives and Management Actions

Lands

Land Transfer

Currently there are 1,690,473 acres of public lands in the JRA. The transfer of public lands in the JRA has been an issue for a number of years. Numerous applications (352) are on file for the transfer of potential agricultural lands in the Lower Bennett, Snake River Riparian Birds of Prey, Saylor Creek East and Saylor Creek West through the Carey Act and Desert Land Entry Programs. Individuals have also requested that specific parcels be made available for sale or exchange. Additionally, exchange proposals from state and other federal agencies have been discussed at various times. The public lands that have received application for transfer or are identified for transfer, have varying degrees of impacts. Current applications for potential agricultural lands are, in part, located in areas having high values for wildlife (raptors), wild horses, valuable cultural and paleontological sites and also in areas with high erosion hazards. Many people believe the BLM should not get rid of any land, while others would prefer that all public lands be turned over to the state or sold to private entities. At the present time, the JRA has received requests to transfer approximately 170,000 acres. The alternatives below provide a range of objectives to address the transfer issue.

Alternative A - Consider for transfer from federal ownership, 1,240 acres of public lands through sale (T1); 9,925 acres through sale or exchange (T2); 6,795 acres for exchange only (T3); and classify 71,615 acres for potential DLE/CA development (T4).

This alternative has identified a minimum of 1,601,456 acres to be retained in public ownership. Of the 71,615 acres identified for potential DLE/CA development, some will be found unsuitable for transfer under the DLE/CA laws (because of higher public values or the unsuitability of soils) and will be classified unsuitable for agricultural development. These lands would then generally be retained in public ownership. However, those lands classified unsuitable on the basis of soils or other physical factors, and are not needed for public purpose may be considered for transfer through sale or exchange.

A portion of the lands that have been applied for under the Desert Land Act would be made available for agricultural development. Lands applied for within the Saylor Creek Wild Horse area would be retained in federal ownership as well as lands within the Birds of Prey area and around the Oregon Trail. Lands currently identified by the public for sale or exchange would be made available for possible land transfer. Lands identified for exchange only (T3) and not exchanged when offered, would be retained because the public lands involved are well blocked and suitable for retention.

Public lands south of the current Classification and Multiple Use line (C&MU) would remain closed to agricultural entry for the duration of this plan or until the identified DLE/CA transfer areas (T4) have been processed and developed. Additionally, the Oregon Trail, Snake River Birds of Prey (49,286 acres), Saylor Creek gunnery range, the area around Bruneau Dunes State Park, and the remaining 111,333 acres of Saylor Creek East (MUA 7) would also be closed to agricultural entry through the duration of this plan. Land transfer areas/acres are shown on Map 2-1 and summarized on Table 2-1. Appendix Table B-2 shows transfer acreage by MUA.

Alternative B - Consider for transfer from federal ownership 1,240 acres of public lands through sale (T1), 9,925 acres through sale or exchange (T2); 6,795 acres through exchange only (T3); and classify 142,194 acres for potential DLE/CA development (T4). This alternative has identified a minimum of 1,530,877 acres to be retained in public ownership. Of the 142,194 acres identified for potential DLE/CA development, some will be found unsuitable for transfer under the DLE/CA laws because of higher public values or the unsuitability of soils and will be classified unsuitable for agricultural development. These lands would then generally be retained in public ownership. However, those lands classified unsuitable on the basis of soils or other physical factors, and are not needed for a public purpose, may be considered for transfer through sale or exchange.

Under this Alternative a total of 160,154 acres of public lands would be made available for possible transfer. All lands applied for sale or exchange (T1, T2, and T3) would be made available for transfer. Minimal clearances and stipulations would be required. Public lands south of the C & MU line would still be retained and closed to entry for the duration of the plan or until the plan was amended. The Oregon Trail would be protected.

Description of the Alternatives

Land transfer areas/acres are shown on Map 2-1 and summarized in Table 2-1. Transfer acreages by MUA are shown in Appendix Table B-2.

Alternative C - Consider for transfer from federal ownership 1,200 acres of public lands through sales (T1); 9,605 acres through sales or exchange (T2); 6,080 acres through exchange only (T3); and classify 74,561 acres for potential DLE/CA development (T4). This alternative has identified a minimum of 1,599,027 acres to be retained in public ownership. Of the 74,561 acres identified for potential DLE/CA development, some will be found unsuitable for transfer under the DLE/CA laws because of higher public values or the unsuitability of soils and will be classified unsuitable for agricultural development. These lands would then generally be retained in public ownership. However, those lands classified unsuitable on the basis of soils or other physical factors and are not needed for a public purpose, may be considered for transfer through sale or exchange.

Under this alternative, 88,566 acres would be considered for transfer. The Wild Horse Herd would remain but 3,846 acres of existing habitat (on east end of herd boundary area) would be made available for potential DLE/CA development. Land transfers would not occur in the Sand Point Paleontological area as the area would be an ACEC. Cultural (including Oregon Trail) and paleontological sites would receive protection and no lands would be transferred that contain these values. All public lands would be retained in the Birds of Prey Area (MUAs). Land transfer, however, would occur in some existing antelope and mule deer habitat and in 3,128 acres of curlew habitat, a sensitive species.

Land transfer area are shown on Map 2-1 and summarized in Table 2-1. Transfer acreages by MUA are shown in Appendix Table B-2.

Alternative D - Consider for transfer from federal ownership 1,120 acres of public lands through sales (T1); 9,605 acres through sales or exchange (T2); and 3,115 acres through exchange only (T3). Retain a minimum of 1,676,633 acres of public lands.

Under this alternative, there would be no lands transferred in important wildlife habitat, cultural, paleontological or scenic areas. No DLE/CA transfers would occur. Only those lands identified for possible transfer, that have no or very minimal impact would be made available for transfer. No curlew habitat would be available for transfer.

Land transfer areas are shown on Map 2-1 and summarized in Table 2-1. Transfer acreage by MUA are shown in Appendix Table B-2.

Table 2-1
Land Transfer and Retention Considerations by Method for
Alternatives A, B, C, and D
(in acres)

Alternative	Sale	Sale or Exchange	Exchange	Agricultural Entry	Total Transfer	Total Retention
A	1,240	9,925	6,795	71,615	89,575	1,601,456
B	1,240	9,925	6,795	142,194	160,154	1,530,877
C	1,200	9,605	6,080	74,561	91,446	1,599,027
D	1,120	9,605	3,115	0	13,840	1,676,633

Utility/Rights-of-Way (ROW) Avoidance

The placement of utility lines (electrical, natural gas) and linear ROWs have historically centered around a corridor concept. Where possible, lines and linear ROWs were located in areas which had already been disturbed or in areas where they would have the least adverse impact. The Lower Bennett MUA (3) is one of these areas where a number of these lines do form a SE to NW corridor. These lines have paralleled the route of the Oregon Trail.

Current policy has changed this corridor concept of locating utility lines and linear ROWs in a corridor to a policy of identifying "Avoidance Areas." These are areas that have very significant values that would be substantially impacted, either through surface, underground or visual disturbance, if a utility or linear ROW would be constructed through it. Such avoidance areas include military gunnery areas, cultural and paleontological sites, high quality scenic areas (Class I or II VRM), Wilderness Study Areas, Wild and Scenic River areas (study areas), natural areas, or crucial wildlife habitats.

The alternatives below provide a range of objectives to identify avoidance areas.

Alternative A - Identify areas utility lines and linear rights-of-ways (ROWs) must avoid.

Utility lines and ROWs would be restricted on 169,953 acres (10%) of the JRA. All other areas would be available for potential Utility and Rights-of-Way locations. Avoidance areas are shown by MUA in Appendix Table B-3 and the locations of avoidance areas are shown on Map 2-2.

The Bruneau-Jarbridge potential Wild and Scenic River Areas would remain an avoidance area until the Congress takes action. The acreages and boundary established by Congress would be added through a plan maintenance action. Hagerman Fossil Beds, Salmon Falls Creek ONA, Sand Point and other cultural and paleontological areas would be avoided. The Saylor Creek Gunnery Range would remain an avoidance area until changes are requested and approved through the U.S. Department of Defense-Air Force. A plan amendment action would then be required and approved. The public land bordering the southern boundary of Bruneau Dunes State Park, would be an avoidance area to protect the visual background (values) of the park.

Description of Alternatives

Alternative B - Identify areas utility lines and linear rights-of-ways (ROWs) must avoid.

Utility lines and ROWs would avoid 176,860 acres (10%) of the JRA. The same areas covered by Alternative A would be avoided in this alternative. In addition, the King Hill WSA (21,095 acres) and the Bruneau River, Sheep Creek and Jarbidge River WSAs, 15,622 acres would be avoided in the JRA. Adjustments to the boundaries of the WSAs and Wild River proposal would be completed after Congress takes action. This would be done as a plan maintenance action.

Avoidance areas are shown by MUA in Appendix Table B-3 and the location of avoidance areas are shown on Map 2-2.

Alternative C - Identify areas utility lines and linear rights-of-ways (ROWs) must avoid.

Utility lines and ROWs would avoid 213,402 acres (12%) of the JRA. In addition to the areas covered by Alternative A, the King Hill WSA (21,095 acres), Bruneau-Jarbidge-Sheep Creek WSAs (52,022 acres) and bighorn sheep habitat (4,320 acres) would be avoided. Adjustments to the boundaries of the WSA and the Wild River proposal would be completed after Congress takes action. This would be done as a plan maintenance action.

Avoidance areas are shown by MUA in Appendix Table B-3 and the location of the avoidance areas are shown on Map 2-2.

Alternative D - Identify areas utility lines and linear rights-of-ways (ROWs) must avoid.

Utility lines and ROWs would avoid 263,213 acres (16%) of the JRA. In addition to the area covered by Alternative A, the King Hill WSA (23,815 acres), Bruneau-Jarbidge-Sheep Creek WSA (95,639 acres) and big horn sheep habitat (4,320 acres) would be avoided. Adjustments to the WSAs and Wild River proposal would be completed after the Congress takes action. This would be done as a plan maintenance action.

Avoidance areas are shown by MUA in Appendix Table B-3 and the location of the avoidance areas are shown on Map 2-2.

Range Resources

Livestock and Wild Horse Management

The management of livestock and wild horses on public lands has been a long standing issue of both livestock operators and the other public land users who have been concerned that livestock has monopolized use of range-land resources. Past improvements on the range have had more beneficial effects for livestock than for wildlife or other users. Levels of livestock and wild horse use, additional rangeland improvements (project developments, vegetative manipulation) and management levels (intensities) for addressing this issue are presented in the following four alternatives. Methodologies used for determining use levels are found in Appendix F. The wild horse area is shown on Map 3-4.

Alternative A - Provide forage use levels of 148,395 AUMs for livestock and 600 AUMs for wild horses to support current preference for livestock and the current number of wild horses. Maintain 367,500 acres of existing range vegetative manipulation improvements and maintain existing range condition by complying with existing grazing systems and maintenance of range improvements.

Current livestock management practices would continue. Livestock use levels would remain at present 5-year average use levels except on areas transferred out of federal ownership. Livestock use would be adjusted downward as transfers occur. The implementation of eight existing AMPs would be continued. No new AMPs or project developments (fencing, water, land treatment) would occur. Livestock and wild horse use levels (AUMs) are summarized below and by MUAs and Allotments in Appendix Tables B-4 and F-4.

Livestock				Wild Horses	
Current Preference	5 Year Average	Initial Use Level	20 Year Use Level	Initial Use Level	20 Year Use Level
166,586	163,477	163,477	148,395	600	600

The Saylor Creek wild horse herd area would remain and the herd managed to sustain existing numbers.

Alternative B - Provide an increase, in stages, of forage use for livestock to 327,140 AUMs by 2005. Eliminate the existing wild horse herd. Maintain existing range vegetative improvements and initiate vegetative manipulation on 132,620 additional acres (Appendix Table B-5).

More intensive livestock practices would be applied to public lands. Initially, forage use levels would be increased on all but one MUA (Appendix Table B-4). Eighty miles of pipelines and supporting storage tanks, 2 reservoirs/wells, and 154 miles of fencing would be developed. Allotment management plans would be developed for an additional 38 allotments. Livestock use levels (AUMs) are summarized below and by MUAs and Allotments in Appendix Tables B-4 and F-4. The 8 existing AMPs would be reviewed and updated to comply with new activity plan policy as outlined in BLM Manuals.

Livestock				Wild Horses	
Current Preference	5 Year Average	Initial Use Level	20 Year Use Level	Initial Use Level	20 Year Use Level
166,586	163,477	197,835	327,140	600	0

No forage would be made available for wild horses and the wild horse herd would be eliminated.

Alternative C - By the year 2005, provide an increase of forage use to 271,631 AUMs for livestock, and provide 600 AUMs to support a wild horse herd of 50 animals. Maintain existing range vegetative improvements. Provide for vegetative manipulation on an additional 57,976 acres of poor condition range to benefit both livestock and wildlife.

Description of Alternatives

Intensive management practices would be applied to designated areas of public land. Spring and fall livestock grazing use would be balanced in MUA 2 (50% spring, 50% fall) to provide additional plant vigor and to reduce the amount of spring forage competition with wintering mule deer. Initially, forage use levels would be reduced on seven MUAs, increased on seven MUAs, and remain unchanged on two MUAs (Appendix Table B-4). The initial forage levels are based on forage estimates that allow proper levels of use on each major forage species for the proposed season of use. These levels provide for proper plant maintenance, vigor, and reproduction. Livestock use at these levels would allow maintenance of existing native plant communities and improvement in range condition if environmental factors (such as precipitation, moisture regimes, and soil conditions) and adjacent seed sources provide opportunities for expansion of native species. Poor condition range areas would be grazed at the levels indicated in the above analysis. Forage developed in seedings would reduce grazing pressure on adjacent native range areas, especially on those areas in poor condition.

Over a 20 year period, livestock use would be increased to the 271,631 AUM level. These increases would be accomplished by developing water and improving livestock distribution on large existing seedings and by developing new seedings.

Range proposed land treatments would occur on 57,976 acres. This consists of sagebrush control (without any seeding) on 23,936 acres, sagebrush control and seeding on 3,600 acres, and seeding only (no brush control needed) on 30,440 acres (Appendix Table B-5). Seed mixtures used in vegetative manipulations would be of varieties that benefit both wildlife and livestock. Additional project development would include 107 miles of pipeline and associated water storage tanks, one reservoir, one well, and 98 miles of fencing.

Allotment Management Plans (AMPs) would be developed for an additional 38 allotments and coordinated activity plans would be developed. The 8 existing AMPs would be reviewed and updated to comply with new activity plan policy as outlined in BLM Manual 1619.12. Livestock and wild horse use levels (AUMs) are summarized below and by MUAs and Allotments in Appendix B-4 and F-4. Grazing would be limited on the Hagerman Fossil Beds (land below the plateau). Grazing would be excluded in the Salmon Falls Creek Outstanding Natural Area.

Livestock				Wild Horses	
Current Preference	5 Year Average	Initial Use Level	20 Year Use Level	Initial Use Level	20 Year Use Level
166,586	163,477	172,493	271,425	600	600

Alternative D - Provide 128,553 AUMs of forage for livestock grazing and 2,100 AUMs for wild horses to support 175 wild horses by 2005. Improve poor condition range by controlling brush on 1,500 acres and seeding an additional 1,650 acres. Seedings would contain a mixture of grasses, forbs and shrubs that benefit both wildlife and livestock.

Initially, forage use levels by livestock would be reduced on all MUAs

(Appendix Table B-4). Grazing would be excluded from two MUAs, the Hagerman Fossil Beds and Salmon Falls Creek ONA to protect natural values. Project development would include 41 miles of pipeline and 75 miles of fencing. Coordinated Activity Plans and 4 additional AMPs would be developed. The 8 existing AMPs would be reviewed and updated to comply with new activity plan policy as outlined in BLM Manuals. Livestock and wild horse use levels (AUMs) are summarized below and by MUAs and Allotments in Appendix Tables B-4 and F-4.

Livestock				Wild Horses	
Current Preference	5 Year Average	Initial Use Level	20 Year Use Level	Initial Use Level	20 Year Use Level
166,586	163,477	119,827	128,553	600	2,100

Sub-Alternative D₁ - Eliminate livestock grazing on public lands in the JRA. Allow natural succession of plant community development to occur.

Existing Allotment Plans would be cancelled as no livestock forage would be provided. Livestock trailing permits would remain in effect to allow movement to adjacent National Forest, state, private lands or other BLM Resource Areas. Structural developments (i.e., fencing) would be removed where they impede wildlife movements.

Wildlife (Terrestrial)

The BLM is responsible for providing wildlife habitat on public lands. Sufficient habitat to sustain viable populations of all species present is the general goal. In addition, state wildlife agencies are encouraged to establish reasonable population goals for big game and other selected species. The Endangered Species Act mandates the BLM to protect and enhance habitat for listed and candidate species.

Each alternative of the RMP addresses a series of actions which would affect wildlife habitat. The basic goal to maintain viable populations of all species present would be met under any of the alternatives within the planning period. However, the abundance of various species may vary significantly between alternatives. Population goals may not be met under a certain alternative, but may be met or exceeded under other alternatives. Existing populations of big game species and 20-year goals are shown below. Expected populations in 20 years under each alternative are shown in Table 2-5. Specific management actions to maintain or enhance wildlife are described under each alternative.

Description of Alternatives

Major Wildlife Species
Existing Populations and Goals for the Year 2005

Species	Existing Numbers f Habitat Acres	Population Goal f Habitat Acres
Mule Deer		
Yearlong	2,480	3,380
Winter	8,380	11,140
Antelope		
Yearlong	660	1,370
Winter	1,160	3,160
Bighorn Sheep		
Yearlong	25	365
Winter	--	---
Elk		
Yearlong	145	220
Winter	195	300
Curlew	7,118 acres	Maintain 7,118 acres

Alternative A - Management actions would include monitoring of the big game habitat. Motorized vehicle activity would remain limited to designated roads and trails within bighorn sheep habitat. Other ORV limitations/closures in crucial big game habitat (winter, nesting, calving areas, etc.) would be initiated if the activities begin to have an adverse impact on the wildlife. Coordination with Fish and Game and affected user groups would be initiated prior to such actions.

A special recreation management area plan to be developed for the growing white water recreation use on the Bruneau-Jarbidge Rivers would consider and be guided, in part, by bighorn needs. Forage (competitive AUMs) would continue to be made available in the following amounts: bighorn sheep (598 AUMs), elk (385 AUMs), mule deer (1,525 AUMs) and pronghorn (261 AUMs). Competitive AUMs are the equivalent cattle AUMs that are required to meet wildlife forage requirements.

Alternative B - Management actions would include those actions proposed in Alternative A and additional actions as follows: vegetative manipulations (seedings) as proposed for improvements for livestock, would contain the type of seed mixtures of grasses, forbs, and shrubs that would benefit the wildlife that are found in that project area. The following amounts of competitive forage (in AUMs) would be made available for wildlife: bighorn sheep (598 AUMs), elk (130 AUMs), mule deer (1,366 AUMs) and pronghorn antelope (261 AUMs). See Appendix Table B-4 for detail breakdown by MUA.

Alternative C - Management actions would include those actions proposed in Alternative A and additional actions as follows: Vegetative

manipulations (seedings as proposed for improvements for livestock, would contain the type of seed mixtures of grasses, forbs and shrubs that would benefit wildlife that are found in that project area. Wildlife proposed land treatment projects include replanting 3,000 acres of poor condition range to native vegetation, interseeding 6,500 acres, and rehabilitating 8,700 acres of existing burns. Appendix Table B-5 shows improvement acreages by MUA.

The following amounts of competitive forage (in AUMs) would be made available for wildlife: bighorn sheep (598 AUMs), elk (586 AUMs), mule deer (2,428 AUMs) and pronghorn antelope (265 AUMs).

An ACEC would be proposed for bighorn habitat (see Map 2-3). The Special Recreation Management Area Plan that would be developed for white water recreation activity for the Bruneau-Jarbridge Rivers would be guided by bighorn needs. Restrictions on mineral activity to protect wildlife are covered in the Boise Districts no occupancy and special stipulation guidelines.

Alternative D - Management actions would include those actions proposed in Alternative A and additional actions as follows: vegetative manipulations (seedings as proposed for improvements for livestock, would contain the type of seed mixtures of grasses, forbs and shrubs that would benefit wildlife that are found in that project area. Wildlife proposed land treatment projects include replanting 18,250 acres of poor condition range to native vegetation, interseeding 6,500 acres, and rehabilitating 8,700 acres of existing burns. Appendix Table B-5 shows improvement acreages by MUA.

The following amounts of competitive forage (in AUMs) would be made available for wildlife: bighorn sheep (598 AUMs), elk (787 AUMs), mule deer (2,502 AUMs) and pronghorn antelope (271 AUMs).

An ACEC would be proposed for bighorn habitat (MUA 10). The Special Recreation Management Area Plan that would be developed for white water recreation activity for the Bruneau-Jarbridge Rivers would be guided by bighorn needs. Restrictions on mineral activity to protect wildlife are covered in the Boise Districts no occupancy and special stipulation guidelines.

Riparian and Aquatic Resources

The presence of riparian habitats adjacent to perennial and intermittent streams and the shorelines of ponds, lakes and reservoirs serves a multiple role in resource management. In addition to serving as a source of forage and water for livestock and terrestrial wildlife, a good riparian habitat helps protect and stabilize the watershed from erosion, maintains and improves water quality, and provides better fish habitat.

Past management practices on public lands in the JRA did not fully consider the impacts that adjacent land use actions had on riparian zones. Livestock grazing practices had perhaps the biggest impact on these areas and in more recent years, agricultural developments have also impacted the riparian and aquatic habitats. Maps 3-6 and 3-7 identify current riparian and aquatic conditions.

Description of Alternatives

The alternatives below address this public issue through different levels of management actions to maintain or improve the current condition of these resources.

Alternative A - Maintain present condition of riparian and fisheries habitat under current management levels on 370 miles of streams along public lands in the JRA.

The management of riparian and fisheries habitats would continue at present levels for implementation practices to improve riparian habitats. Existing coordination and District policies and procedures would guide management actions.

Alternative B - Improve 37 miles of stream riparian habitat and 39 miles of fisheries habitat by fencing by the year 2005. Because of riparian and fisheries habitat overlap, a total of 59 stream miles would be fenced.

Management actions in addition to those taken in Alternative A, would include gap fencing of the above 59 stream miles, vegetative manipulation (including planting of willows), stream habitat structure placement, and providing watering areas for livestock away from selected stream areas. Allotment management plans, which would be developed or reviewed as part of rangeland actions, would address riparian and fisheries needs on those streams identified. Appendix Tables H-1 and H-2 (Alternative B columns) identifies stream segments, by MUA, to be improved and what improvements would apply. Proposed fencing is shown on Map 2-4. The remaining stream miles would be maintained in current condition and coordination with adjacent land owners/permittees would continue.

Alternative C - Improve 53 miles of riparian and 51 miles of fisheries habitat by fencing by the year 2005. Because of riparian and fisheries habitat overlap, a total of 70 miles of stream would be fenced. Proposed fencing is shown on Map 2-4.

Management actions would include those outlined in Alternative B and as shown in Appendix Tables H-1 and H-2 (Alternative C columns).

Alternative D - Improve 55 miles of riparian and 56 miles of fisheries habitat by fencing by the year 2005. Because of riparian and fisheries habitat overlap, a total of 75 miles of stream would be fenced. Proposed fencing is shown on Map 2-4.

Management actions would include outlined in Alternative B and as shown in Appendix Tables H-1 and H-2 (Alternative D columns).

Fire Management

The management of both wild, and prescribed fires have generated considerable interest from the various publics using or living adjacent to BLM lands. These publics have questioned current suppression categories (limited, full) and the way fire is used as a management tool and how burned areas are rehabilitated. Suppression areas by MUA are shown in Appendix Table B-4.

Alternatives A, B, and C - Reduce fire suppression costs by managing 499,712 acres (Alternative A) and 388,730 acres (Alternatives B and C) as limited fire suppression areas. Develop special considerations for fighting fires in WSAs, on the Oregon Trail, in known Cultural and Paleontological Areas and in selected wildlife habitats.

Portions of the Inside Desert and West Devils MUAs would be managed under a limited suppression concept (388,730 acres). Natural fires in the limited zone would be allowed to burn until the fire reaches 2,000 acres before fire crews respond. However, where a wild fire, in a limited suppression zone, threatens private property, key wildlife, cultural or recreation resources or public project investments or if fire danger is considered extreme, fire crews would respond immediately.

Prescribe burns (fire used to implement management objectives for livestock or wildlife) would continue to be used. Rehabilitation of burned areas would use seed mixtures of grasses, forbs and shrubs, which would benefit both wildlife and livestock. Where livestock grazing would be excluded, seed mixtures which are natural to the surrounding area and that benefit the wildlife characteristic to the area would be used.

Where prescribed burns without reseeding are proposed, reseeding through natural processes would be monitored. If natural reseeding is unsuccessful, then rehabilitation similar to above would occur.

Fire management plans would be developed for all alternatives. Interdisciplinary and interagency (including private permittees) input would be sought in developing fire plans.

Alternative D - Manage the Jarbidge Resource Area under a full suppression concept.

The entire Resource Area (1,690,473 acres) would be managed under full suppression. Special considerations would be given/developed for fighting fires in WSAs (or designated wilderness), in areas with cultural values - particularly the Oregon Trail, and in wildlife habitats. Prescribed burns, rehabilitation actions and fire plans would be handled as described in Alternative A, B and C.

Energy and Minerals

The interests in the exploration and development of minerals has not been a major activity in the JRA. Although no oil or natural gas producing wells exist in the JRA, a number of leases have been issued. Portions of two Known Geothermal Resource Areas (KGRA) are found in the JRA; but the relatively low temperatures, low volumes or lack of economic feasibility indicate that these areas would not be an important energy source in the next 20 years.

Although the Resource Area has an active leasing program, only four exploratory oil wells have been drilled in or near the resource area. All were "dry" wells. The 75 leases issued for 1983 cover 62,490 acres.

Sand and gravel (saleables) continue to be the most demanded and

Description of Alternatives

available material from the JRA. Current sources (38 pit/use areas) are expected to meet the needs for these products.

Mineral exploration and development for locatables has historically been concentrated in the Anderson Ranch/Boise River and Upper Bennett MUAs. The Volcano Mining District (MUA 2) is currently active in mining for silver. The current level of activity is expected to continue. Jasper mining in the Bruneau River Canyon would also continue at current levels.

Because of the unknown potential for mineral development and the impacts mineral activity could have, extreme public views from unrestricted opportunity to rigid controls have been expressed. The alternatives address a range of opportunities and areas of restrictions. Current policies have been developed which state subsurface mineral rights (located under privately owned surface land) currently owned by the federal government would be retained in federal ownership.

Alternative A - Keep 1,479,142 acres (88%) of the JRA opened for energy mineral exploration and development; and keep 1,531,587 acres (91%) of the JRA open for locatable and saleable minerals exploration and development. Retain surface and subsurface lands with mineral potential in public ownership.

The current mineral leasing program is expected to continue at about present levels. No Surface Occupancy restrictions would continue to be applied to the Oregon Trail, Birds of Prey Area, Saylor Creek Gunnery Range, Bruneau-Jarbidge River Canyon, cultural and paleontological areas, outstanding Natural Area, crucial wildlife habitats and potential powersites. Appendix Table B-3 shows acreages affected by MUA.

Existing withdrawals under the 1872 mining laws would remain in effect for the potential power site locations, Saylor Creek Gunnery Range and Bruneau-Jarbidge River Canyon. Withdrawal acreages by MUA are shown in Appendix Table B-3.

Alternative B - Keep 1,467,841 acres (87%) of the JRA open for energy mineral exploration and development and keep 1,510,538 acres (89%) of the JRA open for nonenergy mineral exploration and development. Provide special protection for the 624 acre Sand Point Paleontological area and the 4,394 acre Hagerman Fossil Beds.

Management action proposed in Alternative A would apply except that surface occupancy restrictions to protect wildlife would be removed. Other occupancy restrictions, closures and withdrawal acreages by MUA are shown in Appendix Table B-3 and Table 1 of the Plan.

Alternative C - Keep 1,456,569 acres (86%) of the JRA open for energy mineral exploration and development and keep 1,427,074 acres (84%) of the JRA open for nonenergy mineral exploration and development.

Management actions identified in Alternative A would apply. No occupancy restrictions, closures and withdrawal acreages by MUA are shown in Appendix Table B-3 and Table 1 of the Plan.

Alternative D - Keep 1,432,205 acres (84%) of the JRA open for energy mineral exploration and development and keep 1,385,056 acres (82%) of the JRA open for nonenergy mineral exploration and development.

Management actions identified in Alternative A would apply. No occupancy restrictions, closures and withdrawal acreages by MUA are shown in Appendix Table B-3 and in Table 1 of the Plan.

Wilderness

The possible management of the unroaded primitive type public lands under a wilderness concept has generated a lot of interest from various publics who have an interest in the JRA. Three Wilderness Study Areas (WSAs) are currently managed under Interim Management Policy (IMP) in the JRA. Portions of these WSAs extend into the Bruneau Resource Area and into the Shoshone BLM District (see Map 3-9 and the Wilderness Section of Chapter 3). The three areas Bruneau-Sheep Creek WSA, Jarbidge River WSA and King Hill WSA possess high quality primitive and semiprimitive recreation, scenic and natural values. The following Alternatives and Table 2-2 present four configuration/acreages for managing these WSAs.

Alternative A - Of the 208,833 acres that have been identified as WSAs, zero (0) acres are recommended for wilderness. Manage 57,000 acres of the Bruneau-Sheep Creek-Jarbidge River Canyons as a Special Recreation Management Area (SRMA) for white water recreation and for bighorn sheep. Manage the remaining acres of the two WSAs and the 29,309 acres of the King Hill WSA under current levels of multiple use.

Management actions would include the development of a Special Recreation Management Area Plan for the Bruneau and Jarbidge River and for Sheep Creek to provide management direction for growing white water recreation, for primitive type recreation and for protecting bighorn habitat. The previous recommendation for 121 miles of the Bruneau-Jarbidge River for addition to the National Wild and Scenic River system would continue forward. The King Hill WSA would be managed at current multiple use levels with primitive and semiprimitive nonmotorized recreation opportunities emphasized.

Alternative B - Recommend for protection and management as wilderness, 57,799 acres of the public lands in the Bruneau-Sheep Creek, Jarbidge River and King Hill WSAs. Manage the nonrecommended areas (plateaus) for other mixtures of multiple use.

Management actions would include preparation of 3 wilderness management plans. Recreation management on the non recommended areas (plateaus) would emphasize both primitive and semiprimitive, nonmotorized recreation. The 121 mile Wild and Scenic River recommendation would continue forward. In the event Congress does not classify the areas wilderness, they would be managed as outlined under Alternative A. See Maps 2-1, J-2, J-4, J-6, and Appendix Table B-6 for location and acreage breakdown by MUA, and Appendix J for more specific data.

Alternative C - Recommend for protection and management as wilderness 94,199 acres of the public lands in the Bruneau-Sheep Creek, Jarbidge

Description of Alternatives

River and King Hill WSAs. Manage the nonrecommended areas (plateaus) for other mixtures of multiple use.

Management actions would include preparation of 3 wilderness management plans. Recreation management on the areas recommended nonsuitable would emphasize both primitive and semiprimitive, nonmotorized recreation. The 121 mile Wild and Scenic River recommendation would continue forward. In the event Congress does not classify the areas wilderness, the area within bighorn sheep habitat would be managed as an ACEC and the remaining area would be managed for primitive and semiprimitive, nonmotorized values. See Maps 2-1, J-2, J-4, J-7, and Appendix Table B-6 for location and acreage breakdown by MUA and Appendix J for more specific data.

Alternative D - Recommend for protection and management as wilderness 208,883 acres of the public lands in the Bruneau-Sheep Creek, Jarbidge River and King Hill WSAs.

Management actions would include preparation of 3 wilderness management plans. The 121 mile Wild and Scenic River recommendation would continue forward. In the event Congress does not classify the areas wilderness, the area within bighorn sheep habitat would be managed as an ACEC and the remaining area would be managed for primitive and semiprimitive, nonmotorized values. See Maps 2-1, J-1, J-3, J-5, and Appendix Table B-6 for location and acreage breakdown by MUA and Appendix J for more specific data.

Table 2-2
Wilderness Suitability/Nonsuitability Recommendations (acres)

WSA	Recommended Acreages							
	A		B		C		D	
	Suit- able	Non- Suit- able	Suit- able	Non- Suit- able	Suit- able	Non- Suit- able	Suit- able	Non- Suit- able
King Hill 19-2								
Jarbidge RA	0	23,815	21,095	2,720	21,095	2,720	23,815	0
Shoshone DO	0	5,494	5,294	200	5,294	200	5,494	0
WSA Total	0	29,309	26,389	2,920	26,389	2,920	29,309	0
Bruneau-Sheep Creek 111-17								
Jarbidge RA	0	28,869	4,633	24,236	4,633	24,236	28,869	0
Bruneau RA	0	75,537	13,296	62,241	13,296	62,241	75,537	0
WSA Total	0	104,406	17,929	86,477	17,929	86,477	104,406	0
Jarbidge River 17-11								
Jarbidge RA	0	66,770	10,949	55,781	47,389	19,381	66,770	0
Bruneau RA	0	8,348	2,492	5,856	2,492	5,856	8,348	0
WSA Total	0	75,118	13,481	61,637	49,881	25,237	75,118	0
TOTALS	0	208,833	57,799	151,034	94,199	114,071	208,833	0

Recreation

Recreation on public lands in the JRA offers both primitive and semi-primitive (motorized and nonmotorized) opportunities. White water boating, hiking, and nature study are popular activities and may be found occurring in the Bruneau and Jarbidge River Canyons, Salmon Falls Creek Canyon, along the Oregon Trail, and Hagerman Fossil Beds. Cross country skiing and snowmobiling are very popular in the JRA north of the Snake River and fishing, hunting, camping, and ORV activities occur throughout the JRA.

Philosophical conflicts involving recreation uses in the same area and the setting aside of lands for recreation is a concern of many people who have diverse interests in the JRA. These and other factors were considered in developing the following alternatives.

Alternative A - Provide quality recreation opportunities for dispersed recreation and protect four (4) areas having unique natural scenic and recreation values through special designation and management.

The JRA would continue to provide for a diversity of dispersed related recreation opportunities which compliments recreation facilities provided by state, local and other federal agencies. Primitive and semiprimitive (both nonmotorized and motorized) recreation opportunities and roaded natural areas with supported developments would continue to be provided. Special designations to protect the Oregon Trail (National Register), Bruneau-Jarbidge River (Wild and Scenic River), and Salmon Falls Creek Canyon (Outstanding Natural Area) would be processed and Special Recreation Management Area Plans would be developed. The Hagerman Fossil Beds (currently a National Natural Landmark), would continue to be protected. Other Areas having unique natural, scenic and recreation values would be protected and managed under current policies and procedures.

ORV recreation opportunities would be unrestricted on 88% of the JRA. ORV limitations consisting of restrictions to designated roads and trails would continue for Birds of Prey Area, Hagerman Fossil Beds, and the Bruneau-Jarbidge Wild and Scenic River Area (5% of JRA). Over the snow vehicle limitations in the Upper Bennett MUA may be implemented if such activity begins to have impacts on wintering big game. ORV recreation activity is to remain closed on the Oregon Trail ruts, Sand Point, and the Saylor Creek Gunnery Range (7% of JRA).

Appendix Tables B-1a and B-6 show the breakdown of special designation acreage and motorized vehicle management acreage by MUA and Map 2-5 shows areas of ORV restrictions.

Alternative B - Provide quality recreation opportunities for dispersed recreation and protect five (5) areas having unique natural, scenic and recreation values through special designation and management. The management actions identified in Alternative A would apply here as well and in addition, the Hagerman Fossil Beds would be designated an ACEC, and the Upper Jarbidge River East and West Forks would be designated an SRMA. Primitive recreation would be managed for in areas recommended for wilderness.

Description of Alternatives

ORV recreation activities would be unrestricted on 87%, limited on 3% and closed on 10% of the JRA. The increase in additional closed areas comes from wilderness designations, protection of cultural and paleontological site.

Appendix Tables B-1a and B-6 show the breakdown of special designation acreage and motorized vehicle management acreage by MUA and Map 2-5 shows areas having ORV restrictions.

Alternative C - Provide quality recreation opportunities for dispersed recreation and protect six (6) areas having unique natural, scenic, and recreation values through special designation and management.

The management actions identified in Alternatives A and B would apply in this Alternative and in addition, bighorn sheep habitat (including Cougar Canyon) would be designated an ACEC. A Special Recreation Management Area Plan would be developed for the 56,680 acres Bennett Hills Winter Area.

ORV recreation activities would be unrestricted on 72%, limited on 15% and closed on 13% of the JRA. The increase in closures comes from wilderness and ACEC designations.

Appendix Tables B-1a and B-6 show the breakdown of special designation acreage and motorized vehicle management acreage by MUA and Map 2-5 shows areas having ORV restrictions.

Alternative D - Provide quality recreation opportunities for dispersed recreation and protect six (6) areas having unique natural, scenic, and recreation values through special designation and management.

The management actions identified in Alternatives B and C would apply in this Alternative and in addition, Salmon Falls Creek Canyon would be designated an ACEC for its unique natural values (see Appendix C).

ORV recreation activities would be unrestricted on 70%, limited on 14% and closed on 16% of the JRA. The increase in closures comes from wilderness and ACEC designations.

Appendix Tables B-1a and B-6 show the breakdown of special designation acreage and motorized vehicle management acreage by MUA and Map 2-5 shows areas having ORV restrictions.

Cultural Resources

The Oregon National Historic Trail is perhaps the most recognized cultural resource value in the JRA. The Trail, along with the north and south alternates and the Kelton Road, has received national attention for preservation of this asset. The JRA also has a number of other areas having significant cultural resource values. Many of these areas are being destroyed by vandalism, livestock trampling and erosion. Class I and II inventories conducted over much of JRA have identified a number of areas possessing concentrations of cultural sites. Although cultural resource management is not a major issue, the values needing protection

and the public's interest in preserving remnants of our past heritage is a management concern and is addressed at different levels in the four alternatives and acreage protected by MUA is shown in Appendix Tables B-1 and B-1a.

Alternative A - Protect areas having cultural values through existing mechanisms. Enforcement of existing laws, rules and regulations would continue at current levels. Mitigation or excavation of cultural sites disturbed from other management actions, agricultural development etc., would be used to reduce damage or to collect relics from disturbed/damaged sites. Management actions would continue to protect the Oregon National Historic Trail, the north and south alternates and the Kelton Road. The one-half mile visual corridor would remain intact. A total of 44.1 miles of sites/ruts in the Oregon Trail would be nominated for inclusion on the National Register. A Special Recreation Management Plan would also be prepared for the Oregon Trail.

Alternative B - Protect through special designation (national register) three (3) areas/complexes containing concentrations of cultural sites and protect eight (8) areas/complexes through special management.

The management actions that would be taken in Alternative A would also be taken in this alternative. In addition, National Register designation would be requested for 37,000 acres of public land with cultural values for the Dry Lake Bed and Devils Creek Complexes. Cultural Resource Activity Plans will be prepared for the Clover Creek, Post Office, Pot Hole, Dove Springs, Dry Lakes, Devil's Creek, and the Juniper Ranch Complexes. These plans will identify the type of special management (including fencing, signing, erosion control, monitoring, and additional inventory requirements) needed. Undiscovered cultural sites/complexes would be protected by standard operating procedures.

Alternative C - Protect three (3) sites/areas through special designation (national register). Protect nine (9) areas/complexes containing concentrations of cultural sites, through special management (determined by activity planning).

The management actions that would be taken in Alternative B would also be taken in this Alternative. In addition, 1,000 acres of Cougar Canyon would be included within the Bruneau/Jarbidge River ACEC.

Alternative D - Protect six (6) sites/areas through special designation (national register). Protect nine (9) areas/complexes, containing concentrations of cultural sites, through special management (determined by activity planning).

The management actions that would be taken in Alternative B and C would be taken in this alternative and 1,480 additional acres would be nominated to the National Register (Juniper Ranch, Clover Creek, and Cougar Canyon complexes).

Paleontological Resources

The Jarbidge Resource Area contains several important paleontological

Description of Alternatives

resources, including the world famous Hagerman National Natural Landmark. A significant number of these sites are being threatened or seriously impacted by existing and proposed management actions.

Alternative A - Protect paleontological resources.

Paleontological resources would be protected under existing rules and regulations and standard operating procedures. The Hagerman Fossil Beds would be managed as is and under the current Memorandum of Understanding with the State Parks and Recreation Department.

Alternative B - Provide special protection for the 624 acre Sand Point Paleontological area and the 4,394 acre Hagerman Fossil Beds.

In addition to the management actions identified in Alternative A, designate and manage the Sand Point Paleontological areas and Hagerman Fossil Beds as Areas of Critical Environmental Concern (ACEC) (see Map 2-3 and pages 77-82 of Part I). Prepare a Special Recreation Management Plan for the Hagerman Fossil Beds and continue to study the area for possible nomination as a national monument.

Alternatives C and D - Provide special protection for 815 acres of the Sand Point Paleontological area and the 4,394 acre Hagerman Fossil Beds.

The management actions and special designations identified in Alternatives A and B are applicable to Alternatives C and D. However, the ACEC designation for the Sand Point Paleontological area has been increased to 815 acres (see Table B-1a).

Forest Management

The timber resources in the JRA is located in the Anderson Ranch/Boise River and Upper Bennett MUAs (1 and 2). Of the 3,814 forested acres, only 2,371 acres are considered commercial forest. The demand to harvest timber/wood products from these MUAs has been nonexistent over the past several decades. Inaccessibility, scattering of commercial parcels, more economical sales from adjacent U. S. Forest Service lands are a few of several reasons for this lack of interest in harvesting. Although timber harvesting was not an issue, the management potential for future harvest, along with its associated impacts, is a management concern.

Alternatives A and B - Manage 1,143 acres commercial forest lands for timber harvest (sales) over the next 20 years.

Make available for bid (sale) 1,540 Mbdft of commercial timber. Preparation of timber offering would be coordinated with U.S. Forest Service Sale Plans to improve opportunity for economic feasibility. Timber management plans (sales and reforestation) would be prepared prior to sale offerings. Commercial and recreation firewood cutting for personal use would continue.

Alternative C - Manage 1,086 acres of commercial forest lands for timber harvest (sales) over the next 20 years.

Make available for bid (sales) 1,454 Mbdft of commercial timber. Other actions and plans are same as Alternatives A and B.

Alternative D - Manage both non commercial and commercial forest lands for protection of riparian areas, watershed, wildlife habitat (thermal cover), recreation and visual values.

Commercial timber would not be made available (sales). Recreation firewood cutting for personal use, would be allowed to continue.

A comparison of commercial forest acreages, area set asides, deferment, etc., by Alternative is shown in Table 2-3.

Table 2-3
Timber Harvest (acres)

	Alternative A	Alternative B	Alternative C	Alternative D
Total Forested Acres	3,814	3,814	3,814	3,814
Total Woodland	1,443	1,443	1,443	1,443
Total Commercial Forest Land (CFL)	2,371	2,371	2,371	2,371
TPCC Withdrawal	515	515	515	515
Resource Values With- drawals (wildlife, watershed, riparian)	85	85	173	1,856
Economic Deferral	628	628	597	0
Acres Available for Harvest	1,143	1,143	1,086	0
Harvest (Mbdft)	1,540	1,540	1,454	0

Alternatives Considered But Not Developed

Three additional alternatives were considered but were not developed or analyzed in the plan. Alternatives not developed are as follows:

- Maximize Livestock Grazing - This alternative would have developed livestock grazing to the maximum extent possible without consideration for other resource needs and/or demands.
- Maximum Wildlife Production - This alternative would have emphasized converting land capabilities to wildlife habitat to the maximum extent possible without consideration for other resource needs and/or demands.
- Maximum Environmental Protection - This alternative would have limited any outside influences to the natural ecosystem of the area and would have prohibited the conversion of any lands to uses that would deplete resources or result in surface disturbing activities.

Description of Alternatives

These alternatives were not developed further for the following reasons:

- they were not technically feasible,
- they did not include adequate provisions for multiple use of public lands in the resource area,
- it was extremely unlikely that selection could be made due to adverse social and economic reasons, or
- they were not consistent with existing laws and regulations.

Suitability recommendations for additional inventory units were also considered but were not included in any of the alternatives. The stateline units along the Bruneau River, Jarbidge River, and Salmon Falls Creek; BLM lands along the South Fork of the Boise River; and lands in the Lower Salmon Falls Creek area were considered for wilderness recommendations under Section 202 of FLPMA. The wilderness characteristics of these areas were evaluated but they did not have significant wilderness values to warrant management as wilderness under any of the alternatives.

The identification of the three stateline units as Wilderness Study Areas (WSAs) under Section 603 of FLPMA is currently under appeal. If the Interior Board of Land Appeals determines that these areas qualify as Wilderness Study Areas, a land use plan amendment will be prepared to address wilderness suitability recommendations.

The Lower Salmon Falls Creek area was dropped as a WSA by order of the Secretary of the Interior because it is less than 5,000 acres in size. A court suit has been filed to reinstate this area as a WSA under Section 603 of FLPMA. If the court determines that this area qualifies as a WSA, a land use plan amendment will be prepared to address wilderness suitability recommendations.

The alternatives described in this RMP/EIS all would achieve the requirements of sections 101 and 102(1) of NEPA and other environmental laws and policies. Each of the alternatives is designed to use practicable means to create and maintain conditions under which humans and nature can exist in productive harmony, but the emphasis is different in each alternative. Alternative A would place little emphasis on preservation of natural aspects of our national heritage and enhancement of the quality of renewable resources. Alternatives A, B, and D would limit the range of uses and the environment. Alternative C, the Preferred Alternative, would attain the widest range of beneficial uses of the environment while preserving important historic, cultural, and natural aspects of our national heritage.

Relationship to NEPA Goals

All actions taken to implement the Preferred Alternative (C) would be monitored as outlined in Appendix D.

A comparison of impacts between all alternatives is shown on Table 2-5.

Table 2-5
Comparative Impact Summary

Resource	Current Situation	Alternative A	Alternative B	Alternative C	Alternative D	Alternative D1
Lands: Agricultural development and land tenure adjustments	159,529 acres have currently been applied for under the Desert Land Act or Carey Act for agricultural development. There are currently 6 private exchange proposals for 10,656 acres of public land.	Acres available for transfer would be as follows: Ag Entry - 71,615 Sale - 1,240 Sale or Exchange - 9,925 Exchange - 6,795 TOTAL - 89,575	Acres available for transfer would be as follows: Ag Entry - 142,194 Sale - 1,240 Sale or Exchange - 9,925 Exchange - 6,795 TOTAL - 160,154	Acres available for transfer would be as follows: Ag Entry - 74,561 Sale - 1,200 Sale or Exchange - 9,605 Exchange - 6,080 TOTAL - 91,446	Acres available for transfer would be as follows: Ag Entry - 0 Sale - 1,120 Sale or Exchange - 9,605 Exchange - 3,115 TOTAL - 13,840	Same as Alt. D.
Rights-of-Way/utility corridor needs	Several major powerlines and natural gas lines pass through the Resource Area in the vicinity of the Snake River. Idaho Power Co. and the Western Power Council have identified the need for two additional east/west powerline routes and one north/south route in areas currently not crossed by major powerlines.	The two proposed east/west powerline routes would be eliminated by the Bruneau/Jarbridge Wild and Scenic River proposal and the Saylor Ck. Gunnery Range. The north/south route would require slight modification but would be compatible with other resource uses.	The two proposed east/west powerline routes would be eliminated by the Bruneau/Jarbridge Wild and Scenic River proposal, the Bruneau/Jarbridge Wilderness proposal and the Saylor Ck. Gunnery Range. The north/south route would require slight modification but would be compatible with other resource uses.	Same as Alternative B.	Same as Alt. B.	Same as Alt. B.
Soil, Water, Air:	Nearly 1 million acres of the Resource Area have soils in the high to very high erosion hazard classes or have high susceptibility to wind erosion.	There would be a significant increase (10 fold) in wind blown particulate matter and off site soil movement on 58,394 acres (soils with high erosion hazard rating that are identified for transfer).	There would be a significant increase (10 fold) in wind blown particulate matter and off site soil movement on 118,000 acres (soils with a high erosion hazard rating that are identified for transfer).	There would be a significant increase (10 fold) in wind blown particulate matter and off site soil movement on 58,585 acres (soils with a high erosion hazard rating that are identified for transfer).	There would be a significant increase (10 fold) in wind blown particulate matter and off site soil movement on 11,524 acres (soils with a high erosion hazard rating that are identified for transfer).	There would be a significant increase (10 fold) in wind blown particulate matter and off site soil movement on 11,524 acres (soils with a high erosion hazard rating that are identified for transfer).
Soil, Water, Air (con't.)	Accelerated soil erosion is occurring on steep-sloped areas adjacent to agricultural land immediately south of the Snake River. Wind blown soils from farmed areas periodically decrease air quality in nearby communities.	Soil erosion would increase on 895 acres identified for timber harvest. Erosion on the remainder of the area would not change from present levels.	Soil erosion would increase on 895 acres identified for timber harvest. Soil compaction, trampling damage, runoff, and soil movement would be reduced on 59 miles of stream excluded from grazing. Increased grazing levels would result in slight increases in soil erosion.	Soil erosion would increase on 838 acres identified for timber harvest. Soil compaction, trampling damage, runoff, and soil movement would be reduced on 70 miles of stream excluded from grazing. Erosion on the remainder of the area would not change significantly from present levels.	Soil compaction, trampling damage, runoff, and soil movement would be reduced on 75 stream miles excluded from grazing. Reduced grazing level would result in reduced soil erosion.	Soil compaction, trampling, runoff, and soil movement caused by livestock grazing, would be eliminated on all streams. Elimination of livestock grazing would increase soil stability.
Range-Ecological Condition:	Excellent - 2% Good - 5% Fair - 9% Poor - 48% Burned - 12% Seeded - 22% *Misc. - 2%	Excellent - 2% Good - 5% Fair - 10% Poor - 48% Burned - 12% Seeded - 21% *Misc. - 2%	Excellent - 2% Good - 4% Fair - 8% Poor - 36% Burned - 14% Seeded - 33% *Misc. - 3%	Excellent - 2% Good - 6% Fair - 8% Poor - 39% Burned - 13% Seeded - 29% *Misc. - 3%	Excellent - 2% Good - 7% Fair - 8% Poor - 47% Burned - 12% Seeded - 22% *Misc. - 2%	Excel. - 2% Good - 8% Fair - 8% Poor - 45% Burned - 12% Seeded - 22% *Misc. - 3%
	*Miscellaneous includes areas sprayed to remove sagebrush, water bodies, and ungrazed areas within the resource area.					
Total Forage Produc. (AUMs)	261,439 AUMs	251,521 AUMs	395,497 AUMs	342,093 AUMs	299,843 AUMs	290,848 AUMs
Forage Use:						
Initial						
Livestock -	163,477 AUMs	163,477 AUMs	197,835 AUMs	172,493 AUMs	119,827 AUMs	0
Wildlife -	2,374 AUMs	2,374 AUMs	2,374 AUMs	2,374 AUMs	2,374 AUMs	2,374 AUMs
Wild Horses -	600 AUMs	600 AUMs	0	600 AUMs	600 AUMs	600 AUMs
20-Year						
Livestock -	NA	148,395 AUMs	327,140 AUMs	271,425 AUMs	127,153 AUMs	0
Wildlife -	NA	2,769 AUMs	2,355 AUMs	3,877 AUMs	4,158 AUMs	4,158 AUMs
Wild Horses -	NA	600 AUMs	0	600 AUMs	2,100 AUMs	2,100 AUMs
Wild Horse No's. Saylor Creek	50	50	0	50	175	175

Table 2-5 (continued)

Resource	Current Situation	Alternative A	Alternative B	Alternative C	Alternative D	Alternative D1
Terrestrial Wildlife - Mule Deer	Approximate Population: Yearlong - 2,480 Winter - 8,380 Habitat Condition: Crucial Winter/Spring Range: 28% Satisfactory Cond. 72% Unsatisfactory Cond.	Pop: Yearlong - 2,480 Winter - 6,730 Habitat Condition: 28% Satisfactory Cond. 72% Unsatisfactory Cond. Population levels would remain unchanged except in MUA 2 where the present population of 3,350 deer would decline by about 50%.	Pop: Yearlong - 2,190 Winter - 6,120 Habitat Condition: 26% Satisfactory Cond. 74% Unsatisfactory Cond. Population levels would remain unchanged except in MUA 2 where the present population of 3,350 deer would decline by about 50%. Mule deer on crucial winter range in MUA 2 would have population crash sooner than in Alt. A, due to additional forage use by livestock.	Pop: Yearlong - 3,380 Winter - 11,140 Habitat Condition: 27% Satisfactory Cond. 73% Unsatisfactory Cond. Competition with livestock for spring grasses and forbs would lessen. Habitat improvement projects would benefit mule deer by improving plant species composition and ultimately diet. Spring use by livestock in MUA 2 would probably be reduced by half and populations would increase.	Pop: Yearlong - 3,530 Winter - 12,040 Habitat Condition: 28% Satisfactory Cond. 72% Unsatisfactory Cond. Competition with livestock for spring grasses and forbs would lessen. Spring use by livestock in MUA 2 would be reduced by half, allowing the deer on this crucial winter/spring area to utilize additional grass and forbs.	Mule deer population expected to exceed population goals shown in Alt. C. Habitat Cond.: 31% Satisfactory. 69% Unsatisfactory. Mule deer would greatly benefit from the lack of competition for spring grasses and forbs.
Bighorn Sheep	Approximate Pop: 25 Current Habitat Cond.: 56% Satisfactory 44% Unsatisfactory	Populations would increase to the 20 year population goal (365 sheep). Habitat Condition: 56% Satisfactory 44% Unsatisfactory	Populations would not be expected to reach desired goal. Habitat Condition: 56% Satisfactory 44% Unsatisfactory	Population may exceed goal. Habitat quality slightly improved with decreased livestock grazing use on canyon rims. Habitat Condition: 61% Satisfactory 39% Unsatisfactory	Population goal would be exceeded. Habitat quality slightly improved with decreased livestock grazing use on canyon rims. Habitat Condition: 63% Satisfactory 37% Unsatisfactory	Population would very likely exceed population goals (365 sheep) with the lack of livestock competition on plateaus adjacent to core canyon habitat. Habitat Cond: 66% Satisfactory. 34% Unsatisfactory.
Antelope	Approximate Population: Yearlong - 660 Winter - 1,160 Current Habitat Cond.: 10% Satisfactory 90% Unsatisfactory	Pop: Yearlong - 1,340 Winter - 3,130 Habitat Condition: 10% Satisfactory 90% Unsatisfactory Antelope population would continue to grow and occupy habitat changed from sagebrush dominated to one dominated by grass and forbs. Expansion of population due to increase in low height structure of habitat. Quality of habitat is not expected to improve.	Pop: Yearlong - 1,340 Winter - 3,130 Habitat Condition: 10% Satisfactory 90% Unsatisfactory Antelope population would continue to grow and occupy habitat changed from sagebrush dominated to one dominated by grass and forbs. Expansion of population due to increase in low height structure of habitat. Quality of habitat is not expected to improve.	Pop: Yearlong - 1,370 Winter - 3,160 Habitat Condition: 10% Satisfactory 90% Satisfactory Ecological condition of habitat would not change but plant species composition would improve slightly benefiting the antelope's diet.	Pop: Yearlong - 1,410 Winter - 3,200 Habitat Condition: 10% Satisfactory 90% Unsatisfactory Antelope would be expected to establish a permanent population in MUA 3. Ecological condition of habitat would not change but plant species composition would improve slightly benefiting the antelope's diet.	Habitat Cond.: 12% Satisfactory. 88% Unsatisfactory. Antelope population would be expected to exceed population goals shown in Alt. C. Antelope would have use of forbs without competition, thus allowing an improved diet and greater productivity.
Terrestrial Wildlife - Elk	Approximate Population: Yearlong - 145 Winter - 195 Over half the use occurs on Bennett Mtn. A portion of the elk summer on the adjacent Boise National Forest. Habitat Condition: Crucial Winter/Spring 4% Satisfactory 96% Unsatisfactory Crucial Summer/Fall 10% Satisfactory 90% Unsatisfactory	Pop: Yearlong - 145 Winter - 195 Current livestock use would prevent improvement in elk habitat quality and result in maintenance of current populations. Spring competition with livestock for grass would continue. Habitat Condition: Crucial Winter/Spring 4% Satisfactory 96% Unsatisfactory Crucial Summer/Fall 10% Satisfactory 90% Unsatisfactory	Pop: Yearlong - 55 Winter - 55 Elk population would decline with additional 20% livestock use, due to decreased carrying capacity. Current livestock use would prevent improvement in elk habitat quality and result in maintenance of current populations. Spring competition with livestock would continue. Habitat Condition: Crucial Winter/Spring 4% Satisfactory 96% Unsatisfactory Crucial Summer/Fall 10% Satisfactory 90% Unsatisfactory	Pop: Yearlong - 220 Winter - 300 Proper livestock stocking rates coupled with habitat, improvement projects and decrease by 50% in spring livestock use would greatly benefit these animals found on Bennett Mtn. Habitat Condition: Crucial Winter/Spring 4% Satisfactory 96% Unsatisfactory Crucial Summer/Fall 10% Satisfactory 90% Unsatisfactory	Pop: Yearlong - 270 Winter - 450 Proper livestock stocking rates coupled with habitat, improvement projects and decrease by 50% in spring livestock use would greatly benefit these animals found on Bennett Mtn. The additional decline in livestock use by 20% would allow the reasonable be exceeded. Habitat Condition: Crucial Winter/Spr. 4% Satisfactory 96% Unsatisfactory Crucial Summer/Fall 13% Satisfactory 87% Unsatisfactory	Population would exceed the population goals in Alt. C. The lack of competition for spring grass would improve the quality of this animals diet. Habitat Cond.: Cruc. Wtr/Spr. 4% Satisfactory. 96% Unsatisfactory. Cruc. Sum/Fall 15% Satisfactory. 85% Unsatisfactory.
Sage Grouse	Diminished populations occur throughout the area. Nesting Habitat Cond.: 19% Satisfactory 81% Unsatisfactory	Habitat Condition: 19% Satisfactory 81% Unsatisfactory The nesting complex would be reduced in size due to wildfire.	Habitat Condition: 17% Satisfactory 83% Unsatisfactory Habitat conditions would decline in quality with increased livestock use and resultant heavier use on forbs needed by sage grouse chicks. The nesting complex would be reduced in size due to wildfire. Minor habitat improvement would be derived from inclusion of wildlife needs in proposed range manipulations.	Habitat Condition: 19% Satisfactory 81% Unsatisfactory Habitat conditions would improve slightly with decreased livestock use. The nesting complex would be reduced in size due to wildfire. Minor habitat improvement would be derived from inclusion of wildlife needs in proposed range manipulations. Habitat improvement projects would benefit sage grouse populations in a few key areas.	Habitat Condition: 21% Satisfactory 79% Unsatisfactory Habitat conditions would improve slightly with decreased livestock use. The nesting complex would be reduced in size due to wildfire. Minor habitat improvement would be derived from inclusion of wildlife needs in proposed range manipulations. Habitat improvement projects would benefit sage grouse populations in a few key areas.	Habitat Cond.: 23% Satisfactory. 77% Unsatisfactory. Habitat conditions would improve. Riparian areas and meadow would provide abundant forbs, insects, and cover for chicks. Populations should show a dramatic improvement in those areas having food, water, and cover in close proximity.

Table 2-5 (continued)

Resource	Current Situation	Alternative A	Alternative B	Alternative C	Alternative D	Alternative D1
Riparian Habitat	Habitat Condition: (% of 370 miles) Excellent - 1% Good - 34% Fair - 36% Poor - 27% Unsuitable - 2%	1% 35% 35% 27% 2%	1% 45% 34% 18% 2%	1% 49% 34% 14% 2%	1% 52% 31% 14% 2%	6% 56% 25% 11% 2%
Aquatic Habitat	Habitat Condition: (% of 312 miles) Excellent - 0% Good - 47% Fair - 23% Poor - 30%	1% 47% 23% 30%	2% 60% 23% 15%	3% 61% 21% 15%	3% 64% 19% 14%	5% 67% 17% 11%
Fire Management	Within the 1,190,761 acre full suppression area an average of 44,445 acres/year have burned and suppression costs are averaged \$100,000 per year. Within the 499,712 acre limited suppression area an average of 11,975 acres/year have burned.	Agricultural development would increase fire numbers and suppression costs in full suppression areas to approximately \$120,000 to \$125,000/year. In the limited suppression area, fire suppression costs would decrease and the acreages burned would increase approximately 5-10%.	Same as Alternative A, except an additional 110,982 acres would receive full suppression. Suppression costs would increase slightly and the acreage burned would decrease slightly.	Same as Alternative B.	Fire occurrence and suppression costs adjacent to farming projects would remain at current levels. Full suppression action on the entire resource area would reduce the acreage burned in the limited suppression area by 5-10% but suppression costs would increase.	Same as Alt. D.
Recreation	Estimated annual recreation demand is 20,500 activity occasions. Most use occurs in a dispersed nature throughout the resource area.	Common to all Alternatives: Recreation demand would increase to approximately 35,000 activity occasions under all alternatives because of increased population levels and leisure time. Designating portions of the area as limited or closed to ORV use and transferring lands out of Federal ownership would have minimal effects on recreation use under all alternatives because use in affected areas is currently very light.				
Cultural Resources	There have been 1,089 sites located. The following sites and site complexes require special management: Devil's Creek Complex Pot Hole Creek Complex Juniper Ranch Complex Clover Creek Complex Dry Lakes Complex Cougar Canyon Complex Post Office Complex Oregon Trail Historic Route Dove Springs Complex	Sites would continue to be managed under Standard Bureau Procedures but would continue to lose scientific value as a result of vandalism, livestock trampling, erosion and other agents of deterioration. Nomination and acceptance of the Oregon Trail to the National Register would enhance protection measures.	Nomination and acceptance of the Oregon Trail, Dry Lakes, and Devil's Creek site complexes to the National Register would enhance protection measures. Fencing nine sites would limit site deterioration. Twenty-five scientifically important sites would continue to deteriorate from livestock trampling. Increases in grazing use would increase the rate of deterioration and the number of sites impacted by livestock grazing.	Impacts would be the same as Alternative B except that ACEC designation of the Cougar Canyon Complex would provide special protection of cultural values.	Impacts would be the same as Alt. C except that an additional 21 scientifically important sites would be fenced and cultural values enhanced. Three additional sites would be enhanced. Special management would receive special protection through National Register nomination (Cougar Canyon, Juniper Ranch and Clover Creek Complexes).	Impacts from livestock grazing would be eliminated and the scientific value of cultural sites would be enhanced.
Paleontologic Resources	Significant paleontologic sites occur throughout the resource area. The Hagerman and Sand Point sites have high values that are threatened by existing or potential erosion problems.	Ten known, and other unknown sites, would be lost or damaged by land transfer or associated erosion problems. Failure to take affirmative management action at the Sand Point site would lead to the loss of paleontologic values.	There are 26 known sites, and other unknown sites, within the transfer areas. Twenty are not scientifically significant and would probably leave federal ownership. ACEC designation of Hagerman and Sand Point would allow site protection.	Ten known, and other unknown sites, would be lost or damaged by land transfer. ACEC designation of Hagerman and Sand Point would allow site protection.	One known site without scientifically significant fossils is within the transfer area. There is a low probability of loss or damage to other sites by the limited transfer acreage. ACEC designation would allow site protection.	Same as Alt. D.
Wilderness	Wilderness characteristics exist on 208,833 acres within three WSAs: Bruneau/Sheep Creek (111-17) 104,406 acres Jarbridge (17-11) 75,118 acres King Hill Creek (19-2) 29,309 acres	Without wilderness designation, or if Congress does not designate the Bruneau/Jarbridge Rivers as Wild and Scenic, wilderness values of the river canyon and plateau areas could be reduced. If Wild and Scenic designation occurs, the wilderness values of the canyons would be preserved.	Wilderness characteristics would be maintained on 57,799 acres. Wilderness characteristics could be reduced on the remainder of the area.	Wilderness characteristics would be maintained on 94,199 acres. Wilderness characteristics could be reduced on the remaining area.	Wilderness characteristics would be maintained on the entire 208,833 acres.	Same as Alt. D except that removal of livestock grazing would enhance natural successional processes and provide large ungrazed areas for ecological and scientific research.
Energy and Minerals	The potential for mineral and energy resources is generally low. There has been no commercial development of oil and gas or geothermal resources. Extensive mining activity has been limited to several small areas. Numerous mineral material sites (sand and gravel) near Glenns Ferry are currently being used.	Common to All Alternatives: Oil and gas, geothermal and locatable mineral exploration and development would not be significantly affected. Construction of roads associated with agricultural development would substantially deplete sand and gravel sources near high use areas and decrease BLMs ability to supply road districts with these materials following the 20 year time period.	Impacts on mineral materials would be as described for Alternative A.	Impacts on mineral materials would be as described in Alternative A.	Mineral material reserves would be maintained and BLM would be able to meet long-term road district needs.	Impacts on mineral material would be as described in Alternative D.
Forestry Management	There are 2,371 acres of commercial forest land on Bennett Mountain and near Anderson Ranch Reservoir.	Adopting the allowable cut level for the 1,143 acres available for cutting would permit harvest of a total of 1,540 Mbdft of timber.	Same as Alternative A.	Adopting the allowable cut level for the 1,086 acres available for cutting would permit harvest of a total volume of 1,454 Mbdft of timber.	There would be no acres available for harvest.	Same as Alt. D.

Table 2-5 (continued)

Resource	Current Situation	Alternative A	Alternative B	Alternative C	Alternative D	Alternative DL
Economics:						
Crop Agriculture						
Total Cost of Power		\$28.8 million	\$52.8 million	\$28.8 million	\$3.6 million	\$3.6 million
Irrigators Share		\$ 4.6 million	\$ 8.5 million	\$ 4.6 million	\$.6 million	\$.6 million
Others Share		\$24.2 million	\$44.4 million	\$24.2 million	\$3.0 million	\$3.0 million
Water Delivery & Irrigation System Costs (one time)		\$56 million	\$102 million	\$56 million	\$7 million	\$7 million
Seed, Fertilizer, Fuel etc. Costs (annual)		\$16 million	\$ 29 million	\$16 million	\$2 million	\$2 million
Net Income Change (Excluding Costs to Others)		+\$1.6 million	+\$2.9 million	+\$1.6 million	+\$211,000	+\$211,000
Net Employment Change		+232	+413	+232	+31	+31
Livestock						
Total Income Change		0	+\$2,618,900	+\$1,733,100	-\$353,000	-\$1,982,800
Total Employment Change		0	+377	+247	-51	-284
Summary						
Total Income Change		+\$1.6 million	+\$5.5 million	+\$3.3 million	-\$142,000	-\$1.8 million
Total Employment Change		+232	+790	+479	-20	-253

CHAPTER 3

AFFECTED ENVIRONMENT

Introduction

This chapter describes the elements of the environment that could be significantly impacted by implementation of the alternatives under consideration. It describes the present environment and provides background data for the evaluation of environmental consequences presented in Chapter 4. Only those elements expected to be impacted or that have been identified as issues or management concerns are discussed.

Lands

There are 1,690,473 acres of federal land in the Jarbidge Resource Area, 307,537 acres of private land and 102,509 acres of state land.

Agricultural Development

The majority of the private lands in the resource area were obtained through agricultural entries such as the Desert Land Act, Carey Act, Reclamation Homestead Act and the Stock Raising Homestead Act. Most of these private lands are still used for farming and ranching.

Current applications for agricultural development have been made under the Desert Land and Carey Acts and total 159,529 acres.

Agricultural development under the DLE/CA laws requires the demonstration of the availability of a water supply sufficient to irrigate all of the irrigable acres in the entry. The majority of the applicants have applied for water permits to divert water from the Snake River at various locations. The remaining applicants propose to drill wells in various locations in the Snake River aquifer. The Snake River aquifer is known to underlie all areas currently under application, but depths to water and the quantity available is unknown. There is one critical ground water area, and portions of two ground water management areas in the resource area.

At the present time, no new water permits are being approved by the IDWR because of an Idaho Supreme Court ruling (Decision No. 13794, Idaho Power Co. vs. State of Idaho) that Idaho Power Company's water rights at Swan Falls Dam were not subordinated to upstream uses.

Electric powered pumps are normally used to energize the irrigation

Affected Environment

systems. Idaho Power Company, the major utility company in the area, has had a moratorium on new electric pump hookups since 1977. This has required developers to use less economical pumping units run on diesel or propane fuels or has prevented development of the land. Pumping costs represent a major cost in crop production and the additional costs can adversely affect the economic feasibility of an operation.

Land Exchanges, Sales and Acquisitions

The resource area receives many private exchange proposals and inquiries about selling tracts of public land. Section 205 of FLPMA allows for the acquisition of non-federal lands by purchase, exchange or donation. Disposals of lands through exchange or sale will be considered only on lands identified for transfer in Chapter 2.

There are 6 private exchange proposals being considered in the RMP involving 10,656 acres of public land. There are other public lands that the public has expressed an interest in acquiring through sale or exchange.

A portion of the lands that may be disposed of through sale (Sec. 203 of FLPMA) or exchange (Sec. 206 of FLPMA) could be utilized for agriculture. Any lands sold for agricultural use, will comply with the FLPMA provision that parcels be no larger than necessary to support a family sized farm.

Land Use Authorizations

Land use authorizations include short-term Land Use Permits for occupancy for various purposes of limited duration, public works leases, airport leases and rights-of-way.

The majority of the uses are for occupancy related to agriculture and include farming small tracts, storage of farm equipment and products, and bee hive locations. Other uses include sites for remote airstrips, rights-of-way, and construction headquarter sites. They may be casual, short-term, one-time uses, or may include substantial site modification over a long period of time.

Long term rights-of-way include highways, roads, ditches, canals, oil and gas pipelines, power lines, telephone lines, communication sites, power substations, electric power generating sites (including small hydro), and material sites.

Rights-of-way needs are normally expressed by private and governmental entities through the filing of an application. The Bureau, on its own initiative, also identifies needs for the preservation of access and the protection of improvements. Much of the demand is tied to agricultural or residential development.

There are several major powerlines that cross the Resource Area. All but one, travel through the northeast corner of MUA 7, cross the Snake River and pass through the Bennett Mountain Area (MUAs 3 and 5) and generally fit the corridor concept. The other major line comes up from Nevada, entering the Resource Area at approximately the center point of

the southern boundary, travels in a northeasterly direction and crosses Salmon Falls Creek below the Devils Creek confluence. These powerlines are 138 KV to 500 KV capacity.

Idaho Power Co. and the Western Power Council have indicated a desire to cross three areas not previously crossed with major powerlines. One, an east-west line from the Snake River, in the vicinity of Lower Salmon Dam, to the Bruneau River a few miles south of the community of Bruneau. Another would involve paralleling the existing line coming up from Nevada to the point where it would cross Salmon Falls Creek, then turn due north for about 27 miles into the existing corridor area and cross the same area as the first proposal. The third route proposed would be from a point on Salmon Falls Creek approximately 8-10 miles north of Salmon Dam, east and across the confluence area of the West Fork of the Bruneau and Jarbidge Rivers. Existing and proposed utility lines are shown on Map 2-2.

There are also three major natural gas lines that pass through the Resource Area. They are located in the same corridor area as the majority of the powerlines.

Withdrawals

There are 13 withdrawals in the Jarbidge Resource Area, totalling 130,497 acres. The majority of these lands have been withdrawn from all forms of appropriation under the land and mineral laws. The Saylor Creek Gunnery Range comprises 102,746 acres of those lands withdrawn. A withdrawal on 57,000 acres is being processed for the Bruneau and Jarbidge Rivers because of their wild and scenic qualities.

In addition to the above withdrawals, two Classification and Multiple Use Act (C&MU) classifications totaling 1,198,028 acres are in effect which withdraw the affected lands from all forms of appropriation under the land laws. These lands are still open for mineral entry.

Soil, Water, and Air

Information from a 3rd Order Soil Survey shows that nearly 1.0 million acres of the total EIS area have soils in the high to very high erosion hazard classes and/or have a high susceptibility to wind erosion (Table 3-1).

Table 3-1
High Erosion Hazard Areas*

MUA	Total High Erosion Hazard Areas (Total RMP Area)		High Erosion Hazard Areas Previously Burned or in Poor or Fair Ecological Condition (Public Land Only)	
	Acres	% of MUA	Acres	% of MUA
	1	----	--	---
2	89,000	80	49,600	80
3	50,800	68	25,200	52
4	12,500	67	8,700	100
5	48,400	75	45,400	96
6	139,000	71	75,700	46
7	262,000	59	105,900	32
8	3,400	70	3,600	81
9	1,700	59	1,700	59
10	38,200	38	17,000	19
11	42,800	19	45,600	22
12	127,600	45	120,700	47
13	31,200	23	17,100	16
14	3,100	100	2,900	100
15	127,500	44	56,600	28
16	27,500	23	7,700	8
TOTAL	1,004,700	48	583,400	36

* Table 3-1. The acres presented here were estimated by averaging erosion hazard data for each soil mapping unit. When 30 percent or more of a mapping unit had a high to very high hazard rating or Wind Erodibility Group rating of 1 through 4, then the entire mapping unit was rated as high. This method of analysis includes soils in the high erosion hazard class which do not have high erosion potential while not recognizing erodible soils comprising less than 30% of more stable mapping units. This table serves as a "caution flag" indicating areas where erosive soils are concentrated. On-site analysis may be needed on a case-by-case basis.

Factors currently contributing to accelerated soil erosion in the EIS area are poor vegetative ground cover and composition, and various soil surface disturbing activities. Vegetation cover protects the soil surface from the erosive action of wind and water. Plant composition and density is important for its effects on water infiltration rates. Studies in the Boise River watershed (Pearse and Wooley, 1936) noted higher water infiltration rates on plots with fibrous rooted species (grasses) as compared with plots dominated by tap-rooted species (shrubs) or plots with no vegetation. Generally, poor and fair ecological condition (Map 3-2) have vegetative communities which are less effective in protecting the soil surface and/or increasing water infiltration thereby reducing runoff than good or excellent ecological condition areas. Approximately 1.1 million acres of public land in the RMP area is presently in fair or poor ecological condition or has been burned (Figures 3-1 and 3-2). Of these areas, nearly 0.6 million acres (51%) are in the high erosion hazard classes (Table 3-1).

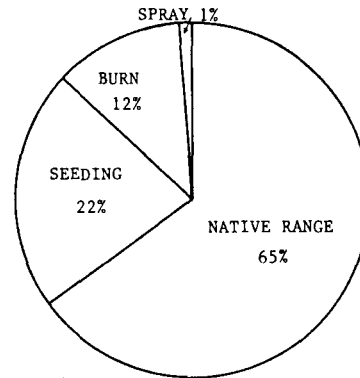
FIGURE 3-1

Current Ecological Condition of Native, Unmanipulated Public Rangelands.



FIGURE 3-2

Current Status of Native vs. Manipulated Public Lands.



Livestock grazing is the most common, area-wide, soil surface disturbing activity. Livestock use affects rangeland hydrology by removing vegetative cover, preventing the buildup of litter cover, and compacting soil which reduces water infiltration. All of these factors contribute to increased runoff and soil movement. The intensity of grazing is important in determining the degree to which water infiltration is affected (Rauzi and Hansen 1966). Five-year average livestock use figures are about 164,000 AUMs or 10.3 acres/AUM if an average area-wide distribution is calculated.

In localized areas just south of the Snake River, large areas have been previously transferred to private ownership and converted from rangeland to agricultural production. These farmed areas are the greatest source of accelerated erosion in the area with erosion rates estimated to be at least 10 times higher than rangeland areas. Poor farming practices near steep-sloped areas along the river have contributed to accelerated soil movement in the area. Occasional wind-blown soils from these farmed areas have caused decreases in air quality in nearby communities.

Wind caused soil movement has also been a problem in sand and loamy sand soils found on rangeland just south of the Snake River. These soils have a tendency to form dunes when the vegetation cover is disturbed or removed. Once the soil begins moving revegetation and stabilization is difficult.

Vegetation cover and composition have been drastically affected on 0.6 million acres (35%) of the EIS area. Wildfires and associated suppression activities have adversely affected 0.2 million acres (12%) which are still in an altered (burn) vegetative state characterized by an abundance of annual plant species. Another 0.4 million acres (22%) have been rehabilitated or treated by seeding to a predominantly crested wheatgrass monoculture (Figure 3-2). These areas are lacking in plant

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species diversity which may have long-term affects on nutrient availability, site productivity, and erosion hazard (the potential for the soil to erode should the site ever be disturbed) (Dormaar, Johnston, Smoliak 1980; Johnson, Rumbaugh, VanEpps 1980; Charley and West 1975).

ORV use has contributed to accelerated soil movement mainly in accessible areas in proximity to communities along the Snake River. ORV use is generally light and these disturbed areas are small.

Range Resources

The grazing program in the area encompasses virtually all of the public acreage (1,690,473 acres) and much of the 102,509 acres of state lands and some of the 302,537 acres of private land. Within the public land acreage shown, there is approximately 36,505 acres ungrazed. These are either isolated wildlife tracts, river canyons, or other isolated areas.

There are 80 grazing allotments in the area that have a current active grazing preference of 166,586 AUMs. The average annual use over the past five years has been 163,477 AUMs. The 80 grazing allotments (Map 3-3) are utilized by 86 livestock permittees. The grazing preference used by each ranges from 8 AUMs to over 15,000 AUMs (see Appendix Table F-4).

Condition classes for the areas rangelands have been derived by the survey and is shown below. No condition was assigned to 11,086 acres unsurveyed (Appendix Table F-2).

Range Condition Acres

Total	Excellent	Good	Fair	Poor	Burn	Seeding	Sprays	Water
Acres	34,661	73,923	153,619	799,416	203,471	367,500	9,103	743
% AMA	2.1	4.5	9.3	48.3	12.3	22.2	.6	>.1

The vegetation on the higher slopes of the Bennett Mountain and Anderson Ranch areas consists primarily of big sagebrush-bluebunch wheatgrass. On the lower elevations near the Snake River, the vegetation is predominantly a big sage-needle and thread grass community. The Saylor Creek Unit south of the river (MUAs 5, 6 and 7) has a native stand of depleted sagebrush range invaded with extensive amounts of cheatgrass. Large areas here have been seeded to crested wheatgrass as a result of fire rehabilitation projects. Further south, the sagebrush community persists with an understory of thurber needlegrass. In the upland areas near the Nevada border, a mix of big sagebrush-Idaho fescue and low sagebrush areas grade into a mix of various mountain sagebrush and mixed mountain shrub areas. Pockets of aspen are common near the Nevada border (Map 3-1).

Trend information is lacking on most of the resource area. Several isolated trend plots have been established in various parts of the resource area, however, not enough are present in key use areas to

determine current trends or to make immediate adjustment in livestock use levels. The range survey will serve as a baseline data for future allotment condition monitoring.

Total estimated forage production levels from the range survey indicate that approximately 98,000 AUMs of forage is available above the current grazing preference. These AUMs are the result of the extensive seedings developed in the past 15 years in the West Saylor Creek and Saylor Creek Allotments (MUAs 5,6 and 7). Due to the uncertainty of future agricultural development within the Saylor Creek allotments, the use of this forage has not been fully developed. Additional water and fencing would be required to effectively use this forage. Both Saylor Creek and West Saylor Creek have not been divided into final grazing allotments. This will occur following completion of the RMP based on transfer area impacts by allotment.

An allotment categorization by management intensity (MIC) (see Appendix A) has been completed. Of the 80 allotments 35% (28) are in the M category; 53% (42) are in the I category; and 13% (10) are in the C category.

There are currently 8 allotment management plans (AMPs) covering in the area (Appendix Table F-4). Grazing systems have been developed for all ranging from rest rotation to deferred use to season long use. Management constraints are normally very general.

Livestock seasons-of-use varies considerably throughout the resource area. Six year-round grazing use is made in the Saylor Creek Allotments and five of the existing AMPs. Most allotments have an 8 month continuous season or a balance of use levels in spring and fall use. Notable exceptions are some of the major Bennett Mountain Allotments (Hammett #1, Hammett #4, and Cold Springs Creek) which have primarily spring use (75% spring, 25% fall). Multiple use area 2 which includes all or major portions of the above Bennett Mountain allotments is in 80% poor condition.

Wild Horses

Currently there is one wild horse herd area in the resource area (Map 3-4). The Saylor Creek wild horse area includes approximately 106,000 acres of MUA 7 and supports an average of 50 horses for the year. Within this area there is extensive competition from domestic livestock.

In the past, there was thought to be approximately 30 wild horses in the Diamond A area (MUA 16). This area has been grazed by licensed domestic horses for approximately 50 years. Current information indicates that the 30 horses were not wild horses but were trespass domestic horses.

When the licensed domestic horses were gathered during the spring of 1984, all but approximately 15 horses in the area were gathered. All horses gathered were branded domestic horses or were colts or yearling horses which were following branded mares. It is felt that the 15 horses that were not gathered are also branded domestic horses.

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If future gatherings or field investigations determine that there are wild and free roaming horses present, a land use plan amendment will be completed to determine appropriate management levels.

Terrestrial Wildlife

Current condition ratings have been assigned to the more significant seasonal wildlife habitats in the resource area. Habitat areas were assigned ratings of satisfactory or unsatisfactory. These ratings are based on existing wildlife distribution data, ecological-site condition data and field observations made during inventories. The general types of criteria used in delineating satisfactory and unsatisfactory conditions included:

- habitat loss due to past range fires
- forage loss due to past range fires
- deteriorated range condition
- availability of forbs
- presence or absence of monoculture grass seedings
- current ecological condition
- presence or absence of cover

Big Game

Mule deer are the most abundant big game species in the RMP area. They range over habitat varying in elevation on the public lands from 2,500 feet along the Snake River to about 7,400 feet on Bennett Mountain. Most of the summer use is on higher elevations of the Boise National Forest and Humboldt National Forest in Nevada. Principal summer use on public lands in the RMP area occurs on Bennett Mountain, along the Bruneau-Jarbidge River Complex, and on the Jarbidge upland along the Idaho/Nevada border. Riparian areas are key summer habitat for mule deer wherever they occur in the RMP area. Mule deer make the greatest use of the public lands during the winter and early spring months. Principal winter range includes the south slopes of Bennett Mountain, Big Island, Columbet Tables, Dorsey Table, Murphy Air Strip, Black Rock Pocket, and a band of habitat on the north and south side of the Rogerson to Murphy Highway. Tables 3-2 and 3-3 show the condition of crucial deer winter range, while Map 3-5 shows the distribution of mule deer in the RMP area.

Table 3-2
 Crucial Winter Mule Deer Habitat
 By Ecological Condition And MUA
 Acres by Ecological Condition

MUA #	Excellent	Good	Fair	Poor	Seeding	Burn	Total
2	60	0	0	34,500	1,500	2,018	38,078
10	0	4,479	4,479	8,976	2,820	3,081	23,014
11	0	0	110	130	0	0	240
15	3,456	9,433	21,233	56,085	0	6,315	110,767
16	1,094	8,283	9,125	21,080	14,245	2,163	42,525
Total	4,610	22,195	34,126	121,551	18,565	13,577	214,624

Table 3-3
 Condition of Major Wildlife Habitat Areas

Wildlife Species	Season	Total Acres BLM Habitat	% Satisfactory Habitat Condition	% Unsatisfactory Habitat Condition
Mule Deer	Crucial Winter/Spring	214,624	28	72
	General Winter	112,348	22	78
Elk	Crucial Winter/Spring	38,078*	4	96
	Summer/Fall	25,710	10	90
Bighorn Sheep	Yearlong	59,234	56	44
Antelope	Crucial Winter/Spring	65,508	10	90
Sage Grouse	Nesting	544,665	19	81

*2,520 acres in MUA 1 is not included due to lack of condition class information.

Elk are presently found in MUAs 1 and 2. The majority of the elk are found in MUA 2 on Bennett Mountain. Most of the summer use is on higher elevations in the Boise National Forest. Summer use on public lands administered by BLM is estimated to be low. Greatest population numbers occur in the winter when elk share the south slopes and hills with wintering mule deer. Table 3-4 indicates the condition of elk winter range by MUA while Map 3-5 shows the distribution in the RMP area.

Table 3-4
Elk Crucial Winter Habitat
Ecological Condition by MUA

MUA #	Excellent	Good	Fair	Poor	Seeding	Burn	Total
1							2,520*
2	60	0	0	34,500	1,500	2,018	38,078
Total	60	0	0	34,500	1,500	2,018	40,598

* Public land in MUA 1 has not been condition mapped.

There is a proposal by the Nevada Department of Fish and Wildlife to reestablish elk in Nevada on the Humboldt National Forest. It is not known at the present time whether elk use will occur on lands in the RMP area.

Pronghorn antelope are found north and south of the Snake River in the RMP area. A small population on the north side is found in MUA 3. They are believed to move back and forth across the east/west boundary with the Bruneau Resource Area. The largest portion of the antelope population is found along the south end of the resource area in the vicinity of the Rogerson to Murphy Highway. A portion of the population are yearlong resident animals while the remainder summer in Nevada and winter in Idaho. This group summers on the upland, low sagebrush dominated slopes on public and national forest land. They later return to Idaho to winter, forced down by deep snow. An additional small isolated population is found in MUAs 10 and 16 on the Diamond A. These also summer principally in Nevada. Antelope crucial winter range is found on the north point of the Diamond A, Murphy Air Strip and Browns Bench. Other important wintering areas may exist. It is only in the last few years that any significant inventory has been conducted. The condition of known crucial winter habitat is listed in Table 3-5 and portrayed on Map 3-5.

Table 3-5
Antelope Crucial Winter Habitat
Ecological Condition by MUA

MUA #	Excellent	Good	Fair	Poor	Seeding	Burn	Total
10	0	320	3,840	3,373	0	3,520	11,053
15	346	2,214	14,847	22,666	16,111	751	57,035
16	0	0	0	420	0	0	420
Total	346	2,534	18,687	26,459	16,211	4,721	68,508

California bighorn sheep were reintroduced to the RMP area in December of 1982 when 12 were released in the West Fork of the Bruneau Canyon and an additional 12 were transplanted to the East Fork of the Jarbidge River

in Nevada. Five lambs were counted from the West Fork population in 1983. Many of the sheep planted in Nevada were lost to mountain lions, but a few survived and moved down the canyon to Idaho. Future transplants are proposed to increase the gene pool. The condition of yearlong sheep habitat is listed in Table 3-6 and portrayed on Map 3-5. Generally, good condition habitats are located within the canyons. Fair and poor condition habitats are located mainly on the plateaus adjacent to the canyons.

Table 3-6
California Bighorn Sheep Habitat
By Ecological Condition and MUA

MUA #	Excellent	Good	Fair	Poor	Seeding	Burn	Total
10	2,348	10,400	4,361	12,412	2,013	2,013	33,547
11	0	0	214	436	0	0	650
15	1,969	3,849	1,163	1,253	716	0	8,950
16	483	5,148	1,448	4,022	0	4,986	16,087
Total	4,800	19,397	7,186	18,123	2,729	6,999	59,234

Upland Game

Upland game birds include sage grouse, ring-necked pheasant, mourning dove, chukar partridge, Hungarian partridge, California quail and mountain quail. The mourning dove, chukar partridge, Hungarian partridge, California quail and mountain quail will not be discussed by species later in the impacts portion of this document but will be addressed as upland game. Mourning doves are abundant and wide spread in the RMP area.

California quail are usually associated with dense riparian habitat along stream bottoms. At the present time no specific plans to manage for this species has been developed other than to protect riparian areas where possible.

Mountain quail a listed Sensitive Species, are only found in a few places in the RMP area. Protection at this time consists of not identifying locations for recreational hunters and improving riparian habitats.

Habitat for the chukar consists of steep rugged canyons with talus slopes and rocky outcrops. The Snake River Canyon, Bruneau/Jarbridge River Canyon complexes, steep rocky slopes of Bennett Mountain, Bennett Creek, Ring Hill Creek, Cedar Creek, Devil's Creek and Salmon Falls Canyon from the major portion of their habitat. Population levels are mainly controlled by winter and spring weather. The Hungarian partridge occurs on the Snake River plain. Highest densities are found in the vicinity of farmlands. Available cover determines quality of habitat. Clean farming practices are a detriment to "hun" populations.

Pheasant populations are principally found adjacent to agricultural land along the Snake River. Presently there are 118,100 acres of habitat

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on public lands. The availability of winter cover near food and nesting cover is very important to maintaining good populations. Like huns, "clean" farming techniques reduce potential populations.

Sage grouse were once the most widely distributed and abundant game bird in the area. They are still scattered throughout, although their numbers have declined due to loss of habitat through conversion of sagebrush lands to cropland, wildfire burns, or monoculture seedings and the impact of livestock grazing on crucial nesting/broodrearing areas associated with wetland/riparian sites. Table 3-7 shows the current ecological condition of nesting habitat by MUA while Map 3-5 displays the current distribution and nesting areas of selected species.

Table 3-7
Sage Grouse Nesting Habitat
Ecological Condition by MUA

MUA #	Excellent	Good	Fair	Poor	Seeding	Burn	Total
2	0	0	48	21,951	1,183	1,504	24,686
3	0	0	0	20,117	5,824	1,033	26,974
6	0	0	0	0	352	1,568	1,920
10	0	2,273	3,496	9,660	2,626	891	18,945
11		764	16,842	67,968	9,216	35,329	130,122
12		796	22,622	65,868	18,547	38,178	146,011
13		0	706	20,234	44,339	1,358	66,637
15	16,504	11,595	18,529	39,981	19,292	4,962	110,863
16	0	4,765	4,765	8,977	0	0	18,507
Total	16,504	20,193	67,011	254,756	101,378	84,823	544,665

Waterfowl

Major areas of waterfowl use include the Snake River, C.J. Strike Reservoir, and to a lesser extent Salmon Falls Creek, Cedar Creek Reservoir, Bruneau River and the Jarbidge River. Small ponds are important for waterfowl such as the teal. Grazing eliminates nesting and brood cover along pond shorelines and stream banks.

Threatened, Endangered and Sensitive Species

Of the animals in the Jarbidge RMP area, only the bald eagle and peregrine falcon are on the federal list of threatened or endangered species. Bald eagles winter along the Snake River and its impoundments (i.e. C.J. Strike Reservoir). There are no known nesting sightings. Peregrine falcons are rare migrants in the RMP area.

Ferruginous and Swainson's hawks were cited as "candidate species" in the Federal Register as of December 30, 1982. "Candidate species" may become federally listed as threatened or endangered species pending a rangewide status review. Both species occur in the RMP area but in low numbers. All of the available habitat has not been inventoried. The

ferruginous hawk also appears on a state list as a species of special concern.

Terrestrial Wildlife

Sensitive species are those whose restricted range, habitat requirements, or low population numbers make them vulnerable to elimination if they suffer significant habitat loss. Eight sensitive species may be found in the RMP area. Many of these species are breeders in the area and stay either yearlong or return in the spring to nest. Other species occur in the fall/winter or spring during migration. Table 3-8 lists endangered and sensitive species and their status in the RMP area.

Table 3-8
Threatened, Endangered, and Sensitive Wildlife
(Mammals, Birds, and Reptiles)

Common Name	Federal Status	Occurrence
<u>Mammals</u>		
California Bighorn Sheep	Sensitive	Yearlong breeder
River Otter	Sensitive	Yearlong breeder
Bobcat*	Sensitive	Yearlong breeder
Kit Fox*	Sensitive	Presumed extinct
Spotted Bat	Sensitive	Rarely, if at all
<u>Birds</u>		
Peregrine Falcon	Endangered	Rare fall & spring migrant
Bald Eagle	Endangered	Rare winter migrant
Ferruginous Hawk*	"candidate" Sensitive species"	Rare spring & summer breeder
Swainson's Hawk	"candidate species"	Uncommon Spring & summer breeder
Western Burrowing Owl	Sensitive	Common spring & summer breeder
Long-billed Curlew*	Sensitive	Common spring & summer breeder
Mountain Quail*	Sensitive	Yearlong breeder
<u>Reptiles</u>		
Western Ground Snake*	Sensitive	Rarely, if at all

* Also listed as a "species of special concern" in the Idaho Department of Fish and Games 1981-1985 Nongame Management Plan.

** "Candidate Species" may become federally listed as threatened or endangered species pending a rangewide status review.

Birds of Prey

Prairie falcons, golden eagles, and red-tailed hawks are the three major birds of prey species found in the RMP area. Uncommon and rare birds of prey are discussed in the Threatened, Endangered, and Sensitive Species section (pgs. 3-12, 13).

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Prairie falcon, golden eagle, and red-tailed hawks occupy traditional territories and often return to the same nest site that was used the previous season. They hunt in the grassland and shrub/grassland habitat types around their nest sites. Their major prey species are black-tailed jackrabbits, mountain cottontails, townsend ground squirrels, various passerine birds, chukar, quail, and reptiles.

Birds of prey require a high degree of solitude during their reproductive cycle. In addition to a lack of disturbance, raptors also need large foraging areas in order to obtain food for themselves and their young. Conversion of their forage habitat to monotypic stands of crested wheatgrass or irrigated agriculture reduces available prey and results in reduced productivity or territorial abandonment.

The Jarbidge RMP area includes a portion of the Snake River Birds of Prey Area in MUA 5. This area contains the densest population of nesting raptors in North America.

A greater than average density of wintering golden eagles occurs in the eastern portion of MUA 7 and the northeast corner of MUA 12.

Within the RMP area north of township 6 south during the 1983 nest census 16 active nests were identified for the major species. Adjacent to the resource area along the north side of the Snake River another 24 nests were found to be active during the same census period. Number of nests by raptor species is displayed in Table 3-9.

Table 3-9
1983 Nesting Sites Within and Adjacent
to the RMP area

Species	Nests in Resource Area	Nests Adjacent to Resource Area*
Golden Eagle	7	8
Red-tailed Hawk	5	8
Prairie Falcon	4	8

* Raptors at these nests very likely use a portion of the Jarbidge Resource Area in their life cycle.

Non-Game

Approximately 330 species of nongame bird and mammal species inhabit the RMP area. These species make up the bulk of the fauna in the RMP area. Most of these species fulfill an important ecological niche as major prey species for bird and mammalian predators.

Riparian Habitat

Healthy vigorous riparian systems hold the key to survival for many wildlife species. Well vegetated drainages are passage corridors between different elevation zones and wildlife use areas (Thomas et al. 1978). They allow movement without undue exposure to predation or the harsh winter elements. Certain cavity nesting species including owls, bears, small mammals and birds are dependent on riparian systems for survival.

Many important game animals including elk, deer, bear, and upland game birds are provided essential food, cover, and nesting opportunities that would be denied them without the presence of good riparian habitat. Small mammals that require a water based environment such as beaver, river otter, muskrat, and racoon are found in abundance only in well established and healthy riparian systems.

A healthy riparian system also contributes other benefits such as stream morphology (Behnke 1977). Narrow deep stream channels with over-hanging vegetation provide optimum temperature regimes and sediment control for summer and winter trout survival. Snow coning and resultant surface protection in winter can only occur when the stream channel is narrow and deep (Bill Platts pers. comm. 1983). Twelve (12) streams that have experienced past livestock use have lost their streamside woody vegetation. Extensive bank trampling and sloughing have created stream channels that are wide and shallow and now suffer severe icing conditions. Complete freezing, slush ice, and ice forming on the stream bottom can make large stream segments uninhabitable for trout and cause extensive mortality (Sheridan, Armstrong et al. 1976).

Upper reaches of streams contain spring heads and meadows. These areas have a major influence on the condition and productivity of downstream aquatic habitat, and of themselves provide excellent wildlife habitat. In the resource area the majority of these headwater sites are livestock concentration areas and are in poor habitat condition.

Riparian surveys in the resource area included all significant perennial and ephemeral drainages on public lands (except the Snake River). Data collection involved identifying size, age, and form classes of woody riparian species; and recording bank erosion and canopy cover.

A riparian vigor rating criteria was then used to establish condition classes of poor, fair, good, excellent, and unsuitable. A total of 370 miles of riparian habitat was surveyed. Approximately 99 miles or 27% of the surveyed area was in poor condition; 132 miles or 36% was in fair condition; 127 miles or 34% was in good condition; 3 miles or 1% was in excellent condition; and 9 miles or 2% was in unsuitable condition (see Appendix H).

Thirty-one (31) miles of the 99 miles in poor condition are attributed to low site potential, and eleven (11) miles to man's influence

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(de-watering activity for irrigation). The remaining 57 miles in poor condition is due to impacts from livestock use. Of the 132 miles in fair condition, 91 miles are attributed to low site potential and the remaining 41 miles are in fair condition due to impacts from livestock use (Map 3-6). Drainages with low site potential cannot be improved through management actions considered in this RMP.

Aquatic Habitat

There are approximately 312 miles of perennial streams and rivers and 3500 reservoir surface acres in the Jarbidge Resource Area. Perennial streams were evaluated on the quality of six habitat features that are important components of a salmonid fishery. Currently 1% of the 312 stream miles are in excellent condition, 47% are in good condition, 23% are in fair condition, and 29% are in poor condition (Map 3-7). The complexity and uniqueness of the Snake River prevented accurate evaluations and this system was reviewed from current literature.

Although no threatened or endangered aquatic species are known to occur in the Jarbidge Resource Area, three candidate aquatic species occur within the Snake River multiple use area (MUA 4) (Federal Register, January 20, 1984 and February 16, 1984). These three species, the Shoshone sculpin, Snake River Physa snail, and Bliss Rapids snail are confined to the few remaining free flowing segments of the Snake River and tributary springs.

The Shoshone sculpin is listed as a species of special concern by the Idaho Department of Fish and Game. Shoshone sculpin inhabit springs and spring fed streams along the Snake River between Bliss Dam and Kanaka Rapids. (Wallace et al 1982, Griffith et al 1981) Individuals have also been taken from the main Snake River by Cochnauer (1980).

Both the Bliss Rapids snail and the Snake River Physa snail are unnamed species, relic survivors of ancient regional lakes. Modern and fossil occurrences of both species indicate they are large-water species inhabiting large lakes and rivers. Both snail species are confined to the fast flowing Melon Gravel boulder bars of the mainstem Snake from Lower Salmon Falls Dam to the mouth of Clover Creek above King Hill for the Bliss Rapids snail and Lower Salmon Falls Dam to Bancroft Spring for the Snake River Physa. A small population of the Bliss Rapids snail is also found in Box Canyon, 2 miles east of the study area (Taylor 1982).

The white sturgeon in Idaho are found in free-flowing portions of the main Snake River system upstream to Shoshone Falls and the extreme lower portion of the Salmon River. They are also present in the Kootenai River in northern Idaho (IF&G 1978). Bocard (1980) sites portions of the Snake River in the Jarbidge Resource Area as containing "some of the last high-quality, free-flowing stretches in southern Idaho." White sturgeon have been lost from most of their former range by the construction of dams eliminating the free-flowing habitat.

Fire Management

Resource Area Summary

Since 1971, wild fires have burned approximately 575,000 acres in the Jarbidge Resource Area. Analysis of available data indicates that the area has an average of 16.6 fires per year, based on the twelve-year average since 1971. An average of approximately 48,000 acres burns in the resource area each year, with an average of 6,700 acres (14%) per year being reburns. Reburns are those areas that have burned more than once during the study period. The average size fire, over the twelve-year period, has been 2,889 acres in size.

Limited Suppression Area

A limited suppression area, encompassing 499,712 acres of low value rangeland, was established under an advance plan in 1981. The purpose of the limited suppression plan was to decrease costs of full fire suppression in areas where resource values are low.

Resource protection criteria within the plan include limiting suppression actions on fires up to 2,000 acres in size, and tying all action to the burning condition index, resource values, and protecting critical wildlife and archaeological areas.

Over the last twelve years, the area designated for limited suppression has had 41 recorded wildfires, totaling over 143,690 acres. Over 19,000 acres (13%) of the total figure has been reburns. The average fire size for the limited suppression area has been 3,505 acres per fire. This is almost 1,000 acres larger than the average fire for the entire resource area. This can partially be explained by the remoteness of the area and the corresponding long response time to get to these locations.

Since the limited suppression area was established, eight wildfires have burned a total of 21,508 acres. Approximately 5,700 acres (27%) of this total has been reburn. The average fire size has been 2,689 acres, or roughly the area average. Not included in the above figures are numerous small fires that occurred with no action taken.

Full Suppression Area

The remaining 1,190,761 acres within the Resource Area are managed as full suppression areas whereby aggressive action is taken on all fires on, or threatening, public land with sufficient forces to contain the fire during the first burning period. Over the past 12 years, approximately 431,000 acres have burned within this area. There has been an average of 13.1 fires/year and 44,445 acres burned per year. Approximately 5,750 acres (13%) have been reburns.

Recreation

Most of the recreation use in the area occurs in a dispersed context but recreationists do concentrate in certain areas around the periphery of the resource area. The Bennett Hills; the area of Murphy Hot Springs/Jarbidge, Nevada (Jarbidge Forks); the Snake River; Salmon Falls Creek Reservoir; and the Hagerman National Natural Landmark (NNL) attract a largely local and regional clientele. The wildwaters of the Bruneau/Jarbidge Rivers and the Oregon Trail attract recreationists nationwide.

During 1983, the Bruneau/Jarbidge Rivers received 4,720 visitor days of use. The estimated annual demand for recreation opportunities within the total resource area is currently 20,500 activity occasions (from Pacific Northwest River Basin Commission data; adjusted by BLM).

The only areas that have received intensive recreation management have been Hagerman and the Bruneau and Jarbidge River system (including Jarbidge Forks). Hagerman has received attention because of resource conflicts between ORV use and farming and the areas' valuable paleontological resource - the reason for its designation as a NNL. The Bruneau/Jarbidge Rivers are included in two Wilderness Study Areas as well as in a proposal already submitted to Congress to classify them as Wild and Scenic Rivers.

The Oregon National Historic Trail passes through the resource area. The trail corridor includes 14,112 acres containing 44 miles of trail remnants of which 39.4 miles (12,608 acres) have National Historic Trail status (see Cultural Resource sections for more detail). The Bureau has agreed to protect and interpret the Oregon Trail where it passes through public lands. The entire trail has been nominated for national register status.

The South Fork of the Boise River from Anderson Ranch Dam to Arrowrock Reservoir and the West Fork of the Jarbidge River are listed on the Nationwide Rivers Inventory as potential National Wild and Scenic or Recreational Rivers. The Jarbidge West Fork was evaluated in 1982 by a joint Forest Service/BLM team and found to be unqualified. BLM holdings on the Boise River are so small and scattered that the Forest Service will need to take the lead in any effort to designate it in the system.

Table 3-10 shows acreages in each recommended "Special Recreation Management Areas" (SRMA) in each of the six "Recreation Opportunity Spectrum" (ROS) classes. ROS classes are used to describe existing and desired management settings on public land. The only areas classified under ROS were those recommended for SRMA status.

Table 3-10
 Recreation Opportunity Spectrum Classes
 (by Special Recreation Management Area and Acreage)

SRMA	ROS Classes and Acreage					
	Primi- tive	Semi- Primitive Motorized	Semi- Primitive Motorized	Roaded Natural	Rural	Modern Urban
Salmon Falls Creek	2,800	0	2,680	0	120	0
Hagerman including Owsley Bridge ORV area & Fossil Beds	0	0	0	0	7,074	0
Bruneau/Jarbidge River	55,800	0	1,200	0	0	0
Jarbidge Forks	0	0	0	4,320	0	0
Bennett Hills (winter only)	0	0	56,680	0	0	0
Oregon Trail	----- unsurveyed -----					

Visual Resources

The public land has been inventoried to determine the quality of the visual resources in the Jarbidge Resource Area. Evaluation of the land was based on landform, vegetation, water, color, scarcity, influence of adjacent scenery and cultural modifications (intrusions) in accordance with the visual resource management (VRM) system presented in BLM Manual 8410.

The VRM system provides for management of visual resources to prevent undue degradation. Management classes based on scenic quality, sensitivity level, and distance zone are established to provide appropriate objectives for management. The acreages of public land in each VRM class are shown in Table 3-11. Locations of the classes are shown on Map 3-8.

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Table 3-11
Acreages by VRM Class

VRM Class I	207,870 acres
VRM Class II	306,840 acres
VRM Class III	437,620 acres
VRM Class IV	1,138,340 acres

Cultural Resources

General

The Jarbidge Resource Area has been inventoried for cultural resources at the Class I, II and III levels. There have been 1,089 cultural resource sites representative of historic and prehistoric occupations located. Site types include rock shelters, rock alignments and structures, petroglyphs, prehistoric and historic scatters and historic roads and trails, including the Oregon Trail. Prehistoric sites are generally typical of the northern Great Basin and historic sites reflect the adaptation of euroamerican culture to the western United States. There have been 894 cultural resource sites evaluated to determine condition. The results of this evaluation show that 2% are in excellent condition, 56% in good condition, 39% in fair condition and 3% have been destroyed.

The following sites and site complexes require special management due to their unique character and/or to their deterioration as a result of vandalism, erosion, livestock trampling or other forces.

Devils Creek Cultural Resource Site Complex

This cultural resource complex consists of 217 sites located along a 33 mile stretch of Devils' Creek. These sites represent the prehistoric period from approximately 11,500 years before the present up to and including the historic period of euroamerican contact and settlement. Site types include rock structures, rock shelters, caves and open lithic scatters, as well as historic sites.

Sites within this complex range in condition from good to poor. Sixteen extremely significant sites are in danger of destruction from vandalism, livestock trampling and erosion.

Pot Hole Creek Cultural Resource Complex

This cultural resource complex consists of two prehistoric sites located near Pot Hole Creek which contain extensive deposits of material representing the earliest occupation of this area as well as later periods of occupation. Both open sites and rock shelters are included. The sites are presently in good condition but are deteriorating from the effects of dune activity and erosion.

Dove Springs Cultural Resource Site Complex

These four cultural resource sites are located on Saylor Creek near Dove Springs. In addition to evidence of very early occupation, these sites are unique in that they also contain fossilized faunal (paleontological) remains. Site condition ranges from good to poor, and vandalism is a major cause of site deterioration.

Juniper Ranch Cultural Resource Site Complex

This group of sites, located on Clover Creek near Juniper Ranch, represents several different site types: a large, open campsite; a small lithic scatter and a stratified habitation site on the terrace above Clover Creek. The latter is being heavily disturbed by livestock trampling and stream bank erosion, while the others remain in good condition.

Clover Creek Cultural Resource Site Complex

This cultural resource site complex consists of a series of three rock structures (probable hunting blinds) associated with lithic debitage and finished tool forms, and a large campsite (open lithic scatter close by). The sites are in poor condition as a result of livestock trampling.

Dry Lakes Cultural Resource Site Complex

This cultural resource site complex consists of sixty-five cultural resource sites located along a 22 mile stretch of the Bruneau River. Seventeen sites are in the canyon along terraces and in caves and rock shelters, and forty-eight are above the river, east of the canyon rim, on the edge of dry lakes (playas) and dispersed between the dry lakes and ephemeral drainages. This complex may represent one of very few known examples of diverse microenvironmental adaptation between riverine, high plains and playas by prehistoric inhabitants of the Great Basin. The condition of these sites ranges from good to poor. Site deterioration results from erosion, vandalism, and livestock trampling. In addition to the prehistoric sites, the area contains an important historic site, the Bengoechea Cabin, which is in poor condition as a result of its use as a livestock containment facility.

Cougar Canyon Cultural Resource Site Complex

The Cougar Canyon cultural resource complex consists of eleven prehistoric and one historic site located in Cougar Canyon in caves and rock shelters. Included in the complex are rock shelters, rock structures, caves and open sites, prehistoric and historic rock art, and historic structures. Site condition ranges from good to destroyed as a result of extensive vandalism and livestock trampling.

Post Office Cultural Resource Site Complex

This cultural resource site complex consists of an historic frame structure and corral near Poison Creek, and a large open prehistoric scatter in the area surrounding the historic sites. Both sites are in

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good condition, but are deteriorating from weathering and livestock trampling.

Oregon Trail Historic Route

The Oregon Trail and its' alternate routes traverse the northern portion of the Saylor Creek Planning Unit and southern and western portions of the Bennett Hills Planning Unit. The condition of the Oregon Trail ranges from good to destroyed. Deterioration is due to agricultural development, ORV use, range facilities construction and use, livestock trampling, fire control and rehabilitation, and vandalism.

Paleontologic Resources

The Hagerman Fauna locality (Hagerman Fauna Sites National Natural Landmark) is world famous among paleontologists for its exceptional assemblage of Pliocene (3.2 MYBP) fossils. There are well over 300 different collection spots known in the Hagerman Fauna area. Thousands of specimens and tons of material have been removed by professionals from this area. The Hagerman beds are only a small part of the Glenns Ferry Formation which is the most fossil rich formation in Idaho and possesses the richest fish fauna in western North America.

Other important sites within the Glenns Ferry Formation include Sandpoint (Shell Mountain), Chalk Flat, Oreana, Grand View (Jackass Butte), Sand Dunes (Flat Iron Butte), Dove Spring and others. Fossils are still being found at all these localities. The Bruneau Formation, Crows Nest Gravel, Melon Gravel and recent superficial deposits have also produced fossils. The Hagerman and Sand Point sites are being considered for ACEC designation. Additional description of these sites is included in the plan portion of this document.

Wilderness

Three wilderness study areas (WSAs) are addressed in this RMP. The Bruneau River/Sheep Creek WSA and the Jarbidge WSA are located along the Bruneau and Jarbidge Rivers. Both WSAs have acreage within the Bruneau Resource Area that is being addressed in this RMP. The King Hill Creek WSA is located in the Bennett Hills area. It has acreage within the Shoshone BLM District that is being addressed in this RMP. WSA acreages are shown on Table 3-12 and the locations are shown on Map 3-9. A brief description of each WSA is presented in Table 3-13. Appendix J provides additional detail and analysis on wilderness values and other resources found in each WSA.

Table 3-12
WSA Acreage

WSA	Total Acres	Acres		
		Jarbidge RA	Bruneau RA	Shoshone District
111-17 Bruneau/Sheep Ck	104,406	28,868	75,537	0
17-11 Jarbidge	75,118	66,770	8,348	0
19-2 King Hill Creek	29,309	23,815	0	5,494
Totals	208,833	119,454	83,885	5,494

* Acres vary slightly from previously reported intensive inventory acres because of refined acreage calculations.

Energy and Minerals

Oil and Gas

The search for oil and gas has been going on in Idaho since 1904. However, activity has been sporadic and short lived. Various small showings of oil and gas have occurred but no discoveries of economic size have been made. The greatest interest has been in southeastern and southwestern Idaho. Very little interest has occurred in the south-central portion of the state in which the Jarbidge Resource Area is located. Only five "exploratory" wells have been drilled in or near the resource area. All were "dry" wells.

Leasing continues in the resource area, especially within the Snake River Plain. Most areas with any "potential" are under leases issued in 1982. There were 75 leases issued for 1983 in the JRA covering 62,490 acres.

Geothermal

The existence of a geothermal resource in Idaho has been known since prehistoric times. The Indian Bath Tubs near the Bruneau Known Geothermal Resource Area (KGRA) were used by the Shoshoni Indians long before the white man showed up. The hot springs in the Mountain Home KGRA were probably also used although no direct evidence is presently known. White man's early use of the resource in and near the Jarbidge Resource Area included the development of a swimming pool in the Bruneau KGRA and the use of water from the Mountain Home KGRA as a medicinal drink.²

It was not until 1970 that an act of Congress was passed specifically identifying and making available the geothermal resource for development. Leasing in the Jarbidge Resource Area did not occur until August, 1975 (1 1/2 years after the Bruneau and Mountain Home KGRA's were designated by

Table 3-13
WSA Descriptions and Characteristics

WSA Name and Number	WSA Size and Configuration	Wilderness Characteristics			Supplemental Values
		Naturalness (Imprints)	Outstanding Opportunities		
			Solitude	Primitive Recreation	
Bruneau River/ Sheep Creek 111-17	104,406 acres long, irregular configuration 6 state in-holdings, no private in-holdings	97% natural appearing 29 miles of ways, 4 1/2 miles of fence, 3 water developments, 2 miles of constructed livestock trails	Excellent topographic screening in 65+ miles of major canyons and 20+ miles of tributary canyons. The WSA is of sufficient size for the screening ability of low growing sagebrush to be effective	Landform diversity includes narrow, meandering canyons and rolling to flat plateaus The natural features of the WSA provide a strong recreational attraction to persons interested in backpacking, day hiking, nature photography, wildlife viewing, hunting, fishing, rockhounding, and white-water boating	Exceptional scenic quality Identified as a potential "National Natural Landmark" by the NPS for its geological values Contains more than 200 known prehistoric and historic cultural sites "Sensitive" species found: river otter, bobcat, red-banded trout, Davis' peppergrass, Bailey's Ivesia, Watsons Leptodactylon Existing and potential habitat for California big-horn sheep and potential bald eagle habitat. Under consideration by Congress for Wild and Scenic River designation 20,000 acres of salt desert shrub vegetation
Jarbridge River 17-11	75,118 acres long, irregular configuration 4 state in-holdings, 2 private in-holdings	99% natural appearing 14 miles of ways, 3 miles of fence, 2 stock reservoirs	Excellent topographic screening in 45+ miles of major canyon and in numerous tributary canyons	Landform diversity includes narrow, meandering canyons and flat to rolling plateaus The natural features of the WSA provide a strong recreational attraction to persons interested in backpacking, day hiking, nature photography, wildlife viewing, hunting, fishing, rockhounding, and whitewater boating	Exceptional scenic quality Contains more than 150 known prehistoric and historic cultural sites "Sensitive" species found include river otter, bobcat, and red-banded trout Existing and potential habitat for California big-horn sheep and bald eagle Under consideration by Congress for Wild and Scenic River designation
King Hill Creek 19-2	29,309 acres trapezoidal configuration about 8 miles wide north to south and 6 to 10 wide east to west 2 state in-holdings, 1 private in-holding	99% natural appearing 4 miles of ways, 6 1/2 miles of fence, 6 spring developments	Good topographic screening in the maze of riparian drainages, ridges, and peaks that make up the unit	Landform diversity includes riparian drainages, ridges, hills, and peaks Area is attractive for a variety of recreation activities including backpacking, dayhiking, nature photography, wildlife viewing, hunting, fishing, and rockhounding Mobility throughout the area is excellent	Considered of good to excellent scenic quality Crucial mile deer wintering range Crucial elk wintering range Numerous cultural sites throughout the area

the U.S.G.S. and 2 years after the "oil crisis" of 1973 that spurred an increase of interest in the geothermal resources of the U.S.3). Various studies, reports, research and leases have been made since then. However, this has not led to any commercial development in the resource area.

The use of the geothermal resource in the Jarbidge Resource Area is slight. Various hot springs are used for bathing. Many wells have been drilled into geothermal waters, however, the use of the water has been for stock watering and irrigation.

Mining

Mineral exploration and mining have been going on in Idaho since the mid-1800's. The lands covered by the Jarbidge Resource Area have not proven to be a significant mineralized area. There are less than 100 unpatented claims within the 1.8 million acres of the resource area. This amounts to a maximum of 2,066 acres or approximately 0.1% of the total area. Over half of the claims were located in 1980.

The Pine Grove Mining District, Volcano Mining District and Jarbidge (Nevada) Mining Area cover lands within or adjacent to the resource area. The only ones presently affecting the resource area are the Pine Grove and Volcano Districts.

The Pine Grove District contains gold, silver, lead and zinc in lode deposits. Gold values have been the most significant. There are presently about 20 unpatented claims within this part of the resource area. Little activity other than assessment work is occurring on the BLM lands in the district.

The Volcano District is the only "active" mining district. There are 33 unpatented claims in this part of the resource area. All except 2 were filed by the Silver Chief Mining Company and surround claims patented in 1903. Little activity has occurred in this area until Silver Chief Mining Company's interest and location in 1980. The area is known to contain gold, silver, copper, lead and zinc, with silver values being the most significant. The Silver Chief Mining Company has reported the removal of 5,000 tons of ore from their claims. The ore is hauled to the Mountain Home area where it is processed by heap leach.

Indian Hot Springs is the only other locality in the resource area that is being actively mined. Bruneau Jasper was discovered here in 1958. Jasper has been removed every year since. Present yearly production is estimated to be between 5,000 and 12,000 lbs. The material is sold world-wide with prices varying from \$2.00 to \$800.00/lb.

Occurrences of gypsum, clay, diatomite, zeolites and gem stone materials (opal, agate, geodes) are known in the resource area. None of them are known to be of a quality and quantity sufficient to support development.

Mineral Materials

Mineral materials (sand and gravel, building stone, clay, etc.) are

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bulk type commodities. This generally means high volume use at a low unit price with haulage costs being the most significant part of the overall cost. For this reason, sources are developed as close to where they are needed as possible. Building construction and road construction and maintenance are the major uses of sand and gravel.

All the BLM pits in the resource area have been developed for these needs. Road maintenance material use far exceeds the other uses.

Development and use of mineral materials is strongly influenced by the economy. For this reason, use has been down for the past few years. There are 33 free use permits covering sites in the Jarbidge Resource Area and 1 material sale pit. The greatest concentration is in the Glenns Ferry area.

The Snake River Plain has substantial deposits of sand and gravel of good quality. The rest of the resource area does not. The Mount Bennett Hills area has one quarry site developed for maintenance of the Mount Bennett Road. Quarrying and crushing are expensive but necessary when an extensive haul distance is the other choice. The southern part of the resource area has some sand and gravel deposits but they are not of the quality and quantity that is available in the Snake River Plain area.

Forest Management

There are 2,371 acres of commercial forest land (CFL) located near Anderson Ranch Reservoir and on Bennett Mountain. There are also 1,443 acres of non-commercial woodland. The commercial forest is primarily Douglas-fir with scattered amounts of Ponderosa and Lodgepole pine. Sites are moderately productive, primarily limited by xeric climatic conditions and a short growing season. Annual growth rates indicate that a 20-25 inch tree could be grown in 90 years.

Only two-thirds of the commercial forest land can be reached and logged economically because some timbered tracts are small and remote. Only one timber sale has occurred in the past (1964). Allegedly, large size limbs and windshake raised logging costs and reduced quality and quantity to a degree that the sale was unprofitable for the purchaser.

Economics

This description of the local economy is divided into a general description of the overall income and employment levels and more complete descriptions of industries which will be impacted by the alternatives as described in Chapter 4.

A. General Description

This section describes the general income and employment levels in the three counties of Elmore, Owyhee, and Twin Falls, Idaho. A description of the multipliers used in impact analysis is also described.

1. Income. The total personal income in the three-county area was \$744.3 million in 1981 (Bureau of Economic Analysis 1983). This is based on earnings of \$539.8 million and adjustments for contributions for social insurance, place of residence, dividends, interest, rent, and transfer payments of \$204.5 million. Agriculture was the number one industry with 19% of total earnings. Federal military use was second with 12% of total earnings and retail trade was third at 10 percent.
2. Employment. The total employment in the three-county area was 40,585 in 1981 (Bureau of Economic Analysis 1983). Agriculture was the number one employer with 16 percent, while retail trade was second at 12 percent.
3. Multipliers. When changes occur in one sector of a local economy, changes also occur in other sectors. This is due to the interrelated nature of the economy. These changes are measured through the use of multipliers. The multiplier is a single number that summarizes the total direct and indirect spending effects of a given change in the local economy. Multipliers tell an analyst how large an impact on the entire local economy will occur as a result of a change in one sector.

The U.S. Water Resources Council published Gross Output Multipliers for Bureau of Economic Analysis Economic Areas in January of 1977. The economic area that includes most of the study area (except that portion in Twin Falls County) is Area 159. This includes all of southwest Idaho and parts of southeast Oregon. These multipliers (see Appendix A) indicate that the sectors in the local economy that would lead to the greatest changes in other sectors would be the meat animals and meat products sectors. In addition to multipliers, output must be converted to income using earnings/gross output ratios. These ratios will be used in Chapter 4 to estimate the impacts on the various local industries. These ratios are shown in Appendix A.

B. Specific Descriptions

This section provides more in-depth descriptions of the three-county and Jarbidge RMP area (where possible) crop agriculture and livestock industries.

1. Crop Agriculture. The 1981 three-county farm income resulting from the raising of crops is estimated at \$55.8 million. This is based on the assumption that crop income is the same proportion of farm income as crop receipts are of total farm receipts. Over the five-year period of 1977-81 crop receipts have totaled 54% of total receipts (Bureau of Economic Analysis 1983).

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The 1981 Idaho ranked in the top ten states in the production of potatoes (#1), barley (#2), dry edible peas (#2), dry edible beans (#3), sugar beets (#3), and alfalfa hay (#6). The state also ranked 12th in wheat production. All of these crops are grown in the three-county region. The three-county region collectively ranks in the top ten producers in Idaho for all these crops: potatoes (#2), barley (#7), dry edible peas (#5), dry edible beans (#1), sugar beets (#3), hay (#1), and wheat (#4) (USDA 1982).

The number of jobs generated in the three-county area due to crop agriculture (based on the BEA Farm Income and BEA Employment data) is approximately 3,580.

2. Livestock. The number of cattle and calves in the three-county area is approximately 280,000. The number of sheep and lambs is about 31,000 (USDA 1981). Ranch budgets prepared for other planning efforts (USDI, BLM, 1980; USDI, BLM 1981) in the three-county area indicate that an AUM generates \$18.47 in sales. Utilizing the gross output multipliers and earning/gross output ratios this was converted to \$12.15/AUM in direct and indirect income. Approximately 3,434,400 AUMs would be required to maintain the area's inventory of cattle and sheep. Total income due to the livestock industry would be \$41.7 million, or 40% of the total farm income. Within the Jarbidge RMP area the permittees have a total herd size of 36,000 cattle and 19,000 sheep. This represents 13% of the three-county total cattle inventory and 61% of the sheep inventory. This would translate into income of \$5.8 million, or 14% of the three-county livestock income and 6% of the three-county farm income. BLM grazing provides about 160,000 AUMs, or 34% of the permittees total needs. This generates \$1.9 million in income, which represents 5% of the three-county livestock income.

The permittees in the Jarbidge RMP area were split into four size groups in order to determine whether one group is more, or less, dependent on BLM grazing than are the other groups. The statistics for the various size groups and the income generated by AUMs used by each group can be found in Appendix A. This data indicates that the smaller the group the more dependent it is on BLM grazing privileges.

A recent study of the Owyhee Canyonlands Wilderness (USDI, BLM 1984) study areas indicated that each AUM results in .00028 jobs. Based on this the livestock industry in the three-county area would account for 962 jobs. AUMs used by Jarbidge permittees account for 133 jobs and BLM AUMs account for 45 jobs. Tables showing the livestock income and employment statistics can be found in Appendix A.

As early as 1925 it was recognized that the annual value of the federal grazing privilege was being capitalized into rancher property. "It is argued that long use of the range in connection with the early settlement of agricultural lands has resulted

in capitalizing the values of public pasturage as part of the value of the ranch..." (USDA 1925).

A report published by the Utah State University Experiment Station stated "There was nothing illegal or unethical in the fact that grazing permits took on value; ranchers just reacted to an economic situation that was created by government policy. Permit values rose because ranchers who have grazing permits were capturing economic rents in the form of low cost grazing; i.e., the grazing fee and recognized non-fee costs did not equal the value of the grazing to ranches. Thus, the authorization to use the federal lands and the associated economic rents were capitalized into rancher-owned assets. This value could show up either as a permit value or as an increased value of the commensurate property." (Nielson and Workman 1971).

The Bureau of Land Management's position on permit values is based on very explicit language in Section 3 of the Taylor Grazing Act of 1934 which states "So far as consistent with the purposes and provisions of this Act, grazing privileges recognized and acknowledged shall be adequately safeguarded, but the creation of a grazing district or the issuance of a permit pursuant to the provisions of this Act shall not create any right, title, interest, or state on or to the lands." Thus, any capitalized value associated with grazing permits has no legal basis, and as a result a rancher has no compensation for loss of this value.

Magazine articles and research results have often been in conflict on the subject of permit values. Nevada rancher, Dean Rhoads, in an article in the New West Magazine stated that "the forage rights for a single cow on the public range now sells for anywhere from \$1,500 to \$3,000 in the Elko area." (Boly 1980) A survey done in New Mexico of ranch appraisers and credit officers placed the value of Forest Service permits as between \$944 and \$1,163 per animal unit, depending on the area in New Mexico. Bureau of Land Management values varied from \$677 to \$888. (Fowler and Gray 1980.) On the other hand, a study in eastern Oregon found "the inclusion of public grazing privileges were found to have no significant impact on the level of private grazing land sale prices." (Winter and Whittaker 1979.)

CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

Introduction

This chapter discusses the environmental consequences of selection and implementation of each of the alternatives described in Chapter 2. The discussion for each alternative identifies impacts on each resource component of the affected environment described in Chapter 3. All practical mitigation measures have been incorporated into the design and description of the alternatives. Therefore, impacts identified in this chapter are unavoidable and would occur if the alternatives were implemented.

The identified environmental consequences provide the basis for selection of the preferred alternative in conjunction with public input and coordination with State and local governments, other Federal agencies, and Indian tribes. A 20 year time frame has been used for the assessment of environmental consequences unless otherwise stated. The following elements of the environment were analyzed but are not addressed since no significant impacts were identified: climate, topography, air quality, flood plains, prime or unique farmlands, and social conditions.

Alternative A

Lands

Land transfer under this alternative would consist of a maximum of 1,240 acres for sale, 9,925 acres for sale or exchange, 6,795 acres for exchange and 71,615 acres for agricultural entry (Desert Land Entry and Carey Act).

The development of 71,615 acres for agricultural entry would require 1,432 cubic feet per second (cfs) of water. It is anticipated that of the 1,240 acres proposed for sale, that 40% would be developed for agricultural use, of the 6,795 acres proposed for exchange, 75% would be developed for agricultural use, and of the 9,925 acres in the sale or exchange category, 80% would be developed for agricultural use. This would require an additional 271 cfs of water. Of the total of 1,703 cfs needed to irrigate these lands, approximately 90 percent would come from the Snake River. Few lands involve well water in the ground water management areas or critical ground water areas.

Environmental Consequences

Land transfer, primarily for agricultural use, would result in an increase in occupancy, agricultural and right-of-way trespass. It is estimated that 14 cases per year would be discovered at an average administrative cost of \$1,250 per case for a total cost of \$17,500 per year.

Transfer of land by sale would generate \$873,000 of revenue for the federal government at an average price of \$150 per acre.

The lands proposed for transfer by sale, or exchange were selected primarily because their disposal would reduce problem management areas and consolidate land ownership patterns thereby improving management and reducing management costs.

Rights-of-way would be precluded or restricted on 169,953 acres of public land due to conflicts with proposed Bruneau/Jarbridge Wild and Scenic River designations, Birds of Prey Essential Nesting Habitat, Oregon Trail, significant cultural and paleontological areas, and the Saylor Creek Gunnery Range.

This would result in reduced right-of-way flexibility, which may increase construction costs, particularly for major utility lines. The two east-west powerline routes proposed by the Idaho Power Company and the Western Power Council would be eliminated by a Wild and Scenic River designation of the Jarbridge/Bruneau Rivers, and a conflict with the Saylor Creek Gunnery Range. These lines would have to be realigned to pass through moderate use areas with few conflicts, which would result in traversing the same basic corridor area as the existing utility lines. The north-south proposal would be restricted somewhat by the Hagerman Fossil Beds, but could probably be slightly rerouted, to avoid any conflicts.

Small hydro development would be precluded in a Bruneau/Jarbridge Wild and Scenic River designation.

Soil, Water, and Air

The major environmental consequence to the soil, water, and air resource resulting from proposed land use decisions would be associated with off-site soil movement. Soil would be displaced by either wind or water action removing top soil and reducing site productivity. Wind borne particulate matter causes a decline in air quality and often a problem at the point of deposition. Water caused erosion increases sediment loads resulting in decreased water quality and reduced downstream water storage as sediment accumulates in reservoirs.

Proposed land use actions in this alternative which would cause the greatest soil displacement are agricultural development, livestock grazing, timber harvest, mineral exploration and development, off-road vehicle use and limited fire suppression (Appendix Table E-1).

The proposed transfer of public lands, the majority of which would be put in agricultural production, includes 58,395 acres of soils with a high erosion hazard rating. Off-site soil movement on farmed areas is expected to be at least ten times higher than on rangeland. Removal of vegetative cover and surface disturbance would result in a significant increase in wind blown particulate matter which affects the air quality in communities in the vicinity of the development. An increase in off-site soil movement caused by water is also anticipated based on experiences with previous agricultural developments. Associated with crop production is the use of pesticides and fertilizers which would add pollutants to air and water. Also associated with agricultural development are trespass problems (right-of-way) and fire occurrence both of which would contribute to air and water pollution.

Livestock use contributes to increased soil erosion from both grazing and trampling. Removal of vegetation by grazing reduces protective ground cover which acts to stabilize soil against the erosive action of both wind and water. Soil compaction increases as livestock trampling occurs. As a result, infiltration is reduced and runoff increased, which in turn, increases soil movement. Livestock use is projected to decrease by about 8 percent over 20 years, with stocking rates decreasing from 10.3 ac/AUM to 10.6 ac/AUM. This reduced use would not result in any major changes in erosion levels (Appendix E, Figures E-1, E-2).

Major long-term erosion from timber harvesting activities would be caused by road construction. One to two year off-site soil movement could be expected from vegetation removal and associated soil surface disturbances. Approximately 1,143 acres would be available for timber harvest.

Mineral exploration and development would be allowed on nearly 1.5 million acres. Even though little activity is anticipated, construction activities associated with drilling or mining operations in addition to construction of access roads would result in increased soil erosion if these activities occurred.

Off-road vehicle (ORV) activities would continue to be allowed on about 1.5 million acres. Currently ORV use is light causing soil surface disturbance on small areas. No increases in use are anticipated in this alternative. Localized disturbance has occurred on steep slopes where water tends to channel in tire ruts which develop into gullies, but no increase in this type of erosion is anticipated.

Limited fire suppression is proposed on about 0.5 million acres in the EIS area. Under limited suppression, larger areas are denuded of vegetation than would occur if full suppression were pursued. Removal of the vegetative and litter portion of ground cover leaves the soil exposed to the erosive action of wind and water.

Fencing 2.4 miles of riparian habitat (Dive Creek) would improve vegetative cover and reduce soil compaction and trampling damage to stream banks. Runoff and soil movement would also be reduced.

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Range Resources

Under this alternative, no adjustments in short-term AUMs are proposed. Allotments would be initially stocked at the current 5 year average use levels and would be adjusted downward as the proposed land transfers occur. Transfer of 89,575 acres of federal range would result in losses of approximately 15,082 AUMs (Appendix Table F-1) and would increase permittee operating costs.

Discussions with potentially affected permittees at planning scoping meetings indicated that approximately 10% of area permittees would be substantially impacted by the additional agricultural development. They would be forced to remove their livestock or move to areas with available forage that are further from their base ranches. Permittee travel for livestock management and supervision; pasture management; and range improvement construction and maintenance makes up a substantial portion of operating expenses. A 40-100% increase in operating costs is expected which would cause affected permittees to be replaced by larger more efficient operations which could operate successfully at the higher costs.

Vegetative conditions are not expected to change in 20 years. Due to the low precipitation (7-10 inches/year), heavy sagebrush overstory and low percentages of potential or "climax" species (less than 15%), no substantial improvement from poor condition to fair or better condition can be expected within 20 years with current grazing levels. In MUAs 3 through 14, the harsh climatic conditions increase the time needed to change from one condition class to another even if livestock is removed (Sanders and Voth 1983; Tisdale, Hironaka, and Fosberg 1969). Fair, good, and excellent condition areas are more inaccessible and would not receive additional use because of long distances from water and rough or steep terrain.

According to BLM records, increased levels of agricultural development would increase the number of wild fires on adjacent public lands which are expected to be rehabilitated as in past years and provide additional available livestock forage. Rehabed areas from wildfires have provided forage above those provided by the depleted native sagebrush cheatgrass areas.

Wild Horses

Short-term impacts to wild horses would be negligible. Long-term impacts would include increased forage competition from livestock displaced from adjacent land transfers and increased presence of humans. Wild horse populations would be expected to remain at or near existing levels (50 head).

Terrestrial Wildlife

Livestock grazing at present levels would continue to prevent improvements in ecological condition of mule deer, elk, bighorn sheep, pronghorn and sage grouse habitat. Population numbers of mule deer would remain near present levels over the long-term in Alternative A except for

MUA 2 (Table 4-1). In MUA 2 mule deer winter/spring habitat has seriously deteriorated. The area is presently overstocked with livestock. Ninety-one percent of the 38,000 acre crucial winter range is in poor condition. The remainder has been seeded or burned. Under this alternative, the present population of 3,350 mule deer would eventually decline. A sequence of bad weather coupled with continued overgrazing would result in a population crash. After such an event mule deer numbers would be expected to be about half of current numbers. The small elk population would also be expected to decline if the existing habitat situation is allowed to continue.

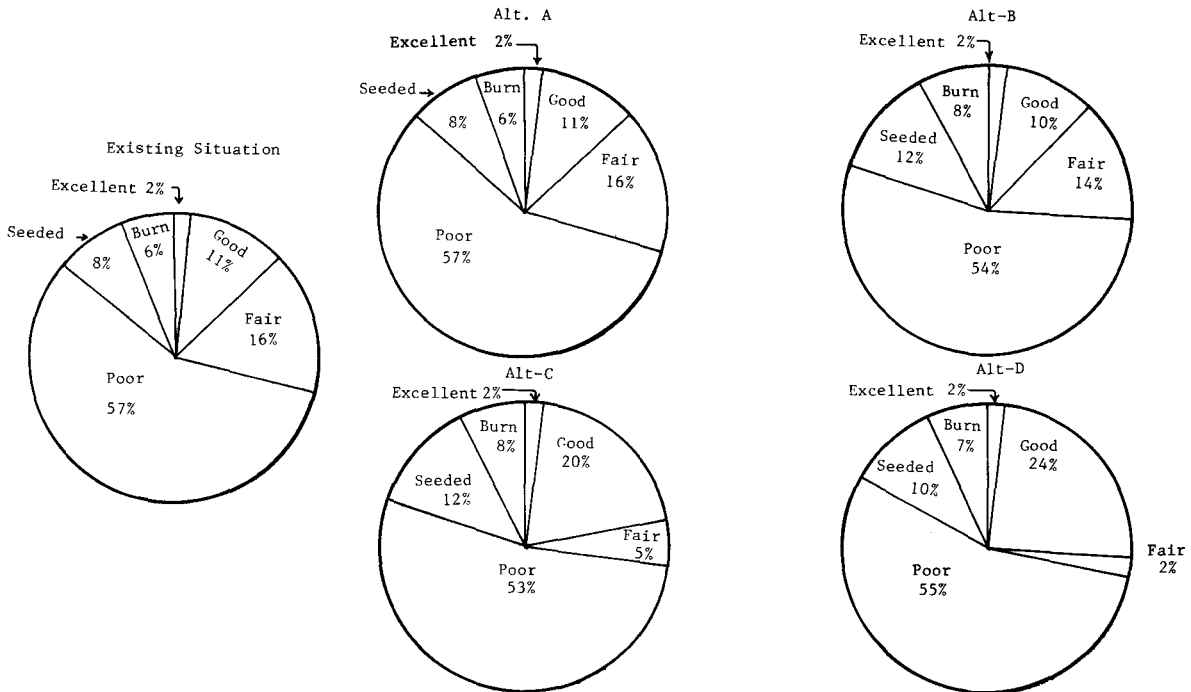
Table 4-1
Current Big Game Populations and Reasonable Number Goals

Animal #'s Existing*	MUA 1	MUA 2	MUA 3	MUA 4	MUA 5	MUA 6	MUA 7	MUA 8	MUA 9	MUA 10	MUA 11	MUA 12	MUA 13	MUA 14	MUA 15	MUA 16
Mule Deer	200	3,500	275	50	50	25	75	5	5	770	300	150	125	50	1,300	1,375
Antelope							15			85	225	150	25		650	65
Bighorn Sheep										10					2	2
Elk	70	125														
Reasonable #'s*																
Mule Deer	250	3,350	600	75	150	40	100	5	5	1,440	350	225	175	50	1,500	2,677
Antelope			25				30			191	400	270	50		1,170	151
Bighorn Sheep										208					56	100
Elk	200	250														

* Largest # of animals found on a given MUA during the year.

Over 50% of the crucial mule deer winter range is in poor ecological condition (Figure 4-1). No improvement is seen in this condition class

Figure 4-1 Ecological Condition of Mule Deer Crucial Winter Range

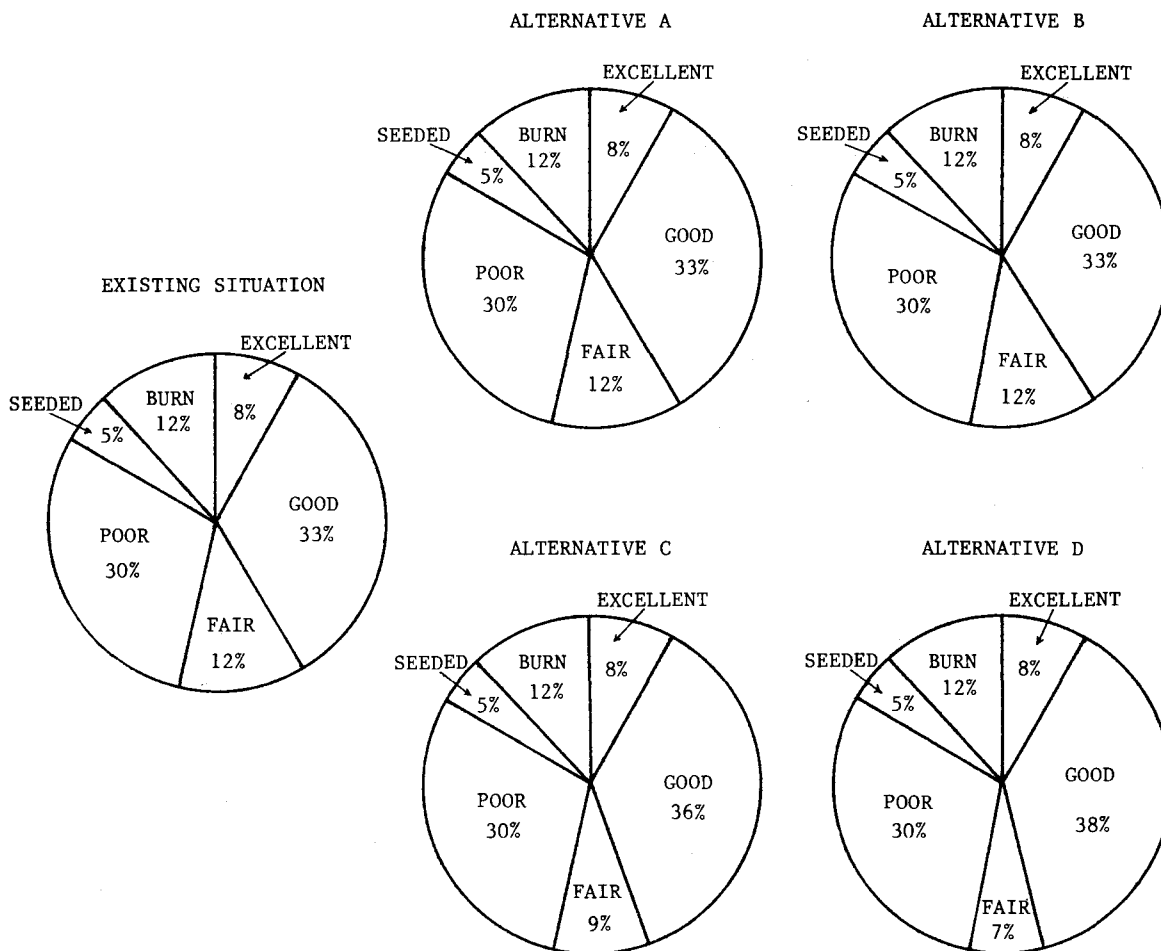


Environmental Consequences

over the 20 year planning period in Alternative A. Crucial mule deer winter areas in MUAs 2, 10, 15 and 16 are estimated to be approaching saturation point for migrating wintering deer. Competition for forage between wildlife and livestock would have the most impact within crucial deer winter range where fall or winter grazing by livestock would remove food needed by mule deer. During late season grazing, livestock shift to browse species as grasses and forbs dry, mature, and lose their nutritional value. This can reduce the carrying capacity of deer winter range becoming a limiting factor with respect to herd productivity.

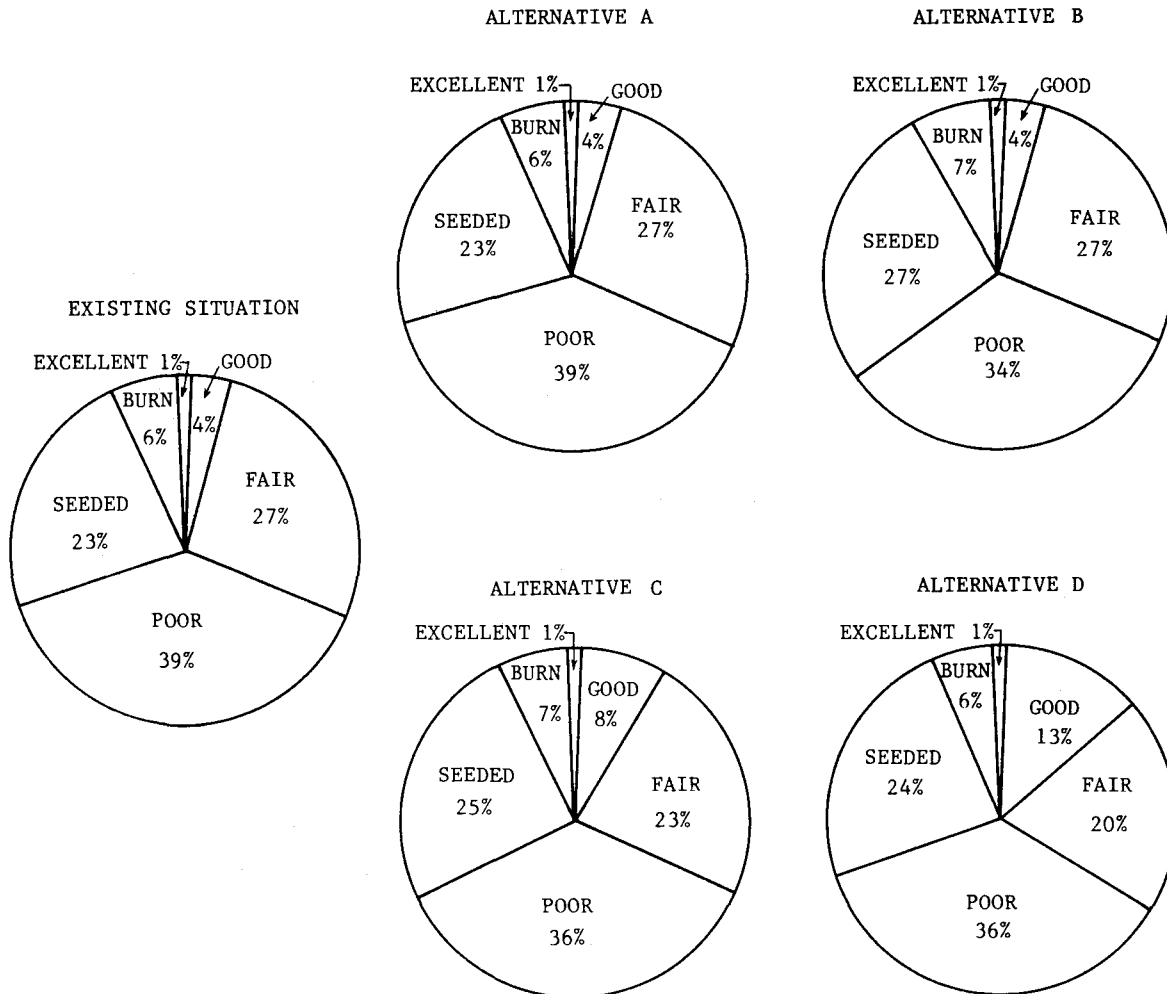
The bighorn sheep population would be expected to rapidly increase in the Jarbidge-Bruneau River Complex. The inner canyons are largely inaccessible to livestock thus allowing bighorn use with little or no competition. Approximately 40% of the existing habitat is in good to excellent ecological condition (see Figure 4-2). Habitat in poor, fair and burned condition is found on the adjacent plateaus. Although these condition classes are not ideal and are not expected to change much in 20 years, abundant forage coupled with excellent habitat structure should allow the population to achieve the 20 year reasonable number goal as seen in Table 4-1.

FIGURE 4-2 ECOLOGICAL CONDITION OF BIGHORN SHEEP HABITAT



Pronghorn habitat is largely in unsatisfactory condition (Table 3-3 and 3-5). The lower ecological condition classes and monoculture wheatgrass seedings typify the habitat. These habitat problems, however, are not expected to hinder pronghorn population growth. The large burns in MUAs 10, 11, 12, 13 and 15 provide an enormous acreage for pronghorns to forage on for succulent forbs during the spring, summer and fall period. Sagebrush is abundant, thus meeting winter dietary needs. The reasonable number goal is expected to be achieved in the long-term for all MUAs except 16. In MUA 16 habitat structure is generally too tall and forage openings are lacking. Pronghorn crucial winter habitat is not expected to change in condition from existing (Figure 4-3).

FIGURE 4-3 ECOLOGICAL CONDITION OF PRONGHORN CRUCIAL WINTER RANGE

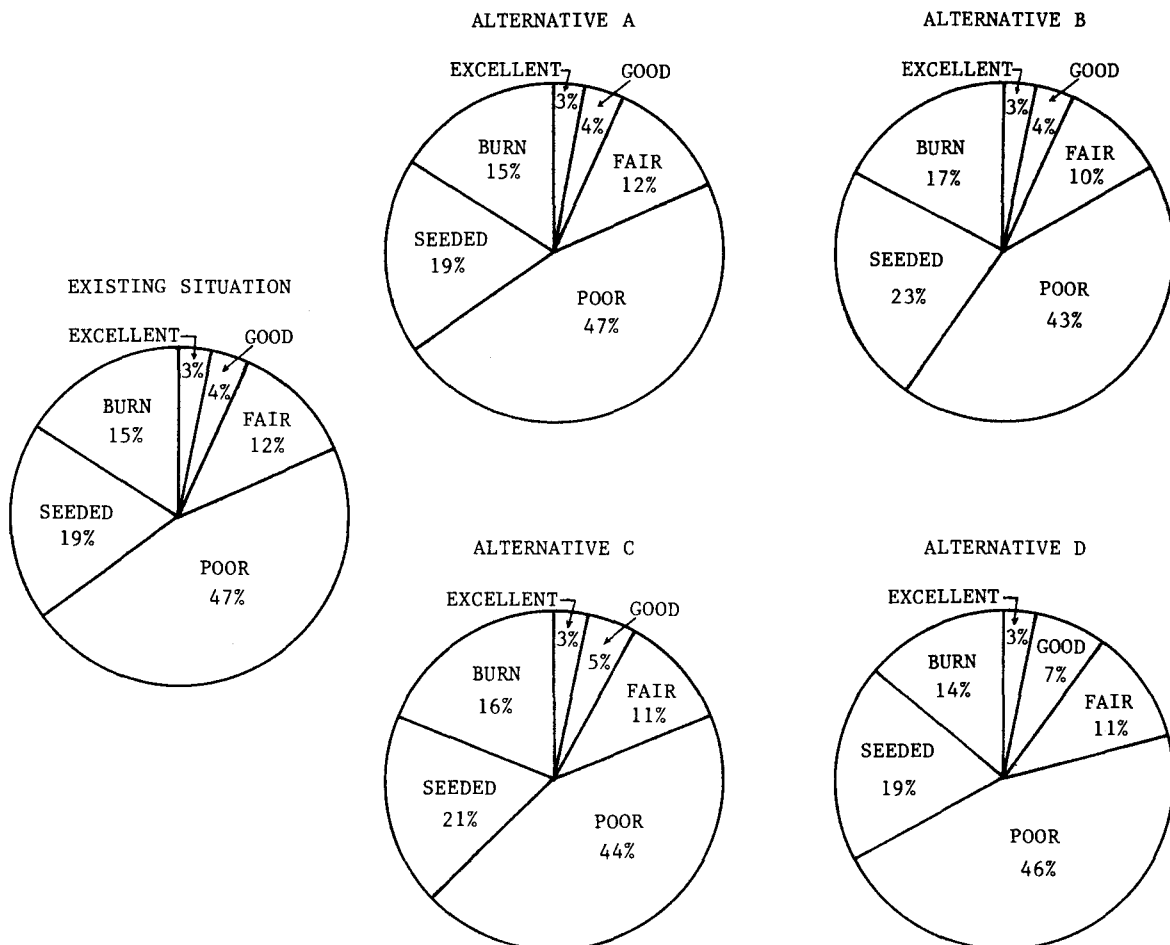


Environmental Consequences

Sage grouse nesting, strutting and brooding habitat has been severely damaged by past overuse, frequent fires and resultant seedings. Figure 4-4 indicates that approximately 50 percent of the existing nesting habitat is in poor ecological condition. The poor condition habitat, burns, and large seedings provide unsatisfactory habitat. Livestock grazing would not allow sage grouse habitat and populations to improve. A rapid removal of the limited forbs by livestock on spring and summer ranges would have an adverse impact on juvenile sage grouse. Less than 10% of the nesting complex is in satisfactory condition and no habitat condition improvement is predicted in the long-term (Figure 4-4). The existing 544,665 acre nesting complex is expected to decrease in size due to loss of sagebrush cover by wildfire.

The management guidance common to all alternatives, sage grouse section, should mitigate losses of habitat normally associated with range improvement projects such as seedings and prescribed burns. Specifically "Guidelines for Habitat Protection in Sage Grouse Range" - Western States Sage Grouse Committee, June 1974 will be followed.

FIGURE 4-4 ECOLOGICAL CONDITION OF SAGEGROUSE NESTING HABITAT



Management facilities and projects developed for the grazing program under the management guidance common to all alternatives should mitigate or prevent most adverse impacts to terrestrial wildlife.

Agricultural development in MUA 7 should have relatively minor impacts on big game. The habitat proposed for farming is only occasionally used by mule deer and rarely used by pronghorn. Farming would preclude future opportunities to reestablish pronghorn and sage grouse in those areas.

Major impacts due to the 71,615 acres of agricultural development would fall on small mammals, birds, and reptiles tied to the existing sagebrush habitat. Complete elimination of numerous species in portions of the RMP area would be expected. Agricultural entry would eliminate 16,900 acres of native habitat in this alternative. This is 25 percent of the native habitat remaining within an 8 mile radius of the Snake River from Sparlin Island upstream to Hagerman. Agricultural development would reduce the total biomass of prey available to raptors. New agriculture supports less than 65% of the prey biomass and energy that is supported by native range (USDI, 1979).

The major long-term effect of agriculture would be reduced carrying capacity of the habitat. The numbers and varieties of raptors would decline due to the elimination of their food supply.

The USDI Special Research Report of 1979 found that the proportion of vacant golden eagle territories in agricultural areas was significantly higher than the proportion in non-agricultural areas.

New agricultural development would probably result in abandonment of some traditional eagle territories and might result in the failure of some pairs to breed (USDI, 1979).

In addition, new farming would also impact wintering golden eagles in MUAs 3, 6 and 7. Jackrabbits, the eagles principle prey species, would not be available in areas where the big sage community is removed.

Prairie falcons and red-tailed hawks would not be as severely impacted as the golden eagle. Prairie falcons generally have home ranges running in a northeasterly direction and thus due to nest locations hunt outside the RMP area. The townsend ground squirrel, the falcons principle prey species is only in limited abundance in the RMP area.

Because of the red-tailed hawks diverse diet, it would be least affected by agricultural development. Red-tailed hawks have exhibited an ability to switch to other prey species (Luttich et al. 1970).

Increased agricultural development could disturb ground-nesting raptors such as Swainson's hawks, burrowing owls, ferruginous hawks and marsh hawks. Road building, vehicular travel, and the use of farm machinery all have the potential to disturb nesting raptors. In addition, increased human activity with improved access would increase chances for human disturbance.

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Sensitive species would also be impacted by the agricultural development. A nesting area containing 20 to 25 pairs of long-billed curlews would be lost. It is unknown at this time whether or not the western ground snake is an inhabitant of the proposed farming area.

Of the acres for sale or exchange, losses are expected to be minimal for terrestrial wildlife. On site inventories of each proposed land action should identify parcels which should be retained.

There would be 27,100 acres of new pheasant habitat created adjacent to the proposed farm land. Selected tracts within proposed farming areas would be retained to enhance pheasant and other farm associated wildlife.

Utility lines are expected to minimally impact wildlife if they are built outside major bird movement corridors. Collisions of migrating birds with towers or wires is an impact that cannot be effectively mitigated. Habitat disturbance associated with development of such corridors is mitigated by the management guidance common to all alternatives.

Under Alternative A terrestrial wildlife would be minimally impacted by mineral exploration. Significant wildlife habitat is protected in the management guidelines common to all alternatives. Site disturbance associated with mineral development could adversely affect wildlife populations and habitat depending on the location. Large scale mining development is thought to be unlikely in the Jarbidge Resource Area.

Maintenance of wild horse herds would result in little impact to terrestrial wildlife. Competition with big game species for forage is estimated to be nonexistent in MUA 7.

The impacts of harvesting a total of 1,143 acres of timber from MUAs 1 and 2 would vary depending on the harvest method, season, duration of activity, and location of the cutting unit. Potential adverse impacts include: reduced fall hiding cover for big game, reduced big game use of clearcut areas, loss of habitat types for wildlife species that require specific types (i.e. fir needles for wintering blue grouse), and disturbance of wildlife during seasonally important time periods (i.e. calving, fawning, and winter habitat). Impacts are lessened by management guidelines common to all alternatives. Some of the more important are limiting clearcuts to 40 acres, no occupancy time periods, and maintenance of buffer zones along riparian areas. Such guidance should prevent significant adverse impacts to mule deer and elk populations. Harvest of timber should result in an increase of shrubs beneficial as forage for big game.

Actual impacts expected to the blue grouse population is unknown. No inventory information is available on the size or habits of the existing population. Harvest would eliminate nongame wildlife associated with forest habitat.

Fire management within the resource area includes full suppression, limited suppression, and prescribed burning. Of the 1.6 million acres of public land in the resource area, 1,061,615 acres is native range. The limited suppression area contains 336,858 acres of native range. The limited suppression area encompasses a large portion of the sage grouse nesting habitat. Loss of nesting habitat by fire could amount to 51,180 acres over 20 years. If this occurred, 10% of the known nesting area south of the Snake River would be lost. The possibility also exists for the loss of unidentified sage grouse wintering areas in this alternative. No wintering areas have yet been found in the Jarbidge Resource Area. Sage grouse numbers in the Jarbidge Resource Area are unknown.

Loss of sagebrush by fire would also result in a decrease of protective thermal cover and forage for mule deer and sage grouse. Populations of nongame birds and mammals would be eliminated.

New fire caused openings in the sagebrush canopy would provide a lower more desirable structure for pronghorn use. Plant competition would also be reduced allowing production of additional succulent forbs for the pronghorn diet. Such additional open habitat in the limited and full suppression areas coupled with a more abundant plant understory would allow the antelope population to continue to grow. Pronghorn population south of the Snake River and east of the Jarbidge River would achieve the reasonable goals found in Table 4-1.

Wildlife occupancy stipulations would mitigate many possible impacts and provide positive benefits in many cases. Protection of important species life cycles and habitat would result. The list of species protected can be seen in Table 2, page 82.

The ORV closure on 116,842 acres should benefit big game, upland and nongame. No population increase would be associated with such closures.

In summary, Alternative A would maintain mule deer and elk numbers at present levels except in MUA 2. Pronghorn and bighorn sheep populations would increase to meet projected goals over most of the available habitat. A total of 2,374 AUMs of forage is needed to support the existing big game population. Forage needed to meet projected 2005 big game population estimates is 2,769 AUMs.

Riparian Habitat

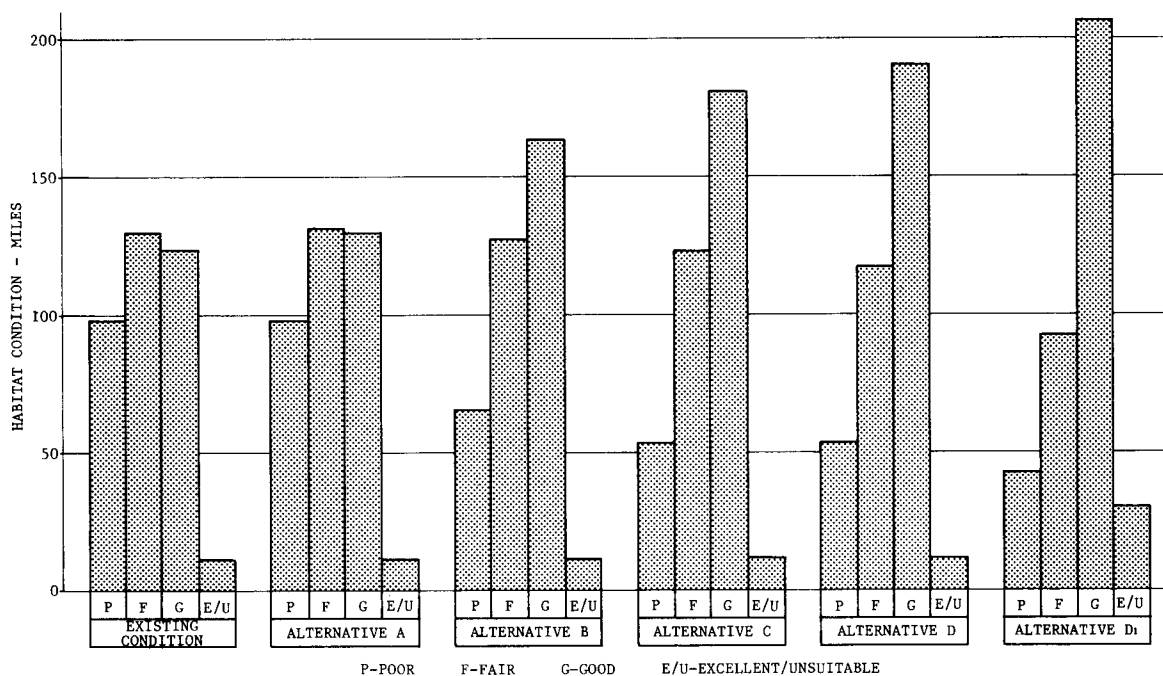
General

Livestock stocking rates and seasons of use have major influences on riparian habitat condition and trend (Bowers et al. 1979, American Fisheries Society Best Mgt. Practices 1982). Pasture rotation systems do not provide riparian benefits if the phenologic needs of the woody-riparian species are not recognized when developing management plans (Platts 1977).

Environmental Consequences

Adherence to Standard Operating Procedures (plan portion, page 85) which includes reduced stocking rates, deferred use, and/or exclusion of livestock from riparian systems would help in protecting existing habitat. Riparian areas should be managed to meet the needs of riparian dependent resources such as woody vegetation, fish, and wildlife. Without livestock herding practices, however, fencing has been shown to be the most effective means available to allow riparian areas to regain an upward trend in condition. Fencing of streams containing poor and low fair condition riparian habitat due to past livestock use would improve condition classes. These changes in condition for each alternative are graphically displayed in Figure 4-5. Areas not fenced would remain in current condition classes.

FIGURE 4-5 RIPARIAN HABITAT CONDITION UNDER PROPOSED LIVESTOCK GRAZING PROGRAMS BY ALTERNATIVE



Uncontrolled timber harvest can have a severe long-term impact to riparian areas. Falling, heavy equipment operation, and road construction adjacent to drainages creates erosion and initiates sediment movement down drainages and stream courses. Loss of streamside vegetation due to harvest activity would also bring about changes in water temperature. Higher summer and lower winter temperatures occur with accompanying adverse impacts to the fish resource (Chapman 1962, Gibbons/Saco 1973, Moring 1975, Chamberlin 1982).

Restriction of falling activity, and heavy equipment operation to areas outside a riparian buffer zone would minimize adverse impacts.

Alternative A Specifics

Under Alternative A, changes in riparian habitat condition from the existing condition are minimal (Table 4-2). The proposed Dive Creek livestock exclosure would improve 2 miles of riparian from poor to good condition over 20 years. There has been little improvement in riparian habitat in the eight allotments currently covered by allotment management plans (AMP's) and little additional improvement is expected in 20 years.

Maintenance of normal instream flows to support existing riparian habitat would maintain current conditions on all perennial and ephemeral streams (see SOP's plan portion, page 85).

Adverse impacts to riparian/aquatic habitat from timber harvest in the Bennett Mountain and Anderson Ranch units would be minimized by utilizing 100 ft. minimum buffer zones on all drainages and adhering to standard operating procedures for timber harvest.

Short term adverse impacts to the riparian zone generally result from fire occurrence. However, recovery is inhibited and the adverse impacts become long term if livestock suppresses recovery of the streamside vegetation. This situation is currently present in portions of the East Fork of the Bruneau River and its tributaries, and Devils Creek. In spite of the SOP priority to prevent fire from burning riparian zones, the limited suppression designation of a large block of the RMP area provides little assurance that fire will be prevented. It is likely that new riparian areas will be damaged and previously damaged areas will reburn. Movement of silt into the Bruneau River, Salmon Falls Creek, and eventually the Snake River is expected.

Additional concerns are that with recommended fencing proposals on the East Fork Bruneau River, any future benefits realized in vegetative regrowth may be lost in a high occurrence fire area. Full suppression designation provides the greatest assurance to protecting riparian zones from the damage caused by fire.

Table 4-2
20-Year Projected Riparian Habitat Condition (Alt. A)

Habitat Condition	Miles	%
Poor	98	27
Fair	130	35
Good	130	35
Excell./Unsuit.	12	3
TOTAL	370	100

Aquatic Habitat

Aquatic habitat/water quality management objectives for this alternative are to maintain present habitat condition. To accomplish this, standard operating procedures (plan portion, page 85) were established to minimize degradation of aquatic habitat/water quality.

Standard operating procedures cover a wide range of potential man-caused impacts. However, long term impacts to aquatic habitat/water quality from livestock grazing would continue on 17 percent of all perennial waters. Behnke and Zarn (1976) describe these impacts as the destruction of the vegetative cover and caving in of overhanging banks eliminating important trout covers. Loss of streambank vegetation leads to increased water temperature, erosion, sedimentation, elimination of spawning sites and the reduction of instream food supplies, all of which drastically degrade trout habitat.

Approximately 32% of the poor and fair aquatic habitat in the area is a direct result of livestock use. Most aquatic habitat identified as good and excellent (0.9 mi) is a result of natural blockages to livestock such as inaccessible canyons, talus or other topographical features. These habitats, with few exceptions, are as good as they can get and could be adversely impacted only by increased upstream disturbances or by introducing livestock.

Aquatic habitat of Dive Creek in the Upper Bennett unit is in poor condition, far below its potential. Since this application of standard operating procedures would do little to improve this downward trend, a 2.4 mile reach would be fenced during the summer of 1984 to exclude livestock grazing in the riparian area. Aquatic habitat is expected to improve to excellent condition after 10 years and trout numbers are expected to increase somewhere in the range of 300-500% as demonstrated by Duff (1978) on Big Creek in Utah.

Long-term impacts adverse to stream fisheries would result from the development of small hydroelectric facilities that may occur within riparian areas. Interest in the construction of these facilities would continue to increase. Mitigative stipulations imposed by Idaho Fish and Game and supported by BLM are required for each project (page 85). Unavoidable impacts such as, increased sedimentation, loss of water in the stream course, destruction of riparian vegetation, and increased water temperatures result from such developments. Cumulative impacts are currently being studied and are thought to have a much greater impact than single projects. All future projects will be evaluated at length to assess impacts to aquatic habitat. Salmon Falls Creek currently has three proposed projects and impacts will be evaluated by an interdisciplinary team as to cumulative impacts. Wild and Scenic River designation for the Jarbidge and Bruneau Rivers would prohibit construction of small hydroelectric facilities.

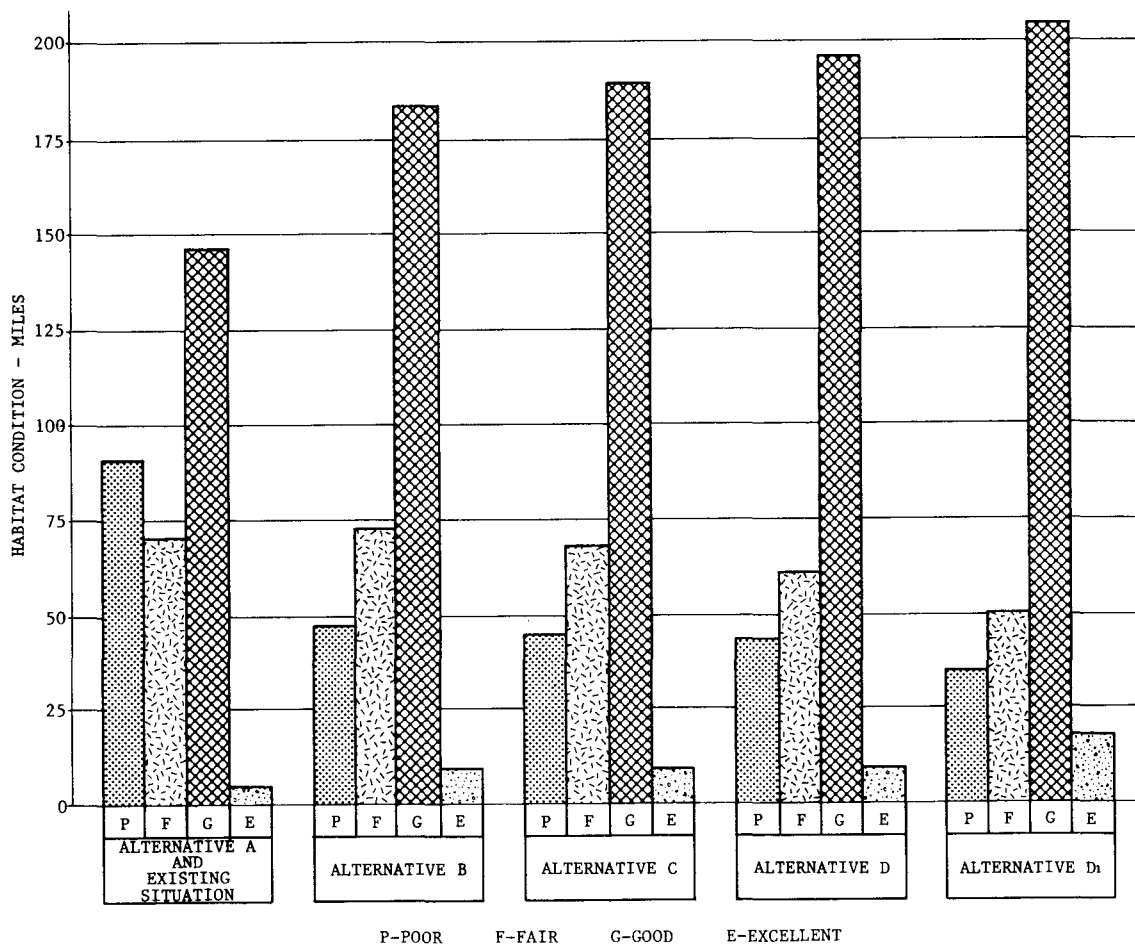
Fire has a long-term adverse impact on aquatic habitat/water quality. Fire within a riparian area can reduce excellent habitat to poor condition. Woody vegetation is damaged or killed resulting in the loss of root systems that hold the soils together. This loss of vegetation promotes mass wasting of streambanks and results in similar impacts described above by Behnke and Zarn (1976) for livestock.

Range fires can have a short-term adverse impact on aquatic habitat even if they are prevented from reaching the stream bottoms. Loss of upland vegetative cover would expose soils to erosive climatic conditions and sedimentation of streams. This process impacts aquatic habitat in the same manner livestock caused sediments do. With riparian vegetation protected, aquatic habitat recovery would occur at a faster rate.

Standard operating procedures require a full suppression buffer zone for maximum protection of riparian areas. Rangeland wildfires could occur within the limited fire suppression areas of this alternative. Efforts will be made to keep them from entering the riparian areas, however if they do enter riparian areas, aquatic habitat will be severely impacted in the long-term as described above.

A summary of long-term condition changes is shown in Figure 4-6. Anticipated changes by MUA is shown in Appendix Table H-3.

FIGURE 4-6 AQUATIC HABITAT CONDITION BY ALTERNATIVE



Environmental Consequences

Snake River

Under this alternative approximately 85,000 acres of agricultural development could occur, of which approximately sixty-four percent would be irrigated by high lift pumping of Snake River water within or adjacent to the resource area. Other possible irrigation plans such as the Bruneau Plateau Water Development Project would utilize Snake River water from winter surplus above Milner Dam (USDI 1979). It is assumed that 27% of the above acres would be irrigated by this project and its impacts on aquatic life of the Snake River in the Salmon Falls Creek to C.J. Strike reach negligible.

The Idaho Department of Fish and Game has recommended a minimum instream flow in the Snake River of 4,520 cfs from Salmon Falls Creek to King Hill and 4,344 cfs from King Hill to C.J. Strike Dam. These flows are proposed for the purpose of maintaining trout, bass, and white sturgeon habitat (Cochnauer and Mabbott 1981). Table 4-3 shows that at no time would irrigation diversions from agricultural development alone reduce Snake River flows below the recommended minimum. These diversions, however, combined with other consumptive uses, particularly in low flow years, may have cumulative impacts that could result in slight reductions in sturgeon populations. Habitats of the Bliss Rapids snail and Snake River Physa snail may be reduced or threatened during low flow years as boulders in riffles are exposed to drying. Little or no impact to the Shoshone sculpin would result from flow reductions since its prime habitat is springs or spring creeks primarily on the north side of the Snake River (Wallace et al. 1982).

Table 4-3
Snake River Irrigation Diversion and Flow Data

Alter- native	Base Flow (cfs) King Hill Gauge*	Irrigation	Irrigation	Total Diversion
		Diversion from Snake River above King Hill cfs/% of Base Flow	Diversion from Snake River below King Hill cfs/% of Base Flow	from Snake River down to Loveridge cfs/% of Base Flow
A	6,590 cfs	150 cfs/2%	450 cfs/7%	600 cfs/9%
B	6,590 cfs	350 cfs/5%	700 cfs/11%	1,050 cfs/16%
C	6,590 cfs	150 cfs/2%	500 cfs/8%	650 cfs/10%
D	6,590 cfs	0	0	0

* From USGS Water Resources Data - Idaho 1982, Low Flow Day August 1981.

Idaho Department of Fish and Game, King Hill to C.J. Strike Dam Minimum Instream Flow Recommendation 4,344 cfs. King Hill to Salmon Falls Creek Minimum Instream Flow Recommendation 4,520 cfs.

Consumptive uses of Snake River water during the irrigations season does not appear to have an impact on the April-June Water Budget described in the Columbia River Basin Fish and Wildlife Program (Jim Ruff personal communication).

Further impacts to aquatic life would result from increased bedload and suspended sediments that would enter the Snake River from wind erosion and agricultural run-off. Agricultural chemicals associated with eroded sediments would possibly show up in increased concentrations. Settling ponds could significantly reduce sediments entering the Snake River, but are not required since State policy is to encourage voluntary pollution control by education to the availability of and incentives for agricultural best management practices (IDHW 1983).

Increased sediments might impact Bliss Rapids and Snake River Physa snails by covering habitat and food sources, but not enough is known to accurately predict degree of impact. Unless large amounts of sediments directly entered springs or creeks, the Shoshone sculpin would not be impacted.

Mortality rates of fish eggs and larvae entrained in pump intake structures at conventional power plants are normally 40 to 100 percent with most plants resulting in the mortality of all eggs and larvae entrained (Marcy 1975). Most of the sources of mortality from entrainment could equally affect fishes entrained in the high-lift pumps that would be used in the proposed action in the Snake River. In addition, fishes that survive pumping but are stressed may subsequently become more vulnerable to predators.

Fish mortality at intake structures is typically most severe when water temperatures are below about 10 C when fish are sluggish. Since water withdrawals from the proposed project would commence in mid-April when temperatures would be about 15 C, temperature effect would not be significant.

Those fish species whose juveniles tend to school and/or inhabit shorelines near where pumping stations would presumably be located would be most vulnerable to pumping mortality. Channel catfish, black crappie, and bluegill (in that order) would be the species most vulnerable as reported elsewhere in the country (Mathur et al. 1977, Freeman and Sharma 1977). Impacts are likely to be slight to moderate for those species. Other gamefish species, with the possible exception of white sturgeon, would not be impacted by entrainment or impingement. Too little is presently known of the distribution and behavior of juvenile sturgeon to predict how they may be affected.

Fire Management

It is anticipated that agricultural development would increase fire numbers and suppression costs in areas adjacent to farming projects. Fire numbers would increase because burning would occur on new agricultural

Environmental Consequences

land to remove sagebrush, clean ditchbanks, and to remove crop aftermath. A portion of these fires escape onto public lands thereby requiring suppression action to be taken. This would increase total suppression costs from approximately \$100,000 per year to approximately \$120,000 to \$115,000 per year in the full suppression area.

In the limited suppression area, an unknown decrease in fire costs is expected and the acreage burned is expected to increase 5-10% because aggressive action to control fires within the first burning period would not be taken on all fires. Full suppression action would be taken on crucial wildlife habitat areas that occur within the limited suppression boundaries.

Recreation

General

Based on Pacific Northwest River Basin Commission data the demand for recreation opportunities is expected to increase 67-77% in the Jarbidge Resource Area by the year 2000. This would result in demand increasing from the current 20,500 activity occasions to 34,000 to 36,000 activity occasions. These increases are expected to occur primarily due to increased population and leisure time and should occur regardless of the alternative chosen in the RMP process. The location and relative mix of recreation activities would vary somewhat between alternatives but overall demand throughout the JRA would be unaffected by any of the four alternatives.

Lands available for dispersed recreation could be reduced by the 89,575 acres of public land identified for possible transfer. Current off road vehicle use on these areas would be shifted to adjacent areas.

The only area where significant impacts are anticipated from this shifted use is the Hagerman Fossil Beds National Natural Landmark. Hagerman is currently experiencing adverse impacts partially attributable to uncontrolled ORV use. An increase in use of Hagerman due to displacement of use from other areas would aggravate an already unacceptable problem.

There are 116,842 acres proposed as closed to ORV use, 82,560 acres with limitations and the balance of the area remains open to ORV use. Impacts to ORV recreation values of these restrictions would be minimal to non-existent because the closed lands are, for the most part unused and unsuitable for ORV use.

Opportunities for primitive, non-motorized recreation in primitive settings would be affected by this alternative. A total of 57,000 acres has been recommended to Congress to be designated as the Bruneau/Jarbidge Wild and Scenic River. Without wilderness designation the remaining 151,511 acres outside the Wild and Scenic River area and the 29,309 acres of King Hill Creek WSA would be subject to gradual degradation by range

developments, utility corridors and hydro projects and their associated roads.

Existing SRMA designations would be unaffected by this alternative. These designations are administrative and signify that special attention is being given to recreation management in the affected areas. In this alternative two areas receiving heavy recreation use would not be designated SRMAs. The 4,320 acre Jarbidge Forks area would not be affectively managed without such a designation. The proposed 56,680 acre Bennett Hills Winter SRMA would be unfunded for further study.

Visual Resources

Impacts on Visual Resources

All four alternatives propose to maintain VRM classes as they are currently identified by inventory. See Table 3-11 for acreages by class.

The impacts to visual resource values by alternative varies primarily with changes in land ownership proposed and with differences in areas proposed under various protective classifications. Acreages transferred from federal management by sale, exchange, etc. would no longer be under BLM control so visual resources would be subject to the wishes of the new landowners. Designation of Wilderness, Wild and Scenic Rivers, Natural Areas, etc. would provide additional protection to visual resources.

The impacts of management decisions on visual resources should be minimized by conformance to the different degrees of modification allowed under the various VRM classes on Federal lands retained in all alternatives and by completion of contrast ratings for specific proposed projects.

Cultural Resources

Cultural resource sites in critical need of special management (Devil's Creek, Pot Hole Creek, Dove Springs, Juniper Ranch, Clover Creek, Dry Lakes, Cougar Creek, Post Office and Oregon Trail cultural resource site complexes) will continue to be protected by BLM standard operating procedures, however, the effects of vandalism, livestock trampling, erosion and other agents of deterioration would continue, causing many of these sites to lose the scientific value they now hold. Monitoring of the Dry Lakes, Cougar Creek, Post Office, Clover Creek, and Devil's Creek cultural resource complexes on an annual basis, and the lack of regular monitoring of the Pot Hole, Dove Springs and the Oregon Trail cultural resource complexes, does not provide the information necessary to determine the rate of deterioration of these sites, or to react to emergency stabilization or other protective needs.

Paleontologic Resources

The full impacts to the paleontologic resources of the Jarbidge Resource Area are unknown as an inventory has not yet been completed. It is expected that 10 known paleontologic sites would leave federal ownership with a high possibility for other sites, not presently known, to be lost or damaged by land transfer or the associated erosion problems.

Once the inventory is completed and site clearances become standard practice, the required protection of the resource would reach a level sufficient to keep the impacts minimal.

Failure to manage Sand Point would probably lead to erosion problems similar to those at Hagerman and the resulting damage would cause irreversible loss of paleontologic values.

Wilderness

Under this alternative 208,833 acres of land with wilderness characteristics would be available for development. Human disturbance of bighorn sheep would be minimized within the canyons of the Bruneau and Jarbidge. The natural character of the canyons would remain unchanged unless mineral resources are discovered or dams constructed. Bighorn management objectives for the plateaus would not prohibit continued use of existing vehicle routes. Existing vehicle routes could become more heavily used as motorized recreation use increases resulting in reductions in naturalness and outstanding opportunities for primitive recreation and solitude. Lands not managed as bighorn sheep habitat could have additional vehicle routes (roads and ways) developed as recreation use increases or as other resource development occurs.

Although no projects are proposed in the Jarbidge area over the next 20 years, lands on the plateaus could receive future land treatments, seeding to non-native species, increased grazing use, and structural range improvements which could further reduce naturalness, outstanding opportunities for primitive recreation, and ecological values. Without wilderness designation or if Congress does not designate the Bruneau/Jarbidge Rivers as Wild and Scenic, powerline or other utility development could be allowed which would reduce wilderness characteristics and scenic quality over vast areas of canyons and plateaus. If mineral and energy resources were located, the naturalness of the WSAs could be lost due to the development of mines, roads, pipelines or other structures. The potential for mineral and energy discovery and development, however, is low (see Appendix J - Wilderness Analysis).

Energy and Minerals

Oil and Gas

More than 88% of the resource area would remain available for leasing under this alternative. The major areas closed to leasing are the existing withdrawals amounting to approximately 138,643 acres and the Bruneau Wild and Scenic River area of approximately 57,000 acres covering parts of the Bruneau and Jarbidge Resource areas.

The 102,746 acre Saylor Creek Bombing and Gunnery Range represents the greatest impact to leasing as it is almost entirely surrounded by leases. Although the area has been classified as prospectively valuable by the U.S.G.S, the actual potential is considered to be low.

The proposed wild and scenic river area has not had any significant leasing interest shown in it and is considered to have low potential.

There are 89,575 acres identified for transfer out of federal ownership in this alternative. The impacts of land transfer and the creation of a split estate are addressed by the State Office leasing mineral specialists when they perform their mineral assessment of the identified lands. It has generally been held that the land transfer will not interfere with development.

The major areas proposed to have no surface occupancy stipulations are cultural and paleontological sites, the Birds of Prey essential nesting areas and areas within 500 feet of streams or reservoirs. These areas could be reached by slant drilling should oil or gas be discovered in the vicinity.

There are 823,980 acres of land proposed for seasonal occupancy stipulations to protect wildlife. All of the curlew area and a small portion of the crucial winter range for mule deer, antelope winter range and sage grouse areas affect existing leases and lease applications. The impact on access to leased lands is considered to be insignificant.

Based on the lack of any commercial oil or gas wells in Idaho, the five dry holes in the resource area, the low potential of the area, low industry interest and the above analysis, the overall impacts of this alternative on the availability of oil or gas leasing and development is considered to be insignificant.

Geothermal

More than 88% of the resource area would remain available for leasing under this alternative. The major areas closed to leasing are the existing withdrawals amounting to 138,643 acres and the Bruneau Wild and Scenic River area of approximately 57,000 acres covering parts of the Bruneau and Jarbidge Resource Areas.

Environmental Consequences

None of the lands within the Known Geothermal Resource Areas, both state and federally classified, are affected by the Saylor Creek Bombing Range withdrawal (102,746 acres). Of the 57,000 acre wild and scenic area, approximately 400 acres are within the state classified area.

Of the approximately 117,760 acres of land identified as Geothermal Resource Areas, 1,360 acres have been identified for transfer from federal ownership. Eight hundred of these acres are within the federally classified KGRA's (8,860 acres).

The impacts of land transfer and the creation of a split estate are addressed by the State Office leasing mineral specialists when they perform their mineral assessment of the identified lands. It has generally been held that the land transfer would not interfere with development.

The major areas proposed to have no surface occupancy stipulations are cultural and paleontologic sites, the 'Birds of Prey essential nesting areas and areas within 500 feet of streams or reservoirs. These areas can be developed off site and do not significantly affect the availability of the resource.

There would be 823,980 acres of land which would have seasonal occupancy stipulations to protect wildlife. The sage grouse stipulation affects the existing leases in the Mt. Bennett hills area. This has not hindered the development of the leases and is not expected to in the future.

Based on the lack of commercial development of the geothermal resource in Idaho for energy production, the lack of information on the reservoirs involved, the substantial decrease in industry interest, the isolation of the KGRAs and the above analysis, the overall impacts of this alternative on the availability of geothermal energy is considered to be insignificant.

Mining

More than 83% of the resource area would remain available for the location of mining claims under this alternative. The major areas withdrawn or restricting mineral location are the existing withdrawals amounting to 138,643 acres, the Bruneau Wild and Scenic River area (57,000 acres), and the proposed land transfers of 89,575 acres.

The 102,746 acre Saylor Creek Bombing and Gunnery Range represents the largest block of land within the resource area that is closed to mineral location. Present knowledge of this area indicates that the potential for the discovery of valuable mineral deposits is low.

Of the remaining 35,897 acres under withdrawal, 20,914 acres are powersite withdrawals which are handled under the "Mining Claims Rights Restoration Act of 1955 (Public Law 359)" or are withdrawals that only affect lands actions.

The proposed Wild and Scenic River area has not had any significant effect on the availability of any metallic or industrial minerals. Mining

activity in this area has been for semi-precious gemstone materials (fire opal, jasper, geodes). It is expected that 20 claims for gemstone materials will be precluded by this withdrawal. This is not considered to be a significant impact on the overall availability of these materials.

Only lands that are not mineral in character or have no known mineral potential would leave federal ownership unless the mineral estate is sold at fair market value. The transfer of lands that do not have mineral potential is not considered to be a significant impact on the availability of locatable minerals.

Areas that have had extensive mining activity (Pine Grove Mining District, Volcano Mining District, and Indian Hot Springs Jasper Claims) are not significantly impacted by this alternative.

Based on the presently known mining activity and mineral potential and the above analysis, the overall impacts of this alternative on the availability of locatable minerals is considered to be insignificant.

Mineral Materials

According to the Agricultural Development EIS (USDI, 1980), 1.7 miles of gravel road would be needed for each section of new farmland. Based on road district standards of a 34 foot wide running surface 8" deep, this alternative would require an increase in materials production of 1,054,895 cubic yards.

County road building and maintenance over the past three years has required an average yearly production of 82,307 cubic yards. The existing sites can in most areas supply the needed materials in the short term. Resources at the various sites would be substantially depleted in the long term (20 years). The additional materials needed to build and then maintain the new roads for the farms is expected to be a substantial factor in this depletion of a finite resource.

To meet the long term needs (20 years), new sites would have to be developed to replace depleted existing sites and allow for shorter haul distances. The Bureau's ability to meet these needs have allowed local highway districts to keep their operating costs down. Within the time frame of this plan, haulage costs would increase along with the demand for more and better maintained roads. This would also add to the demand for new sites and would increase depletion at existing sites.

The Bureau can meet these needs within the time frame of this plan but would have a substantial decrease in its ability and flexibility in meeting the demands in the long term. The essential outcome would be a turning by the highway districts to private sources and to crushing. Both would add significantly to the counties tax requirements.

Forest Management

Although 2,371 acres of forest land are capable of growing commercially valuable amounts of wood, 22% has been withdrawn from harvest to insure continued tree cover on sites where new trees will not readily reestablish; 4% has been set aside to protect streambanks, water quality, and riparian vegetation; and 26% of the commercial forest land has been deferred from harvest for 20 years, the life of this plan, because it is inaccessible or cannot otherwise be economically harvested.

The remaining 48% or 1,143 acres of commercial forest land is available for harvest under this alternative. However, cutting is expected to occur on only 400 acres during the life of the plan.

Silvicultural restrictions (up to 50% to insure continued canopy cover for timber regeneration and wildlife cover) would be applied throughout the acreage available for harvest which would reduce yield by 10%. The timber yield over the next 20 years would be 1540 MBdft.

Economics

Crop Agriculture

This alternative would lead to the development for irrigated agriculture of 85,147 acres. Of this, 71,615 acres would be disposed of through the Desert Land or Carey Acts while 5,096 acres would be disposed of through exchanges, 496 acres through public sales and 7,940 acres either through sale or exchange.

Electricity would be used to pump water, either from deep wells or out of the Snake River, for irrigating these acres. Water withdrawn from the Snake River aquifer would reduce the stream flow in the river and reduce power production at dams downstream. It is estimated that each acre irrigated either uses or prevents downstream generation of 4714 KWH (Whittlesey and Butcher 1979, Chaney 1977, USDI-BLM 1979, Hamilton and Lyman 1984). Electricity costs would range from 6.4¢ per KWH for electricity lost from downstream generation to 8.5¢ per KWH for electricity used in actual pumping (Hamilton and Lyman 1984). Assuming a split between actual uses and downstream losses of 50% each, then the total cost of the electricity would be \$28.8 million. Current Idaho Power Company rates for irrigators are 2.3¢ per KWH used and \$2.25 per KW of demand (IPC 1984). This would equate to irrigators paying \$4.6 million (16%) and other electricity consumers in the Columbia River System paying \$24.2 million (84%) of the cost of pumping water to the lands.

The production of crops resulting from agricultural development would range from 39% of current 3-county production in barley to 61% of current production in sugar beets. In the case of potatoes, it has been estimated

that a 1% increase in nationwide production leads to a 6.6% decrease in price (Schermerhorn 1977). The increase in potato production of 6.0 million CWT (see appendix for production estimates by crop and alternative) would increase national production by 1.9%, decreasing prices by 12.4%. A study done for the BLM in 1979 (BLakeslee 1979) indicated that for every 100 acres of new potato acreage in southwest Idaho, 90 acres of existing potato acreage would go out of production somewhere else in Idaho, the northwest, or, the nation. If this is the case then the net addition to potato production would be only 600,000 CWT or 0.2% of national production. Although this increase in potato production would have redistributive effects both locally and in the nation, the net effect on production and prices would be minimal. Data on the production and price relationships of other crops is not available.

The development of irrigated agriculture on 84,147 acres could lead to one-time costs of installing water delivery and irrigation systems of \$56 million. Annual expenditures for seed, fertilizer, herbicides, and fungicides would be \$13 million (BLM 1984). An additional \$3 million would be spent on fuel for tractors and equipment (Powell and Lindeborg 1981). The appendix contains the basic assumptions and resulting typical farm budgets prepared in the course of this analysis.

Farm income would increase \$3.6 million locally (based on labor costs in BLM Farm Budgets) and decrease by \$3.2 million in the nation. Farm suppliers would realize a local income gain of \$14.3 million while nationally there would be an income loss of \$12.8 million. Ranchers currently using this area to graze livestock would lose \$69,000 in income and ranch suppliers would lose \$114,000. The net income change as a result of the agricultural development in this alternative would be an annual loss of \$22.6 million (\$24.2 million loss to non-irrigator rate-payers and a net gain of \$1.6 to farmers, ranchers, and suppliers). In addition, ranchers could lose capital value due to lost grazing privileges in the range of \$851,000 to \$3,770,000 (Boly 1980, Fowler and Gray 1980). A total of 15,082 AUMs of grazing would be lost to agricultural development.

Farm employment would increase locally by 530 while declining nationally by 477. Employment in local farm supply industries could increase by 2,045 while declining by 1,840 nationally. Ranch employment would decline by 10 and ranch supply jobs would decrease by 16. The net employment change would be a gain of 232 jobs.

Livestock

Short-term stocking rates are no change from present levels and would have no impact on income, employment, grazing fee collections, or capital value.

In the long-term there would be 15,000 fewer AUMs available than at present. Table 4-4 shows the impacts, by size group, that this would have on income and employment.

Environmental Consequences

Table 4-4
Direct Income and Employment Changes
Alternative A

Size Group	Long-term Stocking Rates	Change In Use	Income Change	Employment Change
1	13,470	- 1,364	- 6,220	- .9
2	45,671	- 4,625	-21,090	-3.0
3	79,581	- 8,060	-36,754	-5.3
4	10,196	- 1,033	4,710	- .7
TOTAL	148,918	-15,082	-\$68,774	-9.9

In addition there would be secondary income and employment losses of \$114,000 and 16 jobs. These income and employment changes are due to the agricultural development activities previously described.

Grazing fees are distributed in the following manner: 50% to the range improvement fund, 37 1/2% to the Federal treasury, and 12 1/2% to the State of Idaho (who redistributes it to the county of collection for range improvements). Based on a \$2 grazing fee (the average fee over the grazing years 1979 to 1983 was \$1.96), the following grazing fee collection reductions would take place with this alternative:

Range Improvement Fund	-\$15,082
Federal Treasury	-\$11,312
State of Idaho	-\$ 3,770
TOTAL	-\$30,164

The total capital value of the AUMs lost would amount to between \$851,000 and \$3,770,000 (Boly 1980, Fowler and Gray 1980).

Recreation

Increased recreation use would provide economic benefits to the local economy, primarily retail trade. It is not known how the various alternatives would change expected recreation use. The specific economic benefits of such use cannot be identified as a result.

Summary

This alternative would have large income and employment benefits to the local economy related to agricultural development. Net income change (including livestock income losses) would be a gain of \$1.6 million. Expenditures for seed, fertilizer, fuel, etc., would amount to 16 million annually. The annual cost of electric power would be \$28.8 million of which 84 percent would be paid by ratepayers other than the irrigators involved.

Net employment change (including livestock losses) would be a gain of 232 jobs. Grazing collections would be reduced by \$30,000. The capital value of lost AUMs would range from \$0.9 to \$3.8 million.

Alternative B

Lands

Under this alternative, land transfer would consist of a maximum of 1,240 acres for sale, 9,925 acres for sale or exchange, 6,795 acres for exchange and 142,194 acres for agricultural entry (Desert Land Entry and Cary Act).

The development of 142,194 acres for agricultural entry would require 2,844 cfs of water. It is anticipated that of the 1,240 acres proposed for sale, 40% would be developed for agricultural use, of the 6,795 acres proposed for exchange, 75% would be developed for agricultural use, and of the 9,925 acres in the sale or exchange category, 80% would be developed for agricultural use. This would require an additional 271 cfs of water. Of the total of 3,115 cfs needed to irrigate these lands, approximately 90 percent would come from the Snake River.

Land transfer, primarily for agricultural use, would result in an increase in occupancy, agricultural and right-of-way trespass. It is estimated that with this increased acreage, trespass would double to 28 cases per year. The average administrative cost of each case is \$1,250, which would total \$35,000 per year.

Transfer of land by sale would generate approximately \$873,000 of revenue for the federal government at an average price of \$150 per acre. The lands proposed for transfer by sale or exchange were selected primarily because their disposal would reduce problem management areas and consolidate land ownership patterns, thereby improving management and reducing management costs.

Rights-of-way would be precluded or restricted on 198,183 acres of public land if they would conflict with proposed wilderness, areas of critical environmental concern, proposed Wild and Scenic River designations, Birds of Prey Essential Nesting Habitat, Oregon Trail, and/or the Saylor Creek Gunnery Range.

This would result in reduced right-of-way flexibility, which may increase construction costs, particularly for major utility lines. The two east-west powerline routes proposed by Idaho Power Company and the Western Power Council would be eliminated by the Bruneau/Jarbridge Wild and Scenic River designation or Bruneau/Jarbridge Wilderness Area and a conflict with the Saylor Creek Gunnery Range. These lines would have to be realigned to pass through moderate use areas with few conflicts, which would result in traversing the same basic corridor area as the existing utility lines. The north-south proposal would be restricted somewhat by the Hagerman Fossil Beds, but could probably be slightly rerouted to avoid any conflicts.

Disallowance of a water siphon through the proposed Salmon Falls Creek Natural Area may substantially increase development costs of the Desert Land Entry and Carey Act projects depending on the extension of

Environmental Consequences

the Twin Falls Canal for their water supply. Disallowance may also eliminate these agricultural development projects as there may not be a suitable crossing for the siphon on private lands.

Small hydro development would be precluded in the Bruneau/Jarbridge Wild and Scenic River, wilderness areas, and Salmon Falls Creek Natural Area.

Soil, Water, and Air

The erosional processes described for land use actions in Alternative B are the same as described in Alternative A, but the area size and/or magnitude of the impact may vary considerably (Appendix Table E-1).

Proposed agricultural development areas under this alternative include 118,000 acres of high erosion hazard soils. The impacts associated with farming are discussed in Alternative A (Appendix E, Figure 1).

The impacts associated with livestock use are the same as in Alternative A, except that the use levels are expected to increase 90 percent over current use levels, going from 10.3 ac/AUM to 4.9 ac/AUM in 20 years (Appendix Figures E-1, E-2). Projected increases could occur mainly in seedings where water would be developed. No grazing is currently occurring in these sites. Due to the gentle slopes of most of these areas, off-site soil movement is expected to be slight. Some increased erosion would occur on adjacent grazed areas as some overlap with areas of current use is anticipated.

The type of impacts from mineral exploration and development, timber harvesting, ORV use, and limited fire suppression activities are the same as those described in Alternative A. The acreages however vary (Appendix Table E-1).

Land use actions proposed in this Alternative which were not proposed in Alternative A include efforts to improve riparian/fisheries habitat on 59 stream miles and efforts to improve ecological condition on 129,092 acres of rangeland currently in poor and fair condition by vegetative manipulation.

Riparian/fisheries habitat would be improved by excluding livestock from riparian areas. Excluding livestock would improve vegetative cover and reduce soil compaction and trampling damage to stream banks. Reduced runoff would result in a reduction in soil movement.

Manipulating vegetation by seeding 95,740 acres would increase soil surface disturbance causing a one to two year increase in off-site soil movement. As new seedlings become established, vegetation cover would increase resulting in a long-term reduction in off-site soil movement.

Spraying 19,500 acres with herbicides would result in short-term decreases in air quality and water quality. A short-term reduction in

vegetation cover would result in increased runoff and soil erosion. A reduction in species diversity would result in reduced nutrient cycling with decreased site productivity. Over the long-term, as native vegetation recovers, the site should stabilize at previous levels of soil movement.

Burning 17,380 acres to change the vegetation community would result in a one to two year reduction in vegetation cover and resultant off-site soil movement. A long-term reduction in species diversity would result as the shrub component is removed from the community resulting in a reduction in nutrient cycling and decreased site productivity (Charley and West 1975; Dormaar, Johnston, Smoliak 1980; Johnson, Rumbaugh, VanEpps 1980).

Range Resources

Under this alternative, livestock forage levels would be increased in all MUAs in the short-term which would result in an overall increase of approximately 34,000 AUMs, or a 21% increase over currently authorized 5 year average use levels.

In the long-term, installation of additional structural improvements (water systems and fencing) for better livestock distribution on approximately 1.22 million acres would result in an increase of approximately 69,374 AUMs in the area. Seeding would occur on 95,740 acres. Prescribed burning would occur on 17,380 acres to improve native range condition and an additional 12,460 acres would be burned as preparation for seeding. Spraying would occur on 19,500 acres to improve native range condition and an additional 3,140 acres would be sprayed as preparation for seeding. These land treatments would increase long term forage about 46,000 AUMs. In addition, expected fire rehabilitation seeding over a 20 year period would increase AUMs by 34,000.

Long-term forage increases would allow livestock use levels to be increased by 100% above current authorized levels (164,000 AUMs). This projection is based upon increased forage utilization, availability and production. Increases above initial levels would be dependent upon implementation of grazing systems, installation of range improvements, and implementation of the land treatments discussed.

Seeding is proposed in areas in poor range condition with high potential because of productive soils. Prescribed burning would be done in areas of fair and good condition that have potential for increasing livestock forage levels due to decreased competition from sagebrush.

A downward trend in native vegetative condition is expected in 2 MUA's (2, 15) due to increases in stocking levels above the estimated production levels of the range condition inventory. The changes would be from good and fair to poor condition in the affected MUA's. The condition of remaining MUA's are not expected to change significantly except for the acreage going from poor condition into land treatment categories.

Environmental Consequences

Agricultural development is the largest single impact on livestock grazing. In this alternative, 160,154 acres would be transferred from federal ownership which would reduce available forage by 32,863 AUMs in the long-term (Appendix Table F-1). In the previous long-term analysis of range improvements and land treatment, these AUMs were considered removed prior to addition of new forage procedures.

Impacts are substantially the same on permittees displaced by agricultural development as discussed in Alternative A. MUA's 3, 6 and 7 are expected to have the major detrimental impacts from agricultural development. Although the projected long-term forage levels are above preference in all cases, practical considerations of livestock distribution and permittee displacement by new farms would result in short-term reductions in MUA's 3, 6 and 7 of 31,820 AUMs.

Preference levels are expected to be met in all MUA's in the long-term with some having substantial increases (Appendix Table B-4).

Wild Horses

Under this alternative, wild horses would be removed. Due to the extent of increased competition from livestock and the conversion of 75% of the existing Saylor Creek herd area to agriculture, wild horses would be reduced below viable herd levels.

Terrestrial Wildlife

Livestock grazing would have the greatest adverse impact on big game. In 20 years AUMs used by livestock would climb 100% to 327,140 AUMs. The greatest increase in AUM use would fall in MUAs 6, 7, 11 and 12. Increases in livestock use on crucial big game winter ranges would be slight in MUAs 15 and 16. These increases are tied to range improvements such as burns, sprays and seedings. Impact to big game would be similar to that assessed in Alternative A, except in MUA 2, where the mule deer and elk population decline would probably occur sooner due to the additional 20% increase in forage use by livestock on habitat already in poor ecological condition. Management guidelines common to all alternatives would mitigate these improvement projects and provide benefits for big game and sage grouse. As shown in Figures 4-1, 4-2, 4-3, and 4-4 ecological condition would remain largely unchanged. Expected population numbers of mule deer, elk and bighorn sheep in the 20 year planning period would be less than those in Alternative A (see Table 2-5).

Upland game would benefit from the range improvements as the management guidelines common to all alternatives are followed. With the proposed 132,620 acres of vegetation improvements nongame would be the most heavily impacted. Small mammals, birds and reptiles would be lost or displaced to adjacent suitable habitat.

Agricultural development in MUA 7 should have a minor impact on big game. As in Alternative A, the habitat proposed for farming is

occasionally used by a small number of mule deer and rarely used by antelope. Other impacts are the same as stated in Alternative A, but occur over a larger acreage. Nongame found in the sagebrush habitat would be reduced significantly.

In Alternative B agricultural development would eliminate 17,700 acres of native habitat. This is 26 percent of the native habitat within an 8 mile radius of the Snake River from Sparlin Island upstream to Hagerman. Implementation of Alternative B would increase the magnitude and intensity of adverse impacts to raptors dependent upon the native shrub/grassland habitat as described in Alternative A.

Sensitive species impacted and level of impact would be the same as Alternative A. Habitat for 20 to 25 pairs of nesting long-billed curlews would be lost. A new 53,800 acres of pheasant habitat would be created adjacent to the proposed farm land.

Impacts to wildlife from the sale or exchange of public land would be minimal as described in Alternative A.

Range improvement projects are guided by management guidelines common to all alternatives and thus should result in minimal adverse impacts to wildlife.

Utility corridors would result in minimal impacts to wildlife. See Alternative A for description of impacts.

Mineral exploration and development are the least restrained under Alternative B. In this alternative no stipulations are prescribed to protect important habitat or species. The potential is large for adverse impacts to wildlife. Raptors would not have habitat protected around their nests. Populations of big game on crucial winter range would be disturbed during this period of weather stress. The bald eagle, the only endangered species in the Jarbidge Resource Area could be disturbed by man caused activities. Other possible species impacted can be seen on Table 2, page 82, wildlife habitat occupancy restrictions. As in Alternative A, the amount of impact would depend on the location and time of disturbance. The above impacts are tempered by the lack of developable mineral resources in the Jarbidge.

Impacts to wildlife by timber harvest are identical to those identified in Alternative A. The same 1,143 acres are available for harvest in 20 years. Populations of big game are not affected. Known and unknown impacts are identical to those described in Alternative A.

An additional 111,000 acres managed under full fire suppression would benefit sage grouse. The greatest potential impact is the loss of 39,900 acres of sage grouse nesting habitat.

Wildlife occupancy stipulations will mitigate most possible impacts and provide positive benefits in many cases. The only exception is the lack of stipulations in the case of minerals. Possible impacts from this situation were described previously in this alternative.

Environmental Consequences

The ORV closure on 166,090 acres should benefit big game, upland and nongame although no population increases are expected.

The 59 miles of stream excluded from livestock grazing offer benefits to an approximate three quarters of the wildlife species found in the Jarbidge Resource Area. Nongame birds find nesting and foraging cover. Upland birds such as quail, chukars, sage grouse, and hungarian partridges find clean water and brood rearing areas rich in insect life and forbs. Small mammals reach their greatest diversity in protected riparian habitat. Raptors find abundant prey to feed their young. Mule deer and elk use such areas for fawning and calving. The stream miles protected are not expected to influence the number of harvestable wildlife.

Forty-five AMPs have been proposed for development in Alternative B. AMPs often offer an opportunity for better management and less impact to wildlife if wildlife objectives are included. Since the AMPs are not identified as to location nor type of grazing systems, wildlife impacts or benefits remain unknown.

An outstanding natural area on Salmon Falls Creek would prove beneficial to wildlife. It would prevent further canyon entry for roads, pump sites and small hydro development, thus limiting access.

Bighorn sheep populations would not achieve population goals because of increased livestock use on adjacent plateaus (forage and spacial competition would occur).

Alternative B would allow pronghorn populations to increase to projected goals. Mule deer populations south of the Snake River would remain at approximately current levels. In MUA 2 mule deer and elk populations would be expected to sharply decline at some point during the 20 year planning period due to further deterioration of habitat. A total of 2,374 AUMs of forage is needed to support the existing big game population. Forage needed to meet projected big game populations is estimated to be 2,355 AUMs by the year 2005.

Raptors would be seriously impacted by the removal of 25% of the remaining native habitat adjacent to the Snake River.

Riparian Habitat

Adverse impacts to riparian habitat by increased livestock use would be minimized by fencing 36.9 stream miles. Adherence to standard operating procedures for grazing management practices in riparian zones (page 85, plan portion of document) would help in protecting existing habitat. Management units 11, 12, and 15 contain the largest increases in AUMs and those stream reaches presently in poor or fair condition due to past livestock access are recommended for fencing. Projected riparian habitat condition in 20 years is outlined in Table 4-5.

Long-term adverse impacts to riparian/aquatic habitat from timber harvest in the Bennett Mountain and Anderson Ranch units would be minimized by utilizing a 100 ft. minimum buffer zone, on all drainages, and adhering to standard operating procedures for timber harvest.

Short and long-term adverse impacts would result from fire occurrence in limited suppression areas. Loss of woody vegetation in riparian areas not protected by deep canyons would occur. Movement of silt into the Snake River System would increase with spring runoff. Any vegetative regrowth brought about by fencing riparian zones may be lost over the 20-year period, in high occurrence fire areas.

Table 4-5
20-Year Projected Riparian Habitat Condition (Alt. B)

Habitat Condition	Miles	%
Poor	65	18
Fair	128	34
Good	165	45
Excell./Unsuit.	12	3
TOTAL	370	100

Aquatic Habitat

The application of standard operating procedures and best management practices (AFS 1982) would minimize the degradation to aquatic habitat/water quality due to commercial timber harvest proposed in this alternative. Surface run-off from disturbed areas would contribute suspended and bedload sediments resulting in the potential loss of 0.9 miles of salmonid spawning habitat in the Anderson Ranch unit and 6.1 miles of good aquatic habitat condition in the Upper Bennett unit. These losses could occur in spite of the establishment of riparian set asides.

The implementation of proposed livestock exclusion fences for aquatic habitat/riparian habitat protection would improve and protect crucial habitat that has been seriously impacted by livestock grazing in the past. Range improvements would be covered by standard operating procedures and designed to distribute the increase in livestock numbers away from streams and to alternative water sources. The increased stocking rate would not impact the good condition habitat that is inaccessible (see Alternative A) and the 56.6 miles of riparian/aquatic habitat fencing would result in a 14% increase of the poor-fair habitat to the good-excellent category. Trout populations would increase in these fenced areas approximately 300-500% as described in Alternative A.

Impacts caused by range fires are the same as described in Alternative A, however the limited fire suppression acreage would be reduced.

Environmental Consequences

Adverse impacts to aquatic habitat resulting from mineral exploration is covered by standard operating procedures and no surface occupancy stipulations.

Impacts to the aquatic habitat/water quality resulting from small hydroelectric project development would be the same as described in Alternative A.

Of the 156,000 acres of agriculture development that could occur in this alternative, 94,917 acres would be irrigated directly by Snake River water from within the boundaries of the Jarbidge Resource Area. This is an increase over Alternative A by 44%. Impacts to aquatic life in the Snake River are the same as described Alternative A but with an unknown increase in significance.

Fire Management

Impacts on fire size and occurrence and suppression costs would be the same as described in Alternative A, except an additional 110,982 acres would receive full suppression. The suppression costs would increase slightly and the acreage burned would decrease slightly. Additional agricultural development would not increase fire occurrence above levels anticipated in Alternative A because the majority of the acreage is in blocked patterns and the total boundary area of the developments would not significantly change.

Recreation

Lands available for dispersed recreation would be reduced by the 160,154 acres of public land recommended for disposal.

The same general impacts of displacement on ORV use would occur as described in Alternative A. ORV use would be limited on 58,141 acres and closed on 166,090 acres (Appendix Table B-6). As in Alternative A the actual impacts to ORV use would be minimal as the areas affected do not currently receive significant use.

Primitive recreation opportunities would be protected in the canyons of the Bruneau/Sheep Creek WSA and the King Hill WSA (minus some minor boundary adjustments). The same potential impacts would occur to the rest of the WSA lands as described in Alternative A.

The following acreages would be given special management as SRMAs under Alternative B.

Salmon Falls Creek	5,600 acres
Hagerman-Owsley	7,074 acres
Bruneau/Jarbidge River	57,000 acres
Jarbidge Forks	4,320 acres
Oregon Trail	<u>14,112 acres</u>
TOTAL	88,106 acres

The Hagerman acreage is increased by 2,884 acres in this alternative to include the "Owsley Bridge ORV Area" - a heavily used area popular with motorcyclists. This addition to the Hagerman SRMA would make it easier to manage existing use as well as that displaced, dispersed use that materializes in Hagerman.

Cultural Resources

The semi-annual monitoring of cultural resource sites in critical need of special management (Devil's Creek, Pot Hole Creek, Dove Springs, Juniper Ranch, Clover Creek, Dry Lakes, Cougar Creek, Post Office and the Oregon Trail cultural resource complexes) would facilitate the identification of sites in need of emergency stabilization or other protective needs.

The nomination and acceptance to the National Register of Historic Places would provide an additional measure of protection (through SHPO consultation and the 106 statement process) for 65 Dry Lakes cultural resource complex sites and 217 sites within the Devil's Creek cultural resource complex.

Fencing of sites deteriorating from livestock trampling in the Pothole (one site), Juniper Ranch (one site) and Dry Lakes (seven sites) cultural resource complexes would limit site deterioration and preserve a representative sample of scientifically important sites. Twenty-one scientifically important sites in the Dry Lakes cultural resource complex, one site in the Pothole cultural resource complex and three sites in the Dove Springs cultural resource site complex would continue to deteriorate from livestock trampling.

Stream bank erosion control would stabilize one site within the Juniper Ranch cultural resource site complex.

Perennial streams comprise an area of high cultural resource site density. The exclusion of livestock from 71 stream bed miles would slow the rate of deterioration of sites currently being disturbed by livestock trampling and prevent the deterioration of previously undisturbed cultural resource site complexes.

Significant increases in livestock grazing would increase the rate of deterioration to cultural resource sites presently being impacted and the number of sites impacted would increase.

Paleontologic Resources

The full impacts to the paleontologic resources of the Jarbidge Resource Area are unknown as an inventory has not yet been completed. Twenty six known paleontologic sites are identified for possible transfer from federal ownership under this alternative. Twenty of these sites are not presently known to contain "scientifically significant" fossils and would therefore probably leave federal ownership. The quantity of land identified for transfer in this alternative indicates a high probability of loss or damage to other known or undiscovered sites and materials.

The establishment of site clearances and the completion of paleontologic resources inventory would mitigate some of these impacts.

The increased management of Sand Point and Hagerman through ACEC designation would allow the Bureau to give full protection to these highly significant localities (see Areas of Critical Environmental Concern, pages 61-67, Part I).

Wilderness

Wilderness designation on portions of three WSAs would insure long-term protection of wilderness values. Designation would prevent potential long-term impacts from oil and gas developments. Except for livestock grazing effects, natural ecological process would continue unimpeded. ORV use and utility and transportation development would not effect wilderness values. Impacts on wilderness in this alternative would be the same as in Alternative A for the plateau acreage of the Bruneau and Jarbidge (see Appendix J - Wilderness Analysis).

Energy and Minerals

Oil and Gas

Approximately 88% of the resource area would remain available for leasing under this alternative. The major areas closed to leasing are the existing withdrawals amounting to approximately 138,643 acres and the wilderness areas amounting to approximately 57,799 acres.

The 102,746 acre Saylor Creek Bombing and Gunnery Range represents the greatest impact to leasing as it is almost entirely surrounded by leases. Although the area has been classified as prospectively valuable by the U.S.G.S, the actual potential is considered to be low.

The proposed wilderness areas have not had any significant leasing interest as they are considered to have low potential.

The impacts of land transfer and the creation of a split estate are addressed by the State Office leasing mineral specialists when they perform their mineral assessment of the identified lands. It has generally been held that the land transfer would not interfere with development. There are 160,154 acres identified for transfer out of federal ownership in this alternative.

The major areas proposed to have no surface occupancy stipulations are cultural and paleontological sites, the Birds of Prey essential nesting areas and areas within 500 feet of streams or reservoirs. These areas can be reached by slant drilling should oil or gas be discovered in the vicinity.

Based on the lack of any commercial oil or gas wells in Idaho, the five dry holes in the resource area, the low potential of the area, low industry interest and the above analysis, the overall impacts of this alternative on the availability of oil or gas leasing and development is considered to be minimal.

Geothermal

Approximately 88% of the resource area would remain available for leasing under this alternative. The major areas closed to leasing are the existing withdrawals amounting to 138,645 acres and the wilderness areas of approximately 57,799 acres.

None of the lands within the Known Geothermal Resource Areas (KGRA), both state and federally classified, are affected by the Saylor Creek Bombing and Gunnery Range withdrawal (102,746 acres). Approximately 400 acres of the state classified lands are within the Bruneau River WSA.

Of the approximately 117,760 acres of land identified as Geothermal Resource Areas, 2,040 acres have been identified for transfer from federal ownership. Eight hundred of these acres are within the federally classified KGRA's (8,860 acres).

The impacts of land transfer and the creation of a split estate are addressed by the State Office leasing mineral specialists when they perform their mineral assessment of the identified lands. It has generally been held that the land transfer would not interfere with development.

The major areas proposed to have no surface occupancy stipulations are cultural and paleontologic sites and areas within 500 feet of streams or reservoirs. These areas can be developed off site and do not significantly affect the availability of the resource.

Based on the lack of commercial development of geothermal steam in Idaho for energy production, the lack of information on the reservoirs involved, the substantial decrease in industry interest, the isolation of the KGRA's and the above analysis, the overall impacts of this alternative on the availability of geothermal energy is considered to be insignificant.

Environmental Consequences

Mining

Approximately 79% of the resource area would remain available for the location of mining claims under this alternative. The major areas withdrawn from or restricting mineral location are the existing withdrawals amounting to 138,643 acres, the wilderness areas amounting to 57,799 acres and the proposed land transfers of 160,154 acres.

The 102,746 acre Saylor Creek Bombing and Gunnery Range represents the largest block of land that is closed to mineral location. Present knowledge of this area indicates that the potential for the discovery of valuable locatable mineral deposits is low.

Of the remaining 35,897 acres under withdrawal, 20,914 acres are power site withdrawals which are handled under the Mining Claim Rights Restoration Act of 1955 or are withdrawals that only affect land actions.

The proposed wilderness areas have not had any mining claim interest except for gemstone materials in the Bruneau River Canyon. The areas are not favorable for the discovery of metallic minerals and have only a low to moderate favorability for industrial minerals (diatomite). This wilderness proposal is not considered to be a significant restriction to the overall availability of locatable minerals.

Only lands that are not mineral in character or have no known mineral potential would leave federal ownership unless the mineral estate is sold at fair market value. The transfer of lands that do not have mineral potential is not considered to be a significant impact on the availability of locatable minerals.

The Pine Grove Mining District, Volcano Mining District and Indian Hot Springs Jasper Claims are not significantly impacted by this alternative. These are the only areas that have had extensive mining activity.

Based on the presently known mining activity and mineral potential and the above analysis, the overall impacts of this alternative on the availability of locatable minerals is considered to be insignificant.

Mineral Materials

According to the Agricultural Environmental Impact Statement, 1.7 miles of gravel road would be needed for each section of new farmland. Based on road district standards of a 34 foot wide running surface 8" deep, this alternative would require an increase in materials production of 1,885,665 cubic yards. This production would take 22.9 years at present production rates excluding existing production.

County road building and maintenance over the past three years has required an average yearly production of 82,307 cubic yards. The existing sites can in some areas meet the increased demand. Reserves at all the sites would be substantially depleted in the long term (20 years). The additional materials needed to build and then maintain the new roads for the farms is expected to be a highly significant factor in this depletion of a finite resource.

To meet the long term needs (20 years) new sites would have to be developed to replace depleted existing sites and allow for shorter haul distances. The Bureau's ability to meet these needs have allowed local highway districts to keep operating costs down. Within the time frame of this plan, haulage costs would increase along with the demand for more and better roads. This would also add to the demand for new sites and will increase depletion at existing sites.

The Bureau may not be able to meet these needs within the time frame of this plan. A significant decrease in the Bureau's ability and flexibility in meeting these material demands would result under this alternative. The highway districts would have to increase their work force and equipment purchases to meet the workload and would have to turn to private material sources and to crushing to obtain materials. Both would add significantly to the counties tax requirements.

Forest Management

Impacts to forest management would be the same as those described for Alternative A. The 1,143 acres of commercial forest land available for harvest would yield a total volume of 1,540 million board feet over the next 20 years.

Economics

Crop Agriculture

This alternative would lead to development for irrigated agriculture of 155,726 acres. Of this, a maximum of 142,194 acres would be disposed of through the Desert Land or Carey Acts while 5,096 acres would be considered for disposal through exchanges, 496 acres through public sales and 7,940 through either sale or exchange.

The total cost of electricity either used for pumping or lost from downstream generation would be \$52.8 million. Irrigators would pay 16% or \$8.5 million while other electricity consumers in the Columbia River system would pay 84% or \$44.4 million.

The production of crops resulting from agricultural development would range from 71% of current three-county production in barley to 113% of current production in sugar beets. The increase in potato production of 11.0 million cwt would increase national production by 3.5%, decreasing prices by 22.8%. Assuming 90% of new potato production, simply displaces production elsewhere, then the net addition to potato production would be 1.1 million cwt or 0.3% of national production. Although this increase in potato production (and other crops) would have a redistributive effect both locally and in the nation, the net effect on production and prices would be minimal.

Environmental Consequences

The one-time costs of installing water delivery and irrigation systems would be \$101.9 million. Annual expenditures for seed, fertilizer, herbicides, and fungicides would be \$23.9 million. Annual fuel costs for tractors and equipment would be \$5.2 million.

Farm income would increase \$6.6 million locally and decrease by \$5.9 million nationally. Farm suppliers would realize a local income gain of \$26.1 million and a national loss of \$23.5 million. Ranchers currently using the area to graze livestock would lose \$150,000 in income and ranch suppliers would lose \$250,000. The net income change as a result of the agricultural development in this alternative would be an annual loss of \$41.5 million (based on a net gain of \$2.9 million to farmers, ranchers and suppliers and a loss of \$44.4 million to nonirrigator rate payers). In addition ranchers would lose capital value due to lost grazing privileges of between \$1.9 million and \$8.2 million. A total of 32,863 AUMs of grazing would be lost to agricultural development.

Farm employment would increase locally by 970 while declining 873 nationally. Farm supply industries would gain 3,742 jobs locally while losing 3,368 nationally. Ranch employment would decline by 22 and ranch supply jobs would decrease by 36. The net employment change would be a gain of 413 jobs.

Livestock

Short-term stocking rates would increase by 32,000 AUMs raising to an increase of 183,000 AUMs in the long-term. The range improvements necessary for this level of stocking would cost \$4.7 million. Table 4-6 shows the impacts by size group of the long-term increases in stocking rates. These increases include the reductions identified as resulting from agricultural development.

Table 4-6
Direct Income and Employment Changes
Alternative B

Size Group	Long-term Stocking Rates	Change In Use	Income Change	Employment Change
1	31,350	16,516	75,313	10.8
2	106,293	55,997	255,346	36.6
3	185,216	97,575	444,942	63.9
4	23,730	12,501	57,005	8.2
TOTAL	346,589	182,589	\$832,606	119.5

In addition there would be secondary income and employment gains in the long-term) of \$1,385,900 and 199 jobs.

Changes in the grazing fee distribution would be as follows:

Range Improvement Fund	+ \$182,589
Federal Treasury	+ \$136,942
State of Idaho	+ \$45,647
TOTAL	+ \$365,178

The total capital value of the AUMs gained would amount to between \$10.3 million and \$45.6 million.

Recreation

Increased recreation use would provide economic benefits to the local economy, primarily retail trade. It is not known how the various alternatives would change expected recreation use. The specific economic benefits of such use cannot be identified as a result.

Summary

This alternative would have large income and employment benefits from agricultural development and livestock grazing. The net income change would be a gain of \$5.5 million (including livestock losses due to Ag. Dev.). Expenditures for seed, fertilizer, fuel, etc. for Ag. Dev. would amount to \$29 million annually. The annual cost of electric power for pumping would be \$52.8 million of which 84% would be paid for by non-irrigators. Net employment change would be a gain of 790 jobs. Grazing fee collections would increase by \$365,000. The capital value of AUMs gained would range from \$10.3 to \$45.6 million.

Alternative C

Lands

Land transfers for this alternative would consist of a maximum of 1,200 acres for sale, 9,605 acres for sale or exchange, 6,080 acres for exchange and 74,561 acres for agricultural entry (Desert Land Entry and Carey Act).

The development of 74,561 acres for agricultural entry would require 1,491 cfs of water. It is anticipated that of the 1,200 acres proposed for sale, 40% would be developed for agricultural use, of the 9,605 acres in the sale or exchange category, 85% would be developed for agricultural use, and of the 3,200 acres proposed for exchange, 32% would be developed for agricultural use. This would require an additional 210 cfs of water. Of the total of 1,701 cfs needed to irrigate these lands, approximately 90 percent would come from the Snake River.

Retention of a wild horse area would result in rejection of Desert Land Entry and Carey Act applications on 39,088 acres.

Land transfer, primarily for agricultural use, would result in an increase in occupancy, agricultural and right-of-way trespass. It is estimated that 14 cases per year would be discovered at an average administrative cost of \$1,250 per case for a total cost of \$17,500 per year.

Transfer of land by sale would generate approximately \$843,750 of revenue for the federal government at an average price of \$150 per acre. The lands proposed for transfer by sale or exchange were selected primarily because their disposal would reduce problem management areas and consolidate land ownership patterns, thereby improving management and reducing management costs.

Rights-of-way would be precluded or restricted on 264,332 acres of public land if they would conflict with proposed wilderness, areas of critical environmental concern, the Bruneau/Jarbidge Wild and Scenic River proposal, Birds of Prey Essential Nesting Habitat, Oregon Trail, and/or the Saylor Creek Gunnery Range.

This would result in reduced right-of-way flexibility, which may increase construction costs, particularly for major utility lines. The two east-west powerline routes proposed by Idaho Power Company and the Western Power Council would be eliminated by the Bruneau/Jarbidge Wild and Scenic River designation or Bruneau/Jarbidge Wilderness Area and a conflict with the Saylor Creek Gunnery Range. These lines would have to be realigned to pass through moderate use areas with few conflicts, which would result in traversing the same basic corridor area as the existing utility lines. The north-south proposal would be restricted somewhat by the Hagerman Fossil Beds, but could probably be slightly rerouted to avoid any conflicts.

Disallowance of a water siphon through the proposed Salmon Falls Creek Natural Area may substantially increase development costs of the Desert Land Entry and Carey Act projects depending on the extension of the Twin Falls Canal for their water supply. Disallowance may also eliminate these agricultural development projects as there may not be a suitable crossing for the siphon on private lands.

Small hydro development would be precluded in the Bruneau/Jarbridge Wild and Scenic River, wilderness areas, Salmon Falls Creek Natural Area and other areas designated as Areas of Critical Environmental Concern.

Soil, Water, and Air

The erosional processes described for land use actions in Alternative C are the same as described in Alternative A and B, but the acreage and/or magnitude of the impact may vary considerably (Appendix Table E-1).

Proposed agricultural development actions under this Alternative include 58,585 acres of soils in the high erosion hazard category. The impacts associated with farming are discussed in Alternative A.

Livestock use levels would increase by 66% in this alternative as compared to current levels. Stocking rates would increase from 10.3 ac/AUM to 5.9 ac/AUM in 20 years. The effects of livestock use are as described in Alternative A (Appendix E, Figure E-1, E-2). Projected increase in AUMs would occur as water is developed in previously ungrazed seedings. On-site soil disturbance will increase on these areas, but due to gentle slopes in most areas, off-site soil movement is not expected to increase significantly. Some increased erosion would occur as overlap in use is expected on adjacent grazed areas.

The impacts of timber harvest described in Alternative A would occur on the 1,086 acres available for harvest.

Mineral exploration and associated development would occur on about 1.5 million acres. The impacts are the same as discussed in Alternative A.

The effects of ORV use as described in Alternative A would occur on about 1.2 million acres. ORV use is currently light. No increases in use are anticipated with this alternative, therefore no increases in erosion over current levels are expected.

The impacts of limited fire suppression discussed in Alternative A would occur on 388,730 acres.

Riparian/fisheries habitat improvement as discussed in Alternative B would occur on 70 stream miles.

Range proposed vegetation manipulation would occur on 57,976 acres and would include 34,040 acres of seedings, 12,000 acres of spraying, and 11,936 acres of burning. The impacts of vegetation manipulation are the same as described in Alternative B.

Environmental Consequences

An estimated 40,000 acres of rangeland in fair ecological condition is expected to improve to good ecological condition through implementation of grazing systems. Improved ecological condition would result in increased vegetation cover and decreased runoff and erosion.

Vegetation manipulation to improve wildlife habitat is proposed on 15,200 acres. Treatments would include seeding poor condition range with native vegetation species, interseeding existing monocultures of crested wheatgrass with forbs and shrubs, and seeding old burns with native plants species. Soil disturbance caused by seeding would result in a short-term increase in off-site soil movement. As new seedlings become established, vegetation cover would increase resulting in a long-term reduction in off-site soil movement. Seeding mixtures including forbs and shrubs would increase plant species diversity which would result in decreased nutrient cycling and improved soil productivity.

Range Resources

Under this alternative, livestock forage levels would be increased in the short-term approximately 6% which would result in an increase of 9,000 AUMs over current authorized 5 year average use levels.

Long-term impacts of this alternative would result from increased livestock use levels by an additional 66% over the current forage use level or 108,000 AUMs. Of this, 57,021 AUMs would result from better livestock distribution due to proposed structural improvements on approximately 1.22 million acres. Seeding would occur on 34,040 acres. Prescribed burning would occur on 11,936 acres to improve native range condition and an additional 3,600 acres would be burned as preparation for seeding. Spraying would occur on 12,000 acres to improve native range condition. These land treatments would produce 10,000 AUMs. Due to expected fire rehabilitation, 22,735 AUMs would also be made available in this alternative. Increases above initial levels would depend upon implementation of grazing systems and installation of the land treatments discussed.

The proposed seedings would be recommended for areas in poor range condition with high potential soils. Prescribed burning would be recommended for areas in fair or better condition that have potential for increasing livestock forage levels due to decreased competition from sagebrush. Spraying of sagebrush areas would occur on some sites that have existing seedings that are being invaded heavily by sagebrush or other competing shrubs and or sites that would improve livestock forage levels due to decreased sagebrush competition.

Long-term improvement in ecological condition is expected in MUA's 2, 14, 15, and 16. Approximately 2,950 acres would improve from poor to fair or better condition and 40,000 acres would improve from fair to good or better condition. The native rangeland in the remaining MUA's is expected to remain in the present condition because of site potentials,

current species composition, and climatic factors (see Discussion under Alternative A).

Reducing the amount of forage use made by livestock in the spring season in MUA 2 and increasing the amount made in fall would result in a short-term increase in plant vigor of native forage species and reduced competition with wintering mule deer. Long-term impacts include more vigorous perennial native forage plants, increased surface litter, greater forage yields, and increased potential to improve areas from fair to good condition. Small portions of the area (<3%) in poor condition may improve to fair or better condition class if significant remnants of the perennial native plants are remaining.

Agricultural development would reduce available livestock AUMs primarily in MUA's 3, 6 and 7. Land transfer of 91,446 acres would remove approximately 15,538 AUMs from current available levels in the total area. Due to existing forage excesses in MUA's 6 and 7 reductions that may occur would be short-term. Additional structural improvements (fencing and water developments) would make the forage suitable for use by livestock.

Impacts are substantially the same on permittees displaced by agricultural development as discussed in Alternative A. New agricultural development in MUAs 3, 6, and 7 would result in short-term reductions of approximately 14,726 AUMs. Current grazing preference levels are expected to be met in all MUA's in the long-term with some having substantial increases (Appendix Table B-4).

Wild Horses

Horse populations would remain substantially the same in this alternative as shown in Alternative A. Short-term impacts are negligible in this alternative. Some benefits from additional water system development in the Saylor Creek herd area would be expected. Additional water locations in herd areas will provide better horse distribution during the period from May to October. It will reduce competition at the existing watering areas.

Agricultural development would reduce the Saylor Creek Herd area by 22,887 acres. The remaining area (83,582 acres) is considered to be the minimal area needed to retain the existing viable herd population with considerations for upward population fluctuations prior to gatherings, increased competition for forage from livestock displaced by agricultural development on an adjacent 40,136 acres (some areas remaining in federal ownership would be made inaccessible to horses by farm development), and enough area remaining to maintain their wild and free roaming status.

Terrestrial Wildlife

In this, the preferred alternative, long-term livestock use would increase 66% above current stocking rates. At the end of 20 years 271,425

Environmental Consequences

AUMs would be harvested by livestock each year. The greatest increase in AUM use would occur in MUAs 6, 7, 11 and 12. No increases are called for on crucial mule deer winter range. The increases in livestock AUMs are tied to 57,976 acres of range improvements. Impact to big game would be reduced in Alternative C. In MUA 2 crucial winter-spring habitat would receive special management. Spring use by livestock would be reduced 25%. In addition, overall grazing pressure in this MUA would decline 37% from current use. Priority habitat improvement projects for mule deer and elk would encompass 3,000 acres in this MUA. Ecological condition would only show small changes in bighorn habitat, pronghorn crucial winter range, mule deer crucial winter range and sage grouse nesting habitat (Figures 4-1, 4-2, 4-3, and 4-4). Forty thousand acres of habitat in fair ecological condition is expected to improve on the Jarbidge uplands in MUAs 10, 15 and 16 and on Bennett Mountain in MUA 2. This improvement would greatly benefit mule deer and elk. In addition wildlife generated habitat improvement projects proposed in Alternative C will result in 15,700 acres of improvements in key wildlife habitats (Appendix Table G-1). Moderate population gains would be expected for mule deer.

As in Alternative A bighorn sheep populations would achieve the reasonable goal in 20 years.

Pronghorn habitat would not greatly change from existing condition (Figure 4-3). As in Alternative A impacts are the same and reasonable population goals would be met.

The elk population on Bennett Mountain should also reach the reasonable long-term population goal. The lack of grazing increase in MUA 2 coupled with the improvement in fair ecological condition and the improvement of key acres by the wildlife program makes this possible.

Sage grouse habitat would remain almost unchanged from the current situation (Figure 4-4). The assessment made in Alternative A still applies. Approximately 50% of the existing nesting habitat remains in poor ecological condition. A small portion of the nesting habitat in MUA 15 would improve to good condition but nesting areas in MUAs 11, 12 and 13 would remain unchanged. Proposed wildlife projects would benefit sage grouse nesting habitat on 9,150 acres, but this is less than 2% of the nesting complex. The management guidance common to all alternatives should result in a slower loss of nesting habitat and an improvement in existing habitat.

The agricultural development in Alternative C would cause the same wildlife impacts seen in Alternative A. Minor impacts are predicted on big game. Major impacts accrue to nongame wildlife tied to the sagebrush habitat (see Alternative A). In Alternative C agricultural development would eliminate 16,500 acres of native habitat. This is 24% of the native habitat within a 8 mile radius of the Snake River from Sparlin Island upstream to Hagerman. Implementation of Alternative C would increase the magnitude and intensity of adverse impacts to raptors dependent upon the native shrub/grassland habitat. The impacts to raptors in this alternative would be the same as those identified in Alternative A. The narrative in Alternative A describes the impacts to raptors, small mammals, birds and reptiles. Thirty-thousand and eight hundred acres of

new pheasant habitat would be created adjacent to the proposed farm land. Future establishment of sage grouse and pronghorn is also foregone.

The most important impact is the loss of habitat supporting 20 to 25 pairs of long-billed curlews.

Of the 16,885 acres for sale or exchange, wildlife losses are expected to be minimal. On site inventories of each proposed land action should identify land parcels which should be retained.

Agricultural trespass on Sikes Act wildlife tracts would be expected with additional agricultural development. Such trespass would only displace upland and nongame in the short term.

Range improvement projects are guided by management guidelines common to all alternatives and thus should result in minimal impacts to wildlife.

See Alternative A for the impact of utility corridors on wildlife.

Mineral exploration and development would result in minimal impacts to wildlife in Alternative C. The rationale can be read in the Alternative A narrative.

In this alternative Salmon Falls Creek is proposed as an Outstanding Natural Area. This designation would prevent further development of roads, pump sites, utility lines and small hydros. The result would be the protection of wildlife found in the canyon.

The Bruneau/Jarbridge River complex is proposed as an ACEC in this alternative. Included in the 84,111 acres is the existing bighorn sheep habitat. The designation will prevent future development in the canyon that would impair the bighorn population.

Maintenance of the wild horse herd would result in minimal impact to wildlife. The impacts are the same as shown in Alternative A.

Impacts to wildlife by timber harvest are identical to those identified in Alternative A. Impacts generally would be minimal.

Impacts to wildlife under the fire control program are the same as those depicted in Alternative B. The major impact would be the possible loss of 39,900 acres of sage grouse nesting habitat.

The occupancy stipulations developed in Table 2, page 82 protect important species of wildlife on 823,980 acres. Habitat and seasonal life cycles are protected.

The ORV closure on 264,960 acres of the resource area should benefit big game, upland and nongame. No population increases will be expected from such protection.

The 70 miles of stream excluded from livestock grazing will greatly benefit wildlife. Benefits to wildlife can be examined in Alternative B.

Environmental Consequences

Forty-five AMPs have been proposed for development in Alternative C. Impacts to wildlife are unknown, the same as shown in Alternative B.

Alternative C would result in the achievement of reasonable numbers for all big game species in the planning period.

Agricultural development would result in the loss of 24 percent of the native forage habitat supporting prey for birds of prey adjacent to the Snake River. Birds of prey would decline due to the elimination of their food supply.

Riparian Habitat

Under this alternative, decreases in stocking levels as compared to Alternative B are proposed in management units 1, 2, 13, 14, 15, and 16. Adverse impacts to riparian/aquatic habitat would be reduced generally, and with proposed fencing recommendations (53 of the 70 total miles proposed for fencing were for riparian habitat improvement), habitat condition would improve (Table 4-7).

Long-term adverse impacts to riparian/aquatic habitat from timber harvest in the Bennett Mountain and Anderson Ranch units would be minimized by utilizing a 150 ft. minimum buffer zone on all drainages, and adhering to standard operation procedures for timber harvest.

Short and long-term adverse impacts from fire occurrence in limited suppression areas would be the same as described in Alternative B.

Table 4-7
20-Year Projected Riparian Habitat Condition (Alt. C)

Habitat Condition	Miles	%
Poor	53	14
Fair	124	34
Good	181	49
Excell./Unsuit.	12	3
TOTAL	370	100

Aquatic Habitat

Impacts to aquatic habitat/water quality from commercial timber harvest will be minimized by monitoring operations and establishing riparian buffer leave areas.

A habitat condition improvement of 51.6 miles from existing poor-fair to the good-excellent categories (Appendix Table H-3 and Figure 4-6) are results of riparian fencing for livestock exclusion. Very slight improvements within each rating category resulting from livestock dispersal techniques would be detected by future monitoring. Water quality would slightly improve due to better watershed condition.

Short and long-term impacts to aquatic habitat/water quality from minerals management would be minimized by the observance of the "no surface occupancy" stipulation and related standard operating procedures.

Small hydroelectric facility development will be excluded from the Bruneau and Jarbidge Rivers due to the dual protection of Wild and Scenic and ACEC designations. Sheep Creek and a portion of King Hill Creek will be protected from hydro development by WSA designation. All other streams will require Fish and Game stipulation.

Impacts caused by range fires would be the same as described in Alternative A, however, the limited fire suppression acreage would be reduced.

Snake River

The 6% increase in acreage of agricultural development in this Alternative will not be significant over impacts described in Alternative A. Changes in impact sites may change somewhat.

Fire Management

Impacts on fire size and occurrence and suppression costs would be similar to those described in Alternative A. A small decrease in the acreage burned and a slight increase in suppression costs would occur as a result of managing more of the resource area under full suppression.

Recreation

Lands available for dispersed recreation could be reduced by the 91,446 acres of public land recommended for disposal.

ORV use would be limited on 78,843 acres and closed on 240,149 acres.

Primitive recreation opportunities would be protected on 119,677 acres. The balance of the original WSA acreage would be affected as described in Alternative A.

Environmental Consequences

The following acreages would be designated as SRMAs and would receive special management emphasis for recreation values.

Salmon Falls Creek	5,600 acres
Hagerman-Owsley	7,074 acres
Bruneau/Jarbidge Rivers	57,000 acres
Jarbidge Forks	4,320 acres
Bennett Hills	56,678 acres
Oregon Trail	<u>14,112 acres</u>
TOTAL	<u>144,784 acres</u>

Under this alternative the acreage of the Hagerman Site could be increased if land exchanges to acquire some private land that overlaps the rim of the unit were to occur. This would enable the BLM to more affectively manage the fossil resource for which the area was designated. The addition of the Bennett Hills area would allow the BLM to study (with Idaho State Parks) recreation use during winter time and design a management strategy to suit the needs of all resource values. This alternative would allow special recreation management for all areas receiving significant, concentrated recreation use.

Cultural Resources

Impacts and actions are the same as those described in Alternative B except for the Cougar Creek cultural resource site complex which receives ACEC designation (as part of the Bruneau-Jarbidge ACEC) under this alternative. ACEC designation gives the Area Manager the opportunity to implement special protection options within this site complex (see page 67-71, Areas of Critical Environmental Concern).

Paleontologic Resources

The full impacts to the paleontologic resources of the Jarbidge Resource Area are not known as no inventory has been completed. Ten known paleontologic sites are identified for possible transfer from federal ownership. The quantity of land identified for transfer in this alternative indicates a probability of loss or damage to other known or undiscovered sites and materials.

The establishment of site clearances and the completion of paleontologic resources inventory will mitigate these impacts.

Designation of the Sand Point and Hagerman sites as ACECs would allow the Bureau to give full protection to these highly significant localities.

Wilderness

Wilderness designation of three WSAs would insure long-term protection of wilderness values. Designation would prevent potential long-term impacts from oil and gas developments. Except for livestock grazing effects, natural ecological process would continue unimpeded. ORV use and utility and transportation development would not effect wilderness values. Impacts on wilderness in this alternative would be the same as Alternative A for the plateau acreage of the Bruneau/Sheep Creek WSA and the eastern plateau of the Jarbidge WSA (see Appendix J - Wilderness Analysis).

Energy and Minerals

Oil and Gas

Eighty-five percent of the resource area will remain available for leasing under this alternative. The major areas closed to leasing are the existing withdrawals amounting to approximately 138,643 acres and the wilderness areas amounting to approximately 94,199 acres.

The 102,746 acre Saylor Creek Bombing and Gunnery Range represents the greatest impact to leasing as it is almost entirely surrounded by leases. Although the area has been classified as prospectively valuable by the U.S.G.S, the actual potential is considered to be low.

The proposed wilderness areas have not had any significant leasing interest shown in it and is considered to have low potential.

The impacts of land transfer and the creation of a split estate are addressed by the State Office leasing mineral specialists when they perform their mineral assessment of the identified lands. It has generally been held that the land transfer will not interfere with development. Ninety-one thousand, four hundred and forty-six acres are identified for transfer out of federal ownership in this alternative.

The major areas proposed to have no surface occupancy stipulations are cultural and paleontological sites, the Birds of Prey essential nesting areas and areas within 500 feet of streams or reservoirs. These areas can be reached by slant drilling should oil or gas be discovered in the vicinity.

There are 823,980 acres of land that would have seasonal occupancy stipulations on them to protect wildlife. All of the curlew area and a small part of the crucial winter range for mule deer, antelope winter range and sage grouse areas affect existing leases and lease applications. The impact on access to leased lands is considered to be insignificant.

Environmental Consequences

Based on the lack of any commercial oil or gas wells in Idaho, the five dry holes in the resource area, the low potential of the area, low industry interest and the above analysis, the overall impacts of this alternative on the availability of oil or gas leasing and development is considered to be minimal.

Geothermal

Eighty-five percent of the resource area will remain available for leasing under this alternative. The major areas closed to leasing are the existing withdrawals amounting to 138,643 acres and the wilderness area of approximately 94,199 acres.

None of the lands within the Known Geothermal Resource Areas, both state and federally classified, are affected by the Saylor Creek Bombing and Gunnery Range withdrawal (102,746 acres). Approximately 400 acres of the state classified lands are within the Bruneau River WSA.

Of the approximately 117,760 acres of land identified as Geothermal Resource Areas, 1,240 acres have been identified for transfer from federal ownership. Four hundred and eighty of these acres are within the federally classified KGRA's (8,860 acres).

The impacts of land transfer and the creation of a split estate are addressed by the State Office leasing mineral specialists when they perform their mineral assessment of the identified lands. It has generally been held that the land transfer will not interfere with development.

The major areas proposed to have no surface occupancy stipulations are cultural and paleontologic sites and areas within 500 feet of streams or reservoirs. These areas can be developed off site and do not significantly affect the availability of the resource.

823,980 acres of land will have seasonal occupancy stipulations on them to protect wildlife. The sage grouse stipulations affect the existing leases in the Mt. Bennett Hills area. This has not been a significant problem to the development of the leases and is not expected to be.

Based on the lack of commercial development of geothermal steam in Idaho for energy production, the lack of information on the reservoirs involved, the substantial decrease in industry interest, the isolation of the KGRA's and the above analysis, the overall impacts of this alternative on the availability of geothermal energy is considered to be insignificant.

Mining

Seventy nine percent of the resource area will remain available for the location of mining claims under this alternative. The major areas withdrawn from or restricting mineral location are the existing withdrawals amounting to 138,643 acres, the wilderness acres amounting to 94,199 acres and the proposed land transfers of 91,446 acres.

The 102,746 acre Saylor Creek Bombing and Gunnery Range represents the largest block of land that is closed to mineral location. Present knowledge of this area indicates that the potential for the discovery of valuable locatable mineral deposits is low.

Of the remaining 35,897 acres under withdrawal, 20,914 acres are power site withdrawals which are handled under the Mining Claim Rights Restoration Act of 1955 or are withdrawals that only affect land actions.

The proposed wilderness areas have not had any mining claim interest except for gemstone materials in the Bruneau River Canyon. The areas are not favorable for the discovery of metallic minerals and have only a low to moderate favorability for industrial minerals (diatomite). This wilderness proposal is not considered to be a significant restriction to the overall availability of locatable minerals.

Only lands that are not mineral in character or have no known mineral potential will leave federal ownership unless the mineral estate is sold at fair market value. The transfer of lands that do not have mineral potential is not considered to be a significant impact on the availability of locatable minerals.

The Pine Grove Mining District, Volcano Mining District and Indian Hot Springs Jasper Claims are not significantly impacted by this alternative. These are the only areas that have had extensive mining activity.

Based on the presently known mining activity and mineral potential and the above analysis, the overall impacts of this alternative on the availability of locatable minerals is considered to be insignificant.

Mineral Materials

The impacts from this alternative are essentially the same as these in Alternative A. See Alternative A for the analysis.

Forest Management

Impacts would be the same as described for Alternative A except the acres available for harvest are reduced by 31 to provide additional protection for riparian areas. Adopting the allowable cut level for the 838 acres available for cutting would permit harvest of 374 acres or a total volume of 1,454.M Bdft over the life of the plan.

Economics

Crop Agriculture

This alternative would lead to development for irrigated agriculture of 84,229 acres. Of this, a maximum of 74,561 acres would be disposed of through the Desert Land or Carey Acts while 1,024 acres would be disposed of through exchanges, 480 acres through public sales, and 8,164 acres through either sales or exchanges.

The total cost of electricity either used for pumping or lost from downstream generation, would be \$28.8 million. Irrigation would pay 16% or \$4.6 million while other ratepayers would pay 84% or \$24.2 million.

The production of crops resulting from agricultural development would range from 39 percent of current 3-county production in barley to 61 percent of current production in sugar beets (see Appendix). The increase in potato production of 6.0 million cwt would increase national production by 1.9%, decreasing prices by 12.4%. Assuming 90% of new potato production simply displaces production elsewhere, then the net addition to potato production would be 600,000 cwt or 0.2% of national production. Although this increase in potato (and other crop) production would have or redistributive effect both locally and nationally, the net effect on production and prices would be minimal.

The one-time costs of installing water delivery and irrigation systems would be \$56 million. Annual expenditures for seed, fertilizer, herbicides, and fungicides would be \$13 million. Annual fuel costs for tractors and equipment would be \$3 million.

Farm income would increase \$3.6 million locally and decrease by \$3.2 million nationally. Farm suppliers would realize a local income gain of \$14.3 million and a national loss of \$12.8 million. Ranchers currently using the area would lose \$71,000 in income and ranch suppliers would lose \$118,000. The net income change as a result of the agricultural development in this alternative would be an annual loss of \$22.6 million (based on a net gain of \$1.6 million to farmers, ranchers, and suppliers, and a loss of \$24.2 million to electric company ratepayers). In addition, ranchers would lose capital value due to lost grazing privileges of between \$876,000 and \$3,884,000. A total of 15,536 AUMs would be lost to agricultural development.

Farm employment would increase locally by 530 while declining 477 nationally. Farm suppliers would gain 2,045 jobs locally while losing 1,840 nationally. Ranch employment would decline by 10 and ranch supply jobs would decrease by 16. The net employment change would be a gain of 232 jobs.

Livestock

Short-term stocking rates would increase by 16,000 AUMs raising to an increase of 127,000 AUMs in the long-term. The range improvements necessary for this level of stocking would cost \$2.4 million. Table 4-8 shows the impacts by size group of the long-term increases in stocking rates. These increases include the reductions identified as resulting from agricultural development.

Table 4-8
Direct Income and Employment Changes
Alternative C

Size Group	Long-term Stocking Rates	Change In Use	Income Change	Employment Change
1	26,324	11,490	52,394	7.5
2	89,253	38,957	177,644	25.5
3	155,523	67,882	309,543	44.4
4	19,926	8,697	39,658	5.7
TOTAL	291,026	127,026	\$579,239	83.1

In addition there would be secondary income and employment gains in the long-term) of \$964,900 and 138 jobs.

Changes in the grazing fee distribution would be as follows:

Range Improvement Fund	+ \$127,026
Federal Treasury	+ \$95,270
State of Idaho	+ \$31,756
TOTAL	+ \$254,052

The total capital value of the AUMs gained would amount to between \$7.2 million and \$31.8 million.

Recreation

Increased recreation use would provide economic benefits to the local economy, primarily retail trade. It is not known how the various alternatives would change expected recreation use. The specific economic benefits of such use cannot be identified as a result.

Summary

The impacts from this alternative are almost identical to Alternative A. The net income change would be a gain of \$3.3 million (including livestock losses due to ag. dev.). Expenditures for seed, fertilizer, fuel, etc. would be \$16 million annually. The annual cost of electricity would be \$28.8 million of which 84% would be paid by non-irrigators. Net employment change would be a gain of 479 jobs. Grazing fee collections would increase by \$254,000. The capital value of AUMs gained would range from \$7.2 to \$31.8 million.

Alternative D

Lands

Land transfers for this alternative consists of a maximum of 1,120 acres for sale, 9,605 acres for sale or exchange, and 3,115 acres for exchange. No lands would be disposed of for agricultural entry (Desert Land Entry and Carey Act).

It is anticipated that of the 1,120 acres proposed for sale, that 40% would be developed for agricultural use, of the 9,605 acres in the sale or exchange category, 85% would be developed for agricultural use, and of the 3,115 acres proposed for exchange, 40% would be developed for agricultural use. Development of these acreages for agricultural use would require approximately 197 cfs of water, of which 90% would be taken from the Snake River.

Land transfer, primarily for agricultural use, would result in an increase in occupancy, agricultural, and right-of-way trespass. It is estimated that the limited disposal acreage in this alternative would generate only one new trespass case per year at the average administrative cost of \$1,250.

Transfer of land by sale would generate approximately \$819,000 of revenue for the federal government at an average price of \$150 per acre. The lands proposed for transfer by sale or exchange were selected primarily because their disposal would reduce problem management areas and consolidate land ownership patterns, thereby improving management and reducing management costs.

Rights-of-way would be precluded or restricted on 268,385 acres of public land within proposed wilderness areas, areas of critical environmental concern, proposed Wild and Scenic River designations, Birds of Prey Essential Nesting Habitat, Oregon Trail, and the Saylor Creek Gunnery Range. This would result in reduced right-of-way flexibility, which may increase construction costs, particularly for major utility lines. The two east-west powerline routes proposed by Idaho Power Company and the Western Power Council would be eliminated by the Bruneau/Jarbidge Wild and Scenic River designation of Bruneau Jarbidge Wilderness Area and a conflict with the Saylor Creek Gunnery Range. These lines would have to be realigned to pass through moderate use areas with few conflicts, which would result in traversing the same basic corridor area as the existing utility lines. The north-south proposal would be restricted somewhat by the Hagerman fossil Beds, but could probably be slightly rerouted to avoid any conflicts.

Small hydro development would be precluded in the Bruneau/Jarbidge Wild and Scenic River, wilderness areas, Salmon Falls ACEC and other areas designated as Areas of Critical Environmental Concern.

Soil, Water, and Air

The erosional processes described for land use actions in Alternative D have been described in Alternatives A, B, and C. Some actions proposed in other alternatives would not occur in this Alternative. The area and/or magnitude of actions affecting the soil, water, air resources in this Alternative vary considerably from other Alternatives. Management actions are summarized in Appendix Table E-1.

Proposed agricultural developments under this Alternative include 11,524 acres of soils in the high erosion hazard category. The impacts associated with farming are discussed in Alternative A.

Livestock use levels would decrease by 21% from current levels, going from 10.3 ac/AUM to 13 ac/AUM in 20 years. The effects of livestock use are described in Alternative A (see Appendix E for comparison tables and figures of actions and stocking levels).

The effects of ORV use as described in Alternative A would occur on about 1.2 million acres. The effects of mineral and energy exploration and development as described in Alternative A would occur on 1.4 million acres.

Management of the entire area as a full suppression area would reduce the total acres burned which would reduce erosion.

Riparian/fisheries habitat improvement as discussed in Alternative B would occur on 75 stream miles.

Vegetation manipulation would occur on 3,150 acres and would include 1,650 acres of seedings and 1,000 acres of spraying and 500 acres of burning. The impacts of vegetation manipulation would be as described in Alternative B.

An estimated 60,000 acres of rangeland in fair ecological condition would improve to good ecological conditions with the effects as described in Alternative C.

Range Resources

Under this alternative, short term livestock forage levels would be reduced 26% which is a decrease of 43,650 AUMs from currently authorized 5-year average use levels. In the long-term, an additional 10,399 AUMs would be made available in areas that have minimal environmental conflicts. This use would come from additional land treatments of 3,150 acres producing 339 AUMs and structural improvements making usable 10,000 AUMs of currently unutilized forage (Appendix Table F-1). Land transfers of 13,840 acres would result in a loss of about 886 AUMs (8,680 acres would

Environmental Consequences

not result in forage losses). Livestock use in 20 years (128,553 AUMs) would be 21% below currently authorized forage use levels.

Implementation of grazing systems and improvements would be necessary to achieve the objectives. Priority would be given to those areas that have major wildlife, riparian or other conflicts that would directly benefit from a grazing system that incorporated mitigation for those values.

Long-term improvement in ecological condition is expected in MUA's 2, 3, 8, 11, 14, and 15. Approximately 54,450 acres would improve from fair to good condition and approximately 5,950 acres would improve from poor to fair or better condition. The remaining 10 MUA's are not expected to change because of site potentials, current species composition, and climatic factors (see Alternative A discussion).

Reducing the amount of forage use made by livestock in the spring season in MUA 2 and increasing the amount made in the fall, would result in short-term increase in plant vigor of native species and reduced competition with wintering mule deer. Long-term impacts include more vigor on perennial native forage plants, increased surface litter, greater forage yields (Stoddart and Smith), and increased potential to improve areas from fair to good condition. Small portions (<3%) may improve to fair or better condition class if significant remnants (>15%) of the perennial native plants are remaining.

Wild Horses

Reductions in livestock forage competition and the lack of agricultural development would benefit the population. Numbers are expected to increase rapidly to the desired levels and may comfortably fluctuate higher than desired levels between gatherings without major impacts. Populations would be most limited by the lack of well distributed summer season watering areas.

Horse population dynamics are expected to benefit. Higher numbers would reduce inbreeding effects. New breeding animals from other district populations are expected to be introduced which would better the existing gene pool and produce a more healthy and better looking population in the long-term.

Terrestrial Wildlife

Under Alternative D steps have been taken to reduce livestock use and possible competition with wildlife. Livestock stocking rates would decrease approximately 20% from the existing rate. The actual reduction in AUMs by MUA can be seen in Appendix Table B-4. The greatest decline in AUMs would occur on the crucial winter ranges for deer in MUAs 15 and 16. In addition, grazing use levels on grasses would be decreased by 20%. As shown in Figures 4-1, 4-2, 4-3, and 4-4 ecological condition would only change slightly over the 20 year period. The most important ecological

condition change for wildlife would occur in the fair condition class. A total of 54,450 acres would improve from fair to good condition. The majority of this acreage lies in mule deer crucial winter

range, elk winter range and antelope summer range. The MUAs affected are 2, 10, 15 and 16. Wildlife habitat improvement projects are planned for 33,450 acres. These would benefit sage grouse, mule deer, elk, bighorn sheep and antelope. The location of these improvements and type of improvement can be seen in Appendix Tables B-5. The above changes would greatly benefit big game habitat and population numbers. More forbs would be available for antelope and mule deer. Bighorn sheep would face less livestock competition on the plateaus adjacent to the canyons. There would be less competition for early spring grass and fall green up on mule deer and elk winter and spring habitat.

The 13,840 acres of public lands identified for transfer should not seriously impact wildlife since all of the acreage must pass through a field review process which would identify for retention parcels important for their wildlife values.

Livestock range improvement projects are planned for 5,446 acres. Management guidance common to all alternatives should prevent any impacts other than minor ones.

Alternative D protects 2,949 acres in Salmon Falls Creek canyon with an ACEC designation. Management as an ACEC would prevent new roads, pump stations, utility lines, and small hydro development thus protecting existing habitat.

In Alternative D, wild horses would be managed for increased numbers. The 125 animal increase of the Saylor Creek herd would have negligible effect on big game. Nongame nesting birds may be disturbed to a greater extent but the impact is thought to be minimal.

In Alternative D, 823,980 acres are protected by occupancy stipulations. Important breeding, nesting, calving, farming and wintering areas are protected (Table 2, page 82).

Recreational ORV closure on 281,697 acres would benefit nongame, upland game, and big game habitat.

The 75 miles of stream protection benefits all classes of wildlife. Increased forb production in the exclusion areas should benefit sage grouse brooding. Adequate cover should allow greater production of waterfowl.

Twenty AMPs would be developed under Alternative D. Since the AMPs are not identified as to location nor type of grazing systems, impacts to wildlife or benefit from such management remains unknown.

Alternative D would allow projected reasonable numbers of all big game species to be achieved by 2005.

Riparian Habitat

Under the protection alternative, improvements to riparian habitat would occur due to the proposed fencing of 55.2 miles, and reduced stocking levels in all management units (Table 4-9).

Young growth riparian woody species would have an increased survival rate, and eventually replace old decadent growth. Utilization of the riparian ecosystem by wildlife would increase as additional feeding, resting, and nesting sites become available.

Table 4-9
20-Year Projected Riparian Habitat Condition (Alt. D)

Habitat Condition	Miles	%
Poor	52	14
Fair	116	31
Good	191	52
Excell./Unsuit.	11	3
TOTAL	370	100

Aquatic Habitat

Reduced livestock grazing and fencing of all aquatic habitat that is impacted by livestock and has a potential to improve would improve aquatic habitat. Areas in excellent and good condition would improve by 20%. Improvement would also occur within the poor and fair condition categories (Figure 4-6 and Appendix Table H-1).

Salmon Falls Creek would be protected from small hydro-development with the designation as ACEC.

Long-term water quality would improve as a result of decreased areas burned (full suppression fire management covers the whole area) and improved watershed condition.

Fire Management

Fire occurrence and suppression costs adjacent to farming projects would remain at current levels. Full suppression action on the entire area would reduce the acreage burned in the limited suppression area by 5-10%, but suppression costs would increase.

Recreation

Lands available for dispersed recreation use would be maximized under this alternative with only 13,840 acres identified for disposal.

The affects of land disposal on ORV use as described in Alternative A would be minimal and insignificant.

Areas for "limited" ORV use would decrease by 25,633 from that identified in Alternative C. However, "closed" acreage would increase to 281,697 acres. Again impacts on ORV recreation would be minimal.

Opportunities for primitive recreation would receive the most protection in this alternative. A total of 208,511 acres would be protected from the gradual loss of primitive recreation values due to range projects, mineral development, utility corridors and other proposals that would arise over the years.

The following acreages would be designated as SRMAs and would receive special management emphasis for recreation values.

Salmon Falls Creek	5,600 acres
Hagerman-Owsley	7,074 acres
Bruneau/Jarbidge Rivers	57,000 acres
Jarbidge Forks	4,320 acres
Bennett Hills	56,680 acres
Oregon Trail	14,112 acres
TOTAL	<u>144,786 acres</u>

Impacts to recreation in this alternative would be virtually identical to that of Alternative C.

Cultural Resources

Management actions and impacts are similar to those described in Alternative C with the following exceptions: Cougar Creek cultural resource site complex would receive National Register nomination as well as ACEC designation, and sites within this complex which are currently deteriorating from livestock trampling would be fenced. Signs describing the archaeological value of, and legal restrictions on the unauthorized excavation of sites currently being vandalized would be placed in appropriate locations. Twenty-one sites in the Dry Lakes cultural resource site complex would be fenced, thus ensuring their potential for scientific research. Juniper Ranch and Clover Creek cultural resource complexes would be nominated to the National Register of Historic places as an added measure of protection.

Paleontologic Resources

The full impacts to the paleontologic resources of the Jarbidge Resource Area are unknown as an inventory has not yet been completed. One known paleontologic site is identified for possible transfer from federal ownership under this alternative. The site is not presently known to contain any "scientifically significant" fossils. The small amount of land identified for transfer in this alternative indicates a low probability of loss or damage to other known and undiscovered sites and materials.

The establishment of site clearances, the completion of the paleontologic inventory and the designation of Sand Point and Hagerman as ACECs would allow the Bureau to keep adverse impacts to a minimum (see pages 61-67, Areas of Critical Environmental Concern).

Wilderness

Wilderness designation of all three WSAs would insure long-term protection of wilderness values. Designation would prevent potential long-term impacts from oil and gas developments. Except for livestock grazing effects, natural ecological process would continue unimpeded. ORV use and utility and transportation development would not effect wilderness values (see Appendix J - Wilderness Analysis).

Energy and Minerals

Oil and Gas

Approximately 79% of the resource area would remain available for leasing under this alternative. The major areas closed to leasing are the existing withdrawals amounting to approximately 138,643 acres and the wilderness areas amounting to approximately 208,511 acres.

The 102,746 acre Saylor Creek Bombing and Gunnery Range represents the greatest impact to leasing as it is almost entirely surrounded by leases. Although the area has been classified as prospectively valuable by the U.S.G.S, the actual potential is considered to be low.

The proposed wilderness areas have not had any significant leasing interest shown in them and are considered to have low potential.

There are 13,840 acres identified for transfer out of federal ownership in this alternative. The impacts of land transfer and the creation of a split estate are addressed by the State Office leasing

mineral specialists when they perform their mineral assessment of the identified lands. It has generally been held that the land transfer would not interfere with development.

The major areas proposed to have no surface occupancy stipulations are cultural and paleontological sites, the Birds of Prey essential nesting areas and areas within 500 feet of streams or reservoirs. These areas can be reached by slant drilling should oil or gas be discovered in the vicinity.

There are 827,108 acres of land proposed for seasonal occupancy stipulations to protect wildlife. All of the curlew area and a small portion of the crucial winter range for mule deer, antelope winter range and sage grouse areas affect existing leases and lease applications. The impact on access to leased lands is considered to be insignificant.

Based on the lack of any commercial oil or gas wells in Idaho, the five dry holes in the resource area, the low potential of the area, low industry interest and the above analysis, the overall impacts of this alternative on the availability of oil or gas leasing and development is considered to be insignificant.

Geothermal

Seventy-nine percent of the resource area would remain available for leasing under this alternative. The major areas closed to leasing are the existing withdrawals amounting to 138,643 acres and the wilderness areas amounting to approximately 208,511 acres.

None of the lands within the Known Geothermal Resource Areas, both state and federally classified, are affected by the Saylor Creek Gunnery Range withdrawal (102,746 acres). Approximately 2,100 acres of the state classified lands are within the Bruneau River WSA.

Of the approximately 117,760 acres of land identified as Geothermal Resource Areas, 480 acres have been identified for transfer from federal ownership. Two hundred of these acres are within the federally classified KGRA's (8,860 acres).

The impacts of land transfer and the creation of a split estate are addressed by the State Office leasing mineral specialists when they perform their mineral assessment of the identified lands. It has generally been held that the land transfer would not interfere with development.

The major areas proposed to have no surface occupancy stipulations are cultural and paleontologic sites, the Birds of Prey essential nesting areas and areas within 500 feet of streams or reservoirs. These areas can be developed off site and do not significantly affect the availability of the resource.

There would be 827,108 acres of land which would have seasonal occupancy stipulations to protect wildlife. The sage grouse stipulation affects the existing leases in the Mt. Bennett hills area. This has not

Environmental Consequences

been a significant problem to the development of the leases and is not expected to be in the future.

Based on the lack of commercial development of geothermal steam in Idaho for energy production, the lack of information on the reservoirs involved, the substantial decrease in industry interest, the isolation of the KGRA's and the above analysis, the overall impacts of this alternative on the availability of geothermal energy is considered to be insignificant.

Mining

Seventy nine percent of the resource area would remain available for the location of mining claims under this alternative. The major areas withdrawn from or restricting mineral location are the existing withdrawals amounting to 138,643 acres, the wilderness areas amounting to 208,511 acres and the proposed land transfers of 13,840 acres.

The 102,746 acre Saylor Creek Gunnery Range represents the largest block of land that is closed to mineral location. Present knowledge of this area indicates that the potential for the discovery of valuable locatable mineral deposits is low.

Of the remaining 35,897 acres under withdrawal, 20,914 acres are power site withdrawals which are handled under the Mining Claim Rights Restoration Act of 1955 or are withdrawals that only affect land actions.

The proposed wilderness areas have not had any mining claim interest except for gemstone materials in the Bruneau River Canyon. The areas are not favorable for the discovery of metallic minerals and have only a low to moderate favorability for industrial minerals (diatomite). This wilderness proposal is not considered to be a significant restriction to the overall availability of locatable minerals.

Only lands that are not mineral in character or have no known mineral potential would leave federal ownership unless the mineral estate is sold at fair market value. The transfer of lands that do not have mineral potential is not considered to be a significant impact on the availability of locatable minerals.

The Pine Grove Mining District, Volcano Mining District and Indian Hot Springs Jasper Claims are not significantly impacted by this alternative. These are the only areas that have had extensive mining activity.

Based on the presently known mining activity and mineral potential and the above analysis, the overall impacts of this alternative on the availability of locatable minerals is considered to be insignificant.

Mineral Materials

According to the Agricultural Environmental Impact Statement, 1.7 miles of gravel road would be needed for each section of new farmland. Based on road district standards of a 34 foot wide running surface 8" deep, this alternative would require an increase in materials production of 162,953 cubic yards.

County road building and maintenance over the past three years has required an average yearly production of 82,307 cubic yards. The existing sites can in most areas meet the demand. Reserves at the various existing sites would generally meet the long term (20 year) demand. The additional materials needed to build and maintain the new roads for the farms is not expected to be a significant factor in the overall continual depletion of the resource.

The Bureau would continue to be able to meet the material needs of the road districts in a flexible manner under this alternative.

Forest Management

Under this alternative, none of the forest land would be available for cutting. Therefore, there would be no harvesting of marketable timber.

Economics

Crop Agriculture

This alternative would lead to development for irrigated agriculture of 9,858 acres. Of this, 1,246 acres would be disposed of through exchanges, 448 acres would be disposed of through public sales, and 7,684 acres would be disposed of through either exchange or sale.

The total cost of electricity either used for pumping or lost from downstream generation would be \$3.6 million. Irrigators would pay 16% of \$0.6 million while other ratepayers would pay 84% of \$3.0 million.

The production of crops resulting from agricultural development would range from 4.8 percent of current 3-county production in barley to 7.6 percent of current production in sugar beets. These production increases would have little impact on production or prices either locally or nationally.

The one-time costs of installing water delivery and irrigation systems would be \$6.9 million. Annual expenditures for seed, fertilizers, herbicides, and fungicides would be \$1.6 million. Annual fuel costs for tractors and equipment would be \$400,000.

Farm income would increase \$446,000 locally and decline by \$401,000 nationally. Farms suppliers would realize a local income gain of \$1,774,000 and a national loss of \$1,597,000. Ranchers currently using the area would lose \$4,000 in income and ranch suppliers would lose \$6,700. The net income change as a result of the agricultural development in this alternative would be an annual loss of \$2.8 million (based on a net gain of \$211,000 to farmers, ranchers, and suppliers and a loss of \$3.0 million to electric company ratepayers). In addition, ranchers would

Environmental Consequences

lose capital value due to lost grazing privileges of between \$50,000 and \$222,000. A total of 886 AUMs would be lost to agricultural development.

Farm employment would increase locally by 66 while declining by 59 nationally. Farm suppliers would gain 255 jobs locally and lose 229 nationally. Ranch employment would decline by one job as would ranch supply employment. The net change in employment would be a gain of 31 jobs.

Livestock

Short-term stocking rates would decline by 36,000 AUMs. In the long-term, some AUMs would be gained back leaving the decline at 30,000 AUMs. The range improvements associated with this alternative would cost \$400,000. Table 4-10 shows the impacts by size group of the long-term, decreases in stock rates. These decreases include the reductions identified as resulting from agricultural development.

Table 4-10
Direct Income and Employment Changes
Alternative D

Size Group	Long-term Stocking Rates	Change In Use	Income Change	Employment Change
1	12,125	- 2,709	- 12,353	- 1.8
2	41,111	- 9,186	- 41,888	- 6.0
3	71,635	-16,006	- 72,988	-10.5
4	9,178	- 2,050	- 9,348	- 1.3
TOTAL	134,049	-29,951	-\$136,577	-19.6

In addition, there would be secondary income and employment losses (in the long-term) of \$227,000 and 33 jobs.

Changes in the grazing fee distribution would be as follows:

Range Improvement Fund	- \$29,951
Federal Treasury	- \$22,463
State of Idaho	- \$ 7,488
TOTAL	- \$59,902

The total capital value of the AUMs lost would amount to between \$1.7 million and \$7.5 million.

Recreation

Increased recreation use would provide economic benefits to the local economy, primarily retail trade. It is not known how the various alternatives would change expected recreation use. The specific economic benefits of such use cannot be identified as a result.

Summary

This alternative would have minimal impact due to agricultural development. Livestock losses would be of the same magnitude as the crop agricultural gains. Net income change would be a loss of \$142,000. Expenditures for seed, fertilizer, fuel, etc. would amount to \$2 million annually. The annual cost of electricity would be \$3.6 million, of which 84% would be paid for by non-irrigators. Net employment change would be a loss of 20 jobs. Grazing fee collections would be reduced by \$60,000. The capital value of lost AUMs would range from \$1.7 to \$7.5 million.

Subalternative D

Introduction

Since the actions in this alternative are the same as those described in Alternative D, except for the elimination of livestock grazing, impacts on several resources do not change significantly from those described for Alternative D. These resource elements are: Lands, Fire Management, Recreation, Paleontologic Resources, Energy and Minerals Resources, and Forest Management. These elements will not be specifically addressed in the following impact assessments.

Soil, Water, and Air

Impacts would be the same as described in Alternative D except for those relating to livestock grazing and livestock grazing activities. Removal of livestock use from the EIS area would result in a decrease in soil compaction and an increase in vegetation cover both of which would act to increase water infiltration and reduce run-off and resulting soil movement. As vegetation litter is allowed to accumulate on site, an improved nutrient cycling effect would occur which would help improve site productivity.

Range Resources

Removal of livestock would reduce forage use levels from 163,477 AUMs to 0 AUMs. Vegetation condition changes over 20-years is expected to be similar to that shown in Alternative D. A 3% increase in the improvement from poor to fair condition and a 5% increase in improvement from fair to good condition would be expected over levels shown for Alternative D. This improvement would primarily occur in MUAs 2, 10, 11, 14, 15, and 16. These MUAs have soil, vegetation, and climatic conditions that are favorable for plant successional changes. The large areas that are currently in poor, burned, or seeded condition classes are not expected to change significantly from current levels because of low site potentials, climatic conditions or the absence of native grass and forb species (see discussion in Alternative A). In 20 years, the vegetation condition classes would be as follows: Excellent 2%, Good 8%, Fair 8%, Poor 45%, Burned 12%, Seeded 22%, and Miscellaneous 3%. A period longer than the initial 20 year planning period will be needed to expect substantial changes in condition class. One study (Tisdale, Hironaka, and Fosberg 1969) indicated that all herbaceous vegetation is nearly depleted (as in most of the 45% of the area in poor) that recovery could be delayed for very long periods of time or indefinitely. This conclusion was reached after looking at some areas protected from grazing 25-30 years.

Except on crested wheatgrass seedings, forage production would not change significantly from levels described in Alternative D. Forage production on seedings is expected to decline approximately 3% in 20 years because of a decrease in plant vigor. Total forage production in 20 years would be 290,848 AUMs.

Wild horses would benefit from reduced forage competition as described in Alternative D.

Terrestrial Wildlife

Big game and sage grouse would greatly benefit under this sub alternative. The 3-5% improvement in ecological condition, predicted in the range section, only provides a small part of this benefit. The greatest benefit arises from the removal of competition for limited forbs and grass species during crucial time periods.

Antelope would benefit from the greater availability of forbs during the spring-summer period.

Mule deer would have abundant grass available during the critical early spring period and would not have to compete for grass during fall green-up.

Bighorn sheep would benefit from lack of competition for grass on the tables adjacent to the Jarbidge/Bruneau River habitat complex.

Elk would benefit from the lack of competition for grass yearlong.

Big game species are expected to exceed IDF&G population goals

Sage grouse would enjoy improved nesting cover and brooding cover. Forbs would be in greater abundance for young sage grouse as well as adults. Population numbers would be expected to increase substantially.

Riparian Habitat

Without livestock grazing, riparian/aquatic systems would experience a gradual restoration of natural habitat components as young growth woody species increase in number and eventually replace old decadent growth. Herbaceous ground cover would once again become a dominant factor of the riparian understory.

Increased vigor and influence of woody riparian species on stream banks would occur. Bank stability and resistance to erosion and spring scouring would follow, along with improvement in stream channel morphology and fisheries habitat. Anticipated habitat condition in 20 years is shown on Table 4-11.

Environmental Consequences

Nesting, feeding, and cover opportunities for wildlife would increase as the vegetative component of the riparian ecosystem matured in dimensional structure and diversity.

Table 4-11
20-Year Projected Riparian Habitat Condition (Alt. D₁)

Habitat Condition	Miles	%
Poor	42	11
Fair	92	25
Good	206	56
Excell./Unsuit.	30	8
TOTAL	370	100

Aquatic Habitat

The total elimination of livestock from the range would improve the aquatic habitat and related water quality by 24% over the existing quality in the excellent-good category. Seventy-two percent of the aquatic habitat would be in excellent or good condition. The remaining 28% in fair and poor condition would not be improved by livestock exclusion. The fair and poor condition of these areas is attributed to low site potential (the majority of these stream sites are intermittent).

Economics

Crop Agriculture

Impacts related to crop agriculture would be the same as in Alternative D.

Livestock

Elimination of livestock grazing would have significant adverse impacts to permittees in the area. There would be no range improvements under this alternative. Table 4-12 shows the impacts by size group of these reductions.

Table 4-12
Direct Income and Employment Changes
Alternative D₁ - No Grazing

Size Group	Long-term Stocking Rates	Change In Use	Income Change	Employment Change
1	0	-14,834	- 67,643	- 9.7
2	0	-50,297	- 229,354	-32.9
3	0	-87,641	- 399,643	-57.4
4	0	-11,228	- 51,200	- 7.3
TOTAL	0	-164,000	-\$747,840	-107.3

In addition, there would be secondary income and employment losses of \$1,244,800 and 179 jobs.

Changes in the grazing fee distribution would be as follows:

Range Improvement Fund	-\$164,000
Federal Treasury	-\$123,000
State of Idaho	- \$41,000
TOTAL	-\$328,000

The total capital value of the AUMs lost would range from \$9.3 million to \$41.0 million.

Recreation

Increased recreation use would provide economic benefits to the local economy, primarily retail trade. It is not known how the various alternatives would change expected recreation use. The specific economic benefits of such use cannot be identified as a result.

Summary

This alternative would have the same impacts related to agricultural development as Alternative D. The adverse impacts on local ranchers with this alternative would be very significant. The net income change would be a loss of \$1.8 million. The net employment change would be a loss of 253 jobs. Grazing fee collections would be reduced by \$328,000. The capital value of lost AUMs would range from \$9.3 to \$41.0 million.

Short-Term Use Versus Long-Term Productivity

The short-term uses of man's environment are described for each alternative in Chapter 2. The relationship of these short-term uses to long-term productivity for various resources is discussed in Chapter 4. The environmental consequences presented in Chapter 4 show that a differences in long-term productivity would be expected from one alternative to another. A comparative summary of the environmental consequences for each alternative is presented in Table 2-5.

Irreversible and Irretrievable Commitments of Resources

Implementation of any of the alternatives would limit potential future uses of the land and resources to some extent. Irreversible and irretrievable commitments of resources occur when future options are foreclosed or resource values are lost.

The Preferred Alternative (Alternative C) would result in the following irreversible or irretrievable commitments of resources:

An irretrievable loss of soil would occur on lands put into agricultural production.

Wildlife habitat would be modified on transferred lands converted to other uses. This would benefit pheasant populations but small mammal populations and other prey species for birds of prey would be reduced. This would result in a reduction of birds of prey (raptors). Agricultural development would also result in the loss of habitat for 20 to 25 pairs of long-billed curlews. These areas would be committed for the foreseeable future.

Approximately 15,500 AUMs of grazing use lost from conversion of transferred lands to other uses would be lost for the foreseeable future.

CHAPTER 5

CONSULTATION AND COORDINATION

The Draft Jarbidge Resource Management Plan/Environmental Impact Statement (RMP/EIS) was prepared by an interdisciplinary team with expertise in range management, wildlife, recreation, lands, wilderness, economics, soils, watershed, cultural resources, minerals and energy, fire management and fire ecology. The list of preparers is at the end of this chapter.

The planning process began in February 1981 with issue identification and the other steps of the planning process. Consultation and coordination with agencies, organizations, and individuals occurred in a variety of ways throughout the planning process. A special effort has been made to ensure that the alternatives are consistent with approved plans of local and state government. The following is a summary of the public participation and in-house coordination which occurred during preparation of the Draft Jarbidge RMP/EIS.

Issue Identification and Inventory Stage

- | | |
|-------------------|---|
| February 10, 1981 | Notice of Intent to prepare Resource Management Plan (RMP) published in Federal Register. |
| February 12, 1981 | Boise District Advisory Council was briefed on RMP process and preliminary issues. |
| March 6, 1981 | RMP mailout sent to 491 agencies, organizations, groups, and individuals announcing the beginning of the planning process and soliciting the identification of issues and planning criteria. Approximately 140 people responded by prioritizing and identifying issues. |
| April 3, 1981 | News release issued to announce that 23 areas (3 in Jarbidge RMP) will be considered in the planning process for potential wilderness designation. Public meetings were held in Boise (4/15/81), Marsing (4/16/81), and Bruneau (4/22/81). |
| April 10, 1981 | District Office Staff meeting - preliminary issue identification. |
| April 14, 1981 | Public meeting at Three Creek, Idaho to explain issues and inventory procedures. Forty-two people (primarily livestock permittees and representatives from State and Federal agencies) were in attendance. |
| April 28, 1981 | State Office Staff meeting - issue identification. |

- May 21, 1981 Area Manager meeting with local government officials and special interest groups (county commissioners, Idaho Cattleman's Association, etc.) to identify significant issues at Glens Ferry City Hall. Approximately 25 people attended.
- September 16, 1981 State Director briefing on issues identified for consideration in Jarbidge RMP.
- October 6, 1981 RMP mailout sent to 491 agencies, organizations, groups, and individuals to give results of initial issue identification.
- July 28, 1982 Meeting with Saylor Creek users at Glens Ferry City Hall to discuss inventory progress and the division of Saylor Creek into individual allotments.

In addition to the public meetings listed above, team members also made approximately 20 contacts with individuals concerning planning issues or the collection of inventory data.

Analysis of Management Situation and Formulation of Alternatives

During these steps of the planning process, an effort was made to contact over 500 agencies, organizations, and individuals who had expressed an interest in the development of the land use plan. Comments and input were received from a variety of sources, including the National Park Service, U.S. Forest Service, Idaho Department of Fish and Game, Idaho Department of Water Resources, County Commissioners, Grazing Associations, the Committee for Idaho's High Desert, Sierra Club, and several ranchers and agricultural development groups, as well as other individuals and groups. Following is a summary of the major public meetings, briefings, and in-house coordination which occurred during development of the draft alternatives and impact assessment stages.

- September 4, 1983 Land use plan briefing with Idaho Fish and Game at annual coordination meeting in Jerome.
- November 28, 1983 Preliminary identification of alternatives sent to 482 agencies, organizations, groups, and individuals soliciting comments.
- December 15, 1983 RMP open house held at Boise District Office. Twenty-one people attended and were briefed on the draft alternatives.
- January 17, 1984 Twin Falls County Commissioners meeting to discuss RMP alternatives at Twin Falls County Courthouse.
- February 10, 1984 State Director briefing on alternatives.
- February 14, 1984 Meeting with Nevada Department of Wildlife to discuss elk transplant and RMP alternatives at Jackpot, Nevada.

March 13, 1984	Meeting with 14 members of the Southside Grazing Association to discuss RMP alternatives. Held in Glens Ferry, Idaho.
March 27, 1984	Meeting with Hagerman Grazing Association to discuss RMP alternatives.
March 1984	Meeting with Region 4, Idaho Fish and Game to discuss impact assessments. Held in Jerome, Idaho.
April 6, 1984	Meeting with '71 Grazing Association to discuss RMP alternatives. Held in Buhl. Approximately 70 people attended.
April 23, 1984	Meeting with Region 3, Idaho Fish and Game to discuss impact assessments. Held in Boise.
April 30, 1984	Briefed Congressional delegation (Senator Symms, Congressman Craig, and Senator McClure) on RMP alternatives. Held in Boise.
May 14, 1984	Meeting with Elmore County Commissioners to discuss RMP alternatives. Held at Elmore County Courthouse in Mountain Home.

The Draft and Final RMP/EIS will be sent to the following individuals and organizations. This list is representative but not inclusive.

Elected Officials

Federal:

Senator James McClure
 Senator Steve Symms
 Congressman Larry Craig
 Congressman George Hansen

State:

Governor John Evans
 Senator James Risch
 Senator Walt Yarborough
 Representative Gerry Montgomery
 Representative Lyman Winchester

Local:

Elmore County Commissioners
 Owyhee County Commissioners
 Twin Falls County Commissioners

Federal Agencies

Department of Agriculture:

U.S. Forest Service
 U.S. Soil Conservation Service

Department of Defense:
U.S. Air Force

Department of Energy:
Bonneville Power Administration

Department of the Interior:
National Park Service
U.S. Bureau of Indian Affairs
U.S. Bureau of Reclamation
U.S. Bureau of Mines
U.S. Fish and Wildlife Service
U.S. Geological Survey

Department of Transportation:
Federal Aviation Administration

Environmental Protection Agency

State Agencies, Commissions or Boards

Idaho Department of Agriculture
Idaho Department of Fish and Game
Idaho Department of Health, Welfare and Environmental Services
Idaho Department of Lands
Idaho Department of Parks and Recreation
Idaho Department of Water Resources
Idaho Historic Preservation Office
Idaho Public Utilities Commission
Idaho State Clearinghouse
Idaho Outfitters and Guides Board

Advisory Councils

Boise District Multiple Use Advisory Council
Boise District Grazing Advisory Board

Organizations

Ada County Fish and Game League
Appaloosa Horse Club
American Fisheries Society
American Wilderness Alliance
Association of Idaho Cities
Association of Western Native Plant Societies
Audubon Society
Boise Chamber of Commerce
BSU Conservation Group
Caldwell Chamber of Commerce
Committee for Idaho's High Desert
Desert Bighorn Sheep Council
Desert Fishes Council
Desert Raiders
Desert Rats

Desert Research Institute
Desert Tortoise Council
Eagle Valley Environmentalists, Inc.
Earth First
Federation of Western Outdoor Clubs
Friends of the Earth
Gem County Rock and Mineral Society
Good Sam Club
Idaho Archaeological Society
Idaho Association of Counties
Idaho Carey Act Association
Idaho Cattlemen's Association
Idaho Conservation League
Idaho Environmental Council
Idaho Historical Society
Idaho Mining Association
Idaho Native Plant Society
Idaho Natural Areas Coordinating Committee
Idaho Outdoor Association
Idaho Outfitters and Guides Association
Idaho Petroleum Council
Idaho Rare Birds Committee
Idaho State Grange
Idaho Trail Machine Association
Idaho Wildlife Federation
Idaho Woolgrowers Association
Institute for High Desert Studies
League of Women Voters
Magic Valley Gem Club
Mountain Home Air Force Base Sportsman Club
National Council of Public Land Users
National Public Land Advisory Council
National Public Lands Task Force
National Rifle Association of America
National Wildlife Federation
Natural Resource Defense Council
Nature Conservancy
Northwest Mining Association
Oregon Wilderness Coalition
Owyhee Cattlemen's Association
Owyhee County Historical Society
Pacific League Foundation
Pacific Northwest 4-Wheel Drive Association
Public Lands Council
Sagebrush Rebellion, Inc.
Sierra Club
Snake River Audubon Society
Snake River Gem Club
Society for Range Management
Treasure Valley Club
Treasure Valley Rock and Gem Club
United 4 Wheel Drive Association
Wilderness Institute
Wilderness Society

Wildlife Management Institute
Wildlife Society
Wildlife Research Institute

Concerned or Affected Individuals, Companies, Businesses, and Schools

ARCO

Noranda Exploration, Inc.

Rivers Odysseys West

Salmon River Kayaks

TEXACO

Affected grazing permittees

Other businesses and industries

Colleges and universities

Desert Land Entry applicants

Other individuals

LIST OF PREPARERS

Name	Responsibility	Education	Experience
Delores Blom	Lands	Business Major - Boise State University	7 yr; Realty Specialist-BLM
Gary Carson	Project Leader/Jarbridge Resource Area Manager	B.S. Range Science - Utah State University	10 yr, Range Conservationist-BLM 5 yr, Range Staff Specialist-BLM, ISO 1 yr, Range Program Leader-BLM, ISO 2 yr, Area Manager-BLM
James Clark	Wildlife - Terrestrial	B.S. Wildlife Management - University of Nevada	3 yr, Range Conservationist-BLM 5 yr, Wildlife Biologist-BLM
Dana Danzer	Watershed	B.S. Fish & Wildlife Mgm't. - Montana State University	2 yr, Range Conservationist-BLM 5 yr, Watershed Specialist-BLM
Stan Frazier	Economics	B.S. Agricultural Economics - Oregon State University	9 yr, Economist-BLM
Galan Green	Fire Management	B.S. Range & Forest Mgm't. - Colorado State University	9 yr, Forester-BLM 1 yr, Fire Ecologist-BLM
Ed Gheen	Riparian Habitat	B.S. Wildlife Management -	3 yr, Fisheries Technician-Alaska Dep't. of Fish & Game 6 yr, Range Conservationist-BLM 6 yr, District Wildlife Biologist-BLM 2 yr, Wildlife Biologist-BLM, S.D. 3 yr, Fisheries/Wildlife Biologist-BLM
Bill Hagdorn	Planning Coordinator	B.S. Natural Science, M.S. Resource Development - Michigan State University Post Grad. Forestry & Environmental Planning - Oregon State University	2 yr, Outdoor Rec. Planner/Community Planner-Minnesota Dep't. of Natural Resources/State Planning 10 yr, Planning Bureau Chief-Idaho Parks & Recreation Department 1 yr, Instructor-Oregon State University 2 yr, Planning Coordinator-BLM
Larry Hanlon	Forestry	B.S. Forestry - New York State College of Forestry	18 yr, Forester-BLM 8 yr, Area Manager-BLM 2 yr, Realty Specialist-BLM
John Hays	Recreation, VRM, Wilderness	B.A. Psychology -Seattle Univ. M.S Forestry/Outdoor Recreation Management -University of Washington	5 yr, Outdoor Recreation Planner-BLM 2 yr, NPS
Ted Milesnick	Team Leader	B.S. Range Management - Montana State University	8 yr, Range Conservationist-BLM 4 yr, Environmental Specialist-BLM
Pat Olmstead	Aquatic Habitat	B.S. Fishery Biologist - Michigan State University	5 yr, Aquatic Habitat Biologist-BLM 2 yr, Resource Area Fisheries Biol.-BLM
Tom Seiner	Range/Wild Horses	B.S. Range Management - University of Idaho	2 yr, Range/Forestry/Recreation Tech.-USFS 8 yr, Range Conservationist-BLM
Ted Weasma	Mineral & Energy Resources/Paleontologic Resources	B.S. Geology - University of Washington	2 yr, Civil Engineering Technician-USFS 1 yr, Cascade Testing Field Geologist 1 yr, Drill Inspector-USFS 3 yr, Geologist-BLM
Jack Young	Cultural Resources	B.A. Inter-American Studies - University of Texas-El Paso M.A. Anthropology - Catholic University of America	5 yr, Resource Inventory Team Archaeologist-BLM 2 yr, Jarbidge Resource Area Archaeologist-BLM

REFERENCES

- Allen, R. G. and C. E. Brockway. 1979. Relationship of Costs and Water Use Efficiency for Irrigation Projects in Idaho. Research Technical.
- American Fisheries Society, Western Division. 1982. The best management practices for the management and protection of western riparian stream ecosystems.
- American Society of Range Management, Range Term Glossary Committee. 1964. A Glossary of Terms Used in Range Management. Portland, OR: American Society of Range Management.
- Behnke, R. J. 1977. Workshop on livestock and wildlife-fisheries relationships in the Great Basin. May 3-5, 1977. Sparks, Nevada.
- Behnke, R. J., M. Zarn. 1976. Biology of Threatened and endangered western trout. Tech Report RM-28, Rocky Mountain Forest and Range Exp. Station Ft. Collins Co.
- Blakeslee, L. 1979. Market effects of expended potato production in southwest Idaho. Unpublished study prepared for the BLM.
- Boccard, B. 1980. Important Fish and Wildlife Habitats of Idaho. U.S. Fish and Wildlife Service.
- Boly, W. 1980. The sagebrush rebels. New West Magazine. Nov. 3, 1980.
- Bowers, W., B. Hosfurd, A. Oakley, and C. Bund. 1979. Wildlife habitats in managed rangelands-the great basin of southeastern Oregon-native trout. Pacific Northwest Forest and Range Experiment Station. U.S. Forest Service.
- Chamberlin, T. W. 1982. Influence of forest and rangeland management on anadromous fish habitat in western North America. Timber Harvest. U.S. Department of Agriculture, Forest Service.
- Chaney, E. 1977. The Desert Land Act and Carey Act in Idaho: Implications for Existing Farmers and Ranchers, Idaho Conservation League, Agricultural Lands Project Summary Report, June 1977.
- Chapman, D. W. 1962. Effects of logging upon fish resources of the west coast. Journal of Forestry.
- Charley, J. L. and N. E. West. 1975. Plant-induced soil chemical patterns in some shrub-dominated semi-desert ecosystems of Utah. J. of Ecol. 63:945-964.
- Clayton, J. L. 1981. Soil disturbance caused by clearcutting and helicopter yarding in the Idaho batholith. USFS Intermountain Forest and Range Experiment Station.

- Cochnauer, T. 1980. Snake River Fisheries investigations. Job Ia, Survey of Fish populations in Snake River, Lower Salmon Falls Dam to Bliss Dam. Job Ib, Survey status of white sturgeon population in Snake River, Bliss Dam to C. J. Strike Dam Job Performance Report Proj. F-73-R-2 Idaho Department of Fish and Game.
- Cochnauer, T. and L. B. Mabbott. 1981. Instream flow study - annual report. Volume 48, No. 12. Idaho Department of Fish and Game.
- Completion Report Project B-039 IDA, Idaho Water Resources Research Institute University of Idaho.
- Council of Economic Advisors. 1983. Economic Report of the President. Table B-52. Consumer Price Indexes 1929-82.
- Dormar, J. F., Johnston, A., Smoliak, S. 1980. Organic Solvent-soluble Organic Matter from Soils Underlying Native Range and Crested Wheatgrass in Southeastern Alberta, Canada. J. Range Management 32(2). March.
- Duff, D. 1978. Riparian habitat recovery on Big Cr. Rich County Utah - A summary of 8 years of study. Proceedings of the Grazing and Riparian Stream Ecosystem Forum. Denver Co. Nov. 3, 1978. pg. 91-92.
- Federal Register - Volume 49 No. 14. Friday, January 20, 1984, pp. 2485-2488.
- Federal Register - Volume 49, No. 33. Thursday, February 16, 1984. pp. 5977-5978.
- FERC. 1982. A. J. Wiley Hydroelectric Project. FERC No. 2845 Idaho, Final Environmental Impact Statement FERC/EIS-0031.
- Fowler, J. M. and J. R. Gray. 1980. Market values of federal grazing permits in New Mexico. Rangelands, Vol. 2, No. 3, June 1980.
- Freeman, R. F., and R. K. Sharma. 1977. Survey of Fish Impingement at Power Plants in the United States. Vol. II. Inland Water. ANL/ES-56 Argonne Nat. Lab. Argonne, Ill.
- Gibbons, D. R. and E. O. Salo. 1973. An annotated bibliography of the effects of logging on fish of the western United States and Canada. U. S. Forest Service. Tech. Report PNW-10.
- Griffith, J. S., D. M. Daley, G. B. Berkham, P. L. Wallace, and P. J. Connally. 1981. Status report on the Shoshone sculpin, distribution, relative abundance and threats. report to U.S. Fish and Wildlife Service. Boise, Idaho, July 1981.
- Hamilton, J. R. and R. A. Lyman. 1984. If rights are subordinated-direct economic impact not likely to be large. Idaho Farmer-Stockman, Feb. 2, 1984.

- Hormay, A. L. 1970. Principles of Rest-Rotation Grazing and Multiple-Use Land Management. Washington: Government Printing Office. A joint publication of the U.S. Department of the Interior, BLM, and U.S. Dept. of Agriculture, Forest Service.
- Idaho Department of Fish and Game. 1981. Fisheries Management Plan. 1981-1985.
- Idaho Department of Health and Welfare. 1983. Idaho Water Quality Status Report. 79 pg.
- Idaho Dept. of Parks and Recreation. 1982. Idaho Outdoor Recreation Profile. Addendum to the 1977 SCORP. Elmore, Owyhee, Twin Falls Counties.
- Idaho Power Company. 1984. Personnel communication on current power rates to irrigators. April 6, 1984.
- Kauffman, B. and Krueger, W. and Vavra M. 1983. Impacts of cattle on stream banks in northeastern Oregon Journal of Range Management 36(6) November.
- Keller, C. R., P. K. Burnham. 1982. Riparian fencing, grazing, and trout habitat preference on Summit Creek, Idaho. North American Journal of Fisheries Management 2:53-59.
- Leister, G. Siskiyou Nation Forest Deat Tree (Snag) Guidelines. U.S. Forest Service, Eureka, California.
- Marcy, B. C. 1975. Entrainment of organisms at power plants with emphasis on fishes - an overview. pp. 89-106 in SB Saila, ed. Fisheries and Energy Production: A Symposium, Lexington Books, Lexington, Mass.
- Mathur, D., P. G. Heisey, and N. C. Magnusson. 1977. Impingement of Fishes at Peach Bottom Atomic Power Station, Pennsylvania. Trans. AM. Fish. Society 106(3):258-267.
- Myers, L. 1976. Woody Riparian Survey (unpublished). Dillon Resource Area, BLM.
- Moring, John R. 1975. The Alsea watershed study: effects of logging on the aquatic resources of three headwater streams of the Alsea River, Oregon, Oregon Department of Fish and Wildlife.
- Nielson, A. G. and J. P. Workman. 1971. The Importance of Renewable Grazing Resources on Federal Lands in the 11 Western States. Utah Agricultural Experiment Station, Logan, Utah State University, Circular 155.
- Northwest Power Planning Council. 1982. Columbia River Basin Fish and Wildlife Program Section 300. Anadromous Fish: Downstream Migration-Water budget. November 15, 1982.

- Pearse, C. K. and S. B. Wooley. 1936. The influence of range plant cover on the rate of absorption of surface water by soils. J. Forestry. 34:844-847.
- Platts, W. S. 1978. Livestock interactions with fish and aquatic environments: problems in evaluation; intermountain forest and range experiment station. U.S. Forest Service. Ogden, Utah.
- _____. 1982. Livestock and riparian-fishery interactions: what are the facts? Transactions 47th North American Wildlife and Natural Resources conference.
- _____. 1981. Effects of sheep grazing on a riparian-stream environment. Intermountain forest and range experiment station research note INT-307. U.S. Forest Service.
- _____. 1977. Livestock interactions with fish and their environments. Presentation at the Idaho Section, Society of Range Management. Boise, Idaho, Nov. 1977.
- _____, W. F. Megham, and W. G. Minshall. 1983. Methods for evaluating stream riparian, and biotic conditions. Intermountain Forest and Range Experiment Station. USFS
- Powell, T. A. and K. H. Lindeborg. 1981. Southwest Idaho Crop Enterprise Budgets. Misc. Series No. 66, Jan. 1981, Univ. of Idaho, Agricultural Experiment Station.
- Ratcliff, R. D., and J. N. Reppert. 1974. Vigor of Idaho Fescue Grazed Under Rest-Rotation and Continuous Grazing. Journal of Range Management 27:447-459.
- Rauzi, F. and C. L. Hansen. 1966. Water intake and runoff as affected by intensity of grazing. J. Range Management, Vol 19(6):351-356.
- Rickard, W. H. and C. E. Cushing. 1982. Recovery of streamside woody vegetation after exclusion of livestock grazing. Journal of Range Management 35(3) May.
- Robinson,, J. L. 1979. Stream morphology in two adjacent grazing systems. University of Wyoming.
- Ruff, J. Northwest Power Planning Council. Portland, Oregon. personal communication 4/25/84.
- Sadler, R. R. 1970. Tech. Note. Buffer strips a possible application of decision theory. Bureau of Land Management, U.S. Dept of Interior.
- Sanders, K. D., Voth, A. S. 1983. Ecological changes of grazed and ungrazed plant communities. Symposia: Managing Intermountain Rangelands - Improvement of Range and Wildlife Habitats. General Technical Report Int-157: 176-179.

- Schermerhorn, R. W. 1977. Marketplace aspects of desert land conversion. A speech given in Twin Falls, Idaho in Feb. 1977 at a conference sponsored by the Idaho Conservation League.
- Sheridan, W., R. Armstrong. et al. 1976. Logging and fish habitat. USDA, Forest Service, Alaska Department of Fish and Game, Alaska Dept. of Natural Resources.
- Simpson, J. and R. Wallace. 1978. Fishes of Idaho. The University Press of Idaho. pg. 237.
- Society for Range Management, Range Term Glossary Committee. 1974. A Glossary of Terms Used in Range Management. 2nd Ed. Denver: Society for Range Management.
- Stoddard, L. A., Smith, A. D., and T. W. Box. 1975. Range Management. 3rd Ed. New York: McGraw-Hill.
- Thomas, J. W. et al. 1976. Riparian zones-their importance to wildlife and their management.
- Tisdale, E. W., Hironaka, M., Fosberg, M. A. 1969. The Sagebrush Region in Idaho - A Problem in Range Resource Management. Idaho Ag. Exp. Sta. Bul. 512. Moscow, Id.; University of Idaho. 15 pp.
- U.S. Congress. 1934. Taylor Grazing Act, As Amended.
- USDA, Forest Service. 1965. Rotation, Rest-Rotation, and Season Long Grazing on a Mountain Range in Wyoming. by W. M. Johnson. Forest Service Research Paper RM-14.
- _____. 1972. Rest-Rotation Grazing of Harvey Valley: Range, Health, Cattle Gains, Costs. by Raymond D. Ratliff, Jack N. Reppert, and Richard J. McCoonen. Forest Service Research Paper PSW-77.
- U.S. Dept. of Agriculture, Statistical Reporting Service. 1982 Idaho Agricultural Statistics, in cooperation with Idaho Dept. of Agriculture, compiled by Idaho Crop and Livestock Reporting Service.
- _____. 1981. Idaho Agricultural Statistics
- _____. 1980. Idaho Agricultural Statistics
- U. S. Department of Agriculture. 1925. Yearbook of Agriculture.
- U. S. Dept. of Commerce, Bureau of Economic Analysis. 1983. Personal Income by Major Sources 1976-1981. Regional Economics Information System, Unpublished.
- U. S. Dept. of Commerce, Bureau of Economic Analysis. 1983. Employment by Type and Broad Industrial Source 1976-81. Regional Economics Information System, Unpublished.

- U. S. Dept. of Commerce, Bureau of Economic Analysis. 1983. BEA Farm Income and Expenditures 1976-1981, Regional Economics Information System, Unpublished.
- U. S. Dept. of the Interior, Bureau of Land Management. 1984. Draft Environmental Impact Statement, Owyhee Canyonlands Wilderness. Boise District Office.
- U. S. Dept. of the Interior, Bureau of Land Management. 1984. Farm budgeting computer model. Computer runs made to determine costs and returns from ag. development.
- U. S. Dept. of the Interior, Bureau of Land Management. 1979. Final Environmental Statement, Agricultural Development for Southwest Idaho, Boise District Office.
- U. S. Dept. of the Interior, Bureau of Land Management. 1980. Ranch budgets for the Twin Falls EIS area. by Economics, Statistics, and Cooperatives Service, USDA, unpublished.
- U. S. Dept. of the Interior, Bureau of Land Management. 1981. Ranch budgets for the Bruneau/Kuna EIS area. by Economics, Statistics, and Cooperatives Service, USDA, unpublished.
- U. S. Fish and Wildlife Service. 1980. 1980 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation-Idaho.
- U. S. Geological Survey. 1982. Water Resources Data for Idaho Water year 1981. Vol. I. Great Basin and Snake River Basin above King Hill ID-81-I.
- U. S. Water Resources Council. 1977. Guideline 5 Regional Multipliers, prepared by Regional Economics Analysis Division, Bureau of Economic Analysis, U. S. Dept. of Commerce.
- Whittlesey, N. K. and W. R. Butcher. 1979. Economics of Water Tradeoffs in the Columbia River System paper presented at Eastern Washington University, October 25, 1979.
- Winegar, H. 1980. Pers. Communication on Camp Creek Livestock Exclosure; Oregon Department of Fish and Wildlife.
- Winegar, H. 1977. Camp creek Channel fencing-plant, wildlife, soil, and water response. Rangemans Journal 4(1) Feb. 1977.

GLOSSARY

ACRONYMS

ACEC - Area of Critical Environmental Concern
AMP - Allotment Management Plans
AUM - Animal Unit Month
BLM - Bureau of Land Management
BOP - Birds of Prey
BRA - Bruneau Resource Area
CA - Carey Act
CFL - Commercial Forest Land
cfs - cubic feet per second
CMP - Cultural Management Plan
DEIS - Draft Environmental Impact Statement
DLE - Desert Land Entry
EA - Environmental Assessment
FLPMA - Federal Land Policy and Management Act of 1976
GEM - Geology, Energy, and Minerals
IMP - Interim Management Plan
JRA - Jarbidge Resource Area
KGRA - Known Geothermal Resource Area
MBdFt - thousand board feet
MHAFB - Mountain Home Air Force Base
MIC - Maintain, Improve, Custodial
MUA - Multiple Use Area
NEPA - National Environmental Policy Act of 1969
ONA - Outstanding Natural Area
ORV - Off Road Vehicle
PUF - Proper Use Factor
RA - Resource Area
RAMP - Recreation Area Management Plan
RMP - Resource Management Plan
ROS - Recreation Opportunity Spectrum
ROWS - Rights-of-Ways
RPP - Recreation and Public Purpose Act
SHPO - State Historic Preservation Officer
SOP - Standard Operating Procedures
SRBOP - Snake River Birds of Prey
SRMA - Special Recreation Management Area
TMP - Timber Management Plan
TPCC - Timber Production Capability Class
USFS - United States Forest Service
VRM - Visual Resource Management
WHMP - Wild Horse Management Plan
WMP - Wilderness Management Plan
WSA - Wilderness Study Area

ACTIVE GRAZING PREFERENCE. That portion of the grazing preference that could be licensed and used should the livestock operator desire.

ACTIVITY OCCASION. Participation by one person in one activity for all or part of one day.

ACTUAL LIVESTOCK USE. The use (in AUMs) made of forage on an area without reference to permitted or recommended use.

ALLOTMENT. An area designated for use by a prescribed number of livestock.

ALLOTMENT MANAGEMENT PLAN (AMP). A documented program which applies to livestock operations on the public lands and which is prepared in careful and considered consultation, cooperation, and coordination with the permittee(s) or lessee(s) and others involved. It prescribes the manner in and extent to which livestock operations will be conducted in order to meet the multiple use and sustained yield objectives as determined in the resource management plan.

ANIMAL UNIT MONTH (AUM). The amount of forage (800 lb. dry weight) required to sustain the equivalent of 1 cow, 1 horse, 5 sheep, 5.3 deer, or 9.4 antelope for one month.

AVERAGE LICENSED GRAZING USE (five year average use). The arithmetic mean (average of authorized (or licensed) grazing in AUMs over a particular time period.

BEA. Bureau of Economic Analysis, U.S. Department of Commerce.

BEST MANAGEMENT PRACTICES. A practice or combination of practices that are the most effective and practical (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with water quality goals.

BU. Bushel, a unit of dry measure.

CAPITAL VALUE. The value at which assets (grazing privileges) can be sold. Market value.

CARRYING CAPACITY. The maximum use rate possible without inducing damage to vegetation or related resources. Carrying capacity relates to livestock numbers, wildlife numbers, recreational use, etc.

CLASS II CULTURAL RESOURCE INVENTORY. A sample-oriented field inventory designed to locate and record, from surface and exposed profile indications, all cultural resource sites within a portion of a defined area in a manner which will allow an objective estimate of the nature and distribution of cultural resources in the entire defined area.

CLEAN AIR ACT. A series of Congressional acts and amendments requiring the establishment of air quality standards and national standards for air pollution control. The general intent is to "protect and enhance the quality of the Nation's air resource."

CLIMAX PLANT COMMUNITY. The culminating stage in plant succession after a series of successive vegetation stages and has reached a highly stable condition.

C&MU. The Classification and Multiple Use Act of 1964 which specified that public lands would not be available for entry under various land laws (DLE/CA) within a certain legally described area. In the JRA, it would be south of designated line.

CONDITION.

- Ecological Condition. The present state of the vegetation on a range site in relation to the climax (natural potential) plant community for that site.
- Range Condition. Synonymous with ecological condition.
- Seeding Condition. The amount and productivity of seeded species measured in terms of maximizing production of forage for livestock. Considers the amount of reinvading shrub species in the treatment area.

COOPERATIVE FARM AGREEMENT. An administrative agreement between the BLM and individuals (negotiated by Idaho Fish and Game) which permits farming on public lands with the understanding that certain portions of the farmed area shall be left unharvested to provided wildlife habitat.

COORDINATED RESOURCE MANAGEMENT PLAN (CRMP). A plan developed cooperatively by appropriate State and Federal agencies to formulate a resource management program that integrates and makes provision for all resource values and uses within the selected geographical area.

CRITICAL GROUNDWATER AREA. Several ground water basin areas within the State of Idaho have been developed to the extent that no new rights can be initiated. These basins have been closed, pursuant to state law, because development has drastically lowered the water levels. Drilling wells or any additional development is allowed only to fill existing water rights or for domestic use and stock watering.

CRUCIAL HABITAT. Habitat which is absolutely basic to maintaining viable population of fish, wildlife, or plants during certain seasons of the year or specific reproduction periods.

CULTURAL RESOURCE CLEARANCE. A statement by a competent professional historical or archaeologist as to whether or not any known cultural resources will be adversely affected by an undertaking and requires that such a statement be based on the results of an appropriate investigation directed at determining if and where cultural resources exist in the vicinity of an undertaking.

CULTURAL RESOURCE SITE. A physical location of past human activities or events. Cultural resource sites are extremely variable in size and range from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features. Prehistoric and historic sites which are recorded as cultural resources have sociocultural or scientific values and meet the general criterion of being more than 50 years old.

CWT. Hundred weight, a unit of weight measure equal to 100 pounds.

DAY (Recreation). Any part of a day spent participating in a given activity.

DESERT LAND ACT/ENTRY. Passed in 1877 and subsequently amended, this act allows a state resident to file a patent application on up to 320 acres of public land with the intent of developing said land for cultivated agriculture.

DEVELOPED RECREATION SITE. See Recreation.

DISPERSED RECREATION. See Recreation.

DISTANCE ZONE. The area that can be seen from a travel route as foreground-middleground up to 15 miles), and areas which are seldom seen.

ECOLOGICAL CONDITION. See Condition.

ENDANGERED SPECIES. Any animal/plant species in danger of extinction throughout all or a significant portion of this range.

ENVIRONMENTAL ASSESSMENT (EA). A concise public document prepared to provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact. It includes a brief discussion of the need for the proposal, alternatives considered, environmental impact of the proposed action and alternatives, and a list of agencies and persons consulted.

ERODIBILITY. Susceptibility of soil to erosion.

FEDERAL LAND POLICY AND MANAGEMENT ACT (FLPMA). Public Law 94-579 signed by the President on October 21, 1976. Establishes public land policy for management of lands administered by the Bureau of Land Management. FLPMA specifies several key directions for the Bureau, notably that: management be on the basis of multiple use and sustained yield; land use plans be prepared to guide management actions; public lands be managed for the protection, development, and enhancement of resources; public lands be retained in Federal ownership; and public participation be utilized in reaching management decisions.

FIRE MANAGEMENT. The protection and enhancement of the resources of the public lands through use of fire as a management tool.

- Full Suppression. Immediate aggressive action is taken on all new fires on or threatening public lands.
- Limited Suppression. A policy that considers areas where fire control is extremely difficult or where the values threatened do not warrant the expenses associated with maximum suppression procedures.
- Prescribed or Prescription Burning. Fires burning under conditions that have previously been determined to be beneficial and that meet land management objectives.

43 CFR 3809. Regulations which provide for mineral entry, exploration, location, operations, and purchase pursuant to the mining laws and in a manner that will assume that unnecessary and undue degradation do not occur and that protection is afforded nonmineral resources. It also provides for reclamation of disturbed areas. These regulations pertain to locatable minerals only.

FULL SUPPRESSION. See Fire Management.

GRAZING PREFERENCE. The total number of animal unit months of livestock on public lands apportioned and attached to base property owned or controlled by a permittee or lessee.

GRAZING SYSTEMS. Systematic sequences of grazing use and non-use of an allotment to reach or maintain identified multiple-use goals or objectives by improving or maintaining the quality and quantity of the vegetation.

HABITAT MANAGEMENT PLAN (HMP). A written and approved activity plan for a geographical area of public lands which identifies wildlife habitat management actions to be implemented in achieving specific objectives related to RMP/MFP planning document decisions.

INFILTRATION RATE. The rate at which water enters the surface soil.

INTRUSION. A feature (land and water form, vegetation, or structure) which is generally considered out of context because of excessive contrast and disharmony with the characteristic landscape.

KNOWN GEOTHERMAL RESOURCE AREA (KGRA). An area in which the geology, nearby discoveries, competitive interests and other indicia would in the opinion of the Secretary (of the Interior) has high prospects for extraction of geothermal steam or associated geothermal resources.

KW. Kilowatt, a unit of power equal to 1000 watts.

KWH. Kilowatt hour, a unit of energy, equivalent to the energy transferred or expended in one hour by one kilowatt of power; approximately 1.34 horsepower hours.

LAND REPORT. A written report that documents the physical, environmental, social, and economic factors used in making land use decisions on all lands or rights-of-way actions.

LEASABLE MINERALS. See Minerals.

LIMITED SUPPRESSION. See Fire Management.

LOCATABLE MINERALS. See Minerals.

MINERALS.

- Leasables. Types of minerals, such as coal, oil, oil shale, gas, phosphate, sodium, potash, and geothermal resources, whose prospecting and development on public lands under permit or lease was authorized by the Minerals Leasing Act of 1920, as amended and supplemented.
- Locatables. Precious or semi-precious minerals that are not considered to be common variety minerals. Locatable mineral deposits can be claimed and the mining claim patented, thus converting it to private ownership. These minerals are covered by the Mining Law of 1872.
- Salables. Mineral materials such as common varieties of sand, stone, gravel, cinders, pumice, pumicite, and clay that may be acquired under the Materials Act of 1947, as amended.

MINING LAW OF 1872. An act which authorized placer and lode mining claims, mill sites, and tunnel sites of specific dimensions. Requires \$100 worth of work be done on each claim every year.

MITIGATING MEASURES. Actions to avoid, minimize, reduce, eliminate, or rectify the impact of a management practice.

MONITORING. The collection and analysis of data to evaluate rangeland resources on specific areas to determine the effectiveness of actions in meeting management objectives.

MULTIPLE USE. The management of all the resources of the public lands so that they are utilized in the combination that will best meet the needs of the American people.

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969. A Congressional Act which establishes a national environmental policy. The goal of the act is to improve the quality of the human environment by procedurally requiring all Federal agencies to give equal and complete consideration to environmental values in all their decision making activities.

NATIONAL HISTORIC LANDMARK. Areas of major national historic and cultural significance designated by the Secretary of the Interior (by authority of the Historic Sites Act of 1935). The program is administered by the National Park Service. Dominant objective of the designation is management of the resource for its historic values.

NATIONAL HISTORIC TRAILS (OREGON TRAIL). Extended trails which follow as closely as possible and practical the original trails or routes of travel of national historic significance. Their purpose is the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment. (The National Trail System Act, as amended.)

NATIONAL NATURAL LANDMARK. A specific area designated by the Secretary of the Interior (by authority of the Historic Sites Act of 1935) which contains a representative example(s) of the nation's natural history, including terrestrial or aquatic communities, landforms, geological features, or habitats of native plant and animal species, possessing national significance in illustrating or interpreting the nation's natural heritage.

NATIONAL REGISTER OF HISTORIC PLACES. The official list, established by the Historic Preservation Act of 1966, of the Nation's cultural resources worthy of preservation. The Register lists archaeological, historic, and architectural properties (i.e., districts, sites, buildings, structures, and objects) nominated for their local, State, or national significance by State and/or Federal agencies and approved by the National Register staff. The Register is maintained by the National Park Service.

NESTING/BROOD-REARING AREAS (HABITAT). Localized areas used by some species of the grouse family for nesting and raising of young chicks (broods).

NORMALIZED CROP PRICE. A five-year weighted average of crop prices. Used in economic analysis of farm projects to account for the wide variation in prices that are common to agricultural products.

NOTICE OF INTENT. Required under 43 CFR 3809. When surface disturbance of five acres or less per year at a mining operation will occur, a written notice must be sent to BLM 15 days prior to starting the operation. The notice describes the operation and its location and must contain a statement that the lands will be reclaimed to the standards spelled out in the regulations.

ORDER 3 SOIL SURVEY. A low intensity or scale of soil mapping. In mapping soil landscapes, soil mapping unit lines are drawn as nearly as possible to the natural landscape. Resulting soil mapping units are, therefore, relatively large (generally 40 plus acres) and made up of various soil series, associations, and complexes.

OUTSTANDING NATURAL AREA (ONA). Areas of outstanding scenic quality, natural wonder, or scientific importance that merit special attention and care in management to insure their preservation in their natural condition.

PLAN OF OPERATION. Required by 43 CFR 3809 for mining operations where surface disturbance will exceed five acres per year or where operations are proposed in specially designated areas (wild and scenic rivers, ACECs, wilderness areas, areas closed to or with restricted ORV access, or areas withdrawn from mining where valid existing rights are being exercised). The plan must describe the entire operation including equipment, location of access, support facilities, drill sites, measures to prevent unnecessary or undue degradation, and reclamation plans. The plan of operation must be approved by the BLM authorized officer.

PLANT SUCCESSION. The process of vegetational development whereby an area becomes successively occupied by different plant communities of higher ecological order.

PREFERRED ALTERNATIVE - The plan alternative which management has initially selected as offering the most acceptable resolution of the planning issues and management concerns.

PRESCRIBED OR PRESCRIPTION BURNING. See Fire Management.

PREY BASE. The collection of prey species in an area that are used as a food source for a predator or group of predators.

PREY SPECIES. An organism killed and at least partially consumed by a predator. In the case of raptors, the prey is usually a small mammal or reptile (i.e. rabbit, snake, ground squirrel, etc.).

RANCH CONSOLIDATION. The merger of two or more ranching operations.

RANGE CONDITION. See Condition.

RECLAMATION STIPULATIONS. Special conditions included in mineral leases, permits, plans of operations, etc., which require that reasonable measures be taken to prevent unnecessary or undue degradation of the public lands, including resloping land disturbed by operation to an appropriate contour and, where necessary, revegetating disturbed areas.

RECREATION.

- Developed Recreation Sites. Distinctly defined area where facilities are provided for concentrated public use, e.g., campgrounds, picnic areas, and boat launches.
- Dispersed Recreation. Recreation of various kinds that occurs generally throughout a large area and is not confined to a specific place, e.g., hunting, hiking, ORV use, and horseback riding.

RECREATION AND PUBLIC PURPOSES ACT. A Congressional act which authorizes the Secretary of the Interior, under specific conditions, to sell or lease public domain lands to State and local governments for recreation and other public purposes and to qualified non-profit organizations for public and quasi-public purposes, including recreation, education, and health.

RECREATION AREA MANAGEMENT PLAN (RAMP). A written and approved activity plan for a geographical area of public lands which identifies recreation management actions to be implemented in achieving specific objectives related to RMP/MFP planning document decision. An RAMP is required for each area designated a Special Recreation Management Area.

RENEWABLE RESOURCES. Resources whose supply regenerate themselves over time. Use of these resources can continue indefinitely provided they are managed under a sustained yield philosophy. Living organisms and others such as soil and water which are closely associated with and affected by living organisms.

RESOURCE MANAGEMENT PLAN (RMP). A land use plan as prescribed by the Federal Land Policy and Management Act which establishes allowable resource uses and related levels of production or use to be maintained within the concepts of multiple use and sustained yield.

SALABLE MINERALS. See Minerals.

SCENIC AREA. An area that provides exceptional scenic quality and/or scenic vistas that merit special management attention to insure their protection from visual intrusions.

SEEDING CONDITION. See Condition.

SENSITIVE SPECIES. Species whose ranges are so limited that any reduction in numbers, habitat availability, or habitat condition could result in their being placed on the endangered list.

SENSITIVITY LEVEL. As applied to visual resource management, that degree of concern expressed by the user toward scenic quality and existing or proposed visual change in a particular characteristic landscape.

SIKES ACT. Public Law 93-4452, passed by the United States Congress on October 18, 1974, directs the Secretary of the Interior to cooperate with the State wildlife agencies in the planning, development, maintenance, and coordination of comprehensive plans for the conservation and rehabilitation of fish and wildlife resources.

SOIL COMPACTION. The process by which soil is packed tightly, losing its porosity.

SOIL PRODUCTIVITY. Capacity of a soil to produce vegetation. The amount produced will vary according to plant species and management practices.

SPECIAL RECREATION MANAGEMENT AREA (SRMA). An area where congressionally recognized recreation values exist or where significant public recreation issues or management concerns occur. Special or more intensive management is typically needed. Detailed recreation planning is required in these areas and greater managerial investment is likely.

STRATIFICATION. Layering of artifacts within a cultural resource site. If the site is undisturbed, the oldest artifacts are the deepest in the soil strata with the most recent artifacts nearest the surface.

STREAM HABITAT CONDITION RATINGS. A method used to evaluate the condition of the aquatic habitat of streams. Six factors are evaluated - stream shade, condition of streambank vegetation, streambank stability - stream channel stability, sedimentation of streambed, and instream cover - resulting in an overall rating of the habitat between unsuitable and excellent.

STRUTTING GROUNDS. Localized areas used by some species of the grouse family to display their courtship rituals.

TAYLOR GRAZING ACT OF 1934. Implemented to stop injury to the public grazing lands by preventing overgrazing and soil deterioration. It authorized the Secretary of Interior to manage the public rangelands.

THERMAL COVER. Vegetation used by deer for shelter. It may include saplings, shrubs, or trees at least 5 feet tall with up to 75 percent crown cover.

THREATENED OR ENDANGERED SPECIES. Endangered species are any species which are in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined to constitute a pest. Threatened species are any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

TREND (Range) - The direction of change in range condition.

UTILIZATION. The proportion of current year's forage production that was consumed or destroyed by grazing animals, usually expressed as a percentage.

WILDLIFE LEAVE AREAS. Areas within land treatments which are not treated, providing wildlife cover and increasing the diversity of habitat types.

APPENDICES

APPENDIX A ECONOMICS

Appendix Table A-1
Gross Output Multipliers
BEA Economic Area 159 ^{1/}

Industry	WRC Sector 2/	Multiplier
Agriculture	(03) Meat Animals, Misc. Livestock	2.662
	(08) Vegetables, Sugar, Crops	2.549
Manufacturing	(19) Meat Products	2.774
	(27) Frozen Meats and Vegetables	2.191
	(29) Prepared Feed for Animals	2.138
	(34) Other Food Products	2.060
	(38) Lumber and Wood Products	2.395
	(46) Stone, Clay, and Glass Products	2.122
Retail Trade	(54) Wholesale and Retail Trade	2.262
Wholesale Trade	(54) Wholesale and Retail Trade	2.262
Services	(56) Services	2.296
Construction	(18) General Contractors	2.022
Finance, Insurance, Real Estate	(55) Finance, Insurance, Real Estate	1.803
Transportation and Public Utility	(53) Transportation, Communication, Public Utility	1.978

Source: U.S. Water Resources Council, 1977.

^{1/} Bureau of Economic Analysis Area that includes Owyhee and Elmore Counties.

^{2/} May include several Standard Industrial Classifications.

Appendix Table A-2
Earnings/Gross Output Ratios
Region 159

Industry	Calculation 1/	Ratio
03	$\frac{1}{2.662} (.158) + (1 - \frac{1}{2.662}) (.3008)$	0.247
08	$\frac{1}{2.549} (.511) + (1 - \frac{1}{2.549}) (.3008)$	0.383
18	$\frac{1}{2.022} (.289) + (1 - \frac{1}{2.022}) (.3008)$	0.295
19	$\frac{1}{2.774} (.095) + (1 - \frac{1}{2.774}) (.3008)$	0.227
27	$\frac{1}{2.191} (.138) + (1 - \frac{1}{2.191}) (.3008)$	0.227
29	$\frac{1}{2.183} (.040) + (1 - \frac{1}{2.183}) (.3008)$	0.179
34	$\frac{1}{2.060} (.220) + (1 - \frac{1}{2.060}) (.3008)$	0.261
38	$\frac{1}{2.395} (.239) + (1 - \frac{1}{2.395}) (.3008)$	0.275
46	$\frac{1}{2.122} (.317) + (1 - \frac{1}{2.122}) (.3008)$	0.308
53	$\frac{1}{1.978} (.311) + (1 - \frac{1}{1.978}) (.3008)$	0.306
54	$\frac{1}{2.262} (.513) + (1 - \frac{1}{2.262}) (.3008)$	0.395
55	$\frac{1}{1.803} (.160) + (1 - \frac{1}{1.803}) (.3008)$	0.223
56	$\frac{1}{2.296} (.487) + (1 - \frac{1}{2.296}) (.3008)$	0.382

^{1/} Calculation Routine Described in U.S. Water Resources Council -
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Appendix Table A-3
Livestock Income Statistics

Category	Income (1981 Dollars)	% of Total Regional Farm Income	% of Total Regional Livestock Income	% of Jarbridge RMP Livestock Income
Regional Farm Income	\$103.4 million	100%	--	--
Regional Livestock Income	41.7 million	40%	100%	--
RMP Area Livestock Income	5.8 million	6%	14%	100%
BLM-AUMs Livestock Income	1.9 million	2%	5%	34%

Appendix Table A-4
Livestock Employment Statistics

	Employment	% of Farm Employment	% of Total Regional Livestock Employment	% of Jarbridge RMP Livestock Employment
Regional Farm Employment	6,629	100	---	---
Regional Livestock Employment	962	15	100	---
RMP-Area Livestock Employment	133	2	14	100
BLM-AUMs Livestock Employment	45	1	5	34

Appendix Table A-5
RMP-Area Livestock Income
By Size Group

	No. of Permittees	Herd Size	Total AUMs Required	Total Income	5-Year Average BLM Use	Percent of Total Needs	Income Associated With BLM Use	Percent of Total Income
1. 0-199 Cattle	34	2,841	34,092	\$ 414,218	14,458	42%	\$ 175,665	42%
2. 200-599 Cattle	31	10,615	127,380	\$1,547,667	49,021	38%	\$ 595,605	38%
3. 600+ Cattle	19	22,400	268,800	\$3,265,920	85,419	32%	\$1,037,840	32%
4. All Sheep	6	19,085	45,804	\$ 556,519	10,944	24%	\$ 132,970	24%
TOTALS	86	----	476,076	\$5,784,323	159,842	34%	\$1,942,080	34%

* Four Permittees have both sheep and cattle AUMs.

Appendix Table A-6
Potential Crop Production by Alternative

Crop*	Current** Production	Alternative A		Alternative B		Alternative C		Alternative D	
		Production	% of Current	Production	% of Current	Production	% of Current	Production	% of Current
Barley	3,075,725 Bu.	1,194,092	38.8%	2,188,726	71.2%	1,193,760	38.8%	147,562	4.8%
Winter Wheat	2,848,625 Bu.	1,220,019	42.8%	2,236,249	78.5%	1,219,680	42.8%	150,766	5.3%
Sugar Beets	518,338 ton	318,328	61.4%	583,484	112.6%	318,240	61.4%	39,338	7.6%
Potatoes	11,936,500 CWT	6,002,080	50.3%	11,002,096	92.2%	6,000,792	50.3%	741,566	6.2%

* Only Crops for which data is available.

** 1981-1978 Aug. Idaho Agricultural Statistics (Elmore, Owyhee, Twin Falls Counties)

Appendix Table A-7
Basic Assumptions for
Typical Farm Budgets

<u>Element</u>	<u>Assumption</u>
1. County	Owyhee
2. Crops and Percentages	Alfalfa, 6%
	Winter Wheat, 17%
	Barley, 17%
	Potatoes, 22%
	Sugar Beets, 17%
	Dry Edible Beans, 21%
3. Farmable Acreage	310
4. Water Pumped or Gravity Flow	Pumped
5. Cost of Wells, Pump, Motors	\$150,000
Interest Rate & Term of Loan	12%, 20 years
Annual Electricity Costs	\$12,600
6. Cost of Irrigation System	\$60,000
Interest Rate & Term of Loan	12%, 20 years
Labor Costs For Water-Related Use	\$7,200
7. Soil Type	100% SCS, Class 4
8. Wage Rate	\$3.35 per hour
9. Annual Interest on Prod. Credit	14%
10. Term of Production Credit	12 months
11. Taxes and Overhead	3% of Production Costs
12. Revenue Adj. Factor	10% of Total Revenue
13. Value of Land	\$25 per acre
14. Interest Rate & Term of Loan on Land	12%, 20 years
15. Crop Prices	FY-84 Normalized Prices

APPENDIX TABLE B-2

Lands Designation for Multiple Use and Transfer Areas under Alternative A (in acres and %)

MUA	Moderate Use (acres)	Limited Use (acres)	Intensive Use (acres)	Sale (T1)	Sale or Exchange (T2)	Exchange (T3)	Agric. Entry (T4)	Retention (acres)	Total Public Acres in MUA
1	11,086							11,086	11,086
2	62,148			80				62,148	62,228
3	40,500			380		1,358*	8,111	40,500	49,791
4		8,728		40	118		182	8,728	9,068
5		49,286						49,286	49,286
6	58,725		102,746	120	80		15,188	161,471	176,859
7	207,376	83,540		380	8,122		48,112	290,916	347,530
8		4,394						4,394	4,394
9			2,879				22	2,901	2,901
10	80,017	15,622						95,639	95,639
11	210,294					1,277		210,294	211,571
12	251,639			120		4,160		251,639	255,919
13	107,916			120				107,916	108,036
14		2,947						2,947	2,947
15	203,913				1,325			203,913	205,238
16	65,387	32,313			280			97,700	97,980
Sub				1,240	9,925	6,795	71,613		
Total	1,299,001	196,830	105,625		89,575			1,601,456	1,690,473
%	77	12	6		5				

* Includes 558 acre overlap with Ag. entry.

Lands Designation for Multiple Use and Transfer Areas under Alternative B (in acres and %)

MUA	Moderate Use (acres)	Limited Use (acres)	Intensive Use (acres)	Sale (T1)	Sale or Exchange (T2)	Exchange (T3)	Agric. Entry (T4)	Retention (acres)	Total Public Acres in MUA
1	11,086							11,086	11,086
2	41,133	21,095		80				62,148	62,228
3	40,500			380		1,358*	8,111	40,500	49,791
4	8,728			40	118		182	8,728	9,068
5		49,286						49,286	49,286
6	55,565		102,746	120	80		18,348	158,311	176,859
7	223,497			380	8,122		115,531	223,497	347,530
8	3,359							4,394	4,394
9			2,879				22	2,879	2,901
10	80,017	15,632						95,639	95,639
11	210,294					1,277		210,294	211,571
12	251,639			120		4,160		251,639	255,919
13	107,916			120				107,916	108,036
14		2,947						2,947	2,947
15	203,913				1,325			203,913	205,238
16	97,700				280			97,700	97,980
Sub				1,240	9,925	6,795	142,194		
Total	1,367,347	78,950	106,660		160,154			1,530,877	1,690,473
%	80	5	6		9				

* Includes 558 acre overlap with Ag. entry.

B-2

Lands Designation for Multiple Use and Transfer Areas under Alternative C (in acres and %)

MUA	Moderate Use (acres)	Limited Use (acres)	Intensive Use (acres)	Sale (T1)	Sale or Exchange (T2)	Exchange (T3)	Agric. Entry (T4)	Retention (acres)	Total Public Acres in MUA
1	11,086							11,086	11,086
2	41,133	21,095		40				62,188	62,228
3	42,530			380		558	6,323	42,530	49,791
4		8,728		40	118		182	8,728	9,068
5		49,286						49,286	49,286
6	68,880		102,746	120	80		5,033	171,626	176,859
7	192,338	83,582		380	8,122	85	63,023	275,920	347,530
8		4,394						4,394	4,394
9			2,901					2,901	2,901
10	43,617	52,022						95,639	95,639
11	210,294					1,277		210,294	211,571
12	251,639			120		4,160		251,639	255,919
13	107,916			120				107,916	108,036
14		2,947						2,947	2,947
15	204,233				1,005			204,233	205,238
16	97,700				280			97,700	97,980
Sub				1,200	9,605	6,080	74,561		
Total	1,271,366	222,054	105,647		91,446			1,599,027	1,690,473
%	75	14	6		5				

Lands Designation for Multiple Use and Transfer Areas under Alternative D (in acres and %)

MUA	Moderate Use (acres)	Limited Use (acres)	Intensive Use (acres)	Sale (T1)	Sale or Exchange (T2)	Exchange (T3)	Agric. Entry (T4)	Retention (acres)	Total Public Acres in MUA
1		11,086						11,086	11,086
2		62,228						62,228	62,228
3	42,530			380		558		48,853	49,791
4		8,910		40	118			8,910	9,068
5		49,286						49,286	49,286
6	73,913		102,746	120	80			176,659	176,859
7	232,599	106,469		340	8,122			339,068	347,530
8		4,394						4,394	4,394
9			2,901					2,901	2,901
10		95,639						95,639	95,639
11	210,294					1,277		210,294	211,571
12	254,519			120		1,280		254,519	255,919
13	107,916			120				107,916	108,036
14		2,947						2,947	2,947
15	122,350	81,883			1,005			203,913	205,238
16	13,987	83,713			280			97,700	97,980
Sub				1,120	9,605	3,115	0		
Total	1,170,900	400,086	105,647		13,840			1,676,633	1,690,473
%	69	24	6		1				

APPENDIX B

SPECIAL DESIGNATIONS AND
MULTIPLE USE AREA RECOMMENDATIONS

APPENDIX TABLE B-1

Areas and Sites Recommended for Special Designation*
by Alternatives A, B, C, and D

Areas/Sites	MUA	ACEC	National Hist. Trail	National Register	Outstanding Natural Area	SRMA	Activity Plans	Wilderness	Wild & Scenic River	Withdrawal Area
Cultural										
Cougar Canyon	10,	CD		D			CD			
Devils Ck. Complex	12,13			BCD						
Dry Lake Beds	10,11			BCD						
Juniper Ranch Complex	12			D						
Oregon Trail	3,4,5,7,8		ABCD	ABCD			ABCD			
Post Office	11									
Dove Springs	7									
Clover Creek	12			D						
Pot Hole	6									
Paleo										
Hagerman Fossil Beds	8	BCD					ABCD			
Roosevear Gulch	7									
Sand Point Paleo	4,6	BCD						BCD		
Recreation										
Bennett Hills Wint. Rec. Area	2						CD			
Bruneau Jarbidge River	10	CD					ABCD		ABCD	
Hagerman-Owsley ORV	8,9						ABCD			
Jarbidge Forks Canyon	15,16						BCD			
Salmon Falls Ck. Canyon	14	D			ABCD		ABCD			
Upper Salmon F. Ck. & Canyon	15						ABCD			
Wildlife										
Big Horn Habitat	10,15,16	CD								
Snake River BOP	5						ABCD			ABCD
Wilderness										
Bruneau-Sheep Ck WSA	10							BCD		
Bruneau-Jarbidge WSA	10							BCD		
King Hill WSA	2							BCD		

* Area having special designation would have a management plan prepared for it.

APPENDIX TABLE B-1a

Areas and Sites Recommended for Special Designation by Alternative

Area/Site	Alternative A	Alternative B	Alternative C	Alternative D
Areas of Critical Environmental Concern				
- Hagerman Paleontological ACEC		4,394 ac	4,394 ac	4,394 ac
- Sand Point Paleontological, Geological, & Cultural ACEC		624 ac	815 ac	815 ac
- Bruneau/Jarbidge River ACEC (includes Cougar Canyon, Big Horn Sheep Habitat, E.F. Jarbidge)			84,111 ac	84,111 ac
- Salmon Falls Creek Canyon ACEC				2,947 ac
Outstanding Natural Area				
- Salmon Falls Creek Canyon	2,947 ac	2,947 ac	2,947 ac	2,947 ac
Special Recreation Management Areas (SRMA)				
- Salmon Falls Creek SRMA	5,600 ac	5,600 ac	5,600 ac	5,600 ac
a. Salmon Falls Creek Canyon	2,947 ac	2,947 ac	2,947 ac	2,947 ac
b. Upper Salmon Falls Creek	2,653 ac	2,653 ac	2,653 ac	2,653 ac
- Jarbidge Forks SRMA		4,320 ac	4,320 ac	4,320 ac
- Bennett Hills Winter SRMA			56,680 ac	56,680 ac
- Bruneau/Jarbidge River SRMA	57,000 ac	57,000 ac	57,000 ac	57,000 ac
- Hagerman-Owsley SRMA (total)	4,190 ac	7,074 ac	7,074 ac	7,074 ac
a. Hagerman National Natural Landmark	4,190 ac	4,394 ac	4,394 ac	4,394 ac
b. Owsley Bridge ORV (850 ac overlap between a & b)		3,530 ac	3,530 ac	3,530 ac
Wild and Scenic River (121 miles)	57,000 ac	57,000 ac	57,000 ac	57,000 ac
- Jarbidge Resource Area (100 miles)	30,384 ac	30,384 ac	30,384 ac	30,384 ac
- Jarbidge River (29 miles)	13,661 ac	13,661 ac	13,661 ac	13,661 ac
- Bruneau River (71 miles)	16,723 ac	16,723 ac	16,723 ac	16,723 ac
- Bruneau Resource Area (92 miles)	26,615 ac	26,615 ac	26,615 ac	26,615 ac
- Sheep Creek (21 miles)	9,892 ac	9,892 ac	9,892 ac	9,892 ac
- Bruneau River (71 miles)	16,723 ac	16,723 ac	16,723 ac	16,723 ac
Wilderness				
- Bruneau-Sheep Creek WSA 111-17		17,929 ac	17,929 ac	104,406 ac
- Jarbidge River WSA 17-11		13,481 ac	49,881 ac	75,118 ac
- King Hill Creek WSA 19-2		26,389 ac	26,389 ac	29,309 ac
- Total Suitable		57,799 ac	94,199 ac	208,833 ac
Snake River Birds of Prey (FLO 5777)	47,537 ac	47,537 ac	47,537 ac	47,537 ac
National Register Nominations				
- Oregon Trail (24 miles)	14,112 ac	14,112 ac	14,112 ac	14,112 ac
- Dry Lake Bed Complex		30,000 ac	30,000 ac	30,000 ac
- Juniper Ranch Complex				160 ac
- Clover Creek Complex				320 ac
- Devils Creek Complex		7,000 ac	7,000 ac	7,000 ac
- Cougar Canyon Complex				1,000 ac
National Historic Trail				
- Oregon Trail (39.4 miles)	12,608 ac	12,608 ac	12,608 ac	12,608 ac

APPENDIX TABLE B-4

Forage Use Levels (ALMs), Grazing Exclusions and Fire Suppression Actions for Alternative A (by MIA)

MIA	Forage Use Levels in ALMs							Grazing Exclusion (acres)	Fire Suppression (acres)	
	Livestock		Wlld Horses	Big-Horn	Wildlife				Full	Limited
	Initial	20 Year			Mile	Ante-	Lope			
1. Anderson Lake/Boise River	545	545	0	0	89	44	0	0	11,086	0
2. Upper Bennett	7,813	7,802	0	0	296	365	0	0	62,228	0
3. Lower Bennett	6,376	4,901	0	0	0	58	3	0	48,244	0
4. Snake River Riparian	526	492	0	0	0	17	0	0	9,068	0
5. SRBOP	2,667	2,667	0	0	0	17	0	0	49,286	0
6. Saylor Creek West	9,993	5,036	600	0	0	17	0	0	176,859	0
7. Saylor Creek East	32,954	25,347	0	0	0	17	4	0	347,530	0
8. Hagerman Fossil Beds	340	340	0	0	0	1	0	0	4,394	0
9. Hagerman GRV	340	338	0	0	0	1	0	0	2,901	0
10. Bruneau-Jarbridge-Sheep Ck	6,178	6,178	0	342	0	208	15	0	36,699	58,940
11. Inside Desert	15,787	15,362	0	0	0	59	54	0	53,320	158,251
12. West Devils	28,144	24,789	0	0	0	31	33	0	25,440	230,479
13. East Devils	16,281	16,272	0	0	0	22	8	0	108,036	0
14. Salmon Falls Creek	375	375	0	0	0	16	0	0	2,947	0
15. Jarbridge Foothills	26,214	26,044	0	92	0	361	132	0	190,118	15,120
16. Diamond "A"	8,944	8,907	0	164	0	291	15	0	61,130	36,850
TOTAL	163,477	148,395	600	598	385	1,525	261	0	1,190,761 (70%)	499,712 (30%)

Forage Use Levels (ALMs), Grazing Exclusions and Fire Suppression Actions for Alternative B (by MIA)

MIA	Forage Use Levels in ALMs							Grazing Exclusion (acres)	Fire Suppression (acres)	
	Livestock		Wlld Horses	Big-Horn	Wildlife				Full	Limited
	Initial	20 Year			Mile	Ante-	Lope			
1. Anderson Lake/Boise River	545	545	0	0	47	31	0	0	11,086	0
2. Upper Bennett	9,376	9,734	0	0	83	138	0	0	62,228	0
3. Lower Bennett	7,651	9,286	0	0	0	34	0	0	49,781	0
4. Snake River Riparian	631	597	0	0	0	17	0	0	9,068	0
5. SRBOP	3,200	6,425	0	0	0	8	0	0	49,286	0
6. Saylor Creek West	16,758	51,485	0	0	0	17	0	0	176,859	0
7. Saylor Creek East	38,545	70,133	0	0	0	17	4	0	347,530	0
8. Hagerman Fossil Beds	408	408	0	0	0	1	0	0	4,394	0
9. Hagerman GRV	408	408	0	0	0	1	0	0	2,901	0
10. Bruneau-Jarbridge-Sheep Ck	7,414	8,955	0	342	0	208	15	0	36,699	58,940
11. Inside Desert	18,944	26,130	0	0	0	59	54	0	53,320	158,251
12. West Devils	32,778	54,862	0	0	0	31	33	0	25,440	230,479
13. East Devils	18,537	27,095	0	0	0	22	8	0	108,036	0
14. Salmon Falls Creek	450	450	0	0	0	16	0	0	2,947	0
15. Jarbridge Foothills	31,457	34,723	0	92	0	322	132	0	205,238	15,120
16. Diamond "A"	10,733	15,924	0	164	0	239	15	0	97,980	0
TOTAL	197,835	327,140	0	598	130	1,366	261	0	1,301,743 (77%)	388,730 (23%)

Forage Use Levels (ALMs), Grazing Exclusions and Fire Suppression Actions for Alternative C (by MIA)

MIA	Forage Use Levels in ALMs							Grazing Exclusion (acres)	Fire Suppression (acres)	
	Livestock		Wlld Horses	Big-Horn	Wildlife				Full	Limited
	Initial	20 Year			Mile	Ante-	Lope			
1. Anderson Lake/Boise River	545	545	0	0	91	54	0	0	11,086	0
2. Upper Bennett	4,928	5,913	0	0	398	670	0	0	62,228	0
3. Lower Bennett	6,763	7,652	0	0	0	70	4	0	49,791	0
4. Snake River Riparian	402	402	0	0	0	24	0	0	9,068	0
5. SRBOP	4,482	5,098	0	0	0	32	0	0	49,286	0
6. Saylor Creek West	12,136	46,922	0	0	0	29	0	0	176,859	0
7. Saylor Creek East	36,954	72,739	600	0	0	32	4	0	347,530	0
8. Hagerman Fossil Beds	143	143	0	0	0	1	0	0	4,394	0
9. Hagerman GRV	140	140	0	0	0	1	0	0	2,901	0
10. Bruneau-Jarbridge-Sheep Ck	6,178	6,178	0	342	0	356	15	0	36,699	58,940
11. Inside Desert	17,952	29,661	0	0	0	73	54	0	53,320	158,251
12. West Devils	31,760	41,574	0	0	0	52	33	0	25,440	230,479
13. East Devils	18,031	18,919	0	0	0	37	8	0	108,036	0
14. Salmon Falls Creek	0	0	0	0	0	16	0	2,947	2,947	0
15. Jarbridge Foothills	24,456	24,805	0	49	*	439	132	0	205,238	15,120
16. Diamond "A"	7,473	9,734	0	107	*	541	15	0	97,980	0
TOTAL	172,493	271,425	600	598	586	2,428	265	2,947	1,301,743 (77%)	388,730 (23%)

Forage Use Levels (ALMs), Grazing Exclusions and Fire Suppression Actions for Alternative D (by MIA)

MIA	Forage Use Levels in ALMs							Grazing Exclusion (acres)	Fire Suppression (acres)	
	Livestock		Wlld Horses	Big-Horn	Wildlife				Full	Limited
	Initial	20 Year			Mile	Ante-	Lope			
1. Anderson Lake/Boise River	436	436	0	0	196	54	0	0	11,086	0
2. Upper Bennett	3,942	3,942	0	0	591	678	0	0	62,228	0
3. Lower Bennett	5,101	5,205	0	0	0	119	10	0	49,791	0
4. Snake River Riparian	322	322	0	0	0	24	0	0	9,068	0
5. SRBOP	2,134	2,293	0	0	0	49	0	0	49,286	0
6. Saylor Creek West	7,994	10,994	0	0	0	29	0	0	176,859	0
7. Saylor Creek East	25,254	30,254	2,100	0	0	33	4	0	347,530	0
8. Hagerman Fossil Beds	0	0	0	0	0	1	0	0	4,394	0
9. Hagerman GRV	112	112	0	0	0	1	0	0	2,901	0
10. Bruneau-Jarbridge-Sheep Ck	4,942	4,942	0	342	0	356	15	0	36,699	58,940
11. Inside Desert	12,030	13,030	0	0	0	73	54	0	53,320	158,251
12. West Devils	22,233	22,233	0	0	0	52	33	0	25,440	230,479
13. East Devils	12,157	12,157	0	0	0	37	8	0	108,036	0
14. Salmon Falls Creek	0	0	0	0	0	16	0	2,947	2,947	0
15. Jarbridge Foothills	16,585	16,585	0	92	0	439	132	0	205,238	15,120
16. Diamond "A"	5,978	5,978	0	164	0	541	15	0	97,980	0
TOTAL	119,827	128,553	2,100	598	787	2,502	271	7,341	1,690,473	0

APPENDIX TABLE B-3

Actions, Restrictions and Closures Relating to Lands and Minerals for Alternative A (in acres by MIA)

MIA	Lands (acres)		Leasables (acres)		Locatables (acres)	
	Utility/ROW Avoidance	Closed to Ag Entry	Closed	No Surface Occupancy 1/	Open	Withdrawn
1. Anderson Lake/Boise River	0	0	1,958	0	9,522	1,564
2. Upper Bennett	0	0	0	0	62,228	0
3. Lower Bennett	6,464	6,464 2/	160	6,464	49,711	80
4. Snake River Riparian	640	640	2,543	1,264	8,865	203
5. SRBOP	1,504 3/4/	49,286 3/4/	49,286	49,286	35,175	14,111
6. Saylor Creek West	102,796	102,740	103,186	102,746	74,113	102,746
7. Saylor Creek East	4,864	111,333	13,502	13,502	340,954	6,576
8. Hageman Fossil Beds	4,394	4,394	3,408	4,394	4,394	0
9. Hageman RV	0	0	280	0	2,901	0
10. Bruneau-Jarbridge-Sheep Creek	30,384 5/	95,639	30,384	38,000	65,255	30,384 5/
11. Inside Desert	8,480	211,571	0	8,480	211,571	0
12. West Devils	3,480	255,919	480	3,480	255,434	480
13. East Devils	3,000	108,036	0	3,000	108,036	0
14. Salmon Falls Creek	2,947	2,947	0	2,947	2,947	0
15. Jarbridge Foothills	1,000	205,238	6,090	1,000	202,550	2,688
16. Diamond "A"	0	97,980	54	0	97,926	54
TOTALS	169,953 (10%)	1,252,186 (74%)	211,331 (13%)	234,563 (14%)	1,531,587 (91%)	158,886 (9%)

- 1/ Plus area within 500 feet of stream banks or edges of reservoir or seasonal for wintering/nest wildlife.
- 2/ Plus portions of 3 paleontological areas (38 sites).
- 3/ Plus identified raptor nest sites.
- 4/ Plus areas to ridge line around Bruneau Dunes State Park.
- 5/ Plus 26,616 acres in IRA for total of 57,000 acres.

Actions, Restrictions and Closures Relating to Lands and Minerals for Alternative B (in acres by MIA)

MIA	Lands (acres)		Leasables (acres)		Locatables (acres)	
	Utility/ROW Avoidance	Closed to Ag Entry	Closed	No Surface Occupancy 2/	Open	Withdrawn 1/
1. Anderson Lake/Boise River	0	0	1,958	0	9,522	1,564
2. Upper Bennett	21,095	21,095	21,095	21,095 6/	41,133	21,095 6/
3. Lower Bennett	6,464	6,464 3/	160	6,464	43,327	6,540
4. Snake River Riparian	1,070	1,070	6,525	1,264	7,601	1,467
5. SRBOP	1,504 4/5/	49,286 4/5/	49,286	49,286	33,671	15,615
6. Saylor Creek West	102,840	102,840	103,186	103,370	73,489	103,370
7. Saylor Creek East	4,864	5,104	13,502	4,864	336,090	11,440
8. Hageman Fossil Beds	4,394	4,394	4,394	4,394	4,394	0
9. Hageman RV	0	0	280	0	2,901	0
10. Bruneau-Jarbridge-Sheep Creek	15,622 7/	15,622	15,622	15,622	80,017	15,622 7/
11. Inside Desert	8,480	8,480	0	8,480	211,571	0
12. West Devils	3,480	3,480	480	3,480	255,439	480
13. East Devils	3,000	3,000	0	3,000	108,036	0
14. Salmon Falls Creek	2,947	2,947	0	2,947	2,947	0
15. Jarbridge Foothills	1,000	1,000	6,090	1,000	202,550	2,688
16. Diamond "A"	0	0	54	0	97,926	54
TOTALS	176,860 (10%)	224,882 (13%)	222,632 (13%)	225,266 (13%)	1,510,538 (89%)	179,935 (11%)

- 1/ There is an additional 28,914 acres of limited withdrawals (power site) or withdrawals that only affect lands actions.
- 2/ Plus area within 500 feet of stream banks or edges of reservoir or seasonal for wintering/nest wildlife.
- 3/ Plus portions of 3 paleontological areas (38 sites).
- 4/ Plus identified raptor nest sites.
- 5/ Plus areas to ridge line around Bruneau Dunes State Park.
- 6/ Plus 5,294 acres in Shoshone District.
- 7/ Plus 15,788 acres in IRA for total of 31,410 acres.

Actions, Restrictions and Closures Relating to Lands and Minerals for Alternative C (in acres by MIA)

MIA	Lands (acres)		Leasables (acres)		Locatables (acres)	
	Utility/ROW Avoidance	Closed to Ag Entry	Closed	No Surface Occupancy 2/	Open	Withdrawn 1/
1. Anderson Lake/Boise River	0	11,086	1,958	0	9,522	1,564
2. Upper Bennett	21,095	62,188	21,095	21,095 6/	41,133	21,095 6/
3. Lower Bennett	6,464	42,530	160	6,464	43,251	6,540
4. Snake River Riparian	1,076	8,728	2,978	1,075	7,790	1,278
5. SRBOP	1,504 4/5/	49,286	0	15,615	33,671	15,615
6. Saylor Creek West	103,126	171,625	102,867	102,867	73,733	103,126
7. Saylor Creek East	4,864	275,920	18,364	18,364	336,090	11,440
8. Hageman Fossil Beds	4,394	4,394	3,408	4,394	4,394	0
9. Hageman RV	0	2,901	280	280	2,901	0
10. Bruneau-Jarbridge-Sheep Creek	56,342 5/7/	95,639	75,471	75,471	20,168	75,471 7/
11. Inside Desert	8,480	211,571	0	8,480	203,163	8,480
12. West Devils	3,480	255,919	480	3,480	255,439	3,480
13. East Devils	3,000	108,036	0	3,000	105,036	3,000
14. Salmon Falls Creek	2,947	2,947	0	2,947	2,947	0
15. Jarbridge Foothills	1,000	205,238	6,090	88,856	197,230	8,008
16. Diamond "A"	4,320	97,980	54	83,713	93,606	4,374
TOTALS	213,402 (12%)	1,569,923 (93%)	233,904 (14%)	436,800 (26%)	1,427,074 (84%)	263,399 (16%)

- 1/ There is an additional 28,914 acres of limited withdrawals (power site) or withdrawals that only affect lands actions.
- 2/ Plus area within 500 feet of stream banks or edges of reservoir or seasonal for wintering/nest wildlife.
- 3/ Plus portions of 3 paleontological areas (38 sites).
- 4/ Plus identified raptor nest sites.
- 5/ Plus areas to ridge line around Bruneau Dunes State Park.
- 6/ Plus 5,294 acres in Shoshone District.
- 7/ Plus 15,788 acres in IRA.

Actions, Restrictions and Closures Relating to Lands and Minerals for Alternative D (in acres by MIA)

MIA	Lands (acres)		Leasables (acres)		Locatables (acres)	
	Utility/ROW Avoidance	Closed to Ag Entry	Closed	No Surface Occupancy 2/	Open	Withdrawn 1/
1. Anderson Lake/Boise River	0	11,086	1,958	0	9,522	1,564
2. Upper Bennett	23,815 6/	62,228	23,815	23,815 6/	38,413	23,815 6/
3. Lower Bennett	6,464	49,791	160	6,624	43,247	6,540
4. Snake River Riparian	1,075	9,068	3,618	3,618	7,993	1,075
5. SRBOP	1,504 3/4/	49,286	0	15,615	33,671	15,615
6. Saylor Creek West	103,416	176,859	103,416	103,416	73,443	103,416
7. Saylor Creek East	4,864	347,530	18,364	4,864	324,650	22,880
8. Hageman Fossil Beds	4,394	4,394	4,394	4,394	4,394	0
9. Hageman RV	0	2,901	280	280	2,901	0
10. Bruneau-Jarbridge-Sheep Creek	95,639 5/	95,639	95,639 1/	95,639	0	95,639
11. Inside Desert	8,480	211,571	0	8,480	203,091	8,480
12. West Devils	3,480	255,919	480	3,480	251,959	3,960
13. East Devils	1,000	108,036	0	3,000	105,036	3,000
14. Salmon Falls Creek	2,947	2,947	0	2,947	2,947	0
15. Jarbridge Foothills	1,000	205,238	6,090	7,973	194,577	10,661
16. Diamond "A"	4,320	97,867	54	4,320	93,606	4,374
TOTALS	263,213 (16%)	1,690,473 (100%)	258,268 (16%)	289,280 (17%)	1,385,056 (82%)	305,417 (18%)

- 1/ There is an additional 28,914 acres of limited withdrawals (power site) or withdrawals that only affect lands actions.
- 2/ Plus area within 500 feet of stream banks or edges of reservoir or seasonal for wintering/nest wildlife.
- 3/ Plus identified raptor nest sites.
- 4/ Plus areas to ridge line around Bruneau Dunes State Park.
- 5/ IRA 95,639 acres, IRA 83,885 acres total WSA recommendation affecting Lands and Minerals = 179,524.
- 6/ Plus 5,494 acres in Shoshone District.

APPENDIX TABLE B-6

Motorized Vehicle Management and Special Designation Actions for Alternative A (acres and miles)

MIA	Motorized Vehicle Management			Special Designations								
				Wilderness / Suitable Acres		ACEC (acres)	SRMAs (acres)	National Register (acres)	Natural Area (acres)	Wild & Scenic River (ac/mi)	Withdrawal Area (acres)	National Historic Trail (ac/mi)
	Open	Limited	Closed	Recommended	Not Recommended							
1. Anderson Lake/Boise River	11,086	0	0	0	0	0	0	0	0	0	0	0
2. Upper Bennett	62,228	0	0	0	23,815	0	0	0	0	0	0	0
3. Lower Bennett	41,780	0	6,464	0	0	6,464	6,464	0	0	0	6,464/20.2	0
4. Snake River Riparian	7,464	0	1,264	0	0	640	640	0	0	0	640/2.0	0
5. SRBP	0	47,782	1,504	0	0	1,504	1,504	0	0	49,286	0	0
6. Saylor Creek West	74,113	0	102,746	0	0	0	0	0	0	0	0	0
7. Saylor Creek East	342,666	0	4,864	0	0	4,864	4,864	0	0	0	4,864/15.2	0
8. Hageman Fossil Beds	0	4,394	0	0	0	640	640	0	0	0	640/2.0	0
9. Hageman GRV	2,901	0	0	0	0	0	0	0	0	0	0	0
10. Bruneau-Jarbridge Sheep Gk	65,525	30,384	0	0	95,639	0	30,384	0	0	30,384/100 2/1	0	0
11. Inside Desert	211,571	0	0	0	0	0	0	0	0	0	0	0
12. West Devils	251,639	0	0	0	0	0	0	0	0	0	0	0
13. East Devils	105,036	0	0	0	0	0	0	0	0	0	0	0
14. Salmon Falls Creek	2,947	0	0	0	0	2,947	0	2,947	0	0	0	0
15. Jarbridge Foothills	205,238	0	0	0	0	2,653	0	0	0	0	0	0
16. Diamond "A"	97,980	0	0	0	0	0	0	0	0	0	0	0
TOTALS	1,484,904 (88%)	82,560 (5%)	116,842 (7%)	0	119,454	42,096	12,608	2,947	30,384/100	49,286	12,608/39.4	0

Motorized Vehicle Management and Special Designation Actions for Alternative B (acres and miles)

MIA	Motorized Vehicle Management			Special Designations								
				Wilderness / Suitable Acres		ACEC (acres)	SRMAs (acres)	National Register (acres)	Natural Area (acres)	Wild & Scenic River (ac/mi)	Withdrawal Area (acres)	National Historic Trail (ac/mi)
	Open	Limited	Closed	Recommended	Not Recommended							
1. Anderson Lake/Boise River	11,086	0	0	0	0	0	0	0	0	0	0	0
2. Upper Bennett	41,133	0	21,095	21,095	2,720	0	0	0	0	0	0	0
3. Lower Bennett	43,327	0	6,464	0	0	6,464	6,464	0	0	0	6,464/20.2	0
4. Snake River Riparian	7,804	0	1,264	0	0	640	640	0	0	0	640/2.0	0
5. SRBP	0	47,782	1,504	0	0	1,504	1,504	0	0	194	0	0
6. Saylor Creek West	73,489	0	103,370	0	0	0	0	0	0	0	0	0
7. Saylor Creek East	342,666	0	4,864	0	0	4,864	4,864	0	0	0	4,864/15.2	0
8. Hageman Fossil Beds	1,035	3,359	0	0	0	640	640	0	0	0	640/2.0	0
9. Hageman GRV	2,901	0	0	0	0	0	0	0	0	0	0	0
10. Bruneau-Jarbridge Sheep Gk	80,017	0	15,622	15,622 1/1	80,017	0	30,384	24,000	0	30,384/100 2/1	0	0
11. Inside Desert	203,091	0	8,480	0	0	0	0	0	0	0	0	0
12. West Devils	252,439	3,000	480	0	0	0	0	0	0	0	0	0
13. East Devils	105,036	3,000	0	0	0	0	0	0	0	0	0	0
14. Salmon Falls Creek	2,947	0	2,947	0	0	2,947	0	2,947	0	0	0	0
15. Jarbridge Foothills	204,238	1,000	0	0	0	6,973	1,000	0	0	0	0	0
16. Diamond "A"	97,980	0	0	0	0	0	0	0	0	0	0	0
TOTALS	1,466,242 (87%)	58,141 (3%)	166,090 (10%)	36,717	82,737	5,018	62,490	51,112	2,947	31,400/100	49,286	12,608/39.4

1/ King Hill WSA 19-2 (23,815 acres JRA; 5,494 acres Shoshone District); Bruneau-Sheep Creek WSA 111-17 (28,869 acres JRA; 75,537 acres BRA); Jarbridge River WSA 17-11 (66,770 acres JRA; 8,348 acres BRA).
 2/ 30,384 acres in JRA, 26,616 acres in BRA = 57,000 acres. Sheep Creek-BRA (21 miles), Jarbridge River-JRA (29 miles), Bruneau River-Boundary (71 miles).

1/ King Hill WSA 19-2 (21,095 acres JRA; 5,294 acres Shoshone District); Bruneau-Sheep Creek WSA 111-17 (4,633 acres JRA; 13,296 acres BRA); Jarbridge River WSA 17-11 (10,969 acres JRA; 2,492 acres BRA). Also see Table 2-3.
 2/ 30,384 acres in JRA, 26,616 acres in BRA = 57,000 acres. Sheep Creek-BRA (21 miles), Jarbridge River-JRA (29 miles), Bruneau River-Boundary (71 miles).

B-6

Motorized Vehicle Management and Special Designation Actions for Alternative C (acres and miles)

MIA	Motorized Vehicle Management			Special Designations								
				Wilderness / Suitable Acres		ACEC (acres)	SRMAs (acres)	National Register (acres)	Natural Area (acres)	Wild & Scenic River (ac/mi)	Withdrawal Area (acres)	National Historic Trail (ac/mi)
	Open	Limited	Closed	Recommended	Not Recommended							
1. Anderson Lake/Boise River	11,086	0	0	0	0	0	0	0	0	0	0/0.0	0
2. Upper Bennett	0	41,133	21,095	21,095	2,720	0	56,660	0	0	0	0	0
3. Lower Bennett	43,327	0	6,464	0	0	6,464	6,464	0	0	0	6,464/20.2	0
4. Snake River Riparian	7,993	0	1,075	0	0	435	640	640	0	0	640/2.0	0
5. SRBP	0	47,782	1,504	0	0	0	1,504	1,504	0	0	49,286	0
6. Saylor Creek West	73,733	0	103,126	0	0	380	0	0	0	0	0	0
7. Saylor Creek East	342,666	0	4,864	0	0	0	4,864	5,024	0	0	4,864/15.2	0
8. Hageman Fossil Beds	0	4,394	0	0	0	4,394	4,394	640	0	0	640/2.0	0
9. Hageman GRV	2,901	0	0	0	0	0	2,680	0	0	0	0	0
10. Bruneau-Jarbridge Sheep Gk	42,617	0	75,471	52,022 1/1	43,617	175,471 3/1	52,022	24,000	0	30,384/100 2/1	0	0
11. Inside Desert	202,441	0	9,130	0	0	0	6,000	0	0	0	0	0
12. West Devils	252,439	3,000	480	0	0	0	3,000	0	0	0	0	0
13. East Devils	105,036	3,000	0	0	0	0	3,000	0	0	0	0	0
14. Salmon Falls Creek	0	0	2,947	0	0	0	2,947	0	2,947	0	0	0
15. Jarbridge Foothills	122,355	77,563	5,320	0	0	4,320 3/1	6,973	1,000	0	0	0	0
16. Diamond "A"	14,267	79,393	4,320	0	0	4,320 3/1	4,320	0	0	0	0	0
TOTALS	1,221,861 (72%)	256,265 (14%)	242,347 (14%)	73,117	88,834	193,320	143,488	51,112	2,947	30,384/100	49,286	12,608/39.4

Motorized Vehicle Management and Special Designation Actions for Alternative D (acres and miles)

MIA	Motorized Vehicle Management			Special Designations								
				Wilderness / Suitable Acres		ACEC (acres)	SRMAs (acres)	National Register (acres)	Natural Area (acres)	Wild & Scenic River (ac/mi)	Withdrawal Area (acres)	National Historic Trail (ac/mi)
	Open	Limited	Closed	Recommended	Not Recommended							
1. Anderson Lake/Boise River	11,086	0	0	0	0	0	0	0	0	0	0	0
2. Upper Bennett	0	38,413	23,815	23,815 1/1	0	0	56,660	0	0	0	0	0
3. Lower Bennett	43,327	0	6,464	0	0	6,464	6,464	0	0	0	6,464/20.2	0
4. Snake River Riparian	7,993	0	1,075	0	0	435	640	640	0	0	640/2.0	0
5. SRBP	0	47,782	1,504	0	0	0	1,504	1,504	0	0	49,286	0
6. Saylor Creek West	73,733	0	103,126	0	0	380	0	0	0	0	0	0
7. Saylor Creek East	342,666	0	4,864	0	0	0	4,864	4,864	0	0	4,864/15.2	0
8. Hageman Fossil Beds	0	0	4,394	0	0	4,394	4,394	640	0	0	640/2.0	0
9. Hageman GRV	2,901	0	0	0	0	0	2,680	0	0	0	0	0
10. Bruneau-Jarbridge Sheep Gk	202,441	0	95,639	95,639 2/1	75,471	95,639 2/1	25,000	0	0	30,384/100 3/1	0	0
11. Inside Desert	202,441	0	9,130	0	0	0	6,000	0	0	0	0	0
12. West Devils	252,439	0	3,480	0	0	0	3,480	0	0	0	0	0
13. East Devils	105,036	0	3,000	0	0	0	3,000	0	0	0	0	0
14. Salmon Falls Creek	0	0	2,947	0	0	0	2,947	0	2,947	0	0	0
15. Jarbridge Foothills	122,355	65,796	17,087	0	0	4,320	6,973	1,000	0	0	0	0
16. Diamond "A"	14,167	83,713	0	0	0	4,320	4,320	0	0	0	0	0
TOTALS	1,178,144 (70%)	230,632 (14%)	281,697 (16%)	119,454	0	93,321	187,105	52,992	2,947	30,384/100	49,286	12,608/39.4

1/ King Hill WSA 19-2 (26,389 acres); Bruneau-Sheep Creek WSA 111-17 (17,929 acres); Jarbridge River WSA 17-11 (49,881 acres). Also see Table 2-3.
 2/ 57,000 acres total (30,384 JRA (Jarbridge River - 13,661 acres/29 mi; Bruneau River - 16,723 acres/71 mi); 26,616 acres BRA (Sheep Creek 9,892 acres/21 mi; Bruneau River - 16,723 acres/71 mi)).
 3/ ACEC recommendation for bighorn sheep habitat totals 84,111 acres and includes the Cougar Canyon Area.

1/ King Hill WSA 19-2 (JRA 23,815 acres; Shoshone District 5,494 acres); total acres 29,309. See Table 2-3.
 2/ Bruneau-Sheep Creek WSA 111-17 (104,406 acres) and Jarbridge River WSA 17-11 (75,118 acres); JRA 95,639 acres, BRA 83,885 acres.
 3/ JRA: Jarbridge River 13,661 acres/29 miles; Bruneau River 16,723 acres/71 miles = 30,384 acres/100 miles. BRA: Sheep Creek 9,892 acres/21 miles; Bruneau River 16,723 acres/71 miles = 26,616 acres/92 miles. MIA 10 totals both resource areas = 57,000 acres/121 miles.
 4/ ACEC recommendation for bighorn habitat totals 84,111 acres and includes Cougar Canyon Area.

APPENDIX TABLE B-5

Land Treatments and Projects for Alternative C

MIA	Land Treatment and Projects for Livestock							Land Treatment for Wildlife		
	Brush Control Only (acres)	Brush Control & Seeding (acres)	Seeding Only (acres)	Total Land Treatment	Pipelines (miles)	Reservoirs /Wells (#'s)	Fencing (miles)	Poor Condition Replant to Native (acres)	Interseed (acres)	Rehab Existing Burns (acres)
1. Anderson Lk/Boise River	0	0	0	0	0	0	0	0	0	0
2. Upper Bennett	1,300	0	0	1,300	0	0	5	3,000	200	400
3. Lower Bennett	2,400	0	2,640	5,040	0	0	8	0	300	100
4. Snake River Riparian	0	0	0	0	0	0	0	0	0	0
5. SRBOP	0	0	1,000	1,000	0	0	0	0	0	0
6. Saylor Creek West	0	0	0	0	25	0	25	0	0	150
7. Saylor Creek East	0	0	0	0	50	1	60	0	0	0
8. Hagerman Fossil	0	0	0	0	0	0	0	0	0	0
9. Hagerman ORV	0	0	0	0	0	0	0	0	0	0
10. Bruneau-Jarbridge-Sheep Ck.	0	0	0	0	0	0	0	0	250	900
11. Inside Desert	2,000	3,600	5,400	11,000	12	0	0	0	500	2,000
12. West Devils	4,748	0	11,000	15,748	4	0	0	0	500	2,500
13. East Devils	4,868	0	3,400	8,268	6	0	0	0	1,000	150
14. Salmon Falls Creek	0	0	0	0	0	0	0	0	0	0
15. Jarbridge Foothills	640	0	1,000	1,640	0	0	0	0	3,750	1,150
16. Diamond "A"	8,000	0	6,000	14,000	4	0	0	0	0	1,350
TOTAL	23,936	3,600	30,440	57,976	107	1	98	3,000	6,500	8,700

Land Treatments and Projects for Alternative B

MIA	Land Treatment and Projects for Livestock							Land Treatment for Wildlife		
	Brush Control Only (acres)	Brush Control & Seeding (acres)	Seeding Only (acres)	Total Land Treatment	Pipelines (miles)	Reservoirs /Wells (#'s)	Fencing (miles)	Poor Condition Replant to Native (acres)	Interseed (acres)	Rehab Existing Burns (acres)
1. Anderson Lake/Boise River	0	0	0	0	0	0	0	0	0	0
2. Upper Bennett	640	0	640	1,280	0	0	5	0	0	0
3. Lower Bennett	4,640	0	6,600	11,240	0	0	8	0	0	0
4. Snake River Riparian	0	0	0	0	0	0	0	0	0	0
5. SRBOP	0	0	2,000	2,000	0	0	0	0	0	0
6. Saylor Creek West	0	0	0	0	30	0	35	0	0	0
7. Saylor Creek East	0	0	0	0	100	2	100	0	0	0
8. Hagerman Fossil	0	0	0	0	0	0	0	0	0	0
9. Hagerman ORV	0	0	0	0	0	0	0	0	0	0
10. Bruneau-Jarbridge-Sheep Ck.	0	0	0	0	0	0	1	0	0	0
11. Inside Desert	5,000	9,600	6,400	21,000	0	0	5	0	0	0
12. West Devils	4,100	2,000	38,500	44,600	0	0	9	0	0	0
13. East Devils	0	4,000	9,000	13,600	0	0	0	0	0	0
14. Salmon Falls Creek	0	0	0	0	0	0	0	0	0	0
15. Jarbridge Foothills	7,500	0	6,400	13,900	0	0	0	0	0	0
16. Diamond "A"	15,000	0	10,000	25,000	0	0	0	0	0	0
TOTAL	36,880	15,600	80,140	132,620	80	2	154	0	0	0

Land Treatments and Projects for Alternative A

MIA	Land Treatment and Projects for Livestock							Land Treatment for Wildlife		
	Brush Control Only (acres)	Brush Control & Seeding (acres)	Seeding Only (acres)	Total Land Treatment	Pipelines (miles)	Reservoirs /Wells (#'s)	Fencing (miles)	Poor Condition Replant to Native (acres)	Interseed (acres)	Rehab Existing Burns (acres)
1. Anderson Lake/Boise River	0	0	0	0	0	0	0	0	0	0
2. Upper Bennett	0	0	0	0	0	0	0	0	0	0
3. Lower Bennett	0	0	0	0	0	0	0	0	0	0
4. Snake River Riparian	0	0	0	0	0	0	0	0	0	0
5. SRBOP	0	0	0	0	0	0	0	0	0	0
6. Saylor Creek West	0	0	0	0	0	0	0	0	0	0
7. Saylor Creek East	0	0	0	0	0	0	0	0	0	0
8. Hagerman Fossil	0	0	0	0	0	0	0	0	0	0
9. Hagerman ORV	0	0	0	0	0	0	0	0	0	0
10. Bruneau-Jarbridge-Sheep Ck.	0	0	0	0	0	0	0	0	0	0
11. Inside Desert	0	0	0	0	0	0	0	0	0	0
12. West Devils	0	0	0	0	0	0	0	0	0	0
13. East Devils	0	0	0	0	0	0	0	0	0	0
14. Salmon Falls Creek	0	0	0	0	0	0	0	0	0	0
15. Jarbridge Foothills	0	0	0	0	0	0	0	0	0	0
16. Diamond "A"	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0

Land Treatments and Projects for Alternative D

MIA	Land Treatment and Projects for Livestock							Land Treatment for Wildlife		
	Brush Control Only (acres)	Brush Control & Seeding (acres)	Seeding Only (acres)	Total Land Treatment	Pipelines (miles)	Reservoirs /Wells (#'s)	Fencing (miles)	Poor Condition Replant to Native (acres)	Interseed (acres)	Rehab Existing Burns (acres)
1. Anderson Lk/Boise River	0	0	0	0	0	0	0	0	0	0
2. Upper Bennett	0	0	0	0	0	0	5	3,300	200	400
3. Lower Bennett	500	0	650	1,150	0	0	8	500	300	100
4. Snake River Riparian	0	0	0	0	0	0	0	0	0	0
5. SRBOP	0	0	1,000	1,000	0	0	0	0	0	0
6. Saylor Creek West	0	0	0	0	15	0	15	0	0	150
7. Saylor Creek East	0	0	0	0	20	0	40	0	0	0
8. Hagerman Fossil	0	0	0	0	0	0	0	0	0	0
9. Hagerman ORV	0	0	0	0	0	0	0	0	0	0
10. Bruneau-Jarbridge-Sheep Ck.	0	0	0	0	0	0	0	2,250	250	900
11. Inside Desert	0	0	0	0	0	0	7	1,500	500	2,000
12. West Devils	0	0	0	0	0	0	0	1,500	500	2,500
13. East Devils	1,000	0	0	1,000	2	0	0	500	1,000	150
14. Salmon Falls Creek	0	0	0	0	0	0	0	0	0	0
15. Jarbridge Foothills	0	0	0	0	0	0	0	5,750	3,750	1,150
16. Diamond "A"	0	0	0	0	4	0	0	2,750	0	1,350
TOTAL	1,500	0	1,650	3,150	41	0	75	18,250	6,500	8,700

APPENDIX C
AREAS OF CRITICAL ENVIRONMENTAL CONCERN

This appendix summarizes the description and special management requirements for Salmon Falls Creek Canyon if it were to be designated an area of critical environmental concern. Additional information and a detailed write up is available at the Boise District BLM Office. The preferred alternative in this plan (see pages 61-71) recommends ACEC designation for 3 of the 4 potential ACECs (Hagerman Paleontological Area; Sand Point Paleontologic, Geologic, and Cultural Area; and the Bruneau/Jarbridge River ACEC). The Salmon Falls Creek Natural Area is not recommended for ACEC designation in the preferred alternative, but is recommended for ACEC designation in Alternative D.

Additional potential ACECs were nominated by the public during the scoping process that did not meet the minimum criteria of relevance and importance (43 CFR 1610.7-2) to become eligible for further consideration. These included BLM lands on the South Fork of the Boise River, lands bordering the Snake River, Wilderness Study Areas and dropped portions of WSAs, general riparian habitat, and the Bennett Mountain deer herd.

Name: Salmon Falls Creek Area of Critical Environmental Concern

I. MANAGEMENT OBJECTIVES

- A. The primary objective of the ACEC is to protect the scenic, cultural, wildlife and other natural values of the area.
- B. The secondary objective is to provide for primitive recreational use compatible with the primary objective.

II. DESCRIPTION (including Relevance and Importance)

A. Site Description

Salmon Falls Creek is located in southwestern Idaho in an area approximately 25 miles west and southwest of the city of Twin Falls, Idaho. The portion of Salmon Falls Creek proposed for ACEC designation extends from Salmon Falls Dam downstream about 30 miles to the Balanced Rock crossing and would contain 2,947 acres. Resource values of the canyon reflect the natural, pristine characteristics of the area.

Vegetation between the canyon walls varies from a sagebrush grass community on the steep alluvial slopes below the lava rims to phreatophilic species such as willow, cattail and rushes along the creek. Rocky Mountain juniper, elder and currant occur in the canyon bottom near the water's edge.

Wildlife is abundant and varied within the area. Predatory animals include bobcats, coyotes, falcons, hawks, eagles, and owls. Game animals include mule deer, Hungarian and chukar partridge, pheasant, sage grouse, ducks, and cottontail rabbits.

A multitude of song birds inhabit the area. Fur bearers include beaver, skunk, and muskrat. Small rodents, reptiles, and amphibians also inhabit the area. The stream supports populations of both game and non-game fish. Game fish include brook, rainbow, cutthroat trout, and largemouth bass. Feral goats also live in the area.

The area has considerable value for primitive recreation activities and environmental education, and contains numerous archaeological sites.

The area has no precious metals or industrial minerals but does have oil and gas potential. Saleable mineral materials such as common rock, sand and clay are present in the area.

B. Relevance

The Salmon Falls Creek ACEC is considered relevant as part of a natural system or processes based on a near pristine natural environment. The resource values of Salmon Falls Creek meet the "scientific values" criteria of Section 102 of FLPMA and the "natural system or processes" criteria of Section 103 of FLPMA.

C. Importance

The site has been recommended as a Natural Area by the Burley District and is recommended for the same designation in the Jarbidge RMP in all alternatives.

The portion of the area between Salmon Falls Dam and Lilly Grade was originally named as a Wilderness Study Area (WSA) but was dropped by the Secretary of the Interior for failing to meet the size criteria.

Dr. C.H. Frost of Idaho State University examined the canyon in 1975 and expressed a strong desire for the BLM "to direct management to effect the protection and preservation of the pristine and 'relatively' untouched characteristics of the canyon for the purpose of the preservation of examples of natural ecosystems, to provide for an excellent outdoor laboratory for ecological and environmental education for generations of the future and to preserve the gene pools for typical and endangered plants and animals."

The proximity of this "island" of relatively untouched natural environment containing valuable cultural resources to the communities of southwest Idaho makes it important to give the area ACEC status.

D. Causes for Concern

The primary causes of concern in this area are the potential for small hydro projects and the potential (with one proposal already being discussed) for syphons passing through the natural area. Other utility corridors are also a possibility.

III. SPECIAL MANAGEMENT REQUIREMENTS

A. Immediate Actions on Designation

1. While livestock grazing has been essentially ended in the canyon the situation needs to be monitored with measures taken to insure protection from livestock.
2. Administratively close the canyon, rim to rim, to all vehicular use beyond the road crossings. In conjunction sign the key entrances at Lilly Grade and Balanced Rock accordingly.
3. Develop and establish a system of patrolling to assure compliance with the closures and to monitor use.
4. The resource area archaeologist should study the area and the inventory information and assess the need for measures designed to protect cultural sites from recreationists and pothunters.
5. Acquire through exchange, if possible, private and state inholdings to secure effective management of the whole area.

B. Mid-Range Management Actions

1. Implement an intensive trash removal program. The Lilly Grade Dump will require considerable work either for packing the material out, or if feasible, utilization of a helicopter to lift the car bodies, etc. out. Other areas of the canyon will require backpacking the garbage out. Organizations such as the Boy Scouts, Campfire Girls, sportsmans organizations, etc. may be willing to contribute their resources to this cause.
2. Provide for minor upgrading of the overlook access roads and develop safe overlooks.
3. Install interpretive facilities at overlooks and at the trailheads at Lilly and Balanced Rock Crossings. Subjects for interpretation include historical uses of the canyon (i.e. trapping, hunting, collecting), geology, rare or unique species of plants and/or animals, raptors and/or all key raptorial species and their relationship with the canyon environment and archaeological aspects of the canyon.
4. Install a trailhead day camp picnic facility with ramada and parking area at Lilly Grade in place of the horse corral.
5. Check the access trails into the canyon for possible signing for safety on the more hazardous routes.
6. Implement a visitor use inventory and analysis. In conjunction with monitoring the area as described in Item B(3),

collect and analyze the following kinds of information and develop trends of use and their resulting impacts on the resources:

- a. Point of origin of visitor
- b. Visitor objectives
- c. Visitor perceptions, reactions, opinions
- d. Length of stay
- e. Time of year of visit

C. Long-Range Management Actions

Once an inventory and analysis of visitor use is underway and trends are beginning to develop, adjust management in accordance with the needs of the resources.

IV. COMPATIBLE AND INCOMPATIBLE USES

- A. Existing primitive recreation uses of the canyon are compatible uses.
- B. ORV use, cattle use, utility corridor use, and hydro development are incompatible uses.

APPENDIX D

MONITORING AND EVALUATION

The decisions outlined in the Jarbidge RMP will be implemented over a period of ten to twenty years or more, depending on the availability of funding and manpower. The effects of implementation will be monitored and evaluated on a periodic basis over the life of the plan. The general purposes of this monitoring and evaluation will be:

- (1) To determine if an action is fulfilling the purpose and need for which it was designed, or if there is a need for modification or termination of an action.
- (2) To discover unanticipated and/or unpredictable effects.
- (3) To determine if mitigation measures are working as prescribed.
- (4) To ensure that decisions are being implemented as scheduled.
- (5) To provide continuing evaluation of consistency with state and local plans and programs.
- (6) To provide for continuing comparison of plan benefits versus costs, including social, economic, and environmental.

A specific monitoring plan will be written for the wildlife, watershed, and range programs. This plan will provide a framework for choosing the study methods that will provide the information needed to issue and implement specific management decisions which effect watershed, wildlife, and range. Monitoring efforts will focus on allotments in the Improve category. For the range program, methodologies are available for monitoring vegetative trend, forage utilization, actual use (livestock numbers and periods of grazing), and climate. The data collected from these studies will be used to evaluate current stocking rates, to schedule pasture moves by livestock, to determine levels of forage competition, to detect changes in plant communities, and to identify patterns of forage use. If monitoring studies indicate that allotment or multiple use area objectives are not being met then management actions will be adjusted accordingly. For the grazing program, this may include adjusting livestock seasons of use, livestock stocking levels or the grazing system being used.

Minimum monitoring standards have been adopted by the State of Idaho, Bureau of Land Management. They are included in the Minimum Monitoring Standards for BLM-Administered Rangelands in Idaho. See the attached table for minimum data elements to be monitored for various resource values as described in the Handbook. New studies will be consistent with the minimum standards recommendations. More intensive or specialized studies may be utilized if a management need exists and funding is available.

Priorities for monitoring grazing allotments will be established in

this plan. The methodology and intensity of study that is chosen for a particular allotment will be determined by the nature and severity of the resource conflicts that are present in that allotment.

For the wildlife program, monitoring will be directed at the biotic resource components using both temporary and permanent studies. The findings from these studies can be used to monitor responses in habitat condition and trend; monitor forage availability, composition, and vigor; monitor changes in cover and habitat effectiveness; and monitor habitat management objectives.

Monitoring for the watershed program will mainly involve monitoring soil erosion, although trend in stream bank stability and water quality will be monitored for mining and forestry activities.

Specific monitoring plans for other programs will be developed if the need arises.

The data collected from the monitoring and evaluation process will be analyzed and fed back into the decision making process. This will provide information regarding the effects of the land use decisions, the adequacy of mitigation methods, etc. If monitoring indicates that significant unexpected adverse impacts are occurring or the mitigating measures are not working as predicted, it may be necessary to amend or revise the RMP. Conversely, if implementation and mitigating efforts are highly successful, monitoring and evaluation efforts may be reduced.

Minimum Data Elements
to be Monitored for
Various Resource Values
on Rangelands*

Resource Value	Trend	Herbage Utilization	Actual Annual Use	Condition	Climate
Livestock	2,3 (intensive mgmt areas)	a	yes	<u>2/</u>	<u>3/</u>
	3 (less intensive areas)	<u>1/</u>			
Wildlife (Upland Birds & big game)	1,2,3	a,b	yes		
Watershed	2,3	N/A	N/A		
Fisheries	3	N/A	N/A		
Timber	"Specialized"	Studies Required			
Recreation	"Specialized"	Studies Required			
Paleontologic Resource	"Specialized"	Studies Required			
Cultural Resources	"Specialized"	Studies Required			

- 1/ Intensive: Conflicts and possible significant adjustment needed.
Less Intensive: No real conflicts.
- 2/ Required by law.
- 3/ Necessary to analyze all monitoring elements.

Key to Data Elements Chart

Trend Data Information

1. Cover
2. Frequency
3. Photo Plot

Utilization

- a. Utilization pattern mapping.
- b. Extensive Browse Transect Method (used when browse utilization date is needed. i.e. big game winter ranges.)
- c. Only utilization portion will typically be used.

* Source - Minimum Monitoring Standards for BLM - Administered Rangelands in Idaho (1984).

Appendix Table E-2
Percent Change from 5-Year Average Use in Initial and
20-Year Stocking Levels By Alternative

MUA	5-Year Average Use (AUMs)	A		B		C		D	
		Initial	20-Yr	Initial	20-Yr	Initial	20-Yr	Initial	20-Yr
1	545	0	-100	0	0	0	0	- 20	- 20
2	7,813	0	0	+ 20	+ 25	- 37	- 24	- 50	- 50
3	6,376	0	- 16	+ 20	+ 46	+ 6	+ 20	- 20	- 18
4	526	0	- 6	+ 20	+ 13	- 24	- 24	- 39	- 39
5	2,667	0	0	+ 20	+141	+ 68	+ 91	- 20	- 14
6	9,993	0	- 50	+ 68	+415	+ 21	+370	- 20	+ 10
7	32,954	0	- 23	+ 17	+113	+ 12	+121	- 23	- 8
8	340	0	0	+ 20	+ 20	- 58	- 58	-100	-100
9	340	0	0	+ 20	+ 20	- 59	- 59	- 67	- 67
10	6,178	0	0	+ 20	+ 45	0	0	- 20	- 20
11	15,787	0	- 3	+ 20	+129	+ 14	+ 88	- 24	- 21
12	28,144	0	- 12	+ 16	+ 95	+ 14	+ 48	- 21	- 21
13	16,281	0	0	+ 14	+ 66	+ 11	+ 16	- 25	- 25
14	375	0	0	+ 20	+ 20	-100	-100	-100	-100
15	26,214	0	- 1	+ 20	+ 32	- 7	- 5	- 37	- 37
16	8,944	0	0	+ 27	+ 78	- 16	+ 9	- 33	- 33
TOTAL	163,477	0	- 9	+ 21	+100	+ 6	+ 66	- 27	- 21

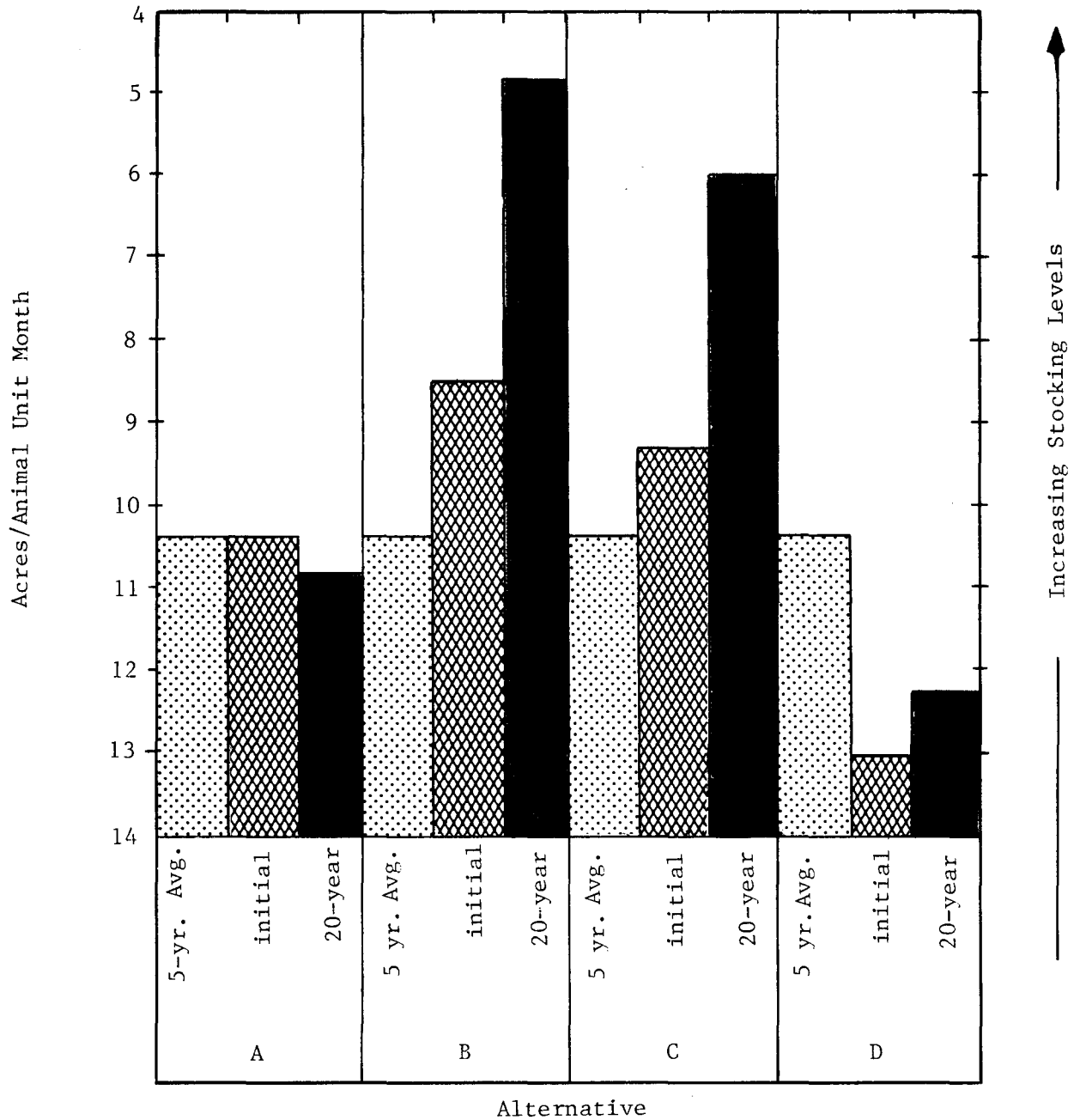
APPENDIX E
SOIL, WATER, AIR

Appendix Table E-1
Actions Affecting Soil, Water, and Air Resources*

Action	Current Situation/ Baseline Data	Alt. A	Alt. B	Alt. C	Alt. D
High Erosion Hazard Areas to be transferred/sold (acres)	1,004,475	58,395	188,489	118,054	11,524
Livestock Use (AUM's)	163,477	148,395	327,140	271,631	128,553
Timber Harvest (acres)	---	1,143	1,143	1,086	0
Fisheries/Riparian Habitat Improvement (stream miles)	---	---	59	70	75
Limited Fire Suppression (acres)	499,712	499,712	388,730	388,730	0
Mineral Exploration and Development (acres)	---	1,531,587	1,510,583	1,456,569	1,432,205
ORV Use (acres)	1,484,904	1,484,904	1,466,242	1,221,861	1,178,144
Improved Ecological Condition due to Grazing Systems (acres)	---	---	---	40,000	60,000
Vegetation Improvements - Wildlife (acres)	---	---	---	18,200	33,450
Vegetation Manipulation:					
Seeding (acres)	---	---	95,740	34,040	1,650
Spray (acres)	---	---	19,500	12,000	1,000
Burn (acres)	---	---	17,380	11,936	500
Total (acres)	---	---	132,620	57,976	3,150

* The impacts caused by land use actions are discussed in the narratives of the alternatives. This table indicates the area affected by the actions, giving an indication of the magnitude of the actions.

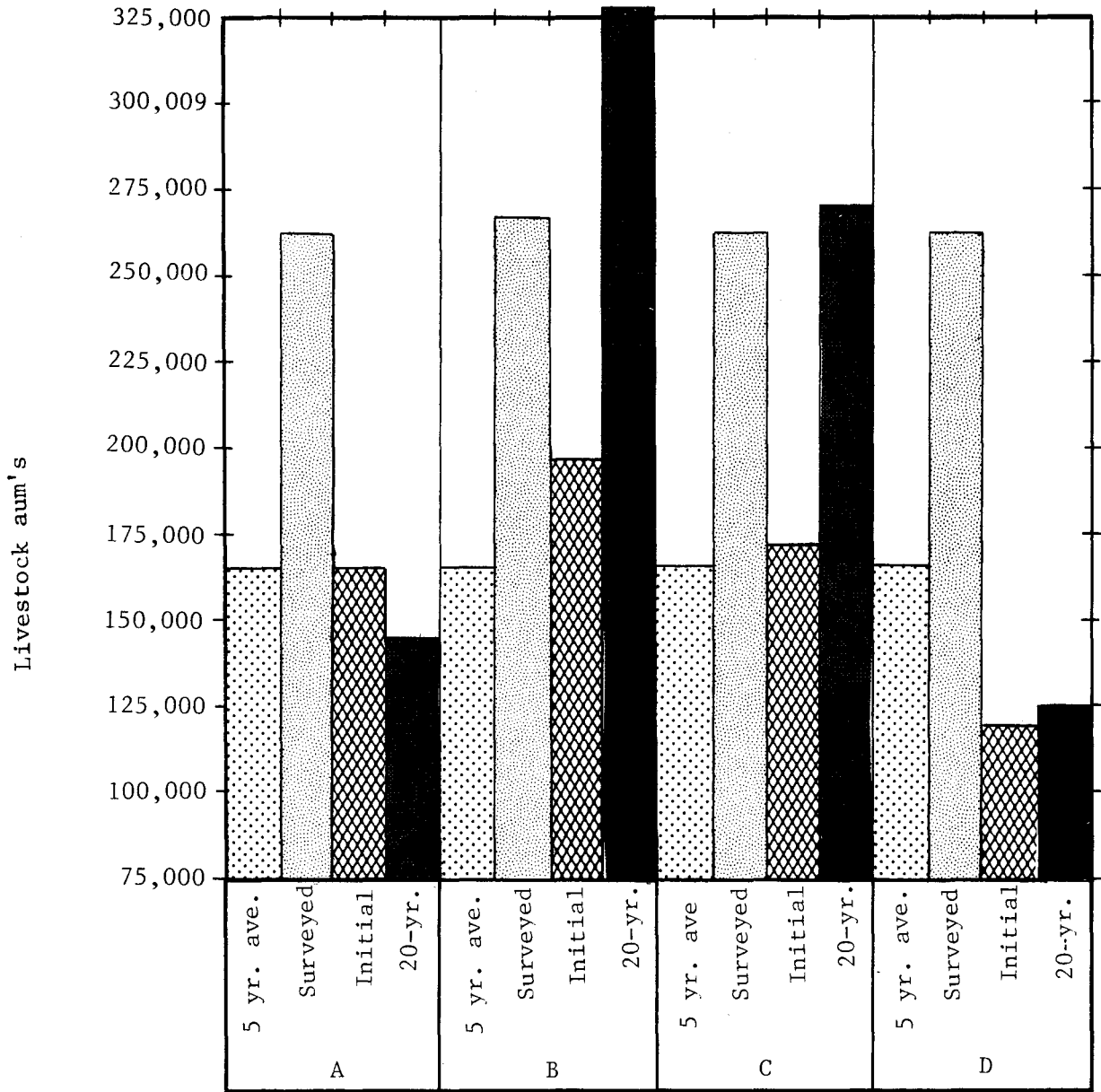
Figure E-1
 20-year livestock stocking rates
 compared with initial stocking rates
 and 5 year average use.



*Stocking rates assume equal distribution over all public land

Figure E-2

Changes in Livestock use
Levels by alternative



APPENDIX F
RANGE RESOURCES

METHODOLOGY FOR DETERMINING LIVESTOCK USE LEVELS

Alternative A

Initial livestock use levels are based on the 5-year average use levels. The 20-year livestock use levels are the 5-year average use levels minus the use that would be lost due to land transfers.

Alternative B

Initial livestock levels are determined by adding 20% to the 5-year average use levels. The 20-year use levels are the initial level plus forage increases due to land treatment, improved distribution from fences and pipelines, and grazing management minus forage that would be lost due to land transfer.

Alternative C

The Range Sites Inventory Method, as outlined in the Soil Conservation Service National Range Handbook, dated July 13, 1976 was used as a guideline in developing the Boise District Inventory Method in 1976-77. The Boise District Method was used for the Jarbidge Range Inventory during 1981-83. This method was used for determining range condition, estimating current forage production, and establishing initial livestock forage use levels for livestock and big game animals. The 20 year use levels are determined as in Alternative B.

The Boise Method is very similar to the guidelines established in the SCS Range Handbook. Range sites and site guides were established and named in coordination with SCS Range and Soil personnel. Range and soil inventories were correlated between BLM and SCS party leaders. The Boise Method forage estimates are based on double plot sampling and condition mapping was also done according to SCS guidelines. SCS methodology was adopted early in the initial development of the Boise Method.

The inventory crews were very experienced and all work was checked and correlated to SCS soil inventories prior to use. The primary differences was the minimum amount of actual plot clipping in the resource area due to budgetary constraints.

A detailed description of the range inventory procedures is available upon request at the Boise District Office.

Alternative D

Initial livestock use levels are determined by subtracting 20% from the lower value of the 5-year average or the estimated forage production. The 20-year use levels are determined as described in Alternative B.

RANGE DEVELOPMENTS

The following is a discussion of typical design features and construction practices for range improvements and treatments proposed in this plan. There are many special design features that can be made part of a project's design that are not specifically discussed in this Appendix. One example of a special design feature would be the use of a specific color of fence post to blend with the surrounding environment and thereby mitigate some of the visual impact of the fence. These mitigating design features will be developed, if needed, for individual projects at the time an environmental assessment is written.

STRUCTURAL IMPROVEMENTS

Fences

Fences would be constructed to provide exterior allotment boundaries, divide allotments into pastures, protect streams, and control livestock. Most fences would be three or four wire with steel post spaced sixteen and one-half feet apart with intermediate wire stays. Jack legs would be used where driving steel posts are not practical. Where fences may impair the movement of wildlife, they would be no more than forty inches in height, three strand, with the bottom wire smooth and at least sixteen inches above the ground. Where needed on key big game areas, the top wire would also be smooth. Existing fences that create wildlife movement problems would be modified. Proposed fence lines would not be bladed or scraped. Gates or cattleguards would be installed where fences cross existing roads. For any fences in wildlife migration areas, the need for let-down fences to allow passage of wildlife would be analyzed. These fences would be let down when livestock area not present. The BLM would be responsible for management of these special purpose fences.

Spring Development

Springs would be developed or redeveloped using a backhoe to install a buried collection system, usually consisting of drain tile and a collection box. The collection box is normally made from a section of twenty-four to forty-two inch metal culvert with a cover and a fitting to which a delivery pipe is connected. A short pipeline would be installed to deliver water to a trough for use by livestock and wildlife. Normally the spring area is fenced to exclude livestock following development.

Pipelines

Wherever possible, water pipelines would be buried. The trench may be excavated by a backhoe, ditchwitch, or similar equipment. Rigid plastic pipe would be placed in the trench and the excavated material would be used to backfill. While some flexible pipe may be installed using a ripper tooth, this is not a preferred technique. Most pipelines would have water tanks spaced one to two miles apart.

Wells

Well sites would be selected based on geologic reports that predict the depth to reliable aquifers. All applicable state laws and regulations that apply to the development of groundwater would be observed.

NONSTRUCTURAL IMPROVEMENTS

Burning

Burning is proposed to reduce the amount of big sagebrush and/or other brush on a site. Burning would normally be done during July to October, depending on the specific prescription written for each area, desired results, weather, and moisture conditions. Burn plans would be developed for each burn.

Plowing and Seeding

Most of the sites to be treated are in poor or fair vegetative conditions and have a low potential to improve under other management practices. Most of the existing vegetation would be eliminated during seedbed preparation, and the site would be seeded with species adapted to the site. The final selection of species to be seeded would depend on the planned use of the site and the management objectives for the allotment. Seed would be drilled wherever possible. The application of mulch and/or fertilizer would be prescribed based on site characteristics.

Interseeding

The treatment differs from plowing and seeding in that the existing vegetation is not eliminated during seedbed preparation. Desirable plant species would be interseeded with existing vegetation. A seed dribbler used with a crawler tractor, a small scalper/seedler, or range drill would be used to interseed strips. Broadcast seedings could possibly be used as well. Species to be seeded would be selected to meet management objectives developed for the allotment.

Plant Pest Control

Poisonous or noxious plants would be controlled where spot infestations occur, or where the BLM would cooperate with other affected landowners in controlling infestations on relatively large areas. Biological control would be used where practical. Chemical control would conform to all applicable state and federal regulations.

Brush Control

Spraying with a approved herbicide or dusting of a pelletized herbicide such as Graslan may be used to remove or reduce the amount of sagebrush. The proposed application type will depend upon costs, specific environmental impacts (to be documented in an Environmental Analysis specific to the proposal), type of terrain, and size of project. Herbicide applications will conform to all applicable State and Federal regulations.

GRAZING SYSTEMS (Typical Examples)

Rest-Rotation Grazing

Under a rest-rotation grazing system, grazing is deferred on various parts of an allotment during succeeding years, and the deferred parts are allowed complete rest for one or more years (Society for Range Management 1974). The allotment is divided into pastures, usually with comparable grazing capacities. Each pasture is systematically grazed and rested so that livestock production and other resource values are provided for, while the vegetation cover is simultaneously maintained or improved. This practice provides greater protection of the soil resource against wind and water erosion (USDA, FS 1965; Hormay 1970; USDA, FS 1972; Ratliff and Reppert 1974).

Any of several rest-rotation grazing systems may be used, depending upon the objectives for the allotment and the number of pastures.

Deferred Rotation Grazing

Deferred rotation is the discontinuance of grazing on different parts of an allotment in succeeding years. This allows each pasture to rest successively during the growing season to permit seed production, establishment of seedlings, and restoration of plant vigor (Society for Range Management 1974). One or more pastures are grazed during the spring, while the remaining one or more pastures are rested until after seed ripening of key species, and then grazed. Deferred rotations grazing differs from rest-rotation grazing in that no yearlong rest is provided.

Deferred Grazing

Deferred grazing is the discontinuance of grazing by livestock on an area for a specified period of time during the growing season. Under this system, grazing would begin after key plants have reached an advanced stage of development in their annual growth cycle. The growing season rest provided by this system promotes plant reproduction establishment of new plants, or restoration of the vigor of old plants (American Society of Range Management 1964).

Alternate Grazing

Alternate grazing is grazing by livestock every other season, with the area being rested in the alternate year. Stoddard, Smith, and Box (1975) describe the system:

Rotation grazing, or alternate grazing, involves subdividing the range into units and grazing one range unit, then another, in regular succession. The rotation system of grazing is based upon the assumption that animals in large numbers make more uniform use of the forage, and that a rest from grazing is beneficial to the plant, even though it must support a greater number of animals in the shorter time during which it is grazed. Certainly, proper rotation grazing results

APPENDIX TABLE F-1

Alternative A - Vegetation Production (AUMs)

MUA	Present Veg. Prod.	Grazing Management	Brush Control	Seeding	Water/Fencing	Transfer AUMs	Est. 20 yr Prod.
1	545						545
2	4,928	-986				- 11	3,931
3	6,763					-1,475	5,288
4	402					- 34	368
5	4,856	971					5,827
6	40,667					-4,957	35,710
7	82,672					-7,607	75,065
8	143	-14					129
9	140	-14				- 2	124
10	7,796						7,796
11	27,328	4,531				- 425	31,434
12	35,089					- 355	34,734
13	18,031					- 9	18,022
14	150	30					180
15	24,456					- 170	24,286
16	7,473					- 37	7,436
TOTAL	261,439	+4,518				-15,082	250,875

Alternative B - Vegetation Production (AUMs)

MUA	Present Veg. Prod.	Grazing Management	Brush Control	Seeding	Water/Fencing	Transfer AUMs	Est. 20 yr Prod.
1	545						545
2	4,928	4,465	107	262		- 11	9,751
3	6,763	2,306	410	2,700		- 1,475	19,704
4	402	263				- 34	631
5	4,856			818	2,407		8,081
6	40,667			12,049	25,788	- 5,110	73,394
7	82,672			24,229	30,594	-25,235	112,260
8	143	110					253
9	140	111				- 2	251
10	7,796	541					8,337
11	27,328		727	6,545	8,339	- 425	42,514
12	35,089		310	17,054	1,705	- 355	53,803
13	18,031			7,200		- 9	25,222
14	150	299					449
15	24,456	6,439		2,618		- 170	33,343
16	7,473	3,297	1,137	4,091		- 15,961	37
TOTAL	261,439	17,831	2,691	77,566	68,833	-32,863	395,499

Alternative C - Vegetation Production (AUMs)

MUA	Present Veg. Prod.	Grazing Management	Brush Control	Seeding	Water/Fencing	Transfer AUMs	Est. 20 yr Prod.
1	545						545
2	4,928	739			246	- 6	5,907
3	6,763	902	249	640	572	- 902	8,224
4	402	34				- 34	402
5	4,856			242			5,098
6	40,667			8,338	16,930	- 936	64,999
7	82,672			14,397	29,229	-12,888	113,410
8	143						143
9	140					- 2	138
10	7,796	1,750					9,546
11	27,328		151	2,182	8,339	- 425	37,575
12	35,089		359	2,667	1,705	- 153	39,667
13	18,031		64	824		- 9	18,910
14	150	30					180
15	24,456	2,446	107	242		- 146	27,105
16	7,473	747	606	1,455		- 37	10,244
TOTAL	261,439	6,648	1,536	30,987	57,021	-15,538	342,093

Alternative D - Vegetation Production (AUMs)

MUA	Present Veg. Prod.	Grazing Management	Brush Control	Seeding	Water/Fencing	Transfer AUMs	Est. 20 yr Prod.
1	545						545
2	4,928	1,592					6,520
3	6,763	1,353		104		- 68	8,152
4	402	80				- 15	467
5	4,856	971		159			5,986
6	40,667				3,000	- 11	43,656
7	82,672				5,000	- 34	87,638
8	143	29					172
9	140	28					168
10	7,796	2,000					9,796
11	27,328	7,891				-425	34,794
12	35,089	6,872				-146	41,815
13	18,031	3,615	76			- 9	21,713
14	150	30					180
15	24,456	5,032				-141	29,347
16	7,473	1,458				- 37	8,894
TOTAL	261,439	30,951	76	263	8,000	-886	299,843

in more uniform utilization. Large number of animals in small units are forced to spread over the entire area and to use the available forage more uniformly. Trampling is reduced because animals are held on small areas where feed is more abundant, and hence less travel is necessary.

Short-Duration, High-Intensity Grazing

High-intensity grazing permits short-duration grazing with the stocking rate higher than what would be considered normal. The purpose of this type of system is to obtain uniform use of all plants, desirable and undesirable alike, and to prevent regrowth of the most desirable plants. This system allows desirable plants to compete for nutrients on an equal basis with less desirable plants.

APPENDIX TABLE F-3

Alternative A - Condition Class in Twenty Years (Acres)*

MJA	Excel.	Good	Fair	Poor	Burn	Seed	Spray	Water	Un-grazed	Total	Acres Trans	Total Public Acres	
1	No Condition Inventory										11,086	0	11,086
2	0	2,496	6,433	49,967	3,252	0	0	0	0	62,148	80	62,228	
3	0	0	0	27,870	8,588	3,771	0	270	1	40,500	9,291	49,791	
4	0	0	0	7,743	113	499	0	0	373	8,728	340	9,068	
5	0	0	0	28,149	15,379	5,414	0	0	344	49,286	0	49,286	
6	0	0	0	25	72,024	22,803	66,619	0	0	161,471	15,388	176,859	
7	0	0	0	254	101,956	38,904	136,520	0	0	13,282	290,916	56,614	347,530
8	0	0	0	0	3,587	400	407	0	0	4,394	0	4,394	
9	0	0	0	0	2,865	14	0	0	0	2,879	22	2,901	
10	2,648	8,068	14,253	56,576	1,886	1,827	0	0	10,381	95,639	0	95,639	
11	0	1,841	20,893	138,851	27,892	20,293	0	0	524	210,294	1,277	211,571	
12	0	1,965	49,793	121,460	48,844	22,518	6,756	16	287	251,639	4,280	255,919	
13	0	428	1,784	48,276	7,547	47,510	2,347	24	0	107,916	120	108,036	
14	0	0	0	2,947	0	0	0	0	0	2,947	0	2,947	
15	30,143	43,916	36,007	57,913	8,590	25,405	0	703	1,236	203,913	1,325	205,238	
16	1,700	15,049	23,916	47,751	7,329	0	0	0	1,955	97,700	280	97,980	
Total	34,491	73,763	153,358	767,935	191,541	330,783	9,103	1,013	28,383	1,601,456	89,017	1,690,473	
%	2.2	4.6	9.6	48.3	12.0	20.8	.6	.1	1.8	100			

*Includes reduction in condition class for transfer acres.

Alternative B - Condition Class in Twenty Years (Acres)*

MJA	Excel.	Good	Fair	Poor	Burn	Seed	Spray	Water	Un-grazed	Total	Acres Trans	Total Public Acres	
1	No Condition Inventory										11,086	0	11,086
2	0	1,248	1,248	55,120	3,252	640	640	0	0	62,148	80	62,228	
3	0	0	0	16,630	9,228	10,371	4,000	270	1	40,500	9,291	49,791	
4	0	0	0	7,743	113	499	0	0	373	8,728	340	9,068	
5	0	0	0	26,149	15,379	7,414	0	0	344	49,286	0	49,286	
6	0	0	0	25	40,124	21,744	96,418	0	0	158,311	18,548	176,859	
7	0	0	0	254	15,898	34,383	159,680	0	0	13,282	223,497	124,033	347,530
8	0	0	0	0	3,587	400	407	0	0	4,394	0	4,394	
9	0	0	0	0	2,865	14	0	0	0	2,879	22	2,901	
10	2,648	8,068	14,253	56,576	1,886	1,827	0	0	10,381	95,639	0	95,639	
11	0	1,841	20,893	108,251	32,892	45,893	0	0	524	210,294	1,277	211,571	
12	0	1,965	45,693	76,960	52,944	67,018	6,756	16	287	251,639	4,280	255,919	
13	0	428	1,784	26,676	7,547	69,110	2,347	24	0	107,916	120	108,036	
14	0	0	0	2,947	0	0	0	0	0	2,947	0	2,947	
15	30,143	30,693	30,868	62,375	14,090	31,805	2,000	703	1,236	203,913	1,325	205,238	
16	1,700	15,049	8,916	37,751	12,329	10,000	10,000	0	1,955	97,700	280	97,980	
Total	34,491	59,292	123,934	539,775	206,201	501,082	25,743	1,013	28,383	1,530,877	159,596	1,690,473	
%	2.3	3.9	8.2	35.5	13.6	33.0	1.7	.1	1.9	100			

*Includes reduction in condition class for transfer acres.

Alternative C - Condition Class in Twenty Years (Acres)*

MJA	Excel.	Good	Fair	Poor	Burn	Seed	Spray	Water	Un-grazed	Total	Acres Trans	Total Public Acres	
1	No Condition Inventory										11,086	0	11,086
2	0	3,461	12,975	42,500	3,252	0	0	0	0	62,188	40	62,228	
3	0	0	0	24,789	8,988	8,482	0	270	1	42,530	7,261	49,791	
4	0	0	0	7,743	113	499	0	0	373	8,728	340	9,068	
5	0	0	0	27,149	15,379	6,414	0	0	344	49,286	0	49,286	
6	0	0	0	25	42,758	24,267	104,576	0	0	171,626	5,233	176,859	
7	0	0	0	254	27,752	41,500	193,132	0	0	13,282	275,920	71,610	347,530
8	0	0	0	3,587	400	407	0	0	0	4,394	0	4,394	
9	0	0	0	2,887	14	0	0	0	0	2,901	0	2,901	
10	2,648	8,068	14,253	56,576	1,886	1,827	0	0	10,381	95,639	0	95,639	
11	0	1,841	18,893	126,251	29,892	32,893	0	0	524	210,294	1,277	211,571	
12	0	1,965	45,045	108,979	54,098	34,493	6,756	16	287	251,639	4,280	255,919	
13	0	428	936	40,876	8,395	54,910	2,347	24	0	107,916	120	108,036	
14	0	0	0	2,947	0	0	0	0	0	2,947	0	2,947	
15	30,143	58,876	20,447	57,113	9,310	26,405	0	703	1,236	204,233	1,005	205,238	
16	1,700	25,049	5,916	41,751	9,329	6,000	6,000	0	1,955	97,700	280	97,980	
Total	34,491	99,868	121,691	610,711	206,823	470,038	15,103	1,013	28,383	1,599,027	91,446	1,690,473	
%	2.2	6.3	7.6	38.6	13.0	29.5	.9	>.1	1.8	100			

*Includes reduction in condition class for transfer acres.

Alternative D - Condition Class in Twenty Years (Acres)*

MJA	Excel.	Good	Fair	Poor	Burn	Seed	Spray	Water	Un-grazed	Total	Acres Trans	Total Public Acres	
1	No Condition Inventory										11,086	0	11,086
2	0	5,102	5,601	48,273	3,252	0	0	0	0	62,228	0	62,228	
3	0	0	2,000	26,140	8,588	11,854	0	270	1	48,853	938	49,791	
4	0	0	0	7,925	113	499	0	0	373	8,910	158	9,068	
5	0	0	0	27,149	15,379	6,414	0	0	344	49,286	0	49,286	
6	0	0	0	25	75,008	26,519	75,107	0	0	176,659	200	176,859	
7	0	0	0	315	123,581	46,278	155,612	0	0	13,282	339,068	8,462	347,530
8	0	0	0	1,000	2,587	400	407	0	0	4,394	0	4,394	
9	0	0	0	2,887	14	0	0	0	0	2,901	0	2,901	
10	2,648	13,068	11,253	54,576	1,886	1,827	0	0	10,381	95,639	0	95,639	
11	0	6,841	15,893	138,851	27,892	20,293	0	0	524	210,294	1,277	211,571	
12	0	1,965	49,793	122,740	49,444	23,518	6,756	16	287	254,519	1,400	255,919	
13	0	428	1,784	47,276	7,547	48,510	2,347	24	0	107,916	120	108,036	
14	0	0	0	2,947	0	0	0	0	0	2,947	0	2,947	
15	30,143	67,876	18,087	52,113	8,670	25,405	0	703	1,236	204,233	1,005	205,238	
16	1,700	27,049	14,916	44,751	7,329	0	0	0	1,955	97,700	280	97,980	
Total	34,491	122,329	123,614	773,857	203,311	369,446	9,103	1,013	28,383	1,676,633	13,840	1,690,473	
%	2.2	7.3	7.4	46.5	12.2	22.2	.5	.1	1.7	100			

*Includes reduction in condition class for transfer acres.

Appendix Table F-2
Current Condition Classes

MIA	Excell.	Good	Fair	Poor	Burn	Seed	Spray	Water	Total Acres	Ungraz Areas
1	No Condition								11,086	+ 0
2	—	2,496	6,433	50,047	3,252	—	—	—	62,228	+ 0
3	—	—	—	29,728	8,588	11,204	—	270	49,790	+ 1
4	—	—	—	8,083	113	499	—	—	8,695	+ 373
5	—	—	—	28,149	15,379	5,414	—	—	48,942	+ 344
6	—	—	25	75,208	26,519	75,107	—	—	176,859	+ 0
7	—	—	315	123,921	46,278	155,612	—	—	326,126	+ 2,140
8	—	—	—	3,587	400	407	—	—	4,394	+ 0
9	—	—	—	2,887	14	—	—	—	2,901	+ 0
10	2,648	8,068	14,253	56,576	1,866	1,827	—	—	82,258	+ 1,038
11	—	1,841	20,893	139,244	27,892	21,177	—	—	211,047	+ 524
12	—	1,965	49,793	123,980	49,604	23,518	6,756	16	255,632	+ 287
13	—	428	1,784	48,396	7,547	47,510	2,347	24	108,036	+ 0
14	—	—	—	2,947	—	—	—	—	2,947	+ 0
ID										
15	22,312	36,084	33,543	57,182	8,190	24,159	—	703	182,173	+ 1,236
NV										
15	8,001	7,992	2,664	1,446	480	1,246	—	—	21,829	+ 0
ID										
16	1,584	1,628	16,265	45,973	7,329	—	—	—	72,779	+ 1,955
NV										
16	116	13,421	7,651	2,058	—	—	—	—	23,246	+ 0
Total	34,661	73,923	153,619	799,412	203,471	367,500	9,103	743	1,653,968	+36,505
%	2.1	4.5	9.3	48.3	12.3	22.2	0.6	0.0		

Appendix Table F-4
Allotment Summary (AUMs)

No.	Name	MIC 1/	AMP 2/	lvstk Class 3/	Current Season-of Use	Grazing Pre- ference	5-Year Average Use	Alternative A				Alternative B				Alternative C				Alternative D			
								Initial Forage Level	%	20-Yr Forage Level	%	Initial Forage Level	%	20-Yr Forage Level	%	Initial Forage Level	%	20-Yr Forage Level	%	Initial Forage Level	%	20-Yr Forage Level	%
1000	Cedar Butte	M	B	C	4/1-1/30	745	539	539	0	526	-21	647	20	745	15	539	0	745	15	431	-20	431	-20
1001	Cedar Butte E.	I		C	4/16-10/15	372	307	307	0	307	0	368	20	783	112	368	-20	783	155	246	-20	246	-20
1002	Cedar Butte Devil Creek	I	B,C	C	4/16-5/30 6/10-11/15	1,857	2,295	2,295	0	2,291	0	2,754	20	2,900	26	1,857	-19	2,295	0	1,604	-30	1,600	-30
1004	Cedar Butte #9	M		S,C	5/11-6/12	102	55	55	0	46	-16	66	20	57	4	55	0	46	-16	44	-20	35	-36
1006	Cedar Butte #10	M		S/C	5/11-6/12	102	55	55	0	46	-16	66	20	57	4	55	0	46	-16	44	-20	35	-36
1007	C.B.#10-Guerry	M	B,C	S/C	5/19-7/12 10/11-11/24	465	415	415	0	396	-5	498	20	767	85	415	0	645	55	332	-20	313	-25
1008	Brackett Bench AMP	M	E	C	4/1-2/28	2,386	3,050	3,050	0	3,045	0	3,660	20	4,005	31	2,386	-22	2,431	-20	1,776	-42	1,771	-42
1009	Roseworth Tr	C		C	4/1-11/30	56	56	56	0	51	-9	67	20	62	11	60	7	55	-21	45	-20	40	-29
1013	Cedar Canyon	M		C	5/1-5/31 11/1-11/30	15	12	12	0	12	0	14	20	14	20	14	20	13	8	10	-17	10	-17
1014	Roseworth Point	I	BCD	C	4/1-11/30	1,864	1,798	1,798	0	1,798	0	2,158	20	3,358	87	1,495	-17	1,895	5	1,196	-33	1,196	-33
1016	Devil Creek	I	B,C	S/C	3/1-8/31 10/1-10/15	907	752	752	0	752	0	902	30	1,229	63	752	0	852	13	508	-32	508	-32
1017	Devil Creek Patrick	M	B,C	C	6/1-8/31 10/1-10/15	907	752	752	0	752	0	902	20	1,229	63	752	0	852	13	508	-32	508	-32
1020	E & W Deadwood Trap	M		C	5/1-11/30	915	495	495	0	489	-1	597	20	581	17	551	11	545	10	356	-28	350	-29
1021	Diamond A Unit	I	B,C	S/C	3/1-2/28	8,546	8,546	8,546	0	8,509	-14	10,255	20	15,487	81	6,772	-21	9,237	8	5,418	-37	5,381	-37
1022	Cedar Crossing Seeding	I	B	C	4/1-10/22	740	621	621	0	621	0	745	20	1,045	68	791	27	791	27	497	-20	497	-20
1023	Diversion	M		C	4/1-6/30	320	341	341	0	341	0	409	20	513	50	409	20	513	50	273	-20	273	-20
1024	Deadwood 4/	I	B	C	4/16-10/10	559	497	497	0	492	-1	596	20	741	49	285	-43	280	-44	228	-54	223	-55
1025	China Creek Player Con.	I	B,C	C	4/1-11/30	714	723	723	0	723	0	868	20	1,289	78	723	0	923	28	574	-21	574	-21
1026	Bear Creek	M		C	7/1-10/15	160	159	159	0	159	0	191	20	297	87	159	0	265	67	127	-20	127	-20
1027	Player Cany.	M	B	C	7/1-10/31	280	219	219	0	219	0	263	20	263	20	219	0	341	56	175	-20	175	-20
1029	Grassy Hills	M	BCD	C	4/1-10/31	1,078	1,654	1,654	0	1,654	0	1,985	20	2,385	44	1,642	-1	1,842	11	1,314	-21	1,314	-21
1031	Juniper Ranch	I	E	H,C	3/15-7/1 12/15-1/10	4,604	4,296	4,296	0	3,791	-12	5,155	20	12,904	200	4,296	0	12,345	187	3,437	-20	3,332	-22
1032	Hammett Unit	I		S	4/10-5/30	489	247	247	0	247	0	296	20	489	98	247	0	489	98	198	-20	198	-20
1033	Hammett #1	I	B,C	C	4/10-7/15 10/1-11/30	4,337	3,987	3,987	0	3,987	0	4,784	20	5,284	33	2,500	-37	2,850	-29	1,488	-63	1,488	-63
1034	Hammett #2	I	B,C	C	4/10-6/30	400	289	289	0	0	100	347	20	58	-80	200	-31	0	100	160	-45	160	-45
1035	Hammett #3	I		H	9/15-3/15	240	241	241	0	154	-36	289	20	402	67	241	0	254	5	154	-36	113	-53
1036	Hammett #4	I	B,C	C	4/10-6/30 10/15-11/15	2,609	2,639	2,639	0	2,074	-21	3,167	20	3,202	21	1,944	-26	2,342	-11	1,555	-41	1,555	-41
1037	Hammett #5	I	B,C	C	4/10-5/31 10/11-10/21	1,924	1,367	1,367	0	1,367	0	1,640	20	1,902	39	1,453	6	1,899	39	1,094	-20	1,094	-20
1038	Hammett #6	I	B,C	C	6/1-6/30 10/1-10/21	911	657	657	0	657	0	788	20	895	36	445	-32	645	-21	356	-46	356	-46
1039	Hammett #7	C	B,C	C	7/1-9/30	340	340	340	0	329	-31	408	20	397	17	403	19	486	43	272	-20	272	-20

Appendix Table F-4 (cont.)

No.	Name	MIC	AMP	Class	Ivstck 3/	Current Season-of Use	Grazing Pre- ference	5-Year Average Use	Alternative A				Alternative B				Alternative C				Alternative D			
									Initial Forage Level	%	20-Yr Forage Level	%	Initial Forage Level	%	20-Yr Forage Level	%	Initial Forage Level	%	20-Yr Forage Level	%	Initial Forage Level	%	20-Yr Forage Level	%
1040	Hammett#4	ST	C	C		4/16-11/30	30	30	30	0	30	0	36	20	36	20	33	10	33	10	24	-20	24	-20
1041	King Hill Canyon		C	C		3/5-4/9	103	106	106	0	106	0	127	20	361	240	127	20	361	240	85	-20	85	-20
1042	House Creek	M		C		7/1-9/30	667	681	681	0	671	-1	817	20	907	33	282	-59	274	-60	226	-67	218	-68
1043	Saint Allot.	M		C		7/1-8/15	190	190	190	0	190	0	228	20	228	20	190	0	190	0	61	-68	61	-68
1046	Kinyon	I	B,C	C		3/1-2/28	881	883	883	0	883	0	1,500	70	2,573	191	1,500	700	2,573	191	706	-20	706	-20
1047	Player Butte	M	B	C		10/23-11/30	136	211	211	0	211	0	253	20	332	57	211	0	290	37	169	-20	169	-20
1050	Poison Creek AMP	I	E	C		3/1-2/29	15,779	13,443	13,443	0	13,434	0	16,132	20	27,134	101	15,779	17	23,688	76	10,754	-20	11,945	-11
1054	Hammett Ind.	I		C		4/10-6/30	152	152	152	0	139	-9	188	24	175	15	188	24	175	15	122	-20	120	-20
1056	Saylor Creek	I	B,C	S/C		4/1-11/30	3,470	34,026	24,026	0	26,396	-22	40,831	20	69,946	105	40,831	20	72,739	113	27,848	-20	32,174	-5
1065	Three Creek- Clover	I	B,C	C		3/1-12/31	60	60	60	0	60	0	72	20	72	20	60	0	60	0	46	-23	46	-23
1066	Three Creek #8-Pvt.	I		C		4/25-6/30 10/1-11/30	439	440	440	0	427	-3	528	20	661	50	440	0	573	30	352	-20	339	-23
1067	Three Creek #2	M	B,C	C		4/1-6/30 10/1-10/31	3,107	2,375	2,375	0	2,372	0	2,850	20	4,047	70	2,598	9	2,598	9	1,900	-20	1,900	-20
1070	Three Creek #8	I	B,C	C		6/1-6/30 10/1-11/30	798	805	805	0	805	0	966	20	976	21	805	0	976	4	644	-20	644	-20
1071	Three Creek Blossom	M	B	C		6/1-6/30 10/1-11/30	529	529	529	0	523	-1	635	20	629	19	529	0	629	19	423	-20	423	-20
1075	Three Creek #8	M		C		4/1-11/30	527	550	550	0	543	0	660	20	753	37	526	-4	519	-6	421	-23	414	-25
1077	Taylor Pocket	I	BCD	C		4/1-6/30 11/1-11/30	2,323	1,826	1,826	0	1,826	0	2,191	20	2,691	47	1,297	-29	1,797	-2	1,038	-43	1,038	-43
1084	Wilkins Island	M	B,C	C		3/1-6/30 11/1-2/28	773	777	777	0	762	-2	932	20	917	18	727	-6	712	-8	582	-25	567	-27
1088	North Fork	M	B	C		5/1-6/30 9/15-9/30	570	596	596	0	584	-2	715	20	1,003	68	286	-52	274	-54	229	-62	217	-64
1092	Signal Butte	M	B,C	S/C		7/1-10/31	1,099	2,465	2,465	0	2,458	0	2,958	20	4,151	68	2,415	0	2,465	0	1,360	-45	1,360	-45
1093	House Creek Pvt.	C		S/C		5/1-6/30 11/1-12/31	112	112	112	0	107	-4	134	20	129	15	112	0	107	-4	45	-60	45	-60
1094	Guerry- Patrick	M	B,C			5/1-11/30	885	816	816	0	816	0	979	20	1,079	32	504	-38	504	-38	403	-51	403	-51
1095	Camas Slough	M	B,C			5/15-6/15 11/25-12/1	180	381	381	0	381	0	457	20	457	20	231	-39	231	-39	185	-51	185	-51
1096	Antelope Springs AMP	I	E	C		7/1-7/5 12/1-12/4	6,046	6,072	6,072	0	6,038	-1	7,286	20	8,853	46	6,072	0	6,666	10	4,858	-20	4,825	-21
1099	Three Creek	I	B,C	C		4/1-12/31	3,739	3,739	3,739	0	3,739	0	4,487	20	6,287	68	3,739	0	5,548	48	2,991	-20	2,991	-20
1100	Bruneau Cany	M		M		11/15-2/28	100	100	100	0	100	0	120	20	120	20	100	0	100	0	80	-20	80	-20
1101	Bennett Mtn.	C	B,C	C		7/1-9/30	377	378	378	0	378	0	454	20	454	20	129	-66	200	-47	103	-73	103	-73
1118	Crawfish	I	B,C	C		4/1-6/30 10/1-12/15	911	1,065	1,065	0	1,065	0	1,278	20	1,278	20	1,065	0	1,065	0	750	-30	750	-30
1119	Juniper Butte	I	B,C	C		4/1-12/31 1/4-2/1	1,059	1,195	1,195	0	1,195	0	1,434	20	3,034	154	1,195	0	2,795	134	956	-20	1,356	13
1120	Horse Butte AMP	I	E	C		4/1-11/30	1,519	2,989	2,989	0	2,989	0	3,587	20	6,587	120	3,163	6	3,663	23	2,391	-20	2,391	-20

Appendix Table F-4 (cont.)

No.	Name	MIC 1/	AMP 2/	lvstk Class 3/	Current Season-of Use	Grazing Pre- ference	5-Year Average Use	Alternative A				Alternative B				Alternative C				Alternative D			
								Initial Forage Level	%	20-Yr Forage Level	%	Initial Forage Level	%	20-Yr Forage Level	%	Initial Forage Level	%	20-Yr Forage Level	%	Initial Forage Level	%	20-Yr Forage Level	%
1121	Grassy Hills AMP	I	E	C	4/1-1/31	2,279	4,453	4,453	0	4,453	0	5,344	20	6,844	54	2,825	-37	3,025	-32	2,660	-49	2,260	-49
1102	Blackrock Pocket	M	B,C	C	7/1-11/30	1,890	1,890	1,890	0	1,890	0	2,268	20	2,268	20	1,905	1	1,905	1	1,512	-20	1,512	-20
1122	Buck Flat AMP	M	E	C	4/1-5/31 10/16-12/9	1,716	2,667	2,667	0	2,601	-2	3,200	20	5,134	93	3,011	13	3,145	18	2,134	-20	2,068	-22
1123	Coonskin AMP	M	E	S/C	3/1-12/31	5,433	6,154	6,154	0	6,092	-1	7,385	20	10,323	68	7,008	14	7,513	22	4,923	-20	4,923	-20
1124	Sugar Bowl	I	B	C	4/10-6/20 11/1-12/30	975	961	961	0	716	-25	1,153	20	1,308	36	975	1	1,400	46	769	-20	767	-20
1125	Pigtail	I	B,C	S/C	4/1-11/30	4,155	3,791	3,791	0	3,791	0	4,549	20	6,649	75	3,802	2	4,102	8	3,033	-20	3,109	-18
1126	Conover	I	BCD	C	4/1-11/30	4,205	4,205	4,205	0	4,205	0	5,046	20	6,546	56	3,932	-6	4,205	0	3,146	-25	3,146	-25
1127	Lower Alkali Seeding	I		C	4/1-6/30 10/1-11/30	150	150	150	0	0	100	180	20	30	-80	131	-13	0	100	105	-30	105	-30
1129	South Alkali Seeding	I	B,C	C	4/1-6/30 10/1-11/30	404	405	405	0	315	-22	486	20	496	20	324	-20	262	-35	259	-36	244	-40
1130	Cold Springs Creek	I	B,C	C	4/1-6/30 10/10-10/30	2,408	2,390	2,390	-2	2,341	-2	2,868	20	4,129	13	2,496	4	2,986	25	1,912	-20	2,006	-16
1131	Cedar Creek	I	B,C	S/C	6/15-11/15	4,221	4,870	4,870	0	4,867	0	5,844	20	6,041	24	2,357	-52	2,407	-51	1,886	-61	1,886	-61
1132	East Juniper Draw	I	B,C	S/C	3/15-6/15 11/1-12/31	907	907	907	0	804	-11	1,200	32	2,688	196	1,066	18	2,260	149	726	-20	726	-20
1133	Devil Creek-Balanced Rck	I	B,C	S	3/1-3/31 11/1-12/31	226	226	226	0	226	0	271	20	1,416	526	226	0	971	330	181	-20	181	-20
1134	Guerry	I	B,C	S/C	3/15-4/25 11/15-12/31	313	313	313	0	279	-11	500	60	1,766	464	475	51	1,760	462	250	-20	250	-20
1135	South Crows Nest	M	B,C	S/C	3/25-5/15 11/1-12/31	790	790	790	0	790	0	948	20	1,608	103	790	0	1,450	84	632	-20	632	-20
1136	East Clover	I	B,C	C	4/1-11/30	320	256	256	0	256	0	320	25	489	91	320	25	441	72	205	-20	205	-20
1137	West Saylor Creek	I	B,C	S/C	4/1-11/30	17,362	13,149	13,149	0	8,192	-38	16,758	27	55,508	332	22,051	68	52,136	297	10,519	-20	13,667	4
1195	Hammett Sec. 15	C		S	6/1-8/31	361	361	361	0	361	0	433	20	433	20	361	0	361	0	289	-20	289	-20
1198	Ballantyne Sec. 15	C		C	6/1-8/31	144	144	144	0	144	0	173	20	173	20	144	0	144	0	115	-20	115	-20
1199	Joost Sec.15	C		C	6/1-8/30	40	40	40	0	40	0	48	20	48	20	40	0	40	0	32	-20	32	-20
ALLOTMENT TOTALS						166,586	163,477	163,477		148,395		197,835		327,140		172,493		271,425		119,827		128,553	

1/ M - Maintain, I - Improve, C - Custodial.

2/ B, C, & D - Alternative proposed for Allotment Management Plans (AMP); E - Existing AMP in effect.

3/ C - Cattle, S - Sheep, H - Horses.

4/ A portion of the allotment shown has been redesigned 1138 South Deadwood. See allotment map.

APPENDIX G
TERRESTRIAL WILDLIFE

Appendix Table G-1
Alternative C - Wildlife Habitat Improvement
(Total Acres, All Species)

MUA	Poor Condition Replanted to Native	Interseed Existing Seedings	Rehabilitate Existing Burns
1			
2	3,000	200	400
3		300	100
4			
5			
6			150
7			
8			
9			
10		250	900
11		500	2,000
12		500	2,500
13		1,000	150
14			
15		3,750	1,150
16			1,350
TOTAL	3,000	6,500	8,700

Appendix Table G-2
Alternative D - Wildlife Habitat Improvement
(Total Acres, All Species)

MUA	Poor Condition Replanted to Native	Interseed Existing Seedings	Rehabilitate Existing Burns
1			
2	3,500	200	400
3	500	300	100
4			
5			
6			150
7			
8			
9			
10	2,250	250	900
11	1,500	500	2,000
12	1,500	500	2,500
13	500	1,000	150
14			
15	5,750	3,750	1,150
16	2,750		1,350
TOTAL	18,250	6,500	8,700

Appendix Table H-2
Improvements to Aquatic Habitat by Alternative

MUA	Streams	Alternatives in Miles				Location	Total Miles	Recommended Action		
		A	B	C	D			Fence (Livestock Exclusion)	Vegetation Manipulation	Instream Habitat Structure
2	Dive Creek	--	2.4	2.4	2.4	T.2S., R.8E., Sec. 15,21,22,28	2.4	2.4	2.4	2.4
15	Cedar Creek	--	2.5	2.5	2.5	T.15S., R.13E., Sec. 26,33,22,15	2.5	2.5	---	---
12	E. Fk. Bruneau River	--	4.0	4.0	4.0	T.14S., R.11E., Sec. 31,30,19 T.14S., R.10E., Sec. 24,13	4.0	4.0	---	0.8
12	" " " "	--	6.8	6.8	6.8	T.12S., R.10E., Sec. 7 T.12S., R.9E., Sec. 12,1,2 T.11S., R.9E., Sec. 35,26	6.8	6.8	6.8	6.8
7	" " " "	--	6.3	6.3	6.3	T.11S., R.9E., Sec. 15,9,8,7 T.11S., R.8E., Sec. 12,1	6.3	6.3	6.3	6.3
7	" " " "	--	4.5	4.5	4.5	T.10S., R.8E., Sec. 25,26,27,22,21(36)	4.5	4.5	4.5	4.5
10	" " " "	--	10.0	10.0	10.0	T.10S., R.8E., Sec. 9,8,7 T.10S., R.7E., Sec.1,2,3,12	10.0	10.0	6.1	6.1
2	Little Canyon Creek	--	1.0	1.0	1.0	T.4S., R.10E., Sec. 9	1.0	1.0	1.0	1.0
10	Jarbridge River at Columbet Creek Mouth	--	0.5	0.5	0.5	T.15S., R.9E., Sec. 32	0.5	0.5	---	---
10	Jarbridge River at Dorsey Creek Mouth	--	0.6	0.6	0.6	T.15S., R.8E., Sec. 10,14,15	0.6	0.6	---	---
2	Willow Creek	--	--	1.2	1.2	T.2S., R.8E., Sec. 35(36) T.3S., R.8E., Sec.2	1.2	1.2	1.2	1.2
15	N. Fk. Salmon Falls Creek	--	--	2.2	2.2	T.16S., R.13E., Sec. 12,13,21	2.2	2.2	2.2	2.2
15	Deadwood Creek	--	--	--	2.0	T.16S., R.12E., Sec. 21(16)	2.0	2.0	2.0	2.0
15	Three Creek	--	--	--	1.2	T.15S., R.11E., Sec. 27,28	1.2	1.2	---	---
15	Big Flat Creek	--	--	--	1.6	T.16S., R.11E., Sec. 19,30	1.6	1.6	---	---
15	Cedar Creek	--	--	--	0.5	T.13S., R.14E., Sec. 31,6	0.5	0.5	---	---
LIVESTOCK MANAGEMENT										
2	W. Fk. King Hill Creek	--	7.0	7.0	7.0	T.3S., R.10E., Sec. 5 to T.4S., R.11E., Sec. 6	7.0			
12	Deadwood Creek	--	2.0	2.0	2.0	T.15S., R.11E., Sec. 3,4	2.0			

Appendix Table H-1
Improvements to Riparian Habitat by Alternative

MUA	Streams	Alternatives (stream miles)				Location	From	To	Public Stream Miles	Totals Public Stream Miles	Recommended Action
		A	B	C	D						
15	Cedar Creek	2.5	2.5	2.5	T.15S., R.13E.	NE1/4 Sec. 26	SE1/4 Sec. 15	2.5	2.5	Gap fence	
10-11	E. Fk. Bruneau River	0.5	1.0	1.0	T.14S., R.11E.	SE1/4 Sec. 31	NE1/4 Sec. 31	1.0		Gap fence	
		1.0	1.2	1.2	T.14S., R.10E.	NE1/4 Sec. 12	NE1/4 Sec. 1	1.2		Gap fence	
		3.0	5.5	5.5	T.13S., R.10E.	NE1/4 Sec. 26	NW1/4 Sec. 3	5.5		Gap fence	
		2.0	3.0	3.8	T.12S., R.10E.	SE1/4 Sec. 33	NE1/4 Sec. 19	3.8		Gap fence	
					T.12S., R.10E.	SW1/4 Sec. 7					
		3.0	6.0	6.1	T.11S., R.9E.	NE1/4 Sec. 15	NW1/4 Sec. 26	6.1		Gap fence	
		8.0	13.0	13.8	T.10S., R.8E.		NW1/4 Sec. 7	13.8	31.4	Gap fence	
15	Bear Creek	0.4	0.4	0.4	T.16S., R.13E.	SE1/4 Sec. 21	NE1/4 Sec. 21	0.4	0.4	Fence/mgt-water/seeding away from stream	
	Shack Creek	1.0	1.1	1.1	T.16S., R.13E.	NW1/4 Sec. 28	SW1/4 Sec. 28	1.1	1.1	Fence/mgt-water/seeding away from stream	
2-3	Little Canyon Creek	2.0	2.2	2.2	T.4S., R.10E.	NE1/4 Sec. 29	SW1/4 Sec. 32	2.2	2.2	Fence/mgt.	
		1.0	1.0	1.0	T.4S., R.10E.	SE1/4 Sec. 9	SE1/4 Sec. 4	1.0	1.0	Fence	
	King Hill Creek	0.5	0.7	0.7	T.4S., R.11E.	SW1/4 Sec. 19	SE1/4 Sec. 19	0.7	0.7	Fence/mgt.	
	W.F. King Hill Creek				T.3S., R.10E.	NE1/4 Sec. 22	SW1/4 Sec. 15	0.8			
		1.5	1.8	1.8	T.4S., R.11E.	SE1/4 Sec. 6	NW1/4 Sec. 6	1.0		Fence/mgt.	
		1.5	1.8	1.8	T.4S., R.10E.	SE1/4 Sec. 5	SE1/4 Sec. 9	1.8	3.6	Fence/mgt.	
15	Spring Creek	3.0	3.2	3.2	T.47N., R.59E.	SW1/4 Sec. 13	NE1/4 Sec. 2	3.2	3.2	Fence	
	Cherry Creek	2.0	2.4	2.4	T.47N., R.60E.	SE1/4 Sec. 15	SW1/4 Sec. 4	2.4	2.4	Fence	
10	Jarbidge River				T.15S., R.8E.	NW1/4 Sec. 14	SE1/4 Sec. 10	1.1			
		1.0	1.1	1.1					1.1	Gap fence	
2	Dive Creek	1.0	1.4	1.4	T.2S., R.8E.	NE1/4 Sec. 28	NW1/4 Sec. 22	1.4	1.4	Fence/plant willow	
14	Salmon Falls Creek	1.0	2.0	2.0	T.12S., R.14E.	NE1/4 Sec. 9		2.0			
		1.0	2.0	2.2	T.11S., R.14E.		SW1/4 Sec. 29	2.2	4.2	Gap fence	
	TOTALS	36.9	53.3	55.2				55.2	55.2		

APPENDIX H
RIPARIAN AND AQUATIC HABITAT

Appendix Table H-4
Riparian Habitat Condition (miles)

Stream	Mult. Use Area	Poor	Fair	Good	Excellent/ Unsuitable	Total
Lime Creek	1				0.9 ex	0.9
Total (1)	1				0.9 ex	0.9
King Hill Creek Main	2	1.79	4.07	5.62		11.48
King Hill Creek W. Fk.	2	1.85	4.71	2.14		8.70
Little Canyon Creek	2	0.55	2.65	4.84		8.04
Cold Springs Creek W. Fk.	2	0.52	1.41	2.04	1.38 uns	5.35
Cold Springs Creek E. Fk.	2		1.65	0.48		2.13
Cold Springs Creek Main	2				0.62 uns	0.62
Bennett Creek	2		3.01	4.19		7.20
Dive Creek	2	1.16	0.75			1.91
Total (2)	2	5.87	18.25	19.31	2.00 uns	45.43
King Hill Creek Main	3		0.33			0.33
Little Canyon Creek	3	3.06	3.63	0.57		7.26
Bennett Creek	3			0.30		0.30
Total (3)	3	3.06	3.96	0.87		7.89
Salmon Falls Creek	7		6.63	0.80		7.43
Total (7)	7		6.63	0.80		7.43
Bruneau River Main	10	11.58	5.59			17.17
Bruneau River W. Fk.	10	10.09	17.23	2.96		30.28
Bruneau River E. Fk.	10	3.61	1.04	4.42		9.07
Sheep Creek	10	2.08	5.11	18.62		25.81
Louse Creek	10	4.73				4.73
Mary's Creek	10	3.64				3.64
Jarbidge River Main	10	3.79	16.15	6.54		26.48
Jarbidge River W. Fk.	10			1.23		1.23
Jarbidge River E. Fk.	10		0.65			0.65
Columbet Creek	10			1.38		1.38
Cougar Creek	10		3.73	3.96		7.69
Total (10)	10	39.52	49.50	39.11		128.13
Bruneau River E. Fk.	11	25.98	4.05	2.17		32.20
Big Flat Creek	11		0.47			0.47
Total (11)	11	25.98	4.52	2.17		32.67
Deadwood Creek	12		2.21			2.21
Three Creek	12		1.72			1.72
Big Flat Creek	12		0.58			0.58
Cherry Creek	12		0.27			0.27
Total (12)	12		4.78			4.78
Cedar Creek	13	10.69	3.92			14.61
Total (13)	13	10.69	3.92			14.61

Appendix Table H-3
Aquatic Habitat Condition (miles)

MUA	Alternative A				Alternative B				Alternative C				Alternative D				Alternative D ₁			
	Exc.	Good	Fair	Poor	Exc.	Good	Fair	Poor	Exc.	Good	Fair	Poor	Exc.	Good	Fair	Poor	Exc.	Good	Fair	Poor
1	0.9	—	—	—	0.9	—	—	—	0.9	—	—	—	0.9	—	—	—	0.9	—	—	—
2	2.4*	10.2	21.7	9.7	2.4	15.5	18.7	7.4	2.4	16.6	18.4	6.6	2.4	18.2	16.8	6.6	5.8	20.1	11.5	6.6
3	—	1.7	—	4.6	—	1.7	2.0	2.6	—	1.7	2.2	2.4	—	1.7	2.0	2.4	—	1.7	4.6	—
7	—	—	7.9	—	—	—	7.9	—	—	—	7.9	—	—	—	7.9	—	—	—	7.9	—
10	—	78.7	8.2	13.6	—	83.8	8.9	7.8	—	83.8	8.9	7.8	—	83.8	8.9	7.8	—	87.3	5.4	7.8
11	—	—	0.8	—	—	27.2	5.3	—	—	27.2	5.3	—	—	27.2	5.3	—	—	28.0	4.5	—
12	—	—	1.2	31.7	—	—	1.2	2.2	—	—	1.2	2.2	—	—	1.2	2.2	—	1.2	2.2	—
13	—	—	—	2.2	—	—	—	14.8	—	—	—	14.8	—	—	0.5	14.3	—	—	3.0	11.8
14	—	16.8	14.5	14.8	—	20.8	12.5	—	—	20.8	10.5	—	—	21.0	10.3	—	—	21.0	10.3	—
15	—	19.8	16.8	—	4.5	21.4	14.3	12.6	4.9	21.4	12.1	12.6	4.9	26.2	8.5	11.4	9.7	28.7	3.7	8.9
16	—	19.5	—	14.4	—	19.5	—	—	—	19.5	—	—	—	19.5	—	—	—	19.5	—	—
TOTAL	3.3	146.7	71.1	91.0	7.8	186.1	70.8	47.4	8.2	191.0	66.5	46.4	8.2	199.4	59.8	44.7	16.4	207.5	53.1	35.1
%	1	47	23	29	2	60	23	15	3	61	21	15	3	64	19	14	5	67	17	11

* Dive Creek - 2.4 miles fenced in 1984.

Appendix Table H-4 (con't.)

Stream	Mult. Use Area	Poor	Fair	Good	Excellent/ Unsuitable	Total
Salmon Falls Creek	14	3.13	13.91	13.69		30.73
Total (14)	1	3.13	13.91	13.69		30.73
Salmon Falls Creek	15				7.15 uns	7.15
N. Fork Salmon Falls Ck.	15		1.21	0.60		1.81
Rocky Canyon	15		0.63	0.78		1.41
Cedar Creek	15	3.13	2.07	3.01		8.21
Bear Creek	15	0.44	0.34	0.84		1.62
Shack Creek	15	1.14	0.14			1.28
House Creek	15	0.60	2.44	0.24		3.28
Deer Creek	15		1.02	3.25		4.27
Three Creek	15		1.91	1.61	1.79 ex	5.31
Cherry Creek	15	1.66	1.33	2.48		5.47
Pole Creek	15		1.59	1.67		3.26
Spring Creek	15	3.95	2.10			6.05
Big Flat Creek	15		1.51	3.28		4.79
Jarbridge River E. Fk.	15		1.02	6.47		7.49
Dave Creek	15		0.49	1.67		2.16
Total (15)	15	10.92	17.80	25.90	8.94	63.56
Jarbridge River W. Fk.	16			7.92		7.92
Buck Creek	16			2.69		2.69
Columbet Creek	16			3.79		3.79
Cougar Creek	16		1.03			1.03
Deep Creek	16			5.96		5.96
Taylor Creek	16		3.54			3.54
Bruneau River W. Fk.	16		3.87	5.03		8.90
Total (16)	16		8.44	25.39		33.83

Table H-5
Riparian Habitat Conditions - Percentages

Mult. Use Area	Poor	Fair	Good	Excellent/ Unsuitable
1	0	0	0	100%
2	13%	40%	42%	5%
3	39%	50%	11%	0
7	0	89%	11%	0
10	31%	39%	30%	0
11	80%	14%	6%	0
12	0	100%	0	0
13	73%	27%	0	0
14	10%	45%	45%	0
15	17%	28%	41%	14%
16	0	25%	75%	0
Total	27%	36%	34%	3%

APPENDIX I
FIRE MANAGEMENT

A. Introduction

The suppression policy of the Boise District is to extinguish fires with the least amount of surface disturbance possible. Suppression actions are to minimize resource losses, suppression and rehabilitation costs and environmental damage. Whenever burning conditions and terrain are such that direct attack is not feasible, the suppression strategy is to burn out from existing natural barriers and established control points, such as roads.

Surface disturbing equipment, such as bulldozers, are utilized only with management approval. First priority is clearing of existing roads and second priority, when all other methods are exhausted, is construction of new control lines.

B. Full Suppression

Full suppression is aggressive action taken on all fires which are on or are threatening public land with sufficient forces to contain the fire during the first burning period. When multiple fires are experienced, suppression priority is given to fires threatening areas of highest value.

C. Limited Suppression

Limited suppression is a modified action on fires in areas where control is extremely difficult or where the values threatened do not warrant the expense associated with the usual suppression procedures. Limited suppression must be planned and approved prior to implementation.

D. Required Action

1. Full Suppression

- a. Pursue an aggressive prevention program to reduce the number of human-caused fires.
- b. Maintain the existing fire organization as to personnel, equipment, and locations with the necessary funding.
- c. Continue contract protection for Mountain Home Air Force Base.
- d. Continue initial attack agreement with Burley District.
- e. Continue initial attack agreement with the Pole Creek Ranger District.
- f. Evaluate burned area for emergency rehabilitation and implement if feasible.

2. Limited Suppression

- a. Pursue an aggressive prevention and investigation program to reduce the number of arson and/or human-caused fires.
- b. Evaluate fires on an individual basis considering values threatened, burning conditions, location and potential. Initiate the appropriate suppression action commensurate with the evaluation and/or identified parameters.
- c. Burned areas would not receive fire funded rehabilitation since these are areas which do not warrant the expense of full suppression.
- d. Escaped prescribed fires within a limited suppression area will not be considered a wildfire unless both the prescription and the limited suppression parameters are exceeded.
- e. Within the limited suppression area critical wildlife habitat will be treated as full suppression.
- f. Full suppression will be initiated whenever fire enters a 1 mile buffer area that surrounds private lands.
- g. Full suppression will be initiated within the limited suppression areas for any wildland fire that approaches within 1 mile of the full suppression boundary.

E. Special Consideration Section

Special considerations have been developed in each MUA to protect special resource values and determine fire management actions. See Appendix Table B-4 for acres of full and/or limited suppression by MUA. Appendix Table I-1 shows the acres proposed for prescribed burning by alternative for each MUA.

1. Multiple Use Area 1: Anderson Ranch Reservoir/Boise River

- a. Resource Values and Levels of Fire Suppression: The entire 11,086 acres of public land managed by BLM will receive full suppression in all alternatives. This MUA is a popular outdoor recreation area. Public lands are important winter habitat for deer and elk and contain 850 acres of commercial timber. Visual resources are especially important in both the foreground and background of Anderson Ranch Reservoir. Full suppression of wildfire is required to accomplish the management objectives of this unit.
- b. Prescribed Burning Planned: None
- c. Constraints/Special Considerations:
 - (1) Anderson Ranch Reservoir area: construct new control lines with bulldozers only as last resort.

- d. Rehabilitation Considerations:
 - (1) Plant trees in high visual areas or when loss of commercial timber has occurred.
 - (2) In deer and elk winter range, use seed mixtures which benefit wildlife as well as livestock.
- e. Suppression Priority
 - (1) Private land and structures.
 - (2) Anderson Ranch Reservoir Area.
 - (3) Deer and elk winter habitat; riparian habitat.
 - (4) Commercial timber stands.
 - (5) Recreation facilities.
- f. Other Considerations: Continue the present exchange of protection with the Boise National Forest for fire suppression in this area.
- g. Fire Activity Plans: None

2. Multiple Use Area 2: Upper Bennett Mountain

- a. Resource Values and Level of Fire Suppression: The 62,228 acres of public land in MUA 2 will receive full suppression in all alternatives. The existing fuel types and terrain in the northern portion near Bennett Mountain make fire suppression effort both difficult and expensive. The area is an important elk and deer winter range, has 1,400 acres of commercial timber and contains the King Hill Creek WSA. There are 37,000 acres of private land, increasing the possibilities of fire destroying isolated ranches, fences, and structures during large or multiple fires. Full suppression is warranted to meet management objectives of the preferred alternative.
- b. Prescribed Burning Planned: Alternative C has identified 1,300 acres for prescribed burning.
- c. Constraints/Special Considerations:
 - (1) King Hill Creek WSA - as fires occur, fire management will be cognizant in both consulting with an area representative and developing fire suppression strategies that will not impair the suitability of the area for designation as wilderness.
- d. Rehabilitation Considerations: Same as for MUA 1.

- e. Suppression Priority:
 - (1) Private land and structures.
 - (2) King Hill Creek WSA.
 - (3) Deer and elk winter range, riparian habitat.
 - (4) Commercial timber.
 - f. Other Considerations: Review need for fire breaks.
 - g. Fire Activity Plans: None planned.
3. Multiple Use Area 3: Lower Bennett
- a. Resource Values and Level of Fire Suppression: The entire 49,791 acres of public land will receive full suppression in all alternatives. Historically, large fires (2,000 acres+) have occurred in this unit where vegetation is primarily big sage-cheatgrass. Portions of the Oregon National Historic Trail cross this MUA. There are 24,000 acres of private land which are at risk.
 - b. Prescribed Burning Planned: There are 400 acres planned in the preferred alternative and 640 acres in Alternative B. Wildfires which occur in the prescription area will be manned, but allowed to burn as long as the prescription is met. See Prescribed Burn Table I-1.
 - c. Constraints/Special Considerations:
 - (1) Fire suppression tactics near the Oregon Trail will not destroy or impair any physical portion of the trail.
 - (2) Emphasize fire suppression of the "Big Sage" habitat (T.5S., R.9E.) to maintain rodent population for raptors.
 - d. Rehabilitation Considerations: Maintain big sage habitat.
 - e. Suppression Priority:
 - (1) Private land and structures.
 - (2) Oregon Trail
 - (3) Big Sage communities.
 - f. Other Considerations: Pursue an aggressive prevention program to reduce number of human-caused fires.
 - g. Fire Activity Plans: Prescribed Burn Plan.

4. Multiple Use Area 4: Snake River Riparian

- a. Resource Values and Level of Fire Suppression: This 51 mile long corridor along the Snake River contains important wildlife habitat for waterfowl, upland game, and mule deer, and is important habitat for the white sturgeon. This unit, with 9,068 acres of public land, will receive full suppression in all alternatives in order to meet management objectives.
- b. Prescribed Burning Planned: None
- c. Constraints/Special Considerations: Limit surface disturbance in riparian areas.
- d. Rehabilitation Considerations: Rehabilitation should benefit wildlife and protection against soil loss.
- e. Suppression Priority:
 - (1) Private land and structures.
 - (2) Riparian habitat.
- f. Fire Activity Plans: None planned.

5. Multiple Use Area 5: Snake River Birds of Prey

- a. Resource Values and Level of Fire Suppression: This unit contains habitat for numerous raptors and their prey base and is within the boundary of the Birds of Prey National Conservation Area. Historically, large fires (10,000 acres+) have occurred in the Sand Dunes and Browns Creek area where loss of ground cover is increasing the erosion potential. Crop damage from fires has occurred in the past in the Indian Cove area. The 49,286 acres of public land will receive full suppression efforts in all alternatives.
- b. Prescribed Burning Planned: None
- c. Constraints/Special Considerations:
 - (1) No impairment of Oregon Trail and other cultural/historical sites.
 - (2) Consider need for fire breaks between public land and farming developments and the Bruneau Dunes State Park.
- d. Rehabilitation Considerations:
 - (1) Maintain Birds of Prey habitat.
 - (2) Establish ground cover on highly erodible soils and sandy areas.

- e. Suppression Priority:
 - (1) Prevent loss to crops and private lands.
 - (2) Protect big sagebrush stands within 3 miles of nesting habitat; protect winterfat areas.
 - (3) Protect Sand Dunes State Park.
 - f. Other Considerations: Pursue an aggressive prevention program to reduce the number of human-caused fires.
 - g. Fire Activity Plans:
 - (1) Address fire management in Birds of Prey Management Plan.
 - (2) Consider need for fire breaks in all activity plans.
6. Multiple Use Area 6: Saylor Creek West
- a. Resource Values and Level of Fire Suppression: The public land (176,859 acres) in this MUA will receive full suppression effort in all alternatives. The Saylor Creek Gunnery Range (102,746 acres) is located in the middle of this area. Vegetation is predominantly crested wheatgrass with pockets of big sage. Historically, this area has experienced high fire occurrence and large burns, necessitating extensive rehabilitation. Over 100,000 acres have burned with 75,000 acres reseeded.
 - b. Prescribed Burning Planned: None
 - c. Constraints/Special Considerations:
 - (1) Special suppression restrictions apply to the Saylor Creek Gunnery Range.
 - (2) The Bruneau River WSA borders this MUA on the west side and will influence suppression strategies.
 - (3) Limit surface disturbance in cultural sites in northern part of MUA.
 - d. Rehabilitation Considerations:
 - (1) Seed mix should contain shrub component to benefit wildlife and improve vegetative community.
 - e. Suppression Priority: None
 - f. Other Considerations:
 - (1) Pursue an aggressive prevention program to reduce the number of human-caused fires.

(2) Continue contract protection for Mountain Home Air Force Base.

g. Fire Activity Plans: None

7. Multiple Use Area 7: Saylor Creek East

a. Resource Values and Level of Fire Suppression: The public lands (347,530 acres) in this MUA will receive full suppression. This unit contains a wild horse herd and significant agricultural development. Historically, this area has experienced high fire occurrence with very large fires. Over 200,000 acres have burned with 155,000 acres reseeded. Mule deer, antelope, sage grouse, and upland game are found in the area. Significant paleontological and cultural resource sites in Pasadena Valley, Dove Springs, and Roosevear Gulch have been recorded and the Oregon National Historic Trail traverses the northern portion of the area.

b. Prescribed Burning Planned: None

c. Constraints/Special Considerations:

(1) Limit surface disturbance on Oregon Trail and cultural and paleontological sites.

(2) Be cognizant of private land values (farm land and Glenns Ferry area); consider fire barriers.

d. Rehabilitation Considerations: Same as MUA 6.

e. Suppression Priority: None

f. Other Considerations: None

g. Fire Activity Plans: None

8. Multiple Use Areas 8 and 9: Hagerman Fossil Beds and ORV Area

a. Resource Values and Level of Fire Suppression: The Hagerman Fossil Beds (4,394 acres) is a National Natural Landmark and an internationally recognized paleontological area. The Hagerman ORV Area (Owsley Bridge) contains 3,530 acres and is used by ORV recreationists (primarily trail bikes) throughout the year. Both areas will receive full fire suppression. Fire occurrence is minimal in these MUAs. There are no prescribed burns planned. Fire suppression techniques would restrict the use of heavy equipment in or near the fossil beds. Activity plans for each area would determine specific fire suppression techniques and rehabilitation considerations.

9. Multiple Use Area 10: Bruneau-Jarbidge-Sheep Creek

- a. Resource Values and Level of Fire Suppression: The Bruneau/ Sheep Creek WSA and the Jarbidge WSA forms this MUA. The area contains big game, upland game, and sage grouse habitat. The Dry Lake Beds are an important cultural resource while the river canyons are rich in wildlife, cultural and geological hunting, scenery, cold and warm water fisheries, and wild river recreation opportunities. Of the 95,639 acres, 62% (58,940 acres) would receive limited fire suppression while the remaining 36,699 acres would receive full suppression in Alternative A. In Alternatives B, C, and D the entire MUA would receive full fire suppression in order to better protect wildlife habitat, cultural and recreational values, and wilderness characteristics.
- b. Prescribed Burning Planned: None
- c. Constraints/Special Considerations:
- (1) Limited Suppression Area (Alternative A): Full fire suppression efforts will be initiated at any time a fire exceeds 2,000 acres, or if private property, critical wildlife habitat, or other significant resource values are threatened. In addition, full suppression will be taken on any wildland fire that reaches a 1 mile buffer to either the limited suppression boundary or the Jarbidge River. The Jarbidge River has been nominated to be considered a Wild and Scenic River and provides deer habitat.
 - (2) Full Suppression Area (All Alternatives): Whenever full suppression is utilized, fire suppression tactics will restrict the use of heavy equipment. Additionally, suppression tactics will not impair the suitability of the identified areas for designation as wilderness or Wild and Scenic Rivers.
- d. Rehabilitation Considerations: Burned areas should be allowed to revegetate to native grasses. If seeding is necessary, the mix should be native species if possible, and should improve wildlife habitat. Burned areas are not rehabilitated in limited suppression areas.
- e. Suppression Priority:
- (1) River canyons.
 - (2) Plateaus.
- f. Other Considerations: If any of the MUA is designated wilderness, a limited fire suppression effort would be implemented.

- g. Fire Activity Plans: Fire management (including suppression tactics) would be addressed in a wilderness management plan, if so designated, or any other subsequent activity plan prepared for the area, such as an ACEC.

10. Multiple Use Areas 11 and 12: Inside Desert and West Devils

- a. Resource Values and Level of Fire Suppression: Vegetation is desert grass-big sage with several large crested wheatgrass seedings, the result of past fire rehabilitation efforts. The area also contains important yearlong antelope range and sage grouse nesting areas. Several significant cultural resource sites are also present. In Alternatives A, B, and C, 158,251 acres (of a total 211,571 acres) in MUA 11 and 230,479 acres (of a total 255,919 acres) in MUA 12 are identified for limited suppression. In Alternative D, both MUAs would receive full suppression to better protect the existing antelope range and sage grouse nesting areas.
- b. Prescribed Burning Planned: Alternative B has 18,700 acres proposed for prescribed burning, while Alternative C has a total of 10,348 acres identified. See Table I-1. Wildfires which occur in the prescription area will be manned, but allowed to burn as long as the prescription is met.
- c. Constraints/Special Considerations: See 9c(1) above. In addition, 70% of the identified limited suppression areas (MUA 11 - 130,122 acres; MUA 12 - 146,011 acres) is considered critical wildlife habitat and may be treated as full suppression if necessary to meet management objectives.
- d. Rehabilitation Considerations: In the full suppression areas, rehabilitation efforts will meet wildlife management objectives, in addition to providing forage for livestock and providing ground cover.
- e. Suppression Priority:
 - (1) Private lands and structures.
 - (2) Post Office Historical and Cultural site.
 - (3) Wildlife habitat.
 - (4) WSA boundary.
- f. Other Considerations: In MUA 11, fire spread will not be allowed into the canyon of the East Fork of the Bruneau River on the east and the Jarbidge WSA on the west.
- g. Fire Activity Plans: Update the existing limited fire suppression plan to incorporate the management objectives of the selected alternative.

11. Multiple Use Areas 13 and 14: East Devils and Salmon Falls Creek

- a. Resource Values and Level of Fire Suppression: The public land (108,036 acres - MUA 13; 2,947 acres - MUA 14) in these two MUAs will receive full suppression management. Vegetation consists of big sage and desert grasses in the flats and riparian habitat in the canyon bottoms, with numerous crested wheatgrass seedings in burned areas. Several large private blocks in the northern and southwestern parts of the area are in agricultural use. Antelope, mule deer, and sage grouse are found throughout the area and numerous significant cultural resource complexes are present, with major concentrations along Devils Creek. Salmon Falls Creek canyon offers a unique natural ecosystem and has been identified as an Outstanding Natural Area in all alternatives and an ACEC in Alternative D. Mule deer and upland game birds are found in this canyon area throughout the year.
- b. Prescribed Burning Planned: Under Alternative C, 848 acres of prescribed burning will occur in MUA 13. Wildfires which might occur first in the prescription area will be manned, but allowed to burn as long as the prescription is met.
- c. Constraints/Special Considerations: All effort will be made to restrict wildfire from entering the Salmon Falls Creek Canyon. Suppression procedures in the canyon are to be limited to helicopter water drops and shovel crews. Surface disturbance by heavy equipment should also be restricted in the Devils Creek Cultural Resource Complexes and other riparian areas.
- d. Rehabilitation Considerations: Rehabilitation of burned areas will meet wildlife, as well as other resource management objectives in MUA 13. In Salmon Falls Creek most burned areas will not be reseeded. If rehabilitation is necessary, only seed mixes of native species will be applied.
- e. Suppression Priority:
 - (1) Private property.
 - (2) Salmon Falls Creek Canyon.
 - (3) Crucial wildlife habitat and riparian areas.
 - (4) Recreational facilities.
- f. Other Considerations: Maintain initial attack agreement with Burley District.
- g. Fire Activity Plans: Include fire management in activity plans prepared for Salmon Falls Creek.

12. Multiple Use Areas 15 and 16: Jarbidge Foothills and Diamond A

- a. Resource Values and Level of Fire Suppression: The Jarbidge Foothills and the Diamond A MUAs provide winter habitat for mule deer and antelope, and includes yearlong habitat for bighorn sheep. MUA 15 contains a total of 205,238 acres of public land, all of which would receive full suppression in Alternatives B, C, and D. In Alternative A, approximately 15,120 acres, or 7% of the area, would receive limited suppression even though some of the limited area is considered crucial winter habitat for mule deer and contains sage grouse nesting areas. MUA 16 contains 97,980 acres of public land, all of which would receive full suppression in Alternatives B, C, and D. However, in Alternative A, 36,850 acres (38%) would be in the limited suppression category. The limited suppression area does include some mule deer winter habitat and sage grouse nesting areas.
- b. Prescribed Burning Planned: Alternative B has 10,500 acres proposed for prescribed burning, while Alternative C has a total of 2,640 acres identified. See Table I-1. Wildfires which occur in the prescription area will be manned, but allowed to burn as long as the prescription is met.
- c. Constraints/Special Considerations:
 - (1) In the limited suppression areas, full suppression would be initiated if wildfire approaches within one mile of either the limited suppression boundary or the Bruneau River Canyon, or if private property is at risk.
 - (2) Use of heavy equipment would be restricted in the Bruneau and Jarbidge River Canyons.
- d. Rehabilitation Considerations: In the crucial wildlife winter ranges, use seed mixtures which benefit wildlife as well as livestock.
- e. Suppression Priority:
 - (1) Private land and structures.
 - (2) Crucial wildlife habitat and riparian areas.
 - (3) Bruneau and Jarbidge River Canyons.
 - (4) Recreational sites (Cedar Creek Reservoir, Murphy Hot Springs, etc.)
- f. Other Considerations: Continue initial attack agreement with Pole Creek Ranger District.
- g. Fire Activity Plans: Update the existing limited suppression plan to incorporate the area and management objectives of the selected alternative.

Appendix Table I-1
Proposed Prescribed Burns (Acres)

MUA	Alternative A	Alternative B	Alternative C	Alternative D
1	0	0	0	0
2	0	0	1,300	0
3	0	640	400	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	0	0	0	0
8	0	0	0	0
9	0	0	0	0
10	0	0	0	0
11	0	14,600	5,600	0
12	0	4,100	4,748	0
13	0	0	848	0
14	0	0	0	0
15	0	5,500	640	0
16	0	5,000	2,000	0
TOTAL	0	29,840	15,536	0

APPENDIX J
WILDERNESS

Introduction

The Jarbidge Resource Management Plan address preliminary wilderness suitability/nonsuitability recommendations for three Wilderness Study Areas (WSAs). The three wilderness study areas are identified in Table J-1 and on Map 3-9.

Table J-1

WSA	Total Acres	Acres*		
		Jarbidge RA	Bruneau RA	Shoshone District
111-17 Bruneau/Sheep Ck	104,406	28,869	75,537	--
17-11 Jarbidge	75,118	66,770	8,348	--
19-2 King Hill Creek	29,309	23,815	---	5,494
Totals	208,833	119,454	83,885	5,494

* Acreage figures above differ from original inventory due to increased accuracy of measurement.

The BLM Planning Process

The Federal Land Policy and Management Act of 1976 (FLPMA) mandates BLM to manage the public lands and their resources under the principles of multiple use and sustained yield. Wilderness values are identified as part of the spectrum of multiple land use values to be considered in BLM inventory, planning, and management. Section 603 of FLPMA requires a wilderness review of BLM roadless areas of 5,000 or more acres and roadless islands. The BLM inventory process identified wilderness study areas which have the mandatory wilderness characteristics (size; naturalness; solitude and/or primitive recreation opportunities). Suitable or nonsuitable wilderness recommendations for each WSA will be presented to the President by the Secretary of the Interior. The President will then make recommendations to Congress. Areas can be designated wilderness only by an act of Congress.

Recommendations concerning the suitability or nonsuitability of WSAs for wilderness designation are developed through BLM's planning system (43 CFR part 1600). After the WSAs are identified in the wilderness inventory, wilderness recommendations are included in Resource Management Plans (RMPs). These recommendations are developed using the requirements of the BLM Wilderness Study Policy.

Following the public comment period on the Draft Jarbidge RMP/EIS a separate Final Wilderness EIS and Wilderness Study Report will be prepared. The Final Wilderness EIS will address only the wilderness recommendations and associated impacts. It will not include other resource recommendations. The other resource recommendations will, however, be addressed in the Final Jarbidge RMP/EIS.

Planning Issues and Concerns

The Jarbidge RMP/EIS addresses significant environmental issues and concerns relating to wilderness designation for the three WSAs. It also evaluates planning criteria and quality standards identified in the BLM Wilderness Study Policy.

Planning Criteria and Quality Standards'

The Study Policy's planning criteria and quality standards are an expression of national issues and concerns over wilderness designation. They are used to determine if wilderness designation is the most appropriate management option for the affected lands. The planning criteria and quality standards to be evaluated are:

Criterion No. 1: Evaluation of Wilderness Values

Consider the extent to which each of the following components contribute to the overall value of an area for wilderness purposes.

- a. **Mandatory Wilderness Characteristics:** The quality of the area's size, naturalness, and outstanding opportunities for solitude or primitive recreation.
- b. **Special Features:** The presence or absence, and quality of the optional wilderness characteristics--ecological, geological, other features of scientific, educational, scenic, or historical value.
- c. **Multiple Resource Benefits:** The benefits to other multiple resource values and uses which only wilderness designation of the area could ensure.
- d. **Diversity in the National Wilderness Preservation System:** Consider the extent to which wilderness designation of the area under study would contribute to expanding the diversity of the National Wilderness Preservation System from the standpoint of each of the factors listed below:
 - 1) Expanding the diversity of natural systems and features as represented by ecosystems and landforms.
 - 2) Assessing the opportunities for solitude or primitive recreation within a day's driving time (5 hours) of major population centers.
 - 3) Balancing the geographic distribution of wilderness areas.

The analysis should consider federal and state lands designated as wilderness, areas officially recommended for wilderness, and other federal and state lands under wilderness study.

Criterion No. 2: Manageability

The area must be capable of being effectively managed to preserve its wilderness character, including both its wilderness characteristics and its multiple resource values. The phrase "effectively managed" means that an area can be managed to maintain the public benefits which justified wilderness designation. A wilderness must be capable of being managed over the long-term to preserve its wilderness character, both to maintain the quality of its wilderness characteristics and to ensure continuation of its uses and multiple use benefits.

Quality Standards

Standard No. 1, Energy and Mineral Resource Values: Recommendations as to an area's suitability or nonsuitability for wilderness designation will reflect a thorough consideration of any identified or potential energy and mineral resource values.

Standard No. 2, Impacts on Other Resources: Consider the extent to which other resource values or uses of the area would be foregone or adversely affected as a result of wilderness designation.

Standard No. 3, Impact of Nondesignation on Wilderness Values: Consider the alternative use of land under study if the area is not designated as wilderness, and the extent to which the wilderness values of the area would be foregone or adversely affected as a result of this use.

Standard No. 4, Public Comment: The BLM's wilderness study process will consider comments received from interested and affected publics at all levels--state, local, regional, and national. Wilderness recommendations will not be based on a vote-counting majority rule system. The BLM will develop its recommendations by considering public comment in conjunction with a full analysis of a WSA's multiple resources, and its social and economic values and uses.

Standard No. 5, Local Social and Economic Effects: The BLM will give special attention to any significant social and economic effects, as identified through the wilderness study process, which wilderness designation of the area would have on local areas.

Standard No. 6, Consistency with Other Plans: The BLM will consider and document the extent to which the recommendation is consistent with officially approved and adopted resource-related plans of other federal agencies, state and local governments, and Indian tribes.

Data for Analysis and Consideration

Following is a discussion of the planning criteria and quality standards as they pertain to each WSA in the Jarbidge Resource Area.

Criteria No. 1: Evaluation of Wilderness Values

Mandatory Wilderness Characteristics

- a. Size - The size of each WSA is shown in Table J-1. Note that the average BLM WSA, nationally, is about 26,000 acres.

Bruneau River-Sheep Creek, 111-17

111-17 contains 104,406 acres of public land in the Bruneau and Jarbidge Resource Areas. The area has a long irregular configuration following the course of the Bruneau River, East Fork Bruneau River and Sheep Creek. The area is 37 miles long and varies between 1/2 mile and 10 miles in width.

Jarbidge River, 17-11

17-11 contains 75,118 acres of public land in the Bruneau and Jarbidge Resource Areas. The area has a linear configuration following the course of the river. The area is 24 miles long and varies between 1 and 6 1/2 miles in width.

King Hill Creek, 19-2

19-2 contains 29,309 acres of public land in the Jarbidge Resource Area and the Shoshone District. The area has a trapazoidal configuration and is approximately 8 miles in width on a north-south line and varies from 10 to 6 miles on an east-west line.

- b. Naturalness - A WSA must appear to be affected primarily by the forces of nature with the imprints of man's work substantially unnoticeable. Most rangeland developments or imprints are permissible within WSAs, but they must be of such a number and distribution throughout the WSA that their presence does not impair the overall apparent primeval or natural character of the WSA.

Bruneau River-Sheep Creek, 111-17

The intensive wilderness inventory identified the following imprints of man within the Bruneau River-Sheep Creek WSA:

- 1) 29 miles of ways (vehicle routes which show no sign of construction or maintenance; where vehicle tracks are maintained solely by the passage of vehicles).
- 2) 4 1/2 miles of fence lines.
- 3) Three water developments.
- 4) Two miles of constructed livestock trail.

Ten water developments, one cabin, one jasper mine, one pump station and one gravel pit are located adjacent to WSA boundary roads but outside the boundary.

The location, number and relative distribution of these imprints of man, in combination with topographic and vegetative screening, makes the imprints substantially unnoticeable in the WSA as a whole. Few of the imprints are located within the major corridors of travel. Visual contact with most imprints is extremely localized because of vegetative screening or a combination of vegetative and topographic screening. A primitive recreationist's visual encounter with imprints would be infrequent and brief. Less than 4% of this WSA is affected by the imprints of man.

Jarbridge River, 11-17

The intensive wilderness inventory identified the following imprints of man within the Jarbridge River WSA:

- 1) 14 miles of ways (vehicle routes which show no sign of construction or maintenance; where vehicle tracks are maintained solely by the passage of vehicles).
- 2) 3 miles of fence line.
- 3) Two stock reservoirs.

Three stock reservoirs are found adjacent to but outside of the WSA boundary.

The location, number and relative distribution of these imprints of man, in combination with topographic and vegetative screening, makes the imprints substantially unnoticeable in the WSA as a whole. Few of the imprints are located within the major corridors of travel. Visual contact with most imprints is extremely localized because of vegetative screening or a combination of vegetative and topographic screening. A primitive recreationist's visual encounter with imprints would be infrequent and brief. Less than 1% of this WSA is affected by the imprints of man.

King Hill Creek, 19-2

The following imprints of man have been identified within the King Hill Creek WSA.

- 1) 4 miles of ways.
- 2) 6 1/2 miles of fence line.
- 3) 6 spring developments.

The location, number and relative distribution of these imprints of man, in combination with topographic and vegetative screening, makes the imprints substantially unnoticeable in the WSA as a whole. Visual contact with most imprints is extremely localized because of vegetative screening or a combination of vegetative and topographic screening. A primitive recreationist's visual encounter with imprints would be infrequent and brief. Less than 1% of this WSA is affected by the imprints of man.

Some additional reservoirs may be developed under the guidance of the BLM Wilderness Interim Management Policy if they remain substantially unnoticeable in the WSAs and would not impair the suitability of the WSAs for wilderness designation.

- c. Opportunities for Solitude - A WSA is considered outstanding for solitude if it has (1) a large enough size and suitable configuration so that topographic relief and vegetative cover can provide plentiful screening among visitor groups and from suitable configuration, that would tend to disperse visitor groups throughout the WSA. If topographic relief tends to concentrate visitors into small or narrow corridors within the WSA, the corridors must be sufficiently long enough and provide plentifully topographic and/or vegetative screening so as to lessen the impact of the corridor effect.

Bruneau River-Sheep Creek, 111-17

The Bruneau River-Sheep Creek WSA is divided into two major topographic regions:

- 1) The main canyons and tributary canyons of the East Fork and West Fork of the Bruneau River, the Bruneau River and Sheep Creek. The meandering canyons are typically narrow, deep, and sheer-walled. The canyon bottoms contain riparian vegetation with scattered juniper trees on some slopes, particularly in the Sheep Creek drainage.
- 2) The flat, uplifted volcanic tableland, which is sharply dissected by the canyons. The tableland is flat with infrequent low knolls providing the only topographic relief. Vegetation is typified by sparse, low-growing sagebrush and other northern desert shrub and grass plant species.

The intensive wilderness inventory of the Bruneau River-Sheep Creek WSA determined that the 65+ miles of major canyons and 20+ miles of tributary canyons provide excellent topographic screening among visitor groups and excellent potential for dispersed recreational use.

It is recognized that the major canyon systems within the WSA have the potential to concentrate visitors into narrow corridors of use and increase the opportunity for visitor interaction. However, the 65+ mile length of the major canyons, their meandering character and broken inner canyon topography, the

presence of riparian vegetation, the 20+ miles of tributary canyons and the constant rate of travel for river users would greatly minimize any potential corridor effect.

Most visitors to the tableland portion of the WSA will be concentrated on the rim of the canyon where views of the sheer canyon walls and the depths of the canyon are spectacular. The numerous tributary canyons and the number of excellent access points to the canyon rim will discourage the development of a travel corridor paralleling the rim. The deep tributary canyons segment the tableland into a number of physically isolated units. The WSA boundary edge of these tableland sections are equally accessible by motorized vehicle and short hikes. The equally spectacular views that are available from much of the canyon rim and the good vehicle access paralleling much of the WSA boundary should encourage the wide dispersal of vista seeking visitor groups throughout much of the plateau. The large size of the tableland, the screening potential of low vegetation on flat terrain, the topography's potential to disperse visitor groups and the good access to much of the WSA boundary will all contribute to assuring that a large number of visitor groups could enjoy the spectacular vistas of the canyon in a natural setting without the disruption of their sense of solitude.

Jarbidge River, 17-11

The Jarbidge River is divided into two major topographic regions:

- 1) The main canyons and tributary canyons of the Jarbidge River and the West Fork Bruneau River. The meandering canyons are typically narrow, deep and are defined by both sheer-walled cliffs and steep talus slopes. The canyon floor contains dense riparian vegetation and scattered stands of juniper with dense stands in areas of erosional accumulation.
- 2) The flat to rolling plateau which is sharply dissected by the canyons. East of the Jarbidge River, the plateau is generally flat with Poison Butte providing the only significant topographic relief. West of the river the flat plateau gently gives way to moderately dissected rolling hills in the northern half of the WSA. Vegetation is typified by sparse low-growing sagebrush and other shrub and grass vegetation characteristic of northern desert shrub plant communities.

The intensive wilderness inventory of the Jarbidge River WSA determined that the 45+ miles of major canyons and the numerous minor tributary canyons provide excellent topographic screening among visitor groups and excellent potential for dispersed recreational use.

It is recognized that the major canyon systems within the WSA have the potential to concentrate visitors into narrow

corridors of use and increase the opportunity for visitor interaction. However, the 45+ mile length of the major canyons, their meandering character and broken inner canyon topography, the presence of riparian vegetation and the constant rate of travel for river users would greatly minimize any potential corridor effect.

The moderately dissected rolling hills located in the northern portion of the WSA between the West Fork Bruneau River and the Jarbidge River provide good topographic screening between visitor groups. The hills are dissected by numerous minor drainages which lead toward the canyon rims. Visitors could be expected to concentrate on the canyon rims because of the spectacular vistas. Since the numerous draws are equivalent both in scenic quality and ease of mobility, visitors to this region would be well dispersed, both among the draws and along the canyon rims.

Opportunities for solitude exist on the flat plateau, particularly adjacent to the 90+ miles of canyon rims where visitors can be expected to congregate. However, the narrow configuration of much of the flat plateau and the topographic relief associated with Poison Butte in the central part of the WSA render opportunities for solitude on the flat plateau portions of the WSA as less than outstanding. The excellent topographic screening in much of the WSA more than compensates for the narrow, flat plateau regions where opportunities are not outstanding.

King Hill Creek, 19-2

While this unit doesn't have the deep, meandering canyon/plateau configuration of the other two units, it does have a very convoluted topography. A maze of riparian drainages, ridges, hills and peaks provide excellent topographic screening among visitor groups and excellent potential for dispersed recreational use. The degree of topographic and vegetative screening is greater in the north half of the unit.

There is no feature in this unit equivalent to the river canyons of the other units that would tend to concentrate or attract visitors. The size of the WSA, in combination with the good to excellent topographic and vegetative screening in the unit ensure that the WSA as a whole has outstanding opportunities for solitude.

- d. Opportunities for Primitive and Unconfined Recreation - Outstanding opportunities for primitive and unconfined recreation within a WSA are dependent upon its size in relation to its ability to provide exceptional or unusual natural features and recreational attractions. Exceptional natural features are defined as those topographic and vegetative features which (1) provide exceptional scenery, (2) create a diversity of landforms, and/or (3) enable a visitor to achieve reasonable mobility within

the WSA (nonconfinement). The natural features should result in a strong recreational attraction to a WSA for one or more types of activities. A WSA is considered to have outstanding opportunities for primitive and unconfined recreation if the overall size of the WSA, in combination with one or more of the factors contributing to exceptional natural features, will give a visitor a sense of nonconfinement within an esthetically pleasing area. In WSAs where there are strong corridor effects, the corridor must be long enough to negate the sense of confinement. In addition, the corridor must be exceptionally scenic to make travel within the corridor enjoyable.

Bruneau River-Sheep Creek, 111-17

The intensive wilderness inventory of the Bruneau River-Sheep Creek WSA determined that the WSA offers unique and exceptionally scenic natural features and a diversity of topographic landforms, which allow for reasonable mobility throughout the WSA. The natural features of the WSA provide a strong recreational attraction to people interested in backpacking, day hiking, sightseeing, nature photography, wildlife viewing, hunting, fishing, rockhounding, whitewater rafting and kayaking.

The Bruneau River is nationally known for its excellent whitewater boating while the canyons are some of the most spectacular in the country. In spots the Bruneau Canyon exceeds 1,000 feet in depth with vertical rock faces as high as 800 feet and 700 foot deep site canyons. Perhaps nowhere else in the United States are there canyons of such magnitude that are so narrow in relation to their depth and possess such numerous and diversified rock formations.

It is recognized that the high sheer walls of the canyons can give one a sense of confinement and restricted mobility. The length of the canyons, 65+ miles of major canyons and 20+ miles of tributary canyons, decrease the probability that visitors will feel confined or restricted by the canyons. The difficulty of travel in the inner canyon will attract primitive recreationists who are seeking the physical challenge and isolation associated with inner canyon travel. It is anticipated that visitors will view the confinement and restricted mobility of the canyons as a positive attribute contributing to the elements of challenge and isolation that enhance a quality wilderness experience.

The dramatic topography of the canyon is enhanced by its contrast to the surrounding plateau. The flat soft forms of the plateau give way suddenly with little warning to sharp, severe forms of the canyon. The visual impact of the canyon is particularly dramatic when approached on foot as the flat solid plateau gives way to the gaping canyon that attests to the power of nature's forces to modify and change the earth. The contrast in form and intensity of color between the canyons and plateau creates a visually startling effect that enhances the scenic quality of both the canyon and the plateau.

In contrast to the physical challenge associated with travelling in the inner canyon, the surrounding plateau provides numerous opportunities for spectacular vistas in a natural setting without the physical hardship or demands normally associated with wilderness travel. The excellent medium-standard gravel roads which parallel portions of the western and north-eastern boundaries of the WSA and the ease of mobility across the flat tableland ensure that the dramatic experience of encountering the spectacular scenery of the canyons in a wilderness setting and with a sense of solitude is within the physical capabilities of nearly all Americans.

Jarbidge River, 17-11

The intensive wilderness inventory of the Jarbidge River WSA determined that the WSA offers unique and exceptionally scenic natural features and a diversity of topographic landforms, which allow for reasonable mobility throughout the WSA. The natural features of the WSA provide a strong recreational attraction to people interested in backpacking, day hiking, sightseeing, nature photography, wildlife viewing, hunting, fishing, rockhounding, whitewater rafting and kayaking.

As stated in the solitude narrative, the WSA contains two types of topographic regions; the deep meandering canyons and the flat to rolling plateau. Most of the recreational opportunities of the WSA are associated with the exceptionally diverse and scenic canyons.

The 45+ miles of spectacular canyons within the WSA include a 1,200 foot deep section of the nationally famous Bruneau Canyon, 1,000 foot depths of the Jarbidge River Canyon and grotto-like tributary canyons as deep as 600 feet.

It is recognized that the high sheer walls of the canyons can give one a sense of confinement and restricted mobility. The 45+ mile length of the canyons decreases the possibility that visitors will feel confined or restricted by the canyons. The difficulty of travel in the inner canyon will attract primitive recreationists who are seeking the physical challenge and isolation associated with inner canyon travel. It is anticipated visitors will view the confinement and restricted mobility of the canyons as a positive attribute contributing to the elements of challenge and isolation that enhance a quality wilderness experience.

The dramatic topography of the canyon is enhanced by its contrast to the surrounding plateau. The flat soft forms of the plateau give way suddenly with little warning to sharp, severe forms of the canyon. The visual impact of the canyon is particularly dramatic when approached on foot as the flat solid plateau gives way to the gaping canyon that attests to the power of nature's forces to modify and change the earth.

The challenge and excitement of whitewater rapids rated at Class II and III (on a scale of I to IV) adds significantly to the recreational experience of the river and the WSA as a whole. Class III rapids are difficult to negotiate and require experienced boatmen and quality equipment. Several mandatory portages and the threat of dangerous juniper log jams add to the challenge associated with the river. Present kayak and float boating use during the short spring boating season is estimated at approximately 50 trips per season with four commercial outfitters running float boating trips through the canyon.

In contrast to the physical challenge associated with traveling in the inner canyons, the surrounding plateau provides numerous opportunities for spectacular vistas in a natural setting without the physical hardship or demands normally associated with wilderness travel. Good access roads and the ease of mobility across the flat tableland ensure that the dramatic experience of encountering the spectacular scenery of the canyons in a wilderness setting and with a sense of solitude is within the physical capabilities of nearly all Americans.

King Hill Creek, 19-2

The wilderness inventory of the King Hill Creek WSA determined that the WSA offers unique and exceptionally scenic natural features and a diversity of topographic landforms, which allow for a reasonable mobility throughout the WSA. The natural features of the WSA provide a strong recreational attraction to people interested in backpacking, day hiking, sightseeing, nature photography, wildlife viewing, fishing, hunting, and rockhounding.

The King Hill WSA does not have the deep, meandering canyons of the Bruneau and Jarbidge Rivers. The shallower canyons and drainages in this WSA are however much more accessible to the recreationist.

The size of this WSA along with its diverse landforms and the accessibility of its canyons gives visitors a sense of nonconfinement within an aesthetically pleasing area.

e. Supplemental Values

Bruneau River-Sheep Creek, 111-17

As previously stated, the WSA is of exceptional scenic quality. The short width and great depth of the canyon make it one of the most visually dramatic canyon complexes in the United States.

The canyon is of exceptional geologic value as a spectacular example of alluvial erosion on an uplifted plain. The great depth of the canyon and its comparatively narrow width are a result of accelerated erosion caused by the uplifting of the tableland. The canyon is also of geologic value because of the

age and depth of the sedimentation record exposed in the canyon walls. It has been identified as a potential "natural landmark" by the National Park Service.

The Bruneau River Canyon is of exceptional cultural resource value. The canyon contains more than 200 known prehistoric and historic archaeological sites.

The WSA has significant ecological, scientific, and wildlife values. "Sensitive" species found in the WSA include river otter, bobcat, red-banded trout, Davis' peppergrass, Bailey's Ivesia, and Watson's Leptodactylon. The WSA also has existing and potential habitat for California bighorn sheep. In addition to being a sensitive species, California bighorn sheep and bobcat are wildlands or wilderness dependent species because of their extreme intolerance to the presence of man. The Bruneau River Canyon has been identified as potential habitat for the endangered bald eagle.

The WSA contains 29,750 acres of Salt Desert Shrub ecosystem (Bailey-Kuchler, 3130-34).

The Bruneau River and Sheep Creek are currently under consideration by Congress for inclusion in the National Wild and Scenic River System.

Jarbidge River, 17-11

As previously stated, the Jarbidge and Bruneau River Canyons are of exceptional scenic quality.

The WSA has significant ecological, scientific, and wildlife values. "Sensitive" species found in the WSA include river otter, bobcat, and red-banded trout. The WSA also has existing and potential habitat for California bighorn sheep. In addition to being a sensitive species, California bighorn sheep and bobcat are wildlands dependent species because of their extreme intolerance to the presence of man. The Bruneau and Jarbidge River Canyons have been identified as potential habitat for the endangered bald eagle.

The Jarbidge and Bruneau River Canyons are also of exceptional cultural resource value. More than 150 known prehistoric and historic archaeological sites have been identified in the canyons within the WSA.

The Jarbidge and Bruneau Rivers are currently under consideration by Congress for inclusion in the National Wild and Scenic Rivers System.

King Hill Creek, 19-2

King Hill Creek WSA is considered of good to excellent scenic quality.

The WSA has significant ecological, scientific and wildlife values.

Multiple Use Benefits

Wilderness designation of the WSAs is not necessary to secure long-term multiple resource benefits to other resource values.

Diversity in the National Wilderness Preservation System (NWPS)

1. Ecosystem Representation - The three WSAs lie within a basalt rhyolite canyonland/sagebrush-bunchgrass ecosystem. This ecosystem is part of a broad landform and vegetation classification known as the Intermountain Sagebrush Province/Sagebrush Steppe ecosystem (ecosystem 3130-49, U.S. Department of the Interior, Geological Survey, Potential Natural Vegetation of the United States, by R. G. Bailey and A. W. Kuchler). The Sagebrush Steppe ecosystem is widespread over much of southern Idaho, eastern Oregon and Washington, and portions of northern Nevada, California, and Utah. Designated or potential wilderness acreages within the Sagebrush Steppe ecosystem including the three WSAs are listed below.

Table J-2
Sagebrush Steppe Ecosystem Representation

<u>Status</u>	<u>Acres</u>	<u>Units</u>
Designated Wilderness		
USFS (Nevada)	6,483	1
USFS (California)	28,062	1
Administratively Endorsed		
USFS (California)	400	1
FWS (Nevada)	341,500	1
FWS (Oregon)	15,500	1
Other Study Areas		
USFS*	34,570	4
BLM	<u>4,231,556</u>	<u>140</u>
TOTAL	4,658,071	149

* The Forest Service is currently reevaluating administratively endorsed and other study areas. These figures are subject to change.

Approximately 29,750 acres of the Bruneau/Sheep Creek WSA (20,000 acres BRA and 9,750 acres JRA) are in Bailey-Kuchler's Salt Desert Shrub ecosystem (3130-34). This ecosystem is found primarily in Nevada and Utah. Designated or potential wilderness acreages within the Salt Desert Shrub ecosystem including the three WSAs are listed in the table below.

Table J-3
Salt Desert Shrub Ecosystem Representation

<u>Status</u>	<u>Acres</u>	<u>Units</u>
Designated Wilderness		
USFS (California)	19,554	2
Administratively Endorsed		
FWS (Nevada)	51,586	1
FWS (Oregon)	30,000	1
Other Study Areas		
USFS*	51,586	5
BLM	<u>2,087,859</u>	<u>439</u>
TOTAL	2,227,598	447

* The Forest Service is currently reevaluating administratively endorsed and other study areas. These figures are subject to change.

2. Proximity to Boise Population Center: Within One Day's Drive of the Boise Metropolitan Statistical Area (Boise MSA) - The major access points to the three WSAs can be reached within three to five hours driving time from the Boise population center. Within five hours drive of Boise there are eight designated wilderness areas totalling 3,250,344 acres. These areas are listed below:

Proximity of Wilderness to Boise, Idaho

<u>Wilderness Area</u>	<u>Agency</u>	<u>Acres</u>
Sawtooth (Idaho)	USFS	217,088
River of No Return (Idaho)	USFS	2,229,211
Hells Canyon (Idaho/Oregon)	USFS	192,233
Jarbidge (Nevada)	USFS	64,667
Eagle Cap (Oregon)	USFS	293,476
Strawberry Mountain (Oregon)	USFS	33,003
Wenaha-Tucannon (Oregon/Washington)	USFS	177,423
Craters of the Moon (Idaho)	NPS	43,243

3. Geographical Distribution of Wilderness - The existing wilderness areas of the NWPS are geographically concentrated in the Sierra Nevada Mountain Range and Cascade Mountain Range of California, Oregon, and Washington, and in the Rocky Mountains and Continental Divide area of Idaho, Montana, Wyoming, Colorado, and eastern Utah, southeast Oregon, and southern Idaho.

A summary of the existing or potential wilderness areas within Idaho including the three WSAs under study is shown on Table J-4.

Table J-4
Existing or Potential Wilderness Areas in Idaho

Status	Acres	Units
Designated Wilderness		
USFS	3,825,016	5
NPS	43,243	1
Administratively Endorsed		
USFS*	1,035,674	20
NPS	22,217	1
Other Study Areas		
USFS*	640,924	11
BLM	1,706,442	58

* The Forest Service is currently reevaluating administratively endorsed and other study areas. These figures are subject to change.

Criterion No. 2: Manageability of WSAs as Designated Wilderness

Each of the WSAs can be managed in the long term as designated wilderness to protect its wilderness characteristics and supplemental values. The ability to provide long-term protective management is due to the fact that the areas are generally self-protecting because of rugged topographic relief, rocky soil conditions, and due to their isolation from major highways. The management of access routes to retain existing levels of construction and maintenance can be used to enhance wilderness management. The manageability of each WSA or the grouping of WSAs can be improved by adjusting the recommended wilderness boundaries away from portions of the WSA boundaries in all alternatives except the All Wilderness Alternative.

Management adjustments should eliminate WSA lands from a wilderness recommendation if that portion of the WSA has:

1. Existing resource developments that locally impact naturalness and would affect management for solitude and primitive recreation opportunities.
2. Terrain and vegetation features which could not realistically be protected from off-road vehicle use. These areas also have to be lacking in high quality wilderness characteristics and supplemental values in order to be eliminated; furthermore, the adjusted boundary has to be more protectable and definable.
3. Inescapable external influences immediately adjacent in the WSA which adversely affect opportunities for solitude or primitive recreation. If an area affected by external influences has high quality supplemental wilderness values, or the retention of the area is essential for the overall management of the WSA as wilderness, the area is not eliminated. Again, the adjusted boundary has to be protectable and definable.

4. Private inholdings which create unmanageable land configurations.

Manageability adjustments are shown in Table J-5.

Table J-5
Manageability Adjustments for WSAs

WSA	Acreage Adjustment	Adjustment Rationale
Bruneau River-Sheep Creek 111-17	86,477 acres - all plateaus areas within the WSA.	The primary wilderness value of these plateaus is their addition to the NWPS of salt-desert shrub vegetative communities. These areas, however, are all in "poor" ecological condition and are not a good representation of this ecological community. Management of these plateau areas is hindered by numerous imprints of man and the accessibility of the area to vehicles. The wilderness values of the plateau areas are not sufficient to warrant the costs of management.
Jarbidge River 17-11	25,237 acres - the plateau areas east of the Jarbidge River and West of the Bruneau River.	These areas are in "poor" ecological condition and are not a good representation of the ecological community. Management of the plateau areas is hindered by numerous imprints of man and the accessibility of the area to vehicles. The wilderness values of the plateau areas are not sufficient to warrant the costs of management.
King Hill Creek 19-2	1. Drop 2,160 acres - portions of T.3S., R.9E. Sec. 1; and T.3S., R.10E., Secs. 6, 7, 8, 17, 18, 20, 21, and 28	This is a hillside above a frequently traveled road and, on the north end, adjacent to private property. It is felt that the influence of the road adversely effects manageability. The wilderness values of this hillside do not warrant the costs of management.

WSA	Acreage Adjustment	Adjustment Rationale
King Hill Creek (con't.)	2. Drop 80 acres - portions of Sec. 5 of T.3S., R.10E. 3. Drop 680 acres - portions of Secs. 1 and 12 of T.3S., R.10E., and Sec. 6 of T.3S., R.11E.	This is a small extension bordered on three sides by private property. This is a long peninsula of land surrounded by private land. The wilderness values of these isolated acres do not warrant the attention that may be necessary to manage them as wilderness.

Each alternative presented in this RMP contains recommendations for prohibiting recreational use of existing roads and/or ways (two-wheel tracks). These closures to general public use would enhance the management of wilderness characteristics (naturalness; solitude and primitive recreation opportunities) and supplemental wilderness values. Though closed to the general public, these vehicle routes may be used for live-stock operations when authorized by BLM. Routes would be closed by posting of signs and fencing. Boundary adjustments have 1) been made to eliminate major cherry stem roads or ways whenever possible, 2) located along topographic features which would require minimal fencing, 3) located along existing fence lines already established for grazing management, or 4) located sufficient distance from boundary roads to limite unauthorized vehicle use without the need for fencing.

State inholdings within the WSAs are all natural in character. Vehicle access via roads or ways is lacking to most fo the state lands. Because of their natural character and limited potential for development, state lands do not represent a serious management problem.

Most private inholdings within WSAs are not accessed by roads and none are developed. The continued use of these lands for grazing or subsequent future development for other potential uses would not substantially impair the wilderness quality of any of the WSAs.

Quality Standards

1. Energy and Mineral Resources

Bruneau River-Sheep Creek, 111-17

The Bruneau Sheep Creek WSA is within the North Bruneau River GEM Resource Area (ID-010-08). Existing mining activity involves 8 active mining claims at Indian Hot Springs. The claims are for Bruneau Jasper (a semi-precious gem stone material). No other area can meet the demand for Bruneau Jasper. The material is unique to this area No other areas of mining interest or potential are known in the WSA.

Sixty-four hundred (6,400) acres of the northern area of the WSA is under oil and gas leases. No activity has occurred on these leases and none is expected. The area has been classified by USFS as prospectively valuable for oil and gas, however, the actual potential is considered to be low.

It is expected that slant drilling from the surrounding area could get to any oil or gas deposit present.

The area is favorable for geothermal resources, especially at Indian Hot Springs. The potential for development is low.

A wilderness decision is not expected to have a significant impact on energy or mineral resources. Existing mining activity would be allowed to continue on the existing mining claims that are valid.

Jarbidge River, 17-11

The Jarbidge River WSA is within the South Bruneau River GEM Resource Area (ID-010-07). Existing mining activity involves a small portion of 3 of the Indian Hot Springs Jasper claims. No other area can meet the demand for this material. No other areas of mining interest or potential are known in the WSA.

There are no oil and gas leases covering lands within the WSA. The area has been classified as prospectively valuable for oil and gas but the actual potential is considered to be low. It is expected that slant drilling from the surrounding area could get to any oil or gas deposit present.

The area is favorable for geothermal resources in the northern part of Indian Hot Springs and in the southernmost area near Murphy Hot Springs. The potential for development is low.

A wilderness decision is not expected to have a significant impact on energy or mineral resources.

King Hill Creek, 19-2

The King Hill Creek WSA is within the Mt. Bennett Hills GRA. No mining activity or claims are known in the WSA.

Lease applications have been received for 7,700 acres in the southern part of the WSA, however, no drilling or geophysical oil and gas exploration has occurred in the area. The potential of the area is considered to be low.

The area is favorable for the discovery of geothermal resources. The potential for development of the resources is considered low due to the low temperature, the isolation of the area and the limited knowledge of the hydrology of the area.

A wilderness decision is not expected to have a significant impact on energy or mineral resources.

2. Impacts on Other Resources

Wilderness designation would have adverse impacts for livestock grazing, potential energy and mineral development, and motorized recreation opportunities. Though no mineral or energy resources are known, wilderness would prevent future exploration for these resources. Wilderness would also prohibit future consideration of utility corridors in the area. Those roads and all ways customarily used for motorized access would be closed to recreational use, but the major access routes into the canyons would remain open for public use.

3. Impacts of Nondesignation on Wilderness Values

Without wilderness designation, 208,833 acres of the canyonlands and plateaus of the Bruneau/Jarbridge and the hills and ridges of King Hill Creek would be unprotected. Human disturbance of bighorn sheep habitat would be minimized within the canyons. The natural character of the canyons would remain unchanged unless mineral resources are discovered or dams constructed. Bighorn management objectives for the plateaus would not prohibit continued use of existing vehicle routes. Existing routes could become more heavily used as motorized recreation use increases resulting in reductions in naturalness and in outstanding opportunities for primitive recreation and solitude. Lands not managed as bighorn sheep habitat could have additional vehicle routes (roads and ways) developed as recreation use increases or as other resource developments occurs. Lands on the plateaus could receive land treatments, seeding to non-native species, increased grazing use, and structural range improvements which could further reduce naturalness, outstanding opportunities for primitive recreation, and ecological values. Without wilderness designation, proposed utility corridors could be authorized at some future date and result in high voltage powerlines which would reduce wilderness characteristics and scenic quality over vast areas of the plateaus. If mineral and energy resources were located, the naturalness of the WSAs could be lost due to the development of mines, roads, pipelines or other structures.

4. Public Comment

Comments on these WSAs both support and oppose wilderness designation. Those supporting wilderness designation consider it necessary to preserve ecological values, scenic values, white-water boating opportunities, wildlife habitat, and recreation values in general. Those opposing wilderness designation feel that these values can be protected and that livestock grazing activities, mineral and energy exploration and development, motorized recreation use, and other activities can occur under multiple use management without wilderness designation.

5. Local Social and Economic Effects

There are no significant social or economic impacts to Owyhee, Twin Falls, and Elmore Counties.

6. Consistency with Other Plans

The Bureau has not identified any inconsistencies with any Federal agencies, State or local governments or Indian tribes.

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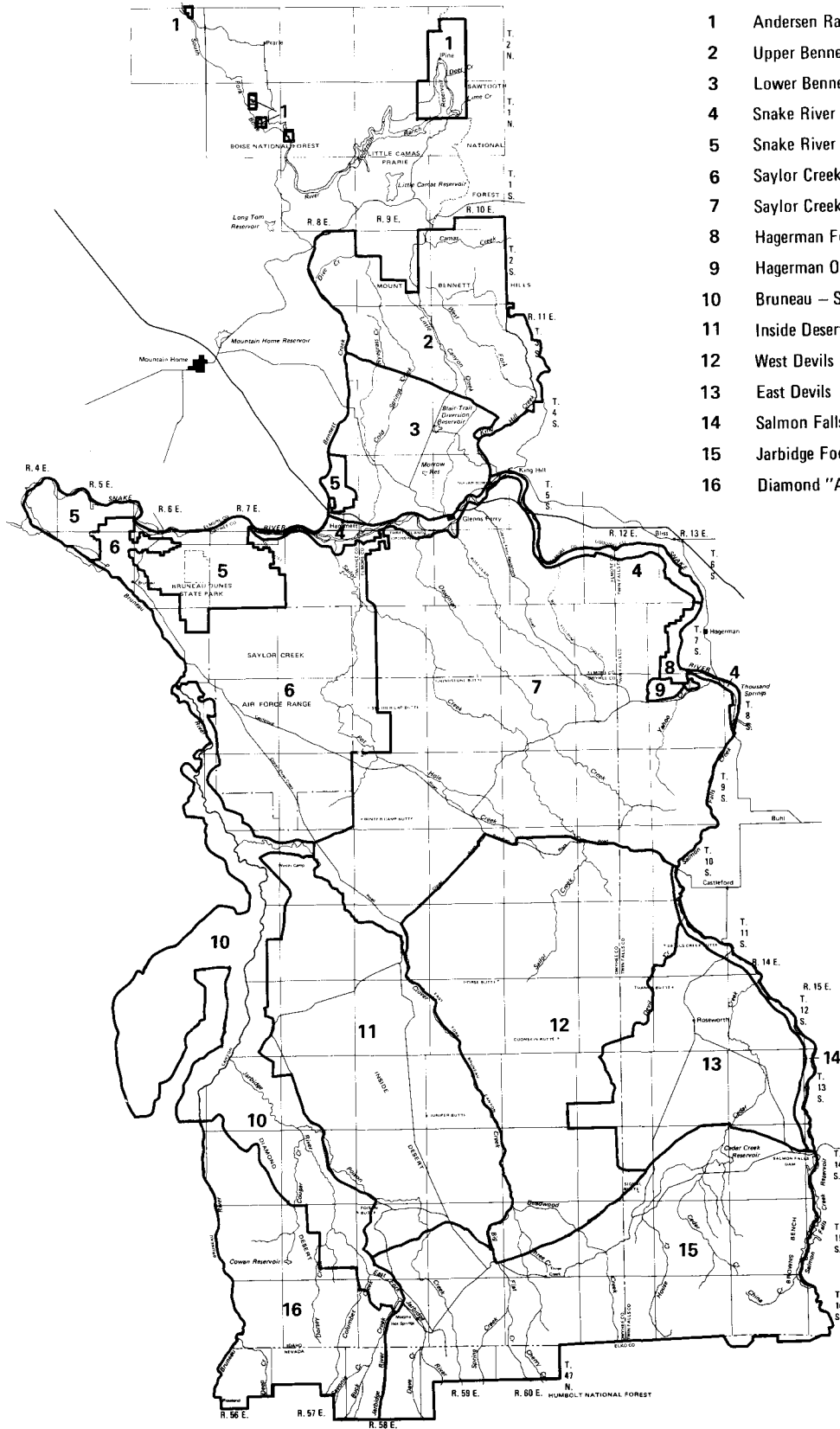
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- 10 Bruneau – Sheep Creek
- 11 Inside Desert
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- 15 Jarbidge Foothills
- 16 Diamond "A"



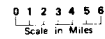
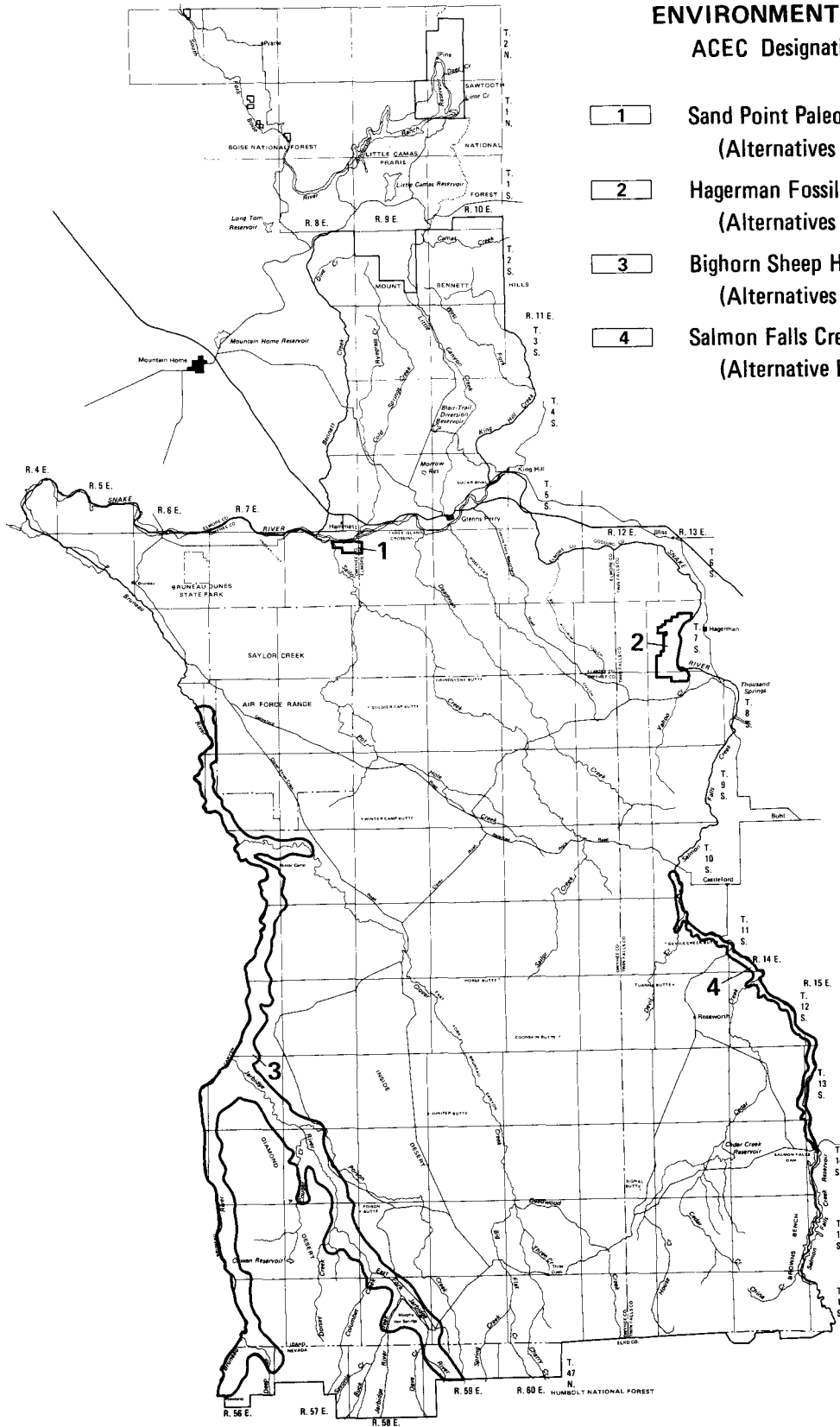
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AREAS OF CRITICAL ENVIRONMENTAL CONCERN

ACEC Designation (proposed)

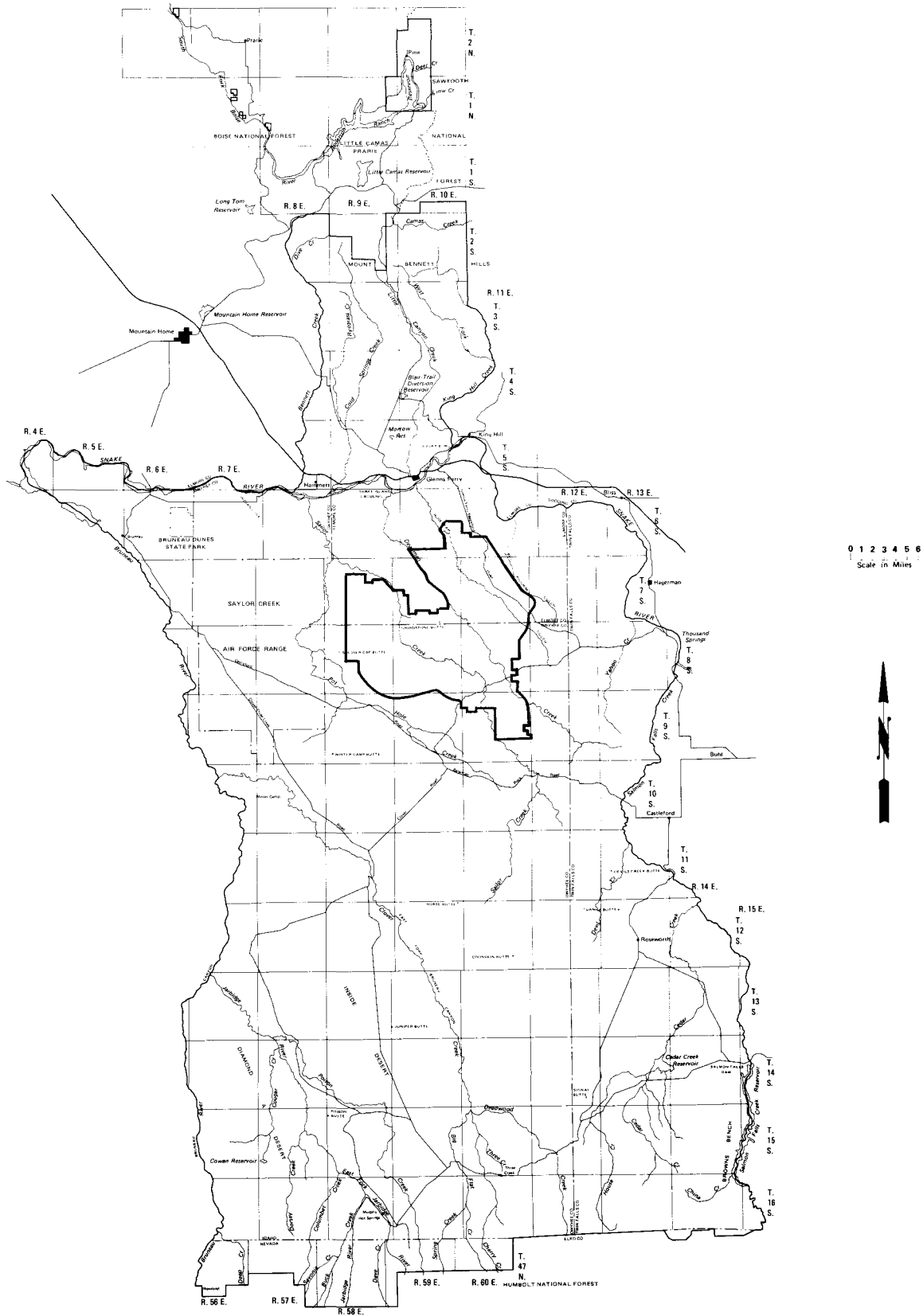
- 1** Sand Point Paleontological Site
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- 2** Hagerman Fossil Area
(Alternatives B, C & D)
- 3** Bighorn Sheep Habitat & Cougar Canyon
(Alternatives C & D)
- 4** Salmon Falls Creek Canyon
(Alternative D)



JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

1984

MAP 3-4 WILD HORSE HERD AREA



**MAP 3-5
WILDLIFE HABITATS**



BIGHORN SHEEP

- Existing Habitat
- Potential Habitat



MULE DEER

- General Winter Range
- Crucial Winter Range

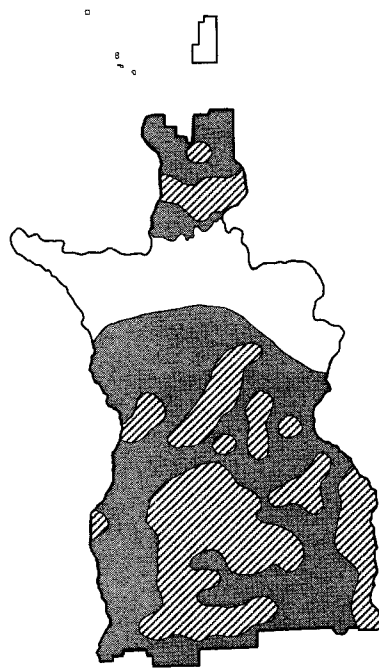


ANTELOPE

- General Distribution
- Winter Range

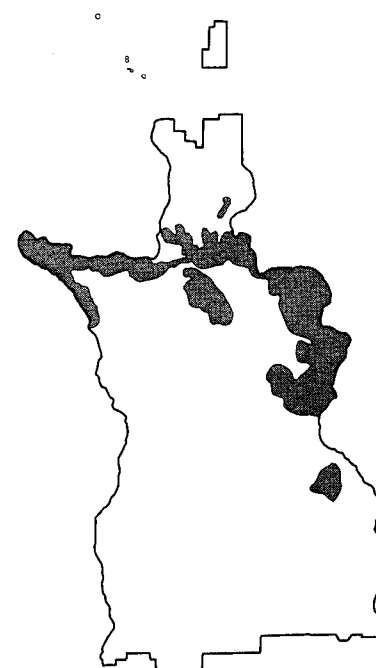
ELK

- Winter Range



SAGE GROUSE

- General Distribution
- Sage Grouse Nesting



PHEASANTS

- Pheasant Habitat



CURLEW / BIRDS OF PREY

- Curlew Habitat
- Birds of Prey Area

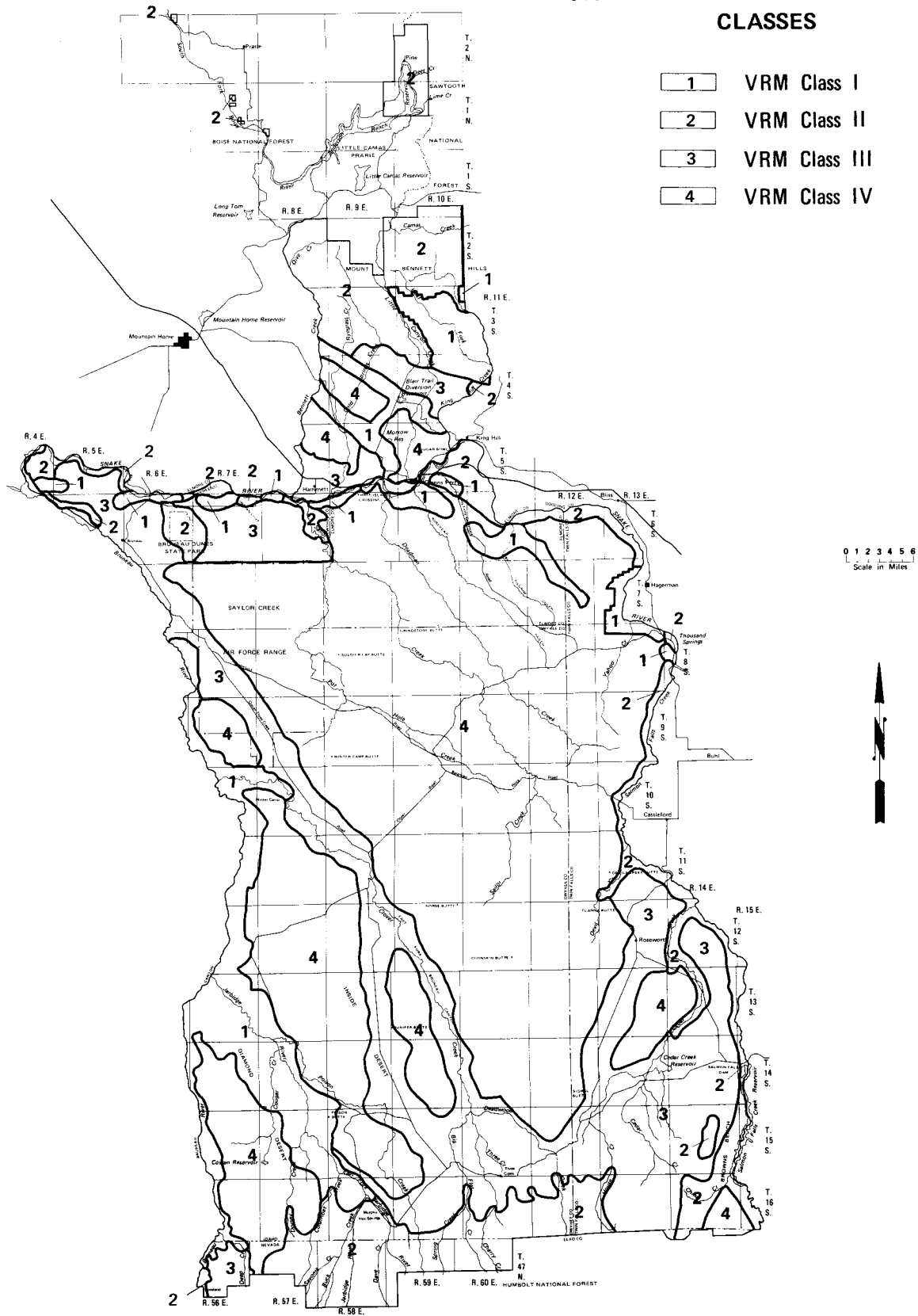
JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

1984

MAP 3-8

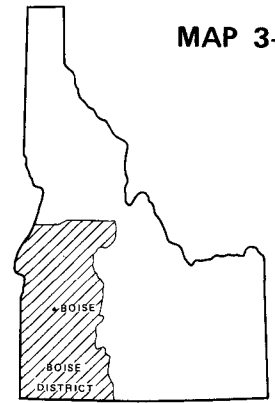
VISUAL RESOURCE MANAGEMENT CLASSES

- 1 VRM Class I
- 2 VRM Class II
- 3 VRM Class III
- 4 VRM Class IV

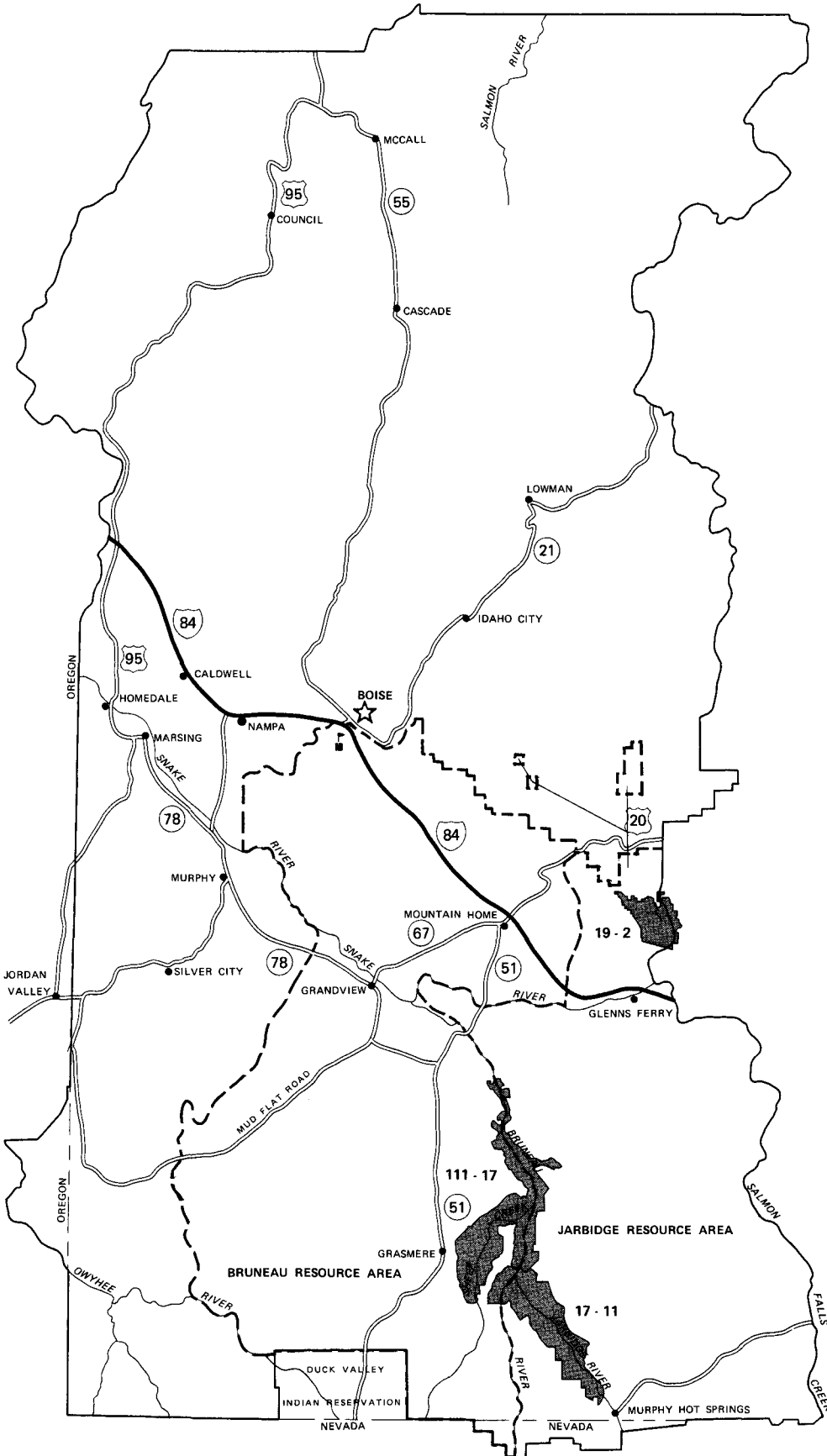


JARBIDGE WILDERNESS LOCATION MAP

MAP 3-9



IDAHO KEY

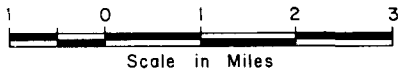
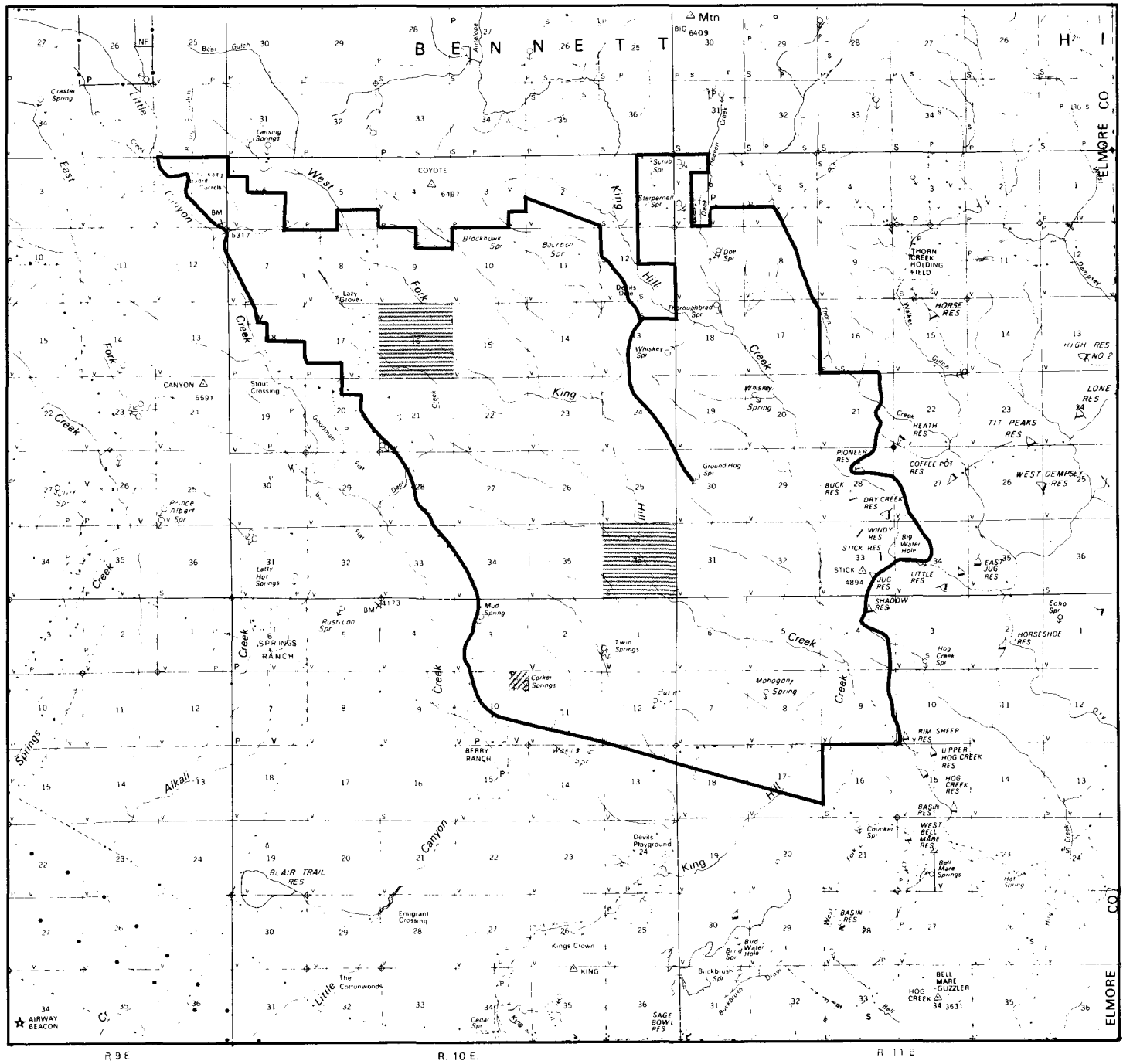


WILDERNESS STUDY AREA (WSA) UNITS

UNIT NO.	WSA NAME	ACRES
111 - 17	Bruneau River / Sheep Creek	104,406
17 - 11	Jarbidge River	75,118
19 - 2	King Hill Creek	29,309
TOTAL		208,833




- ★ STATE CAPITOL
- BLM DISTRICT OFFICE
- 84 INTERSTATE HIGHWAY
- 95 U.S. HIGHWAY
- 67 STATE HIGHWAY
- DISTRICT BOUNDARY
- - - RESOURCE AREA BOUNDARY
- WILDERNESS STUDY AREA (WSA)




WSA 19-2 KING HILL CREEK



ALTERNATIVE A

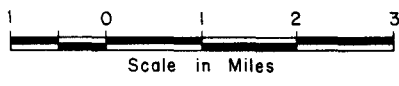
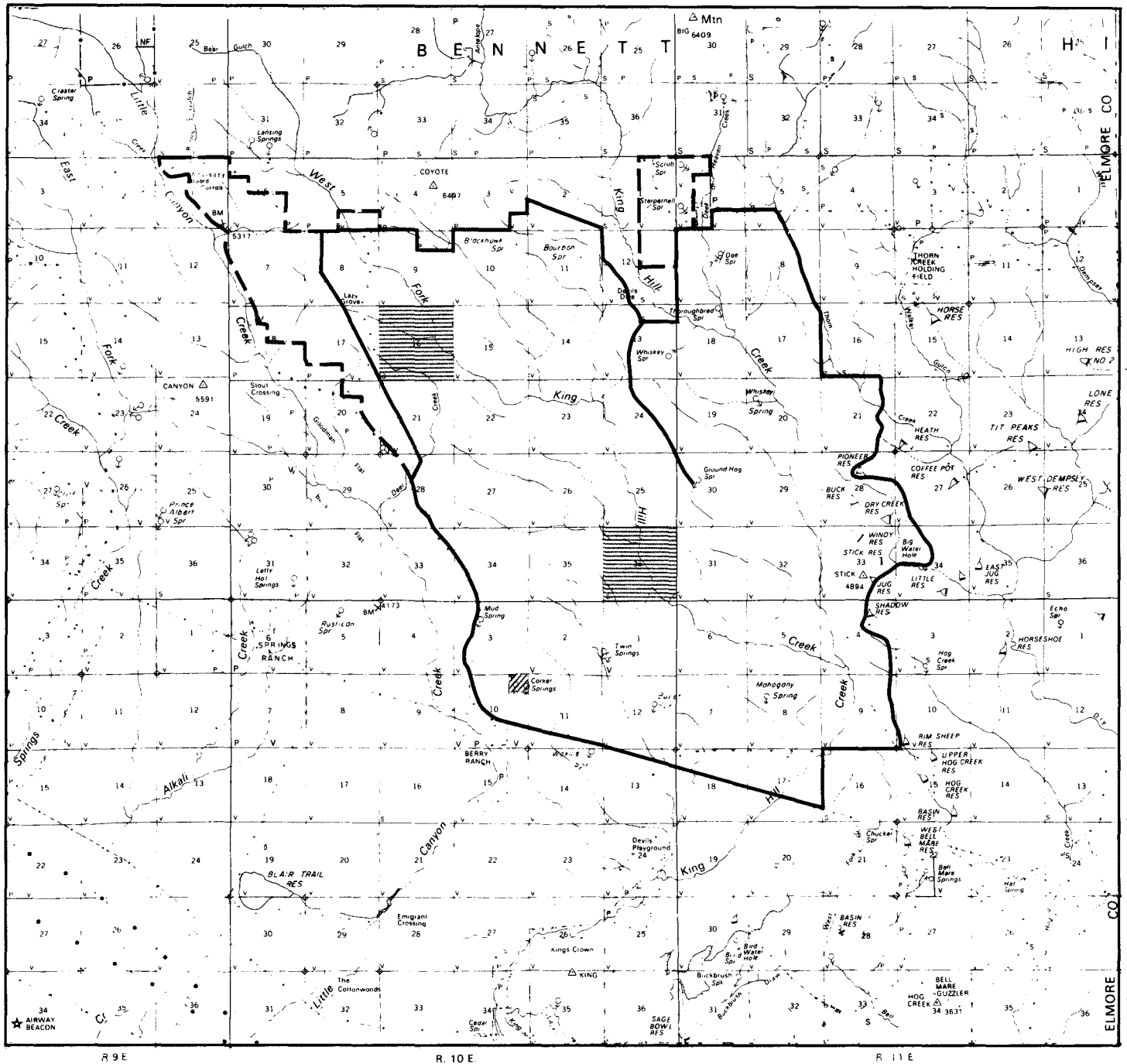
ALTERNATIVE D

-  WSA Recommended Nonsuitable for Wilderness
-  State Lands Within WSA
-  Private Lands Within WSA





-  WSA Recommended Suitable for Wilderness
-  State Lands Within WSA
-  Private Lands Within WSA

MAP J-1





WSA 19-2 KING HILL CREEK



ALTERNATIVE B

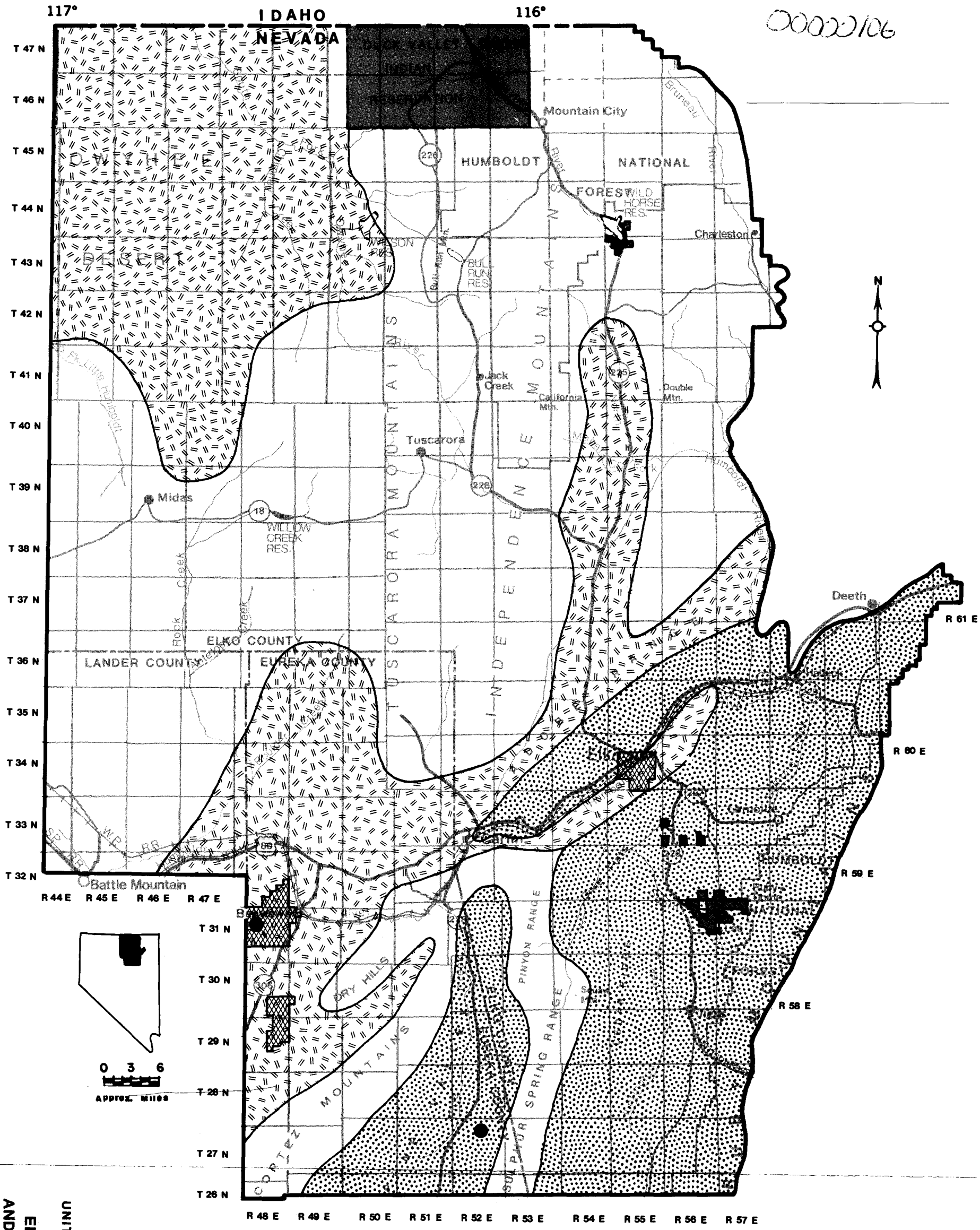
-  WSA Recommended Suitable for Wilderness
-  WSA Recommended Nonsuitable for Wilderness
-  State Lands Within WSA
-  Private Lands Within WSA


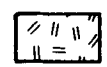
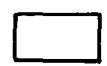



ALTERNATIVE C

-  WSA Recommended Suitable for Wilderness
-  WSA Recommended Nonsuitable for Wilderness
-  State Lands Within WSA
-  Private Lands Within WSA

MAP J-2

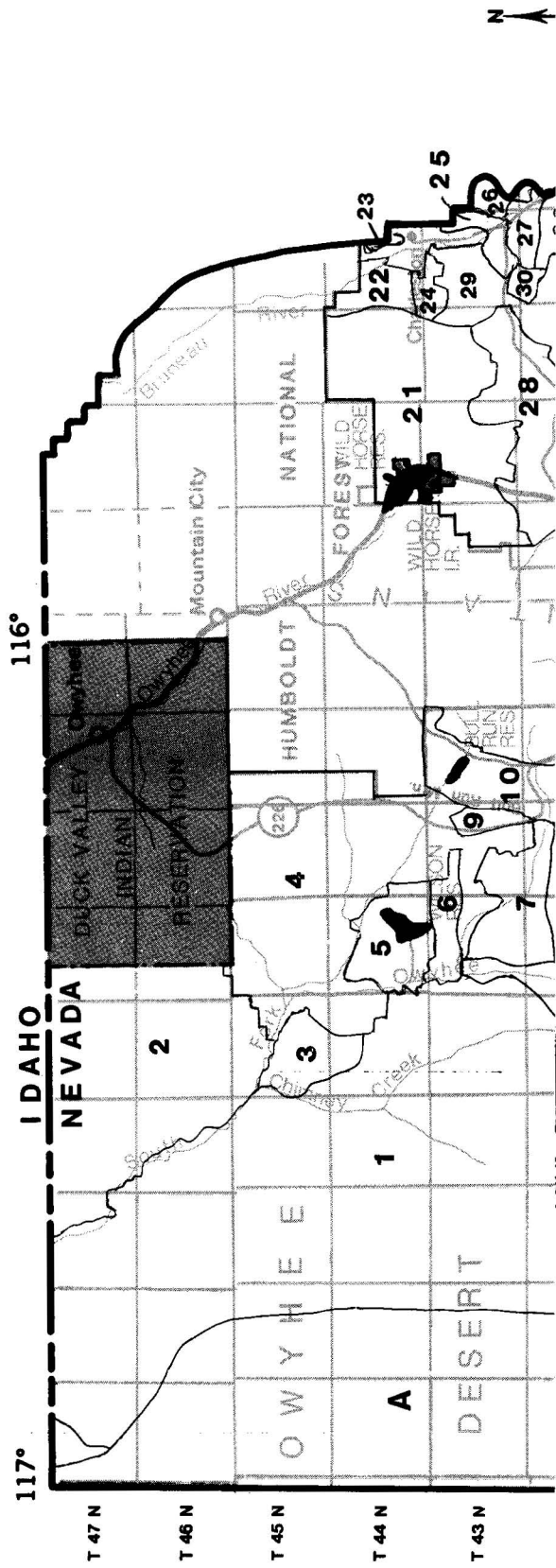
00000106



-  **High (Oil and Gas)**
-  **Moderate (Oil and Gas)**
-  **Low (Oil and Gas)**
-  **Known Geologic Structure(S) And Developed Field (S)**
-  **Known Geothermal Resource Areas**
-  **Geothermal Power Plant**

NOTE: More detailed mineral potential information concerning wilderness study areas is available in the Elko Resource Area Wilderness Technical Report.

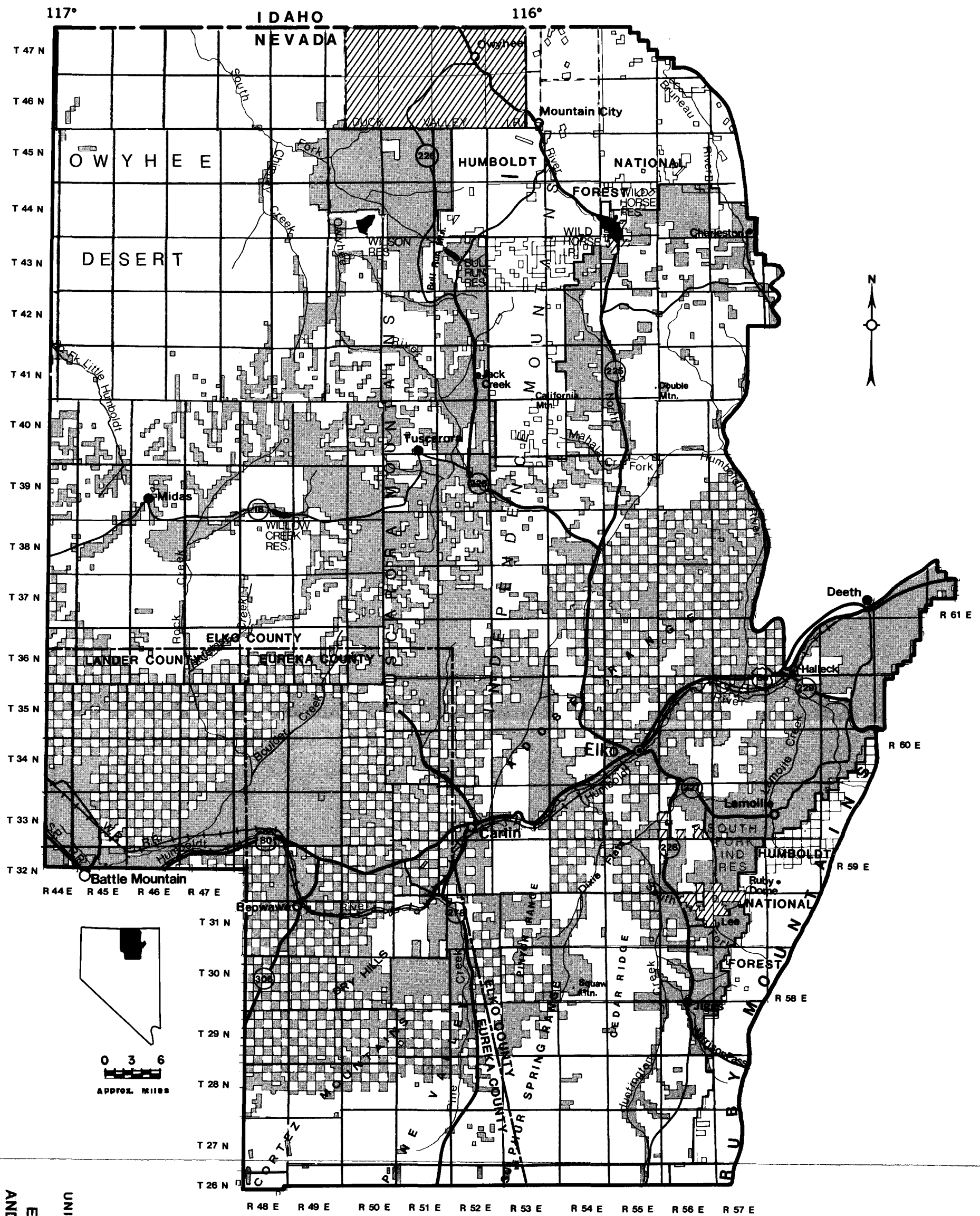
UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 ELKO RESOURCE MANAGEMENT PLAN
 AND ENVIRONMENTAL IMPACT STATEMENT
 LEASABLE MINERAL POTENTIAL






UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 ELKO RESOURCE MANAGEMENT PLAN
 AND ENVIRONMENTAL IMPACT STATEMENT

ALLOTMENT BOUNDARIES

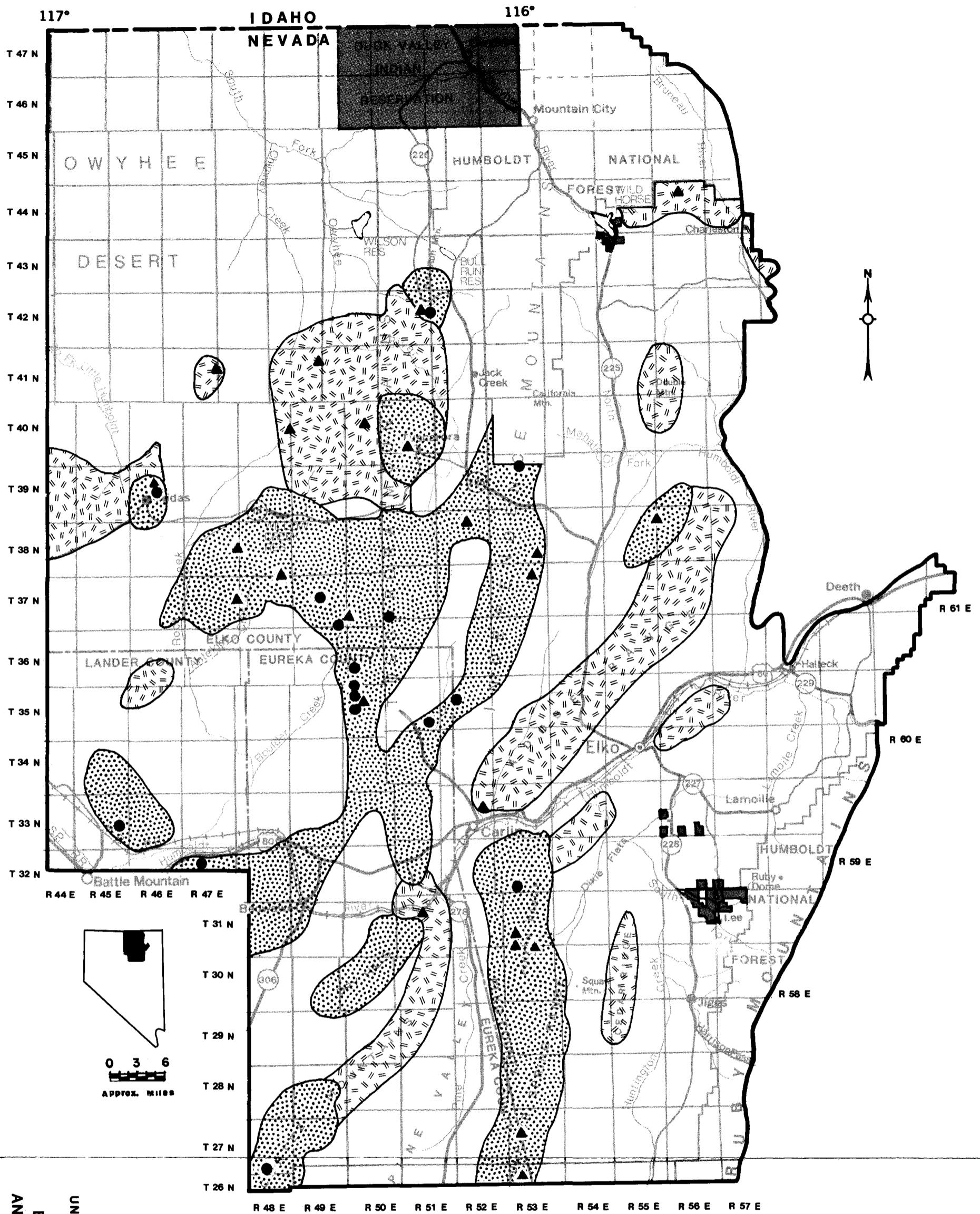
101000000



-  Public Lands
-  Private Lands
-  Native American Lands

000000 99

UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 ELKO RESOURCE MANAGEMENT PLAN
 AND ENVIRONMENTAL IMPACT STATEMENT
 LAND STATUS

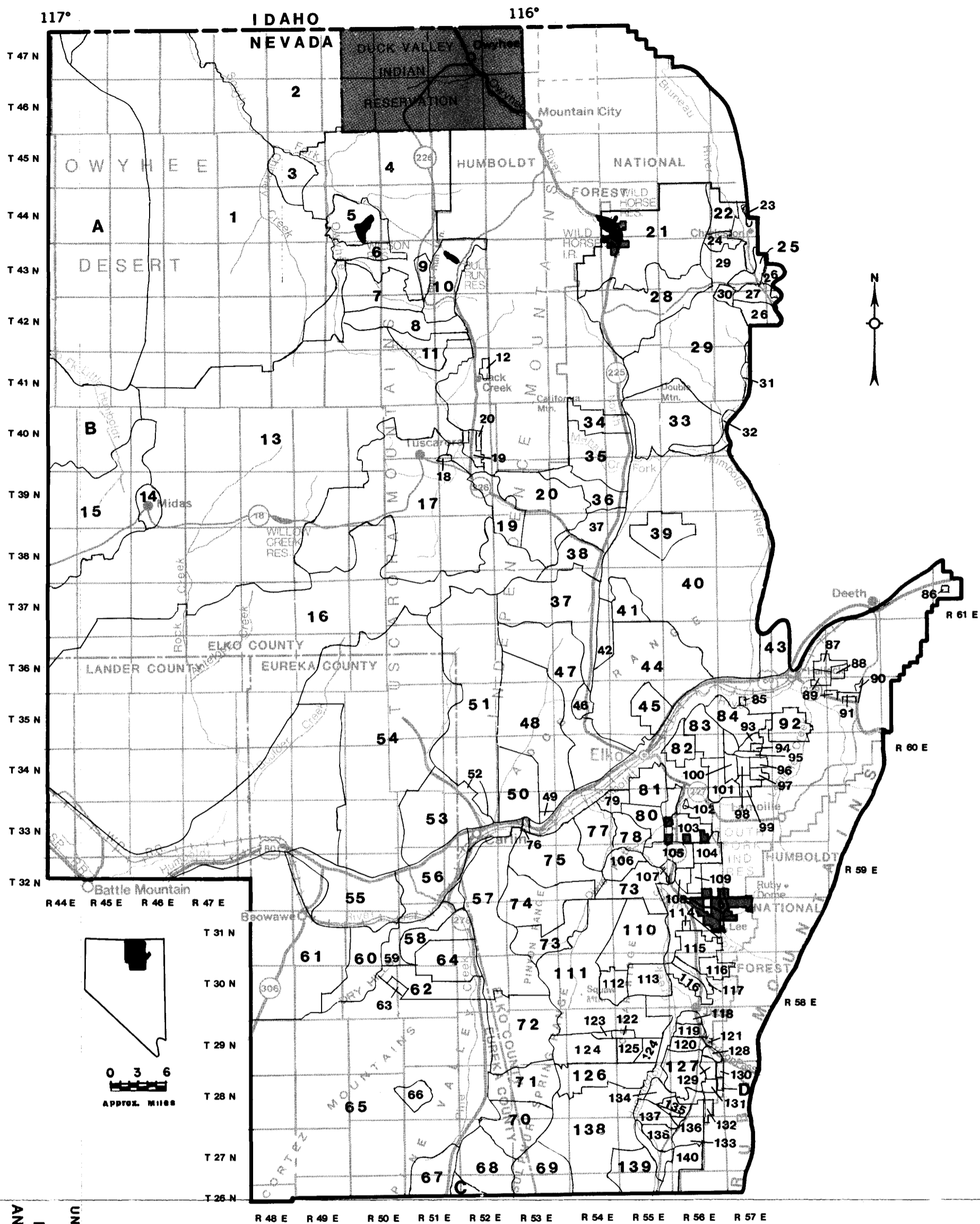


-  **High**
-  **Moderate**
-  **Low**
-  **Current or Recently Active Mines**
-  **Historic Mining Areas**

NOTE: More detailed mineral potential information concerning wilderness study areas is available in the Elko Resource Area Wilderness Technical Report.

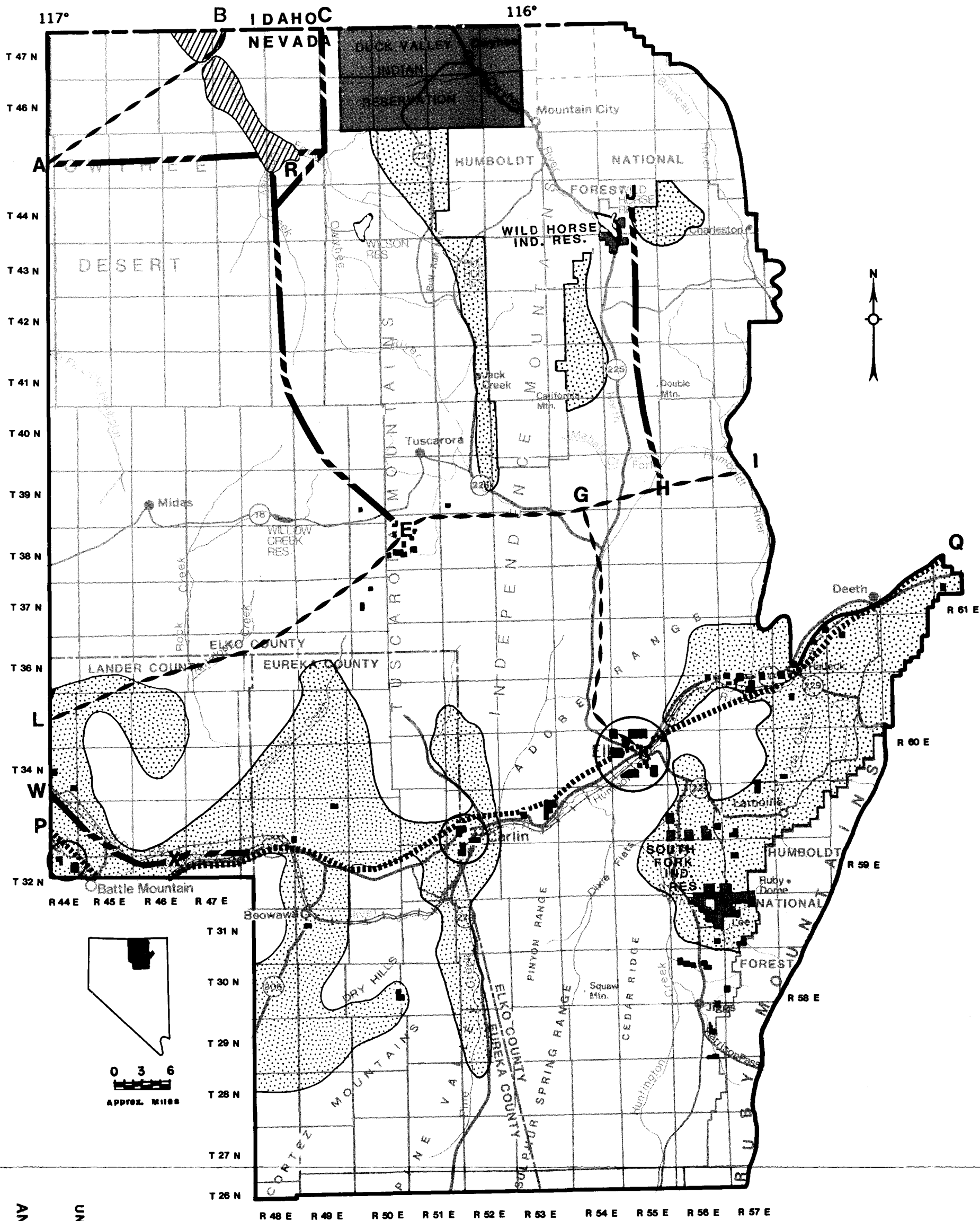
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UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
**ELKO RESOURCE MANAGEMENT PLAN
 AND ENVIRONMENTAL IMPACT STATEMENT**
LOCATABLE MINERAL POTENTIAL




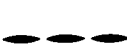





UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 ELKO RESOURCE MANAGEMENT PLAN
 AND ENVIRONMENTAL IMPACT STATEMENT

ALLOTMENT BOUNDARIES

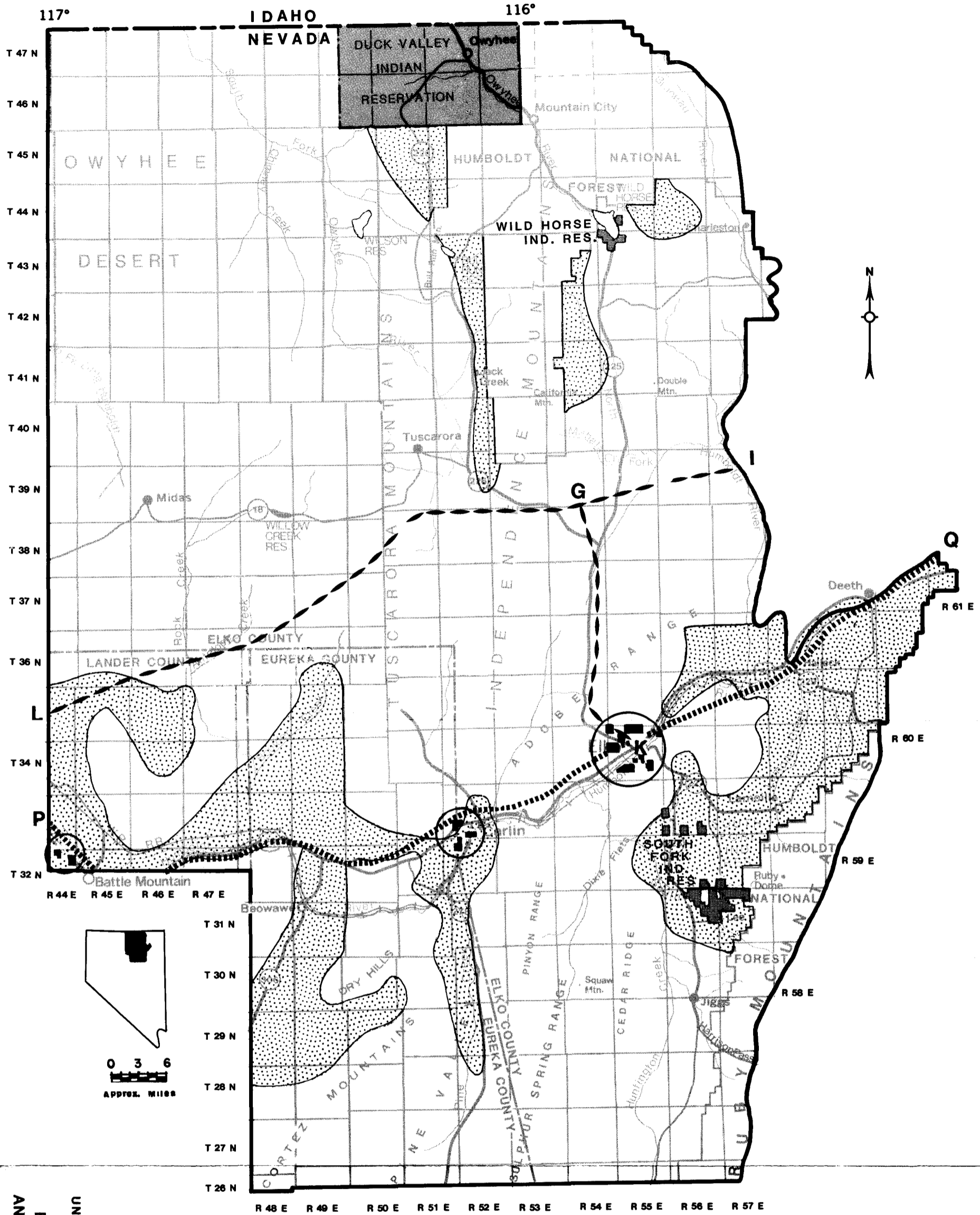


ALTERNATIVE D





-  SALES (Community Expansion)
-  SALES
-  TRANSFER PRIMARILY BY EXCHANGE
-  CENTERLINE OF DESIGNATED CORRIDORS (3 Miles Wide)
-  CENTERLINE OF DESIGNATED LOW VISIBILITY CORRIDOR (3 Miles Wide)
-  CENTERLINE OF PLANNING CORRIDOR (5 Miles Wide)
-  OWYHEE CANYONLANDS WSA

UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
**ELKO RESOURCE MANAGEMENT PLAN
 AND ENVIRONMENTAL IMPACT STATEMENT**
**LAND TENURE ADJUSTMENTS
 AND CORRIDORS**

00000070

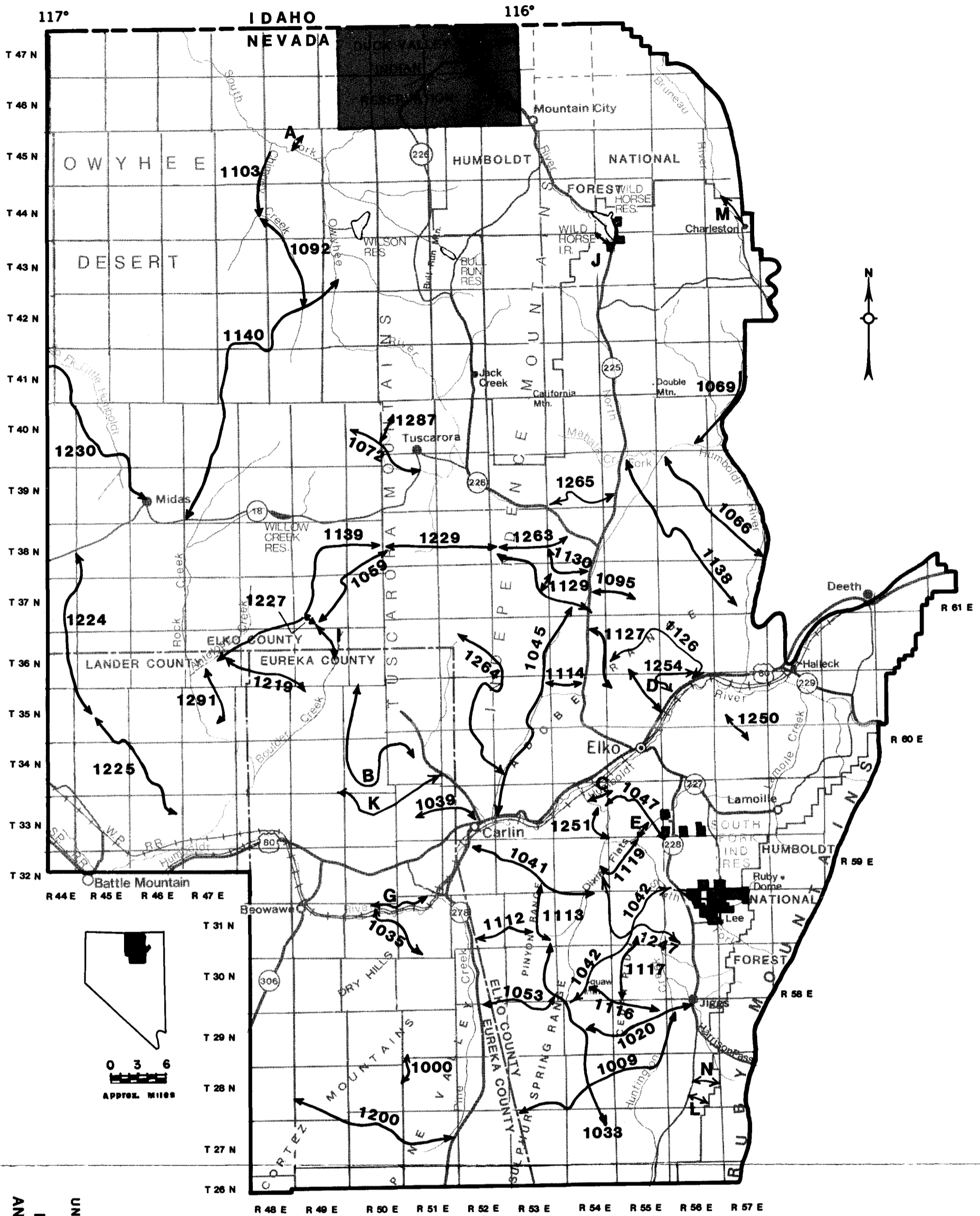


ALTERNATIVE C & E

-  SALES (Community Expansion)
-  TRANSFER PRIMARILY BY EXCHANGE
-  CENTERLINE OF DESIGNATED CORRIDORS (3 Miles Wide)
-  CENTERLINE OF DESIGNATED LOW VISIBILITY CORRIDOR (3 Miles Wide)

00000069

UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
ELKO RESOURCE MANAGEMENT PLAN
 AND ENVIRONMENTAL IMPACT STATEMENT
LAND TENURE ADJUSTMENTS
AND CORRIDORS



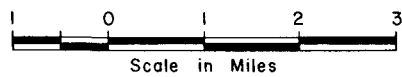
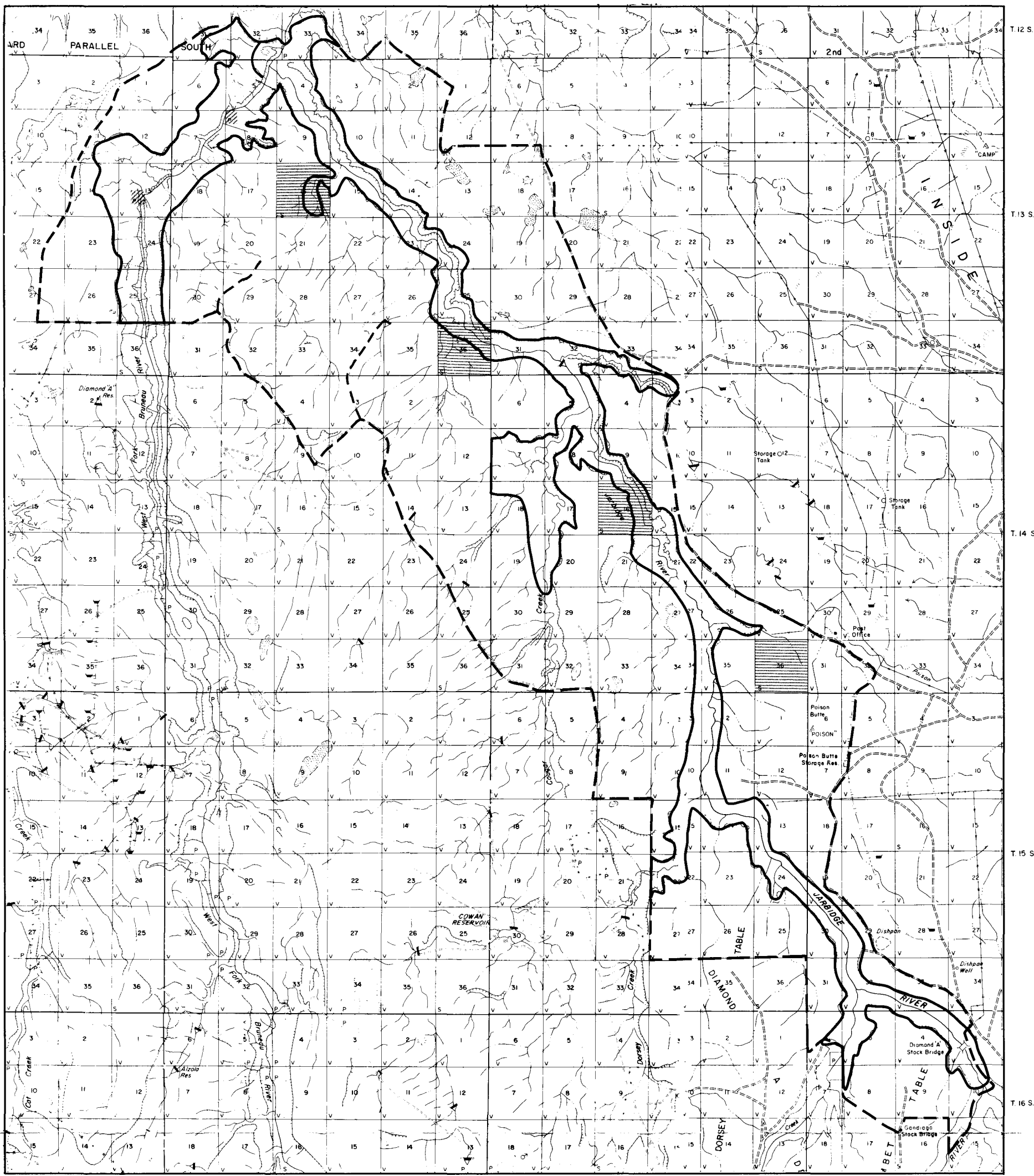
ROADS IDENTIFIED AS NEEDING ACCESS ACQUISITION CONSIDERATIONS

- A** Bureau Roads Not On Transportation Plan
- 1043** Bureau Roads on Transportation Plan

000068

UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 ELKO RESOURCE MANAGEMENT PLAN
 AND ENVIRONMENTAL IMPACT STATEMENT
 ACCESS ROADS

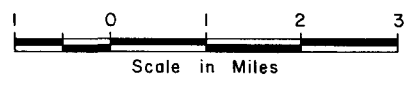
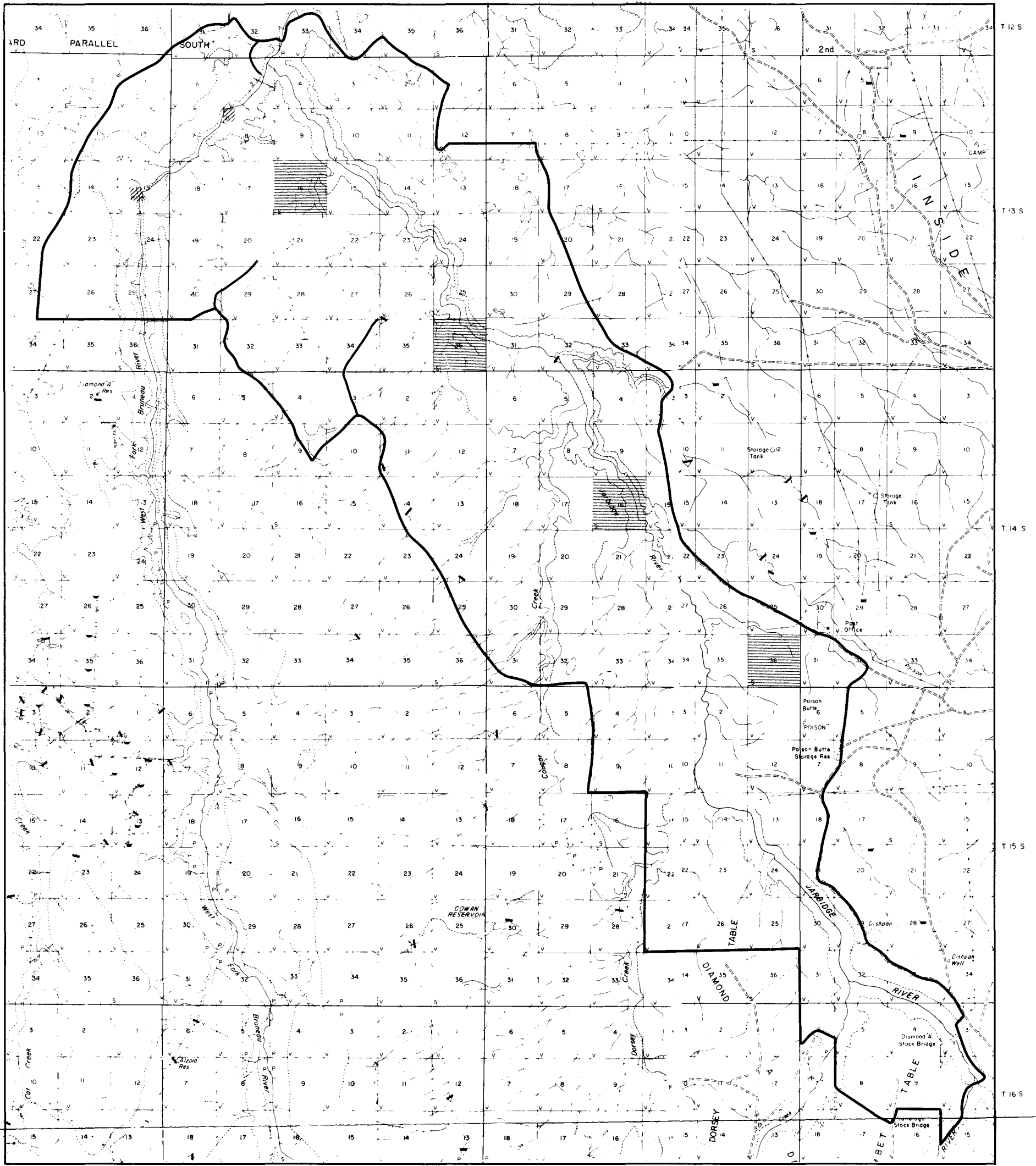
WSA 17-11 JARBIDGE RIVER




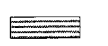

ALTERNATIVE B

- WSA Recommended Suitable for Wilderness
- - - WSA Recommended Nonsuitable for Wilderness
- ▨ State Lands Within WSA
- ▩ Private Lands Within WSA




WSA 17-11 JARBIDGE RIVER



ALTERNATIVE A

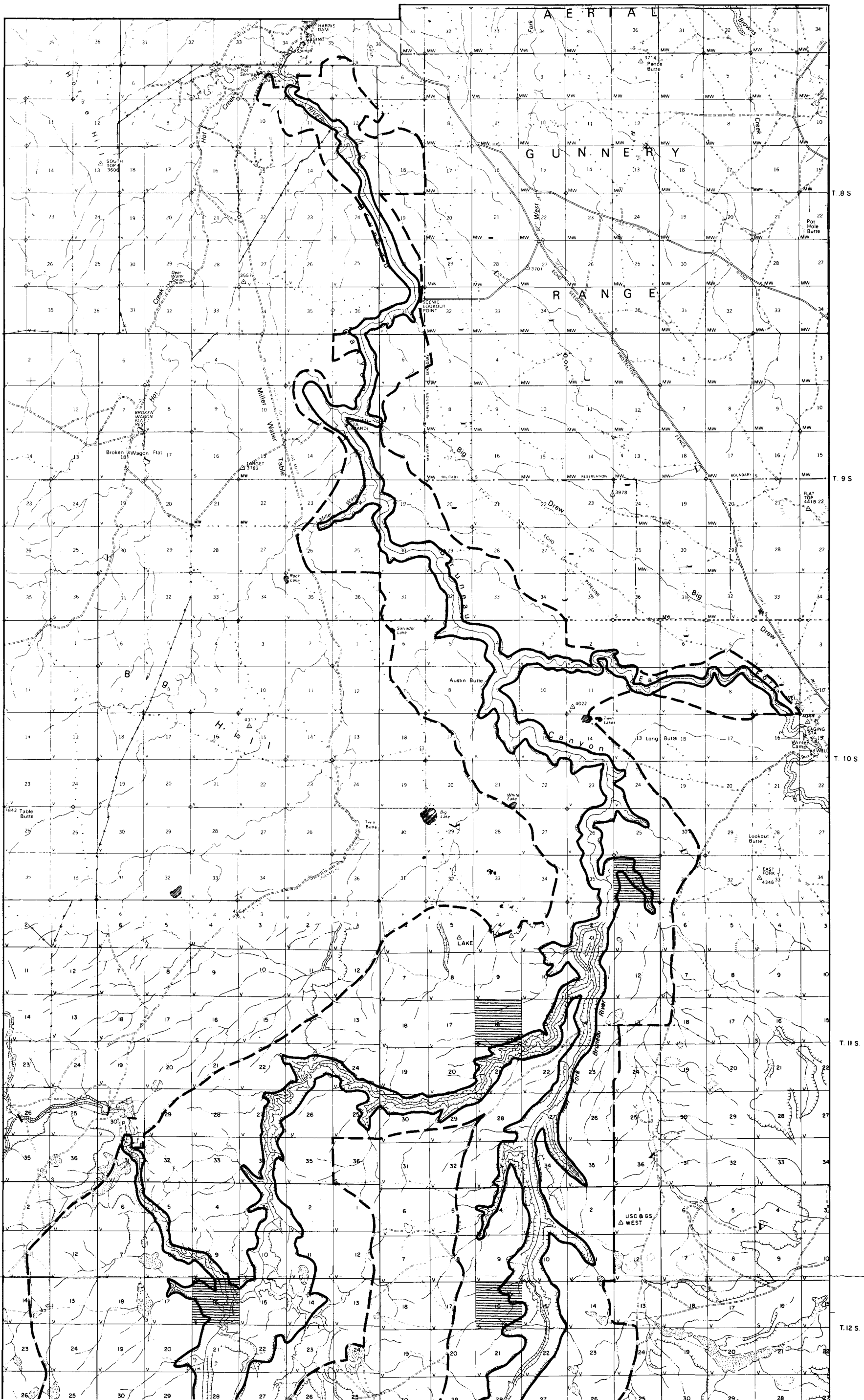
-  WSA Recommended Nonsuitable for Wilderness
-  State Lands Within WSA
-  Private Lands Within WSA

ALTERNATIVE D

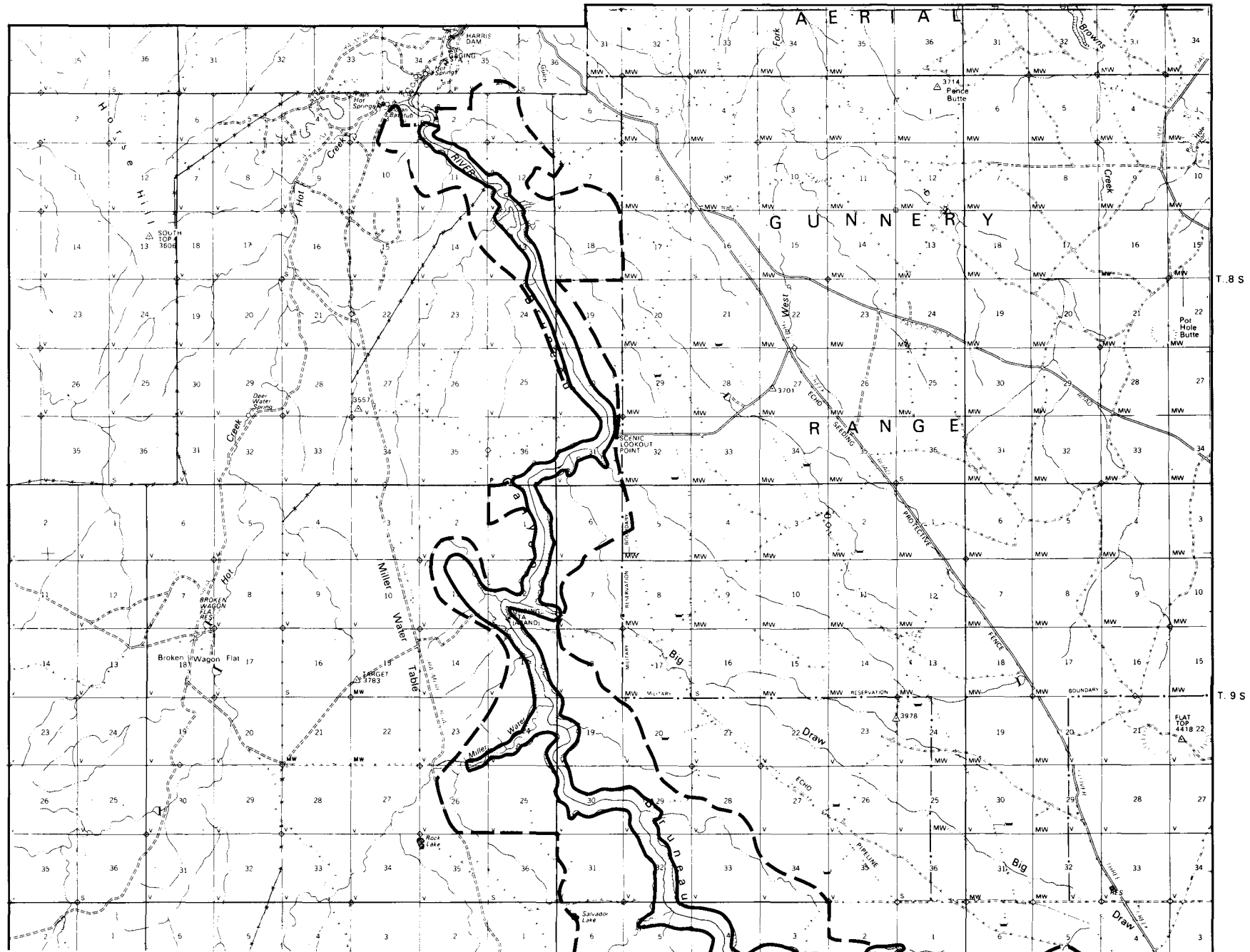
-  WSA Recommended Suitable for Wilderness
-  State Lands Within WSA
-  Private Lands Within WSA

MAP J-5

WSA 111-17 BRUNEAU RIVER / SHEEP CREEK

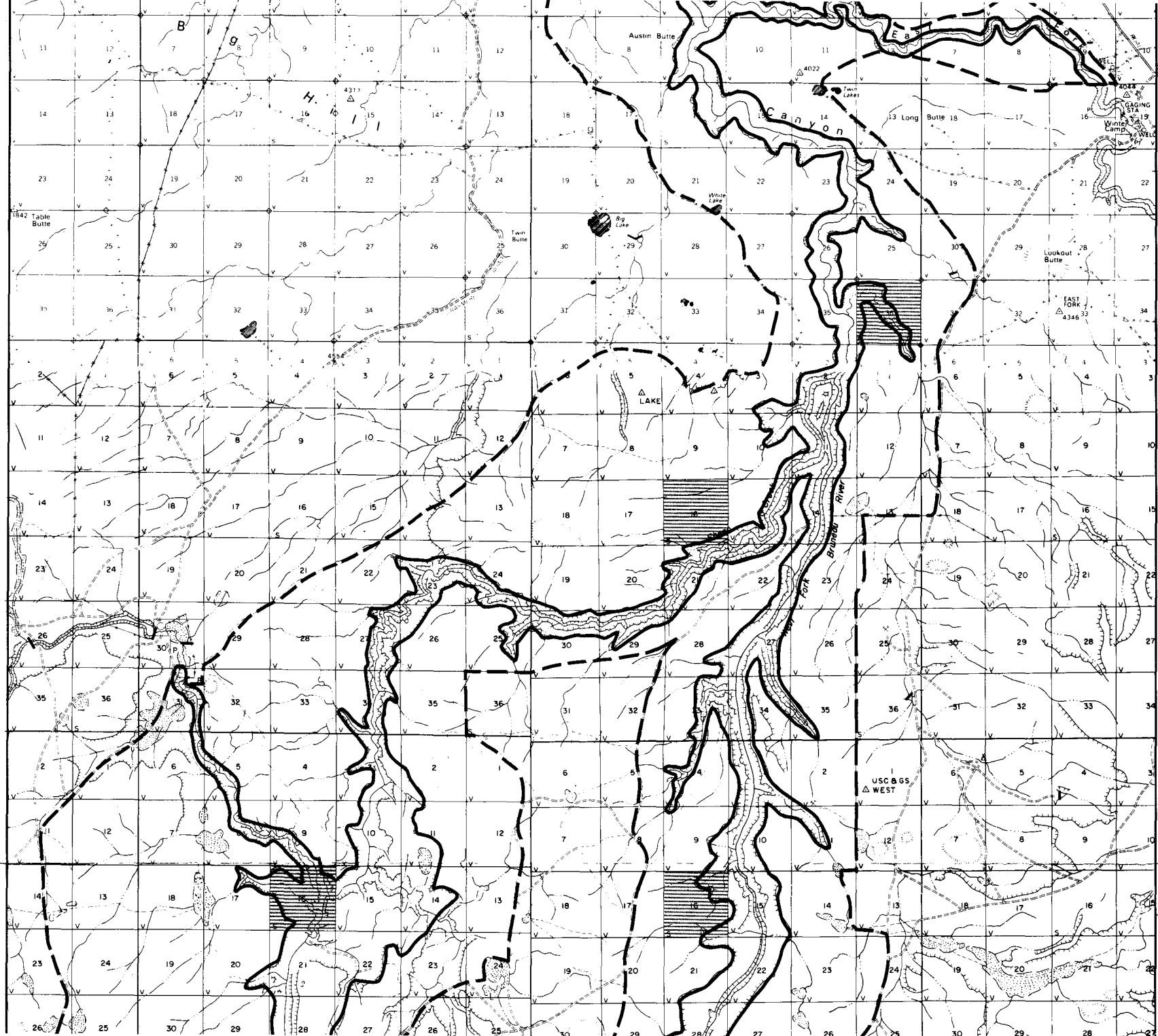


WSA 111-17 BRUNEAU RIVER / SHEEP CREEK



T. 8 S

T. 9 S



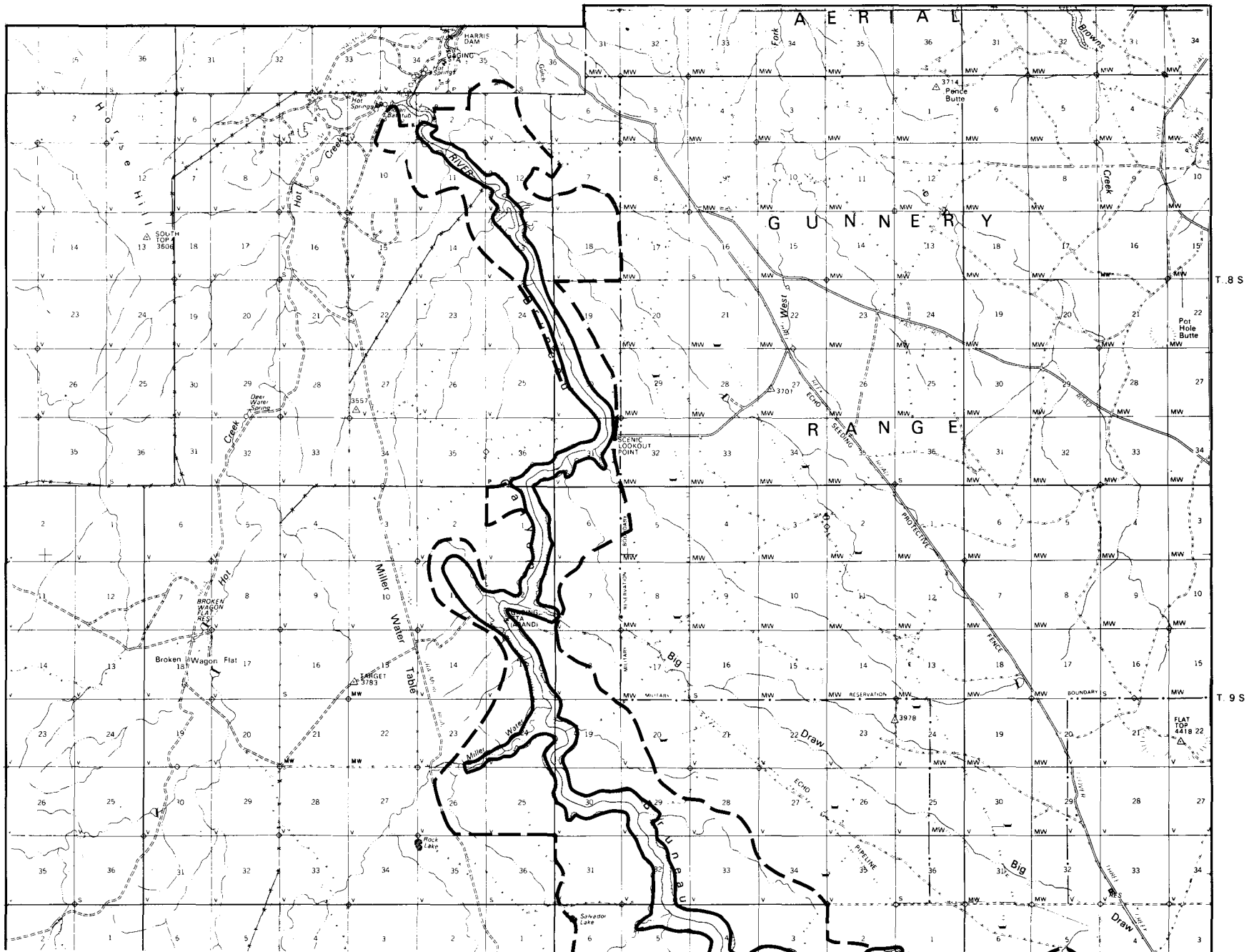
T. 10 S

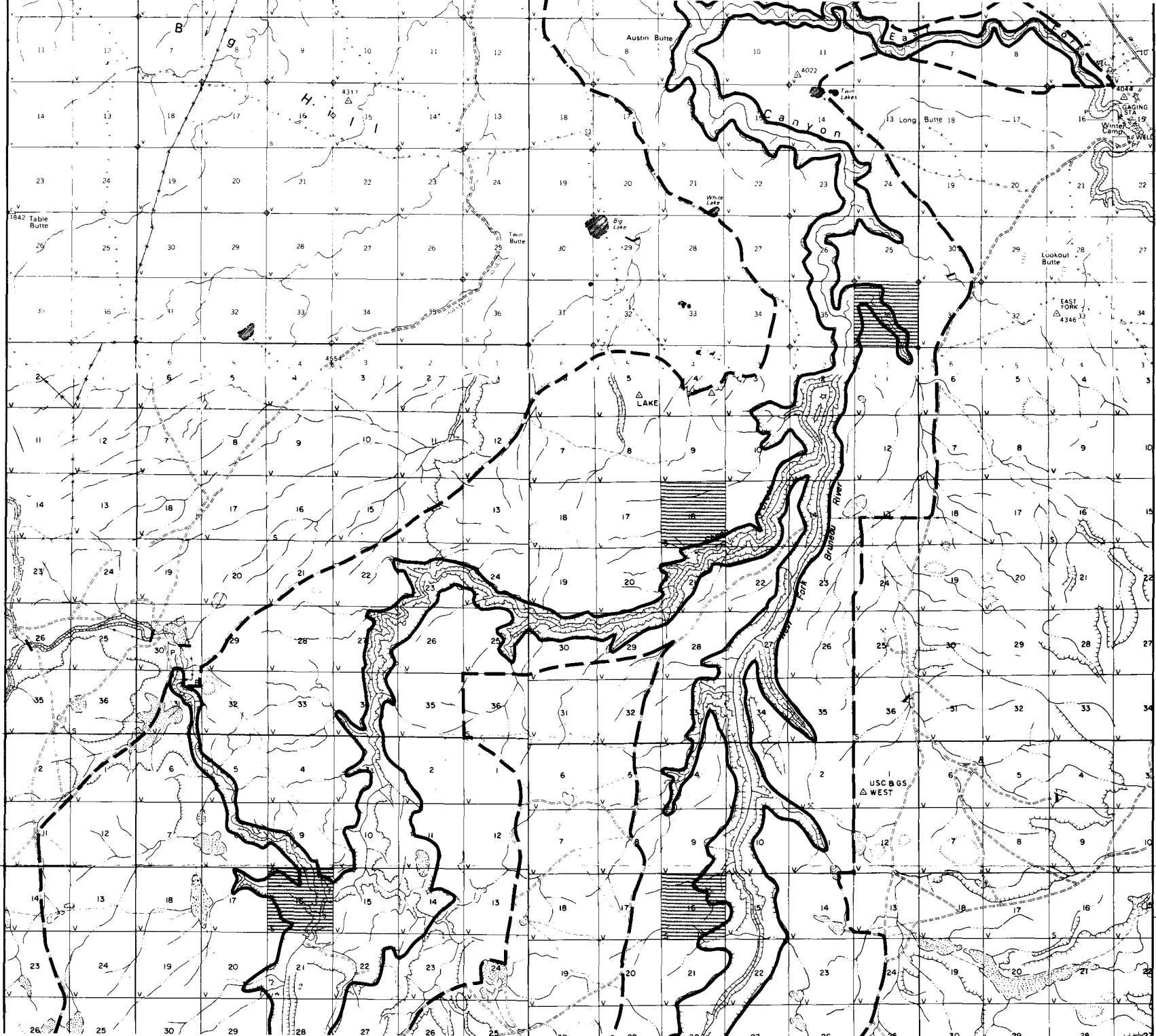
T. 11 S

T. 12 S

USC & GS
WEST

WSA 111-17 BRUNEAU RIVER / SHEEP CREEK



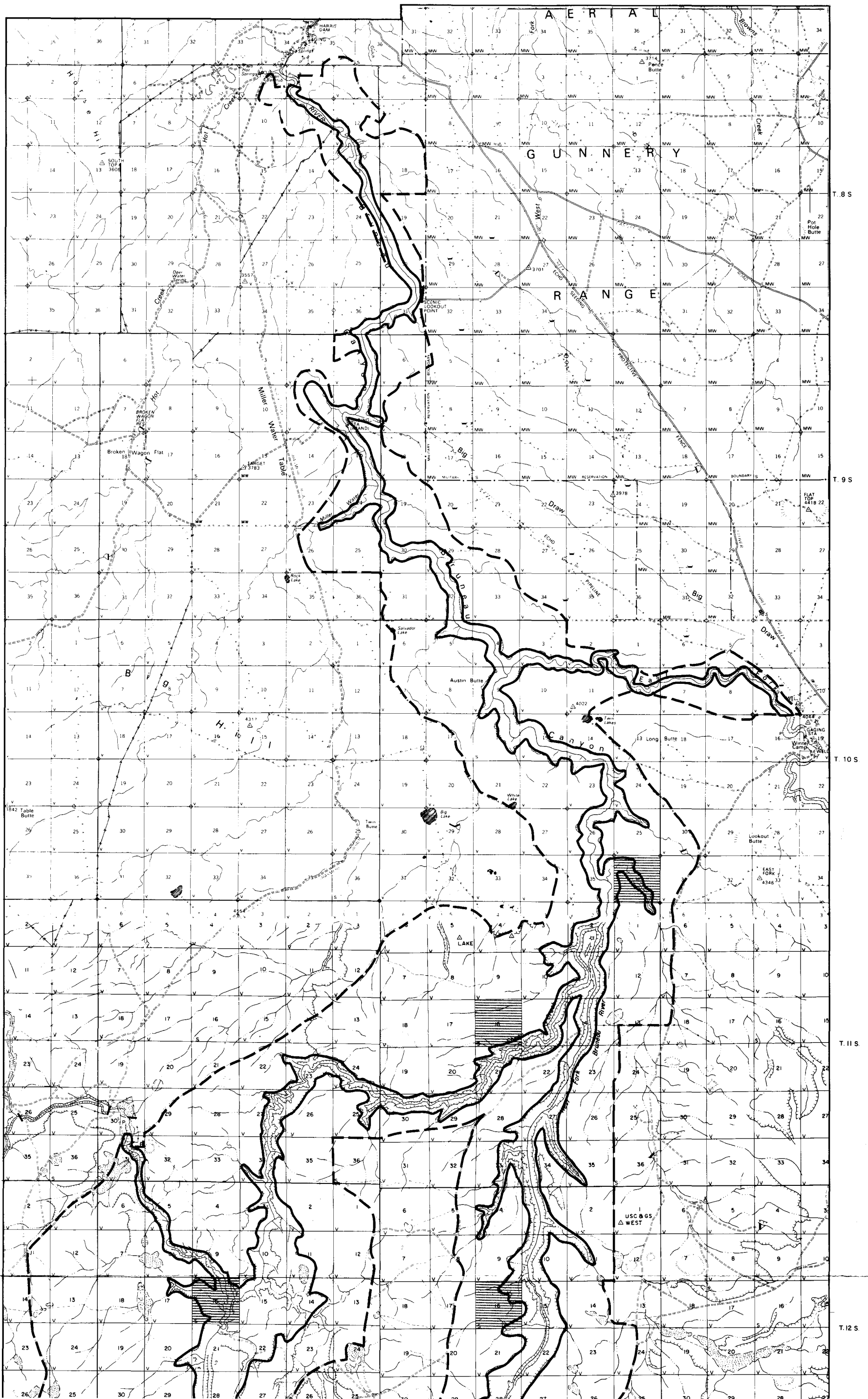


T. 10 S.

T. 11 S.

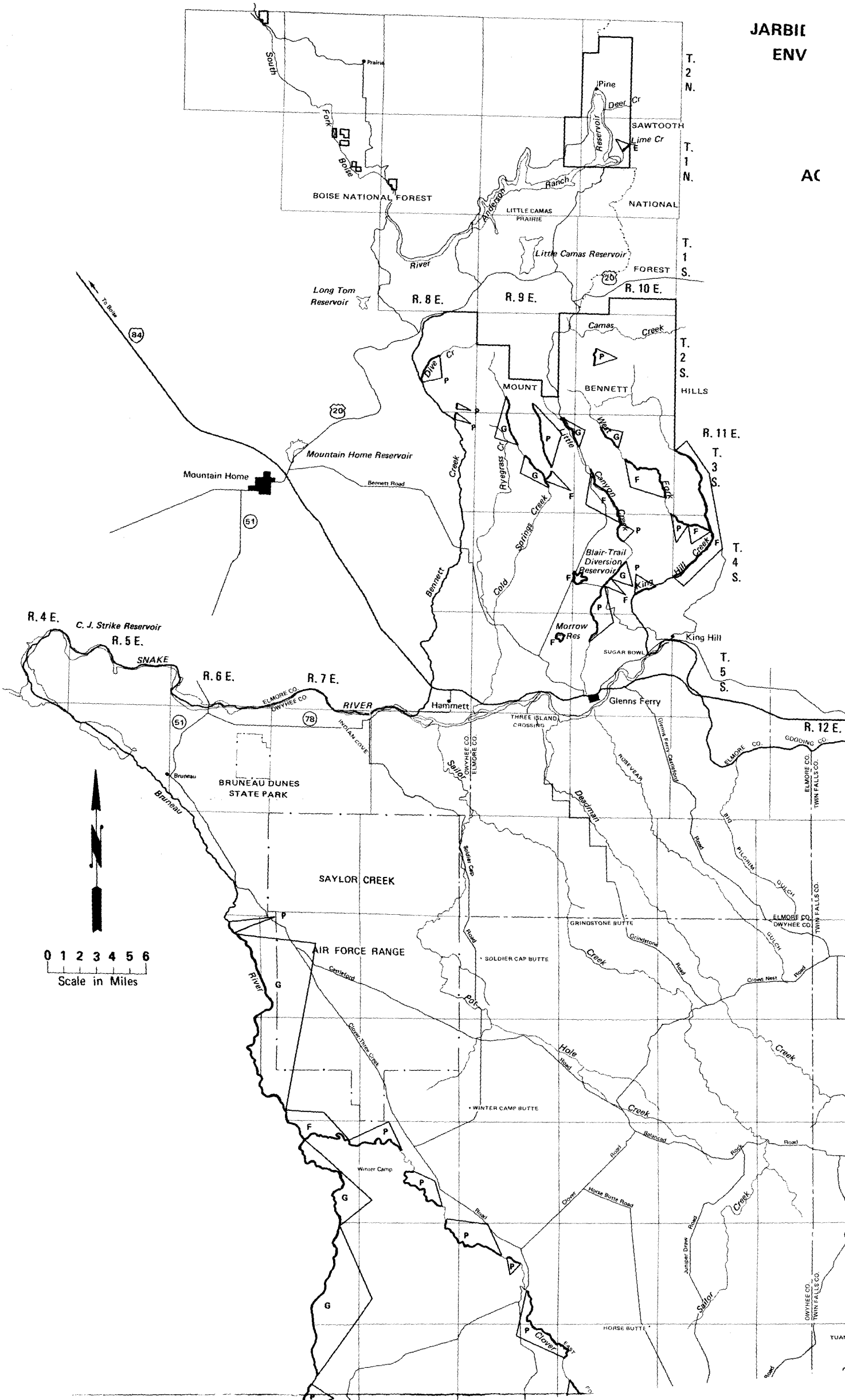
T. 12 S.

WSA 111-17 BRUNEAU RIVER / SHEEP CREEK



JARBIL ENV

AC

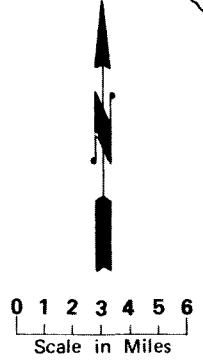
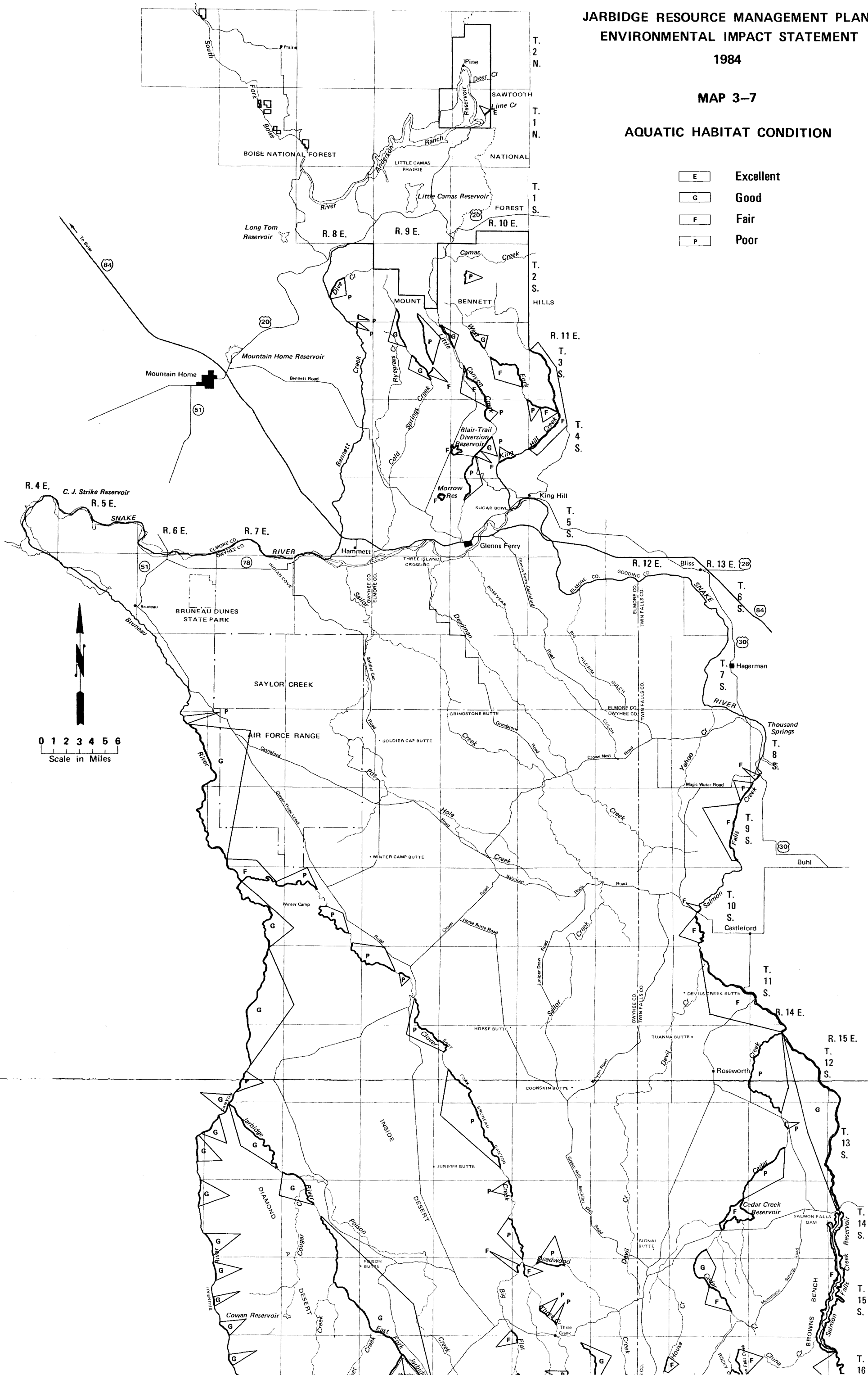


JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT
1984

MAP 3-7

AQUATIC HABITAT CONDITION

E	Excellent
G	Good
F	Fair
P	Poor

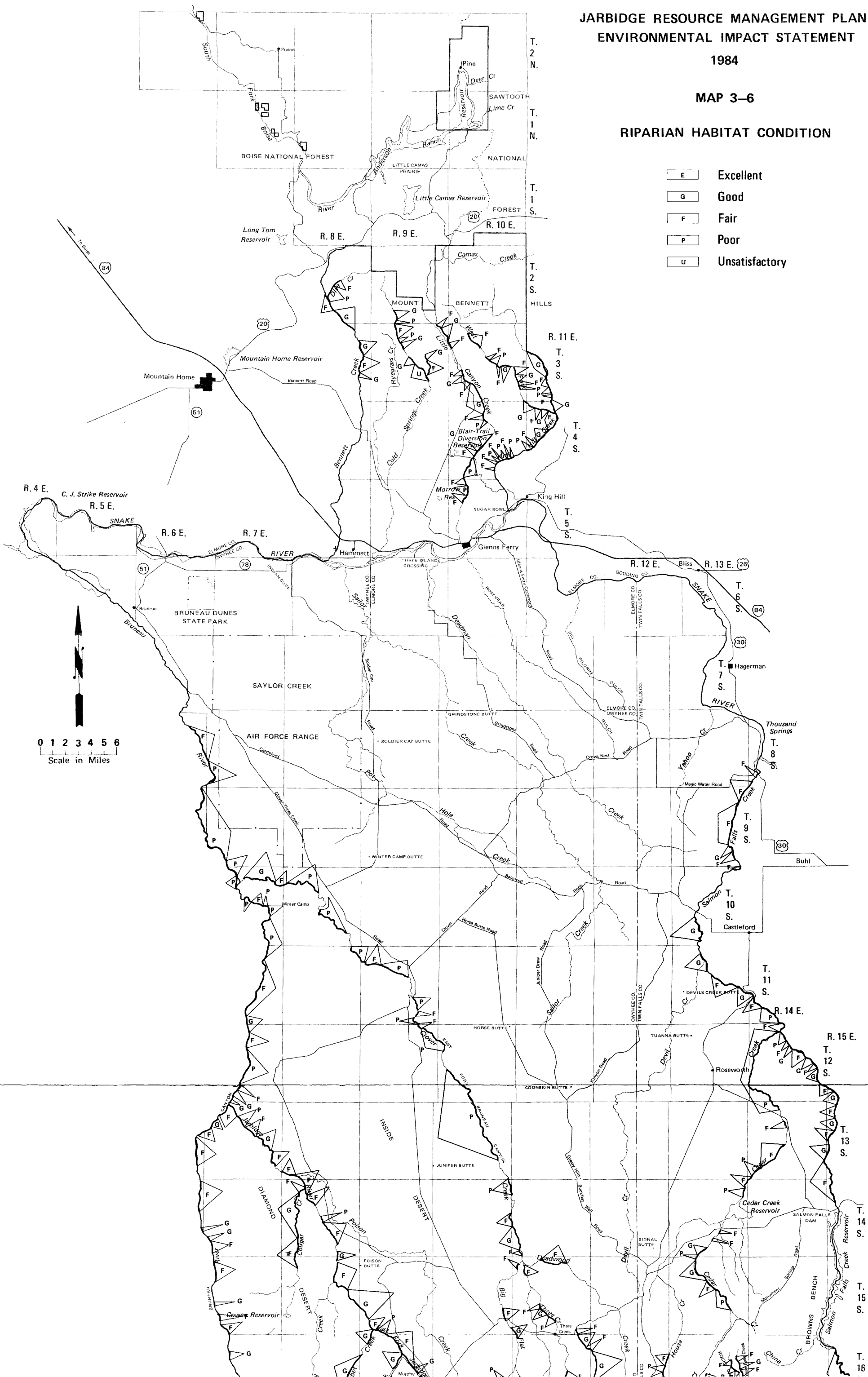


JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT
1984

MAP 3-6

RIPARIAN HABITAT CONDITION

- E Excellent
- G Good
- F Fair
- P Poor
- U Unsatisfactory

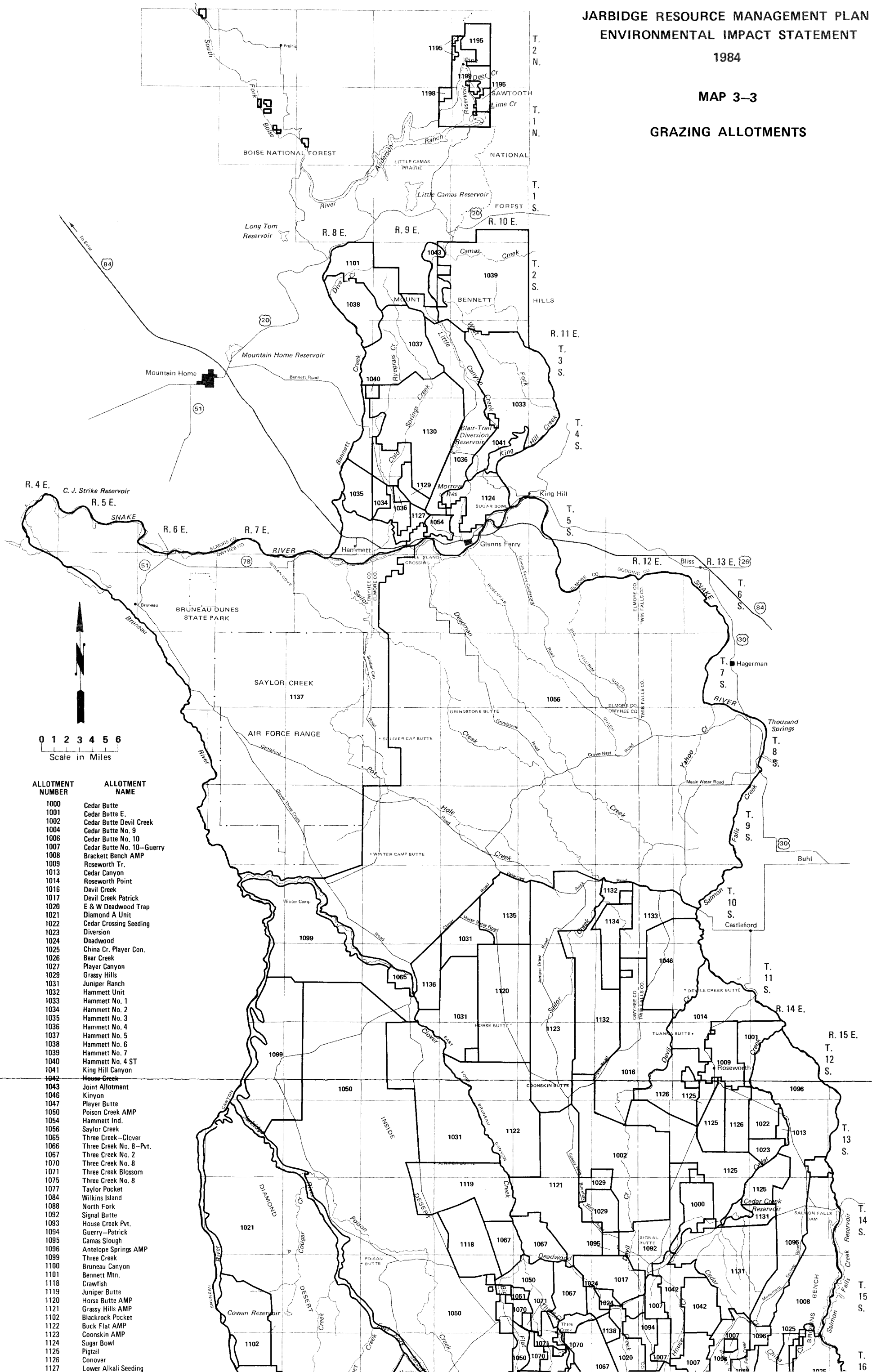


JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

1984

MAP 3-3

GRAZING ALLOTMENTS



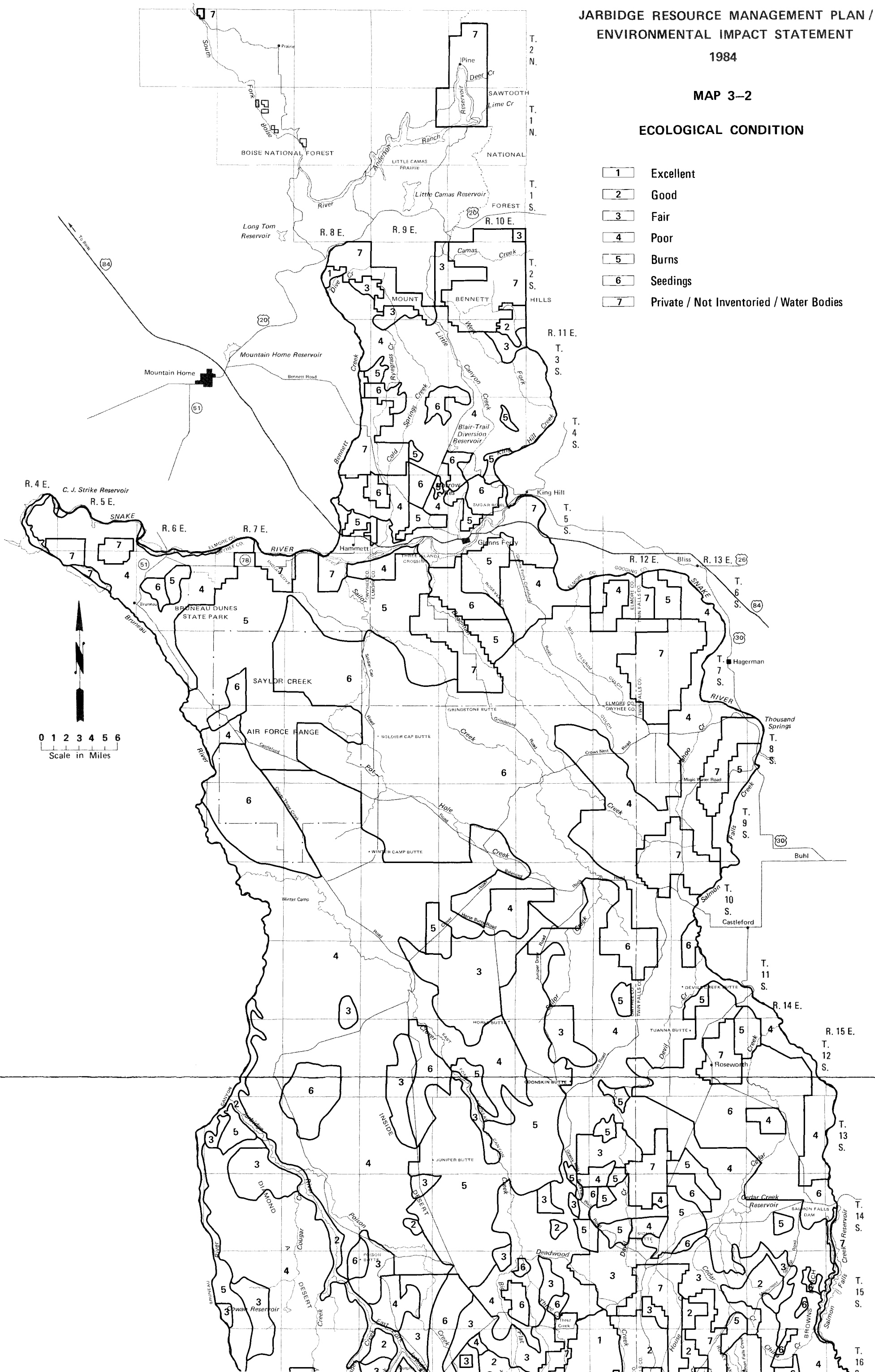
ALLOTMENT NUMBER	ALLOTMENT NAME
1000	Cedar Butte
1001	Cedar Butte E.
1002	Cedar Butte Devil Creek
1004	Cedar Butte No. 9
1006	Cedar Butte No. 10
1007	Cedar Butte No. 10-Guerry
1008	Brackett Bench AMP
1009	Roseworth Tr.
1013	Cedar Canyon
1014	Roseworth Point
1016	Devil Creek
1017	Devil Creek Patrick
1020	E & W Deadwood Trap
1021	Diamond A Unit
1022	Cedar Crossing Seeding
1023	Diversion
1024	Deadwood
1025	China Cr. Player Con.
1026	Bear Creek
1027	Player Canyon
1029	Grassy Hills
1031	Juniper Ranch
1032	Hammett Unit
1033	Hammett No. 1
1034	Hammett No. 2
1035	Hammett No. 3
1036	Hammett No. 4
1037	Hammett No. 5
1038	Hammett No. 6
1039	Hammett No. 7
1040	Hammett No. 4 ST
1041	King Hill Canyon
1042	House Creek
1043	Joint Allotment
1046	Kinyon
1047	Player Butte
1050	Poison Creek AMP
1054	Hammett Ind.
1056	Saylor Creek
1065	Three Creek-Clover
1066	Three Creek No. 8-Pvt.
1067	Three Creek No. 2
1070	Three Creek No. 8
1071	Three Creek Blossom
1075	Three Creek No. 8
1077	Taylor Pocket
1084	Wilkins Island
1088	North Fork
1092	Signal Butte
1093	House Creek Pvt.
1094	Guerry-Patrick
1095	Camas Slough
1096	Antelope Springs AMP
1099	Three Creek
1100	Bruneau Canyon
1101	Bennett Mtn.
1118	Crawfish
1119	Juniper Butte
1120	Horse Butte AMP
1121	Grassy Hills AMP
1122	Blackrock Pocket
1122	Buck Flat AMP
1123	Coonskin AMP
1124	Sugar Bowl
1125	Pigtail
1126	Conover
1127	Lower Alkali Seeding

JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT
1984

MAP 3-2

ECOLOGICAL CONDITION

- 1 Excellent
- 2 Good
- 3 Fair
- 4 Poor
- 5 Burns
- 6 Seedings
- 7 Private / Not Inventoried / Water Bodies



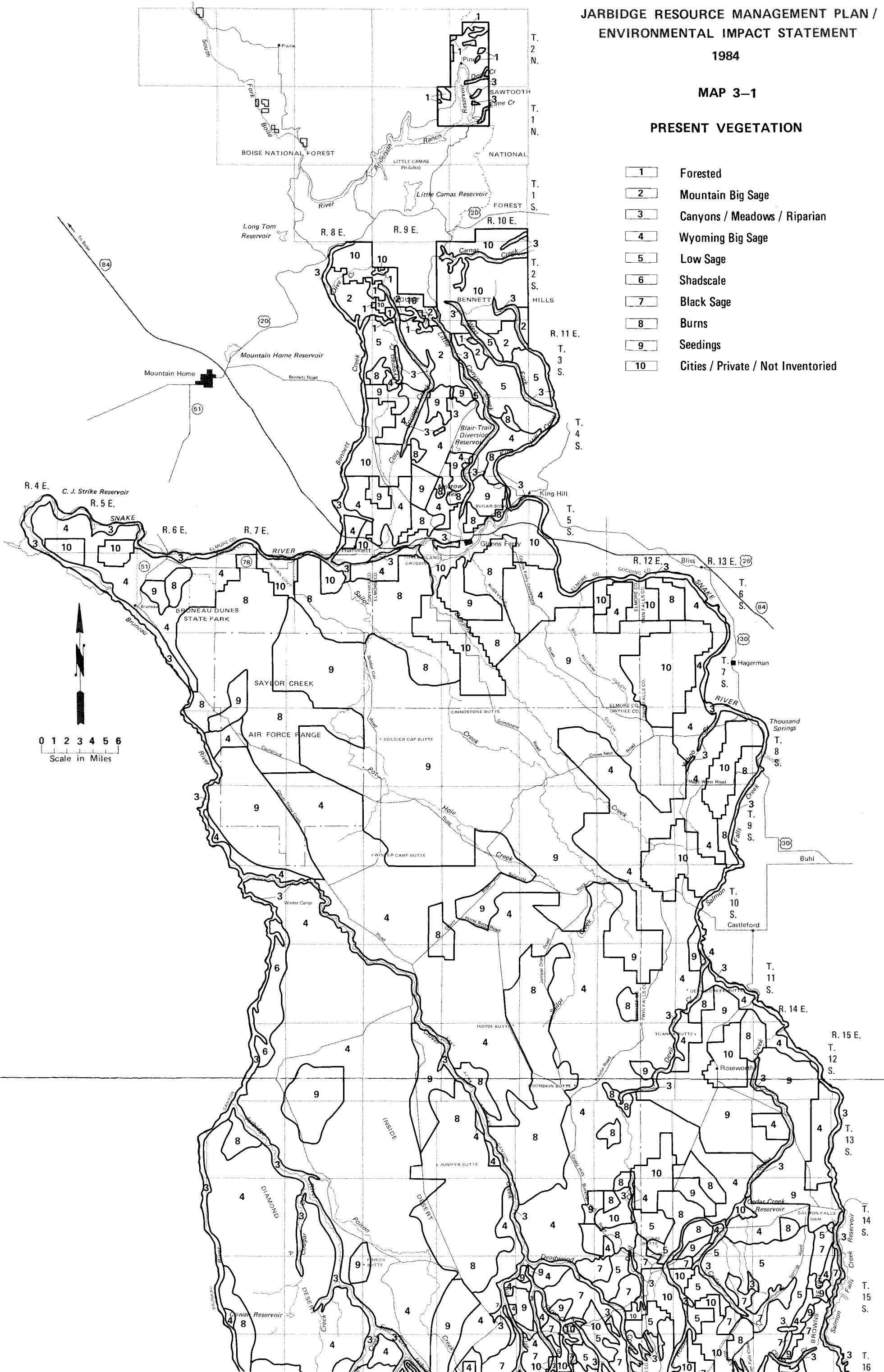
JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

1984

MAP 3-1

PRESENT VEGETATION

- 1 Forested
- 2 Mountain Big Sage
- 3 Canyons / Meadows / Riparian
- 4 Wyoming Big Sage
- 5 Low Sage
- 6 Shadscale
- 7 Black Sage
- 8 Burns
- 9 Seedings
- 10 Cities / Private / Not Inventoried



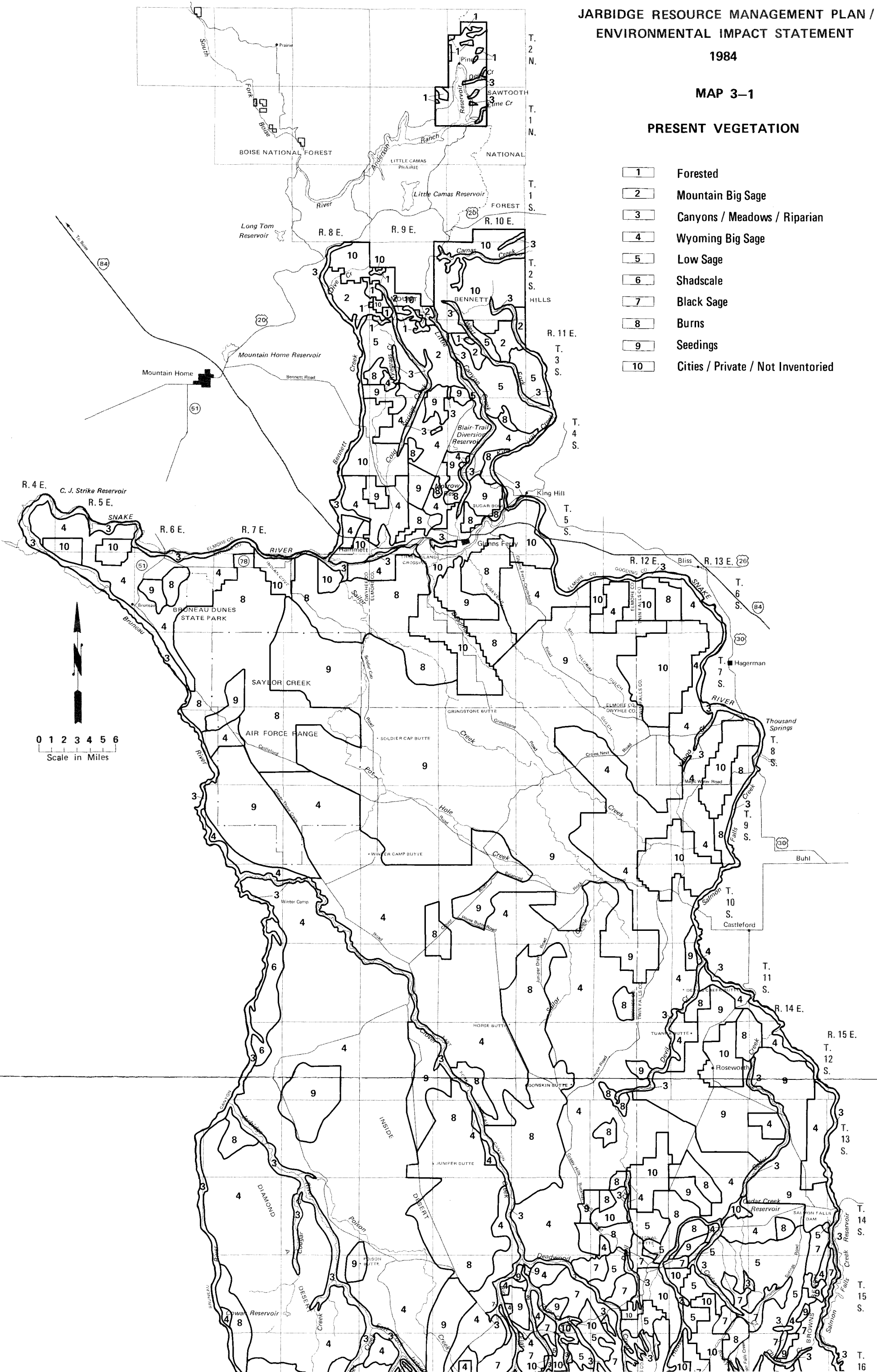
JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

1984

MAP 3-1

PRESENT VEGETATION

- 1 Forested
- 2 Mountain Big Sage
- 3 Canyons / Meadows / Riparian
- 4 Wyoming Big Sage
- 5 Low Sage
- 6 Shadscale
- 7 Black Sage
- 8 Burns
- 9 Seedings
- 10 Cities / Private / Not Inventoried

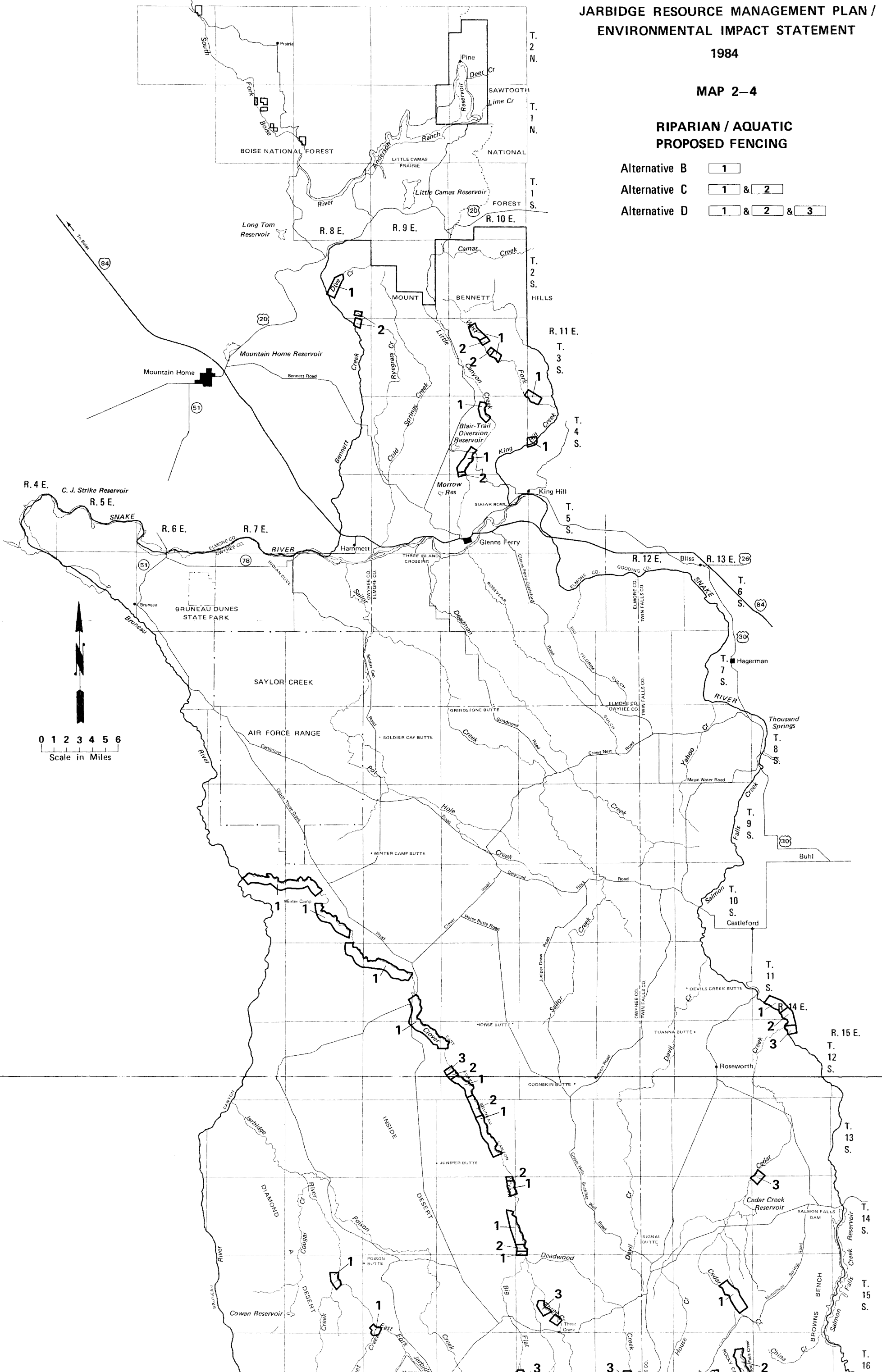


JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT
1984

MAP 2-4

RIPARIAN / AQUATIC PROPOSED FENCING

- Alternative B 1
- Alternative C 1 & 2
- Alternative D 1 & 2 & 3



JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT 1984

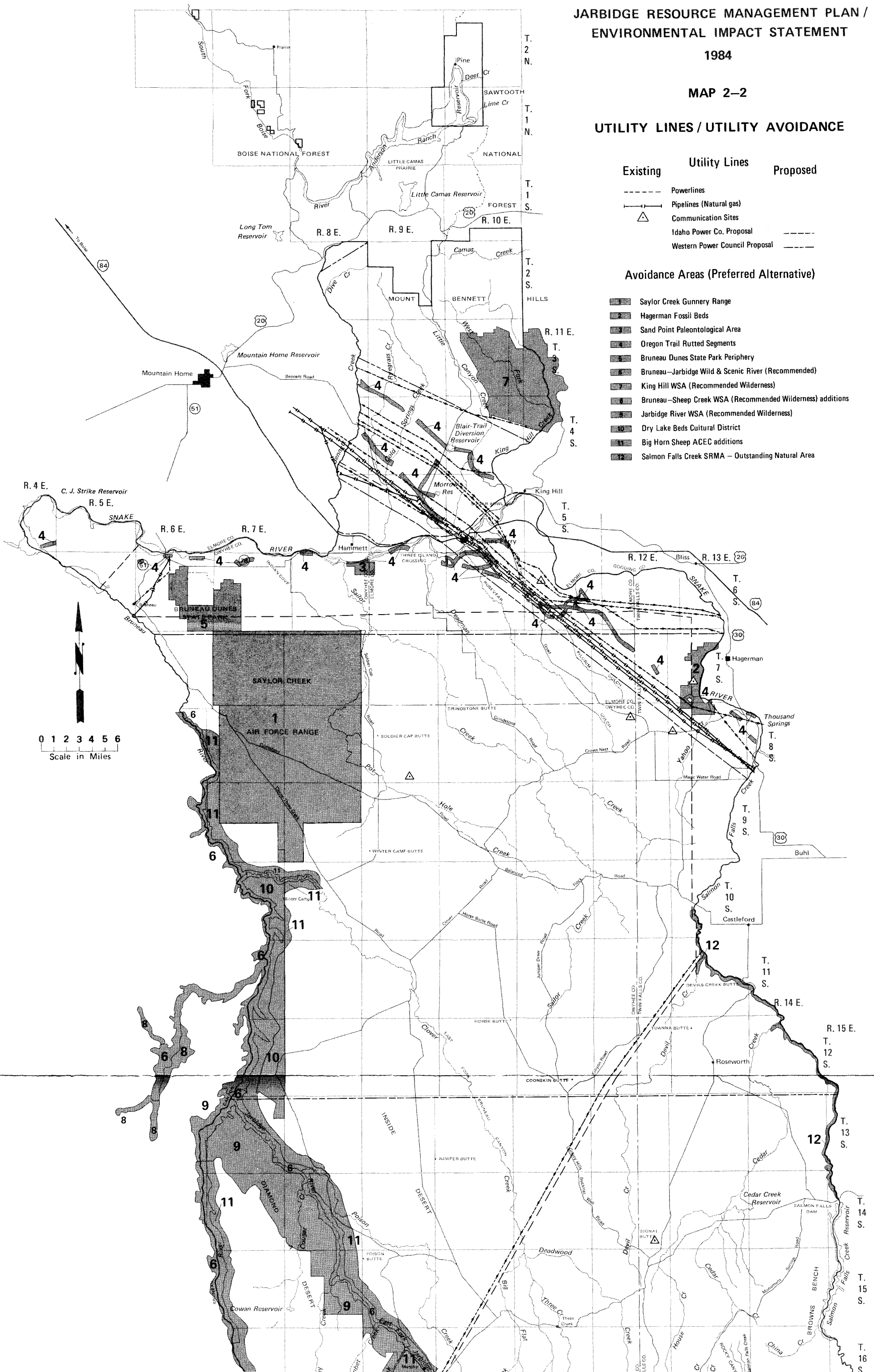
MAP 2-2

UTILITY LINES / UTILITY AVOIDANCE

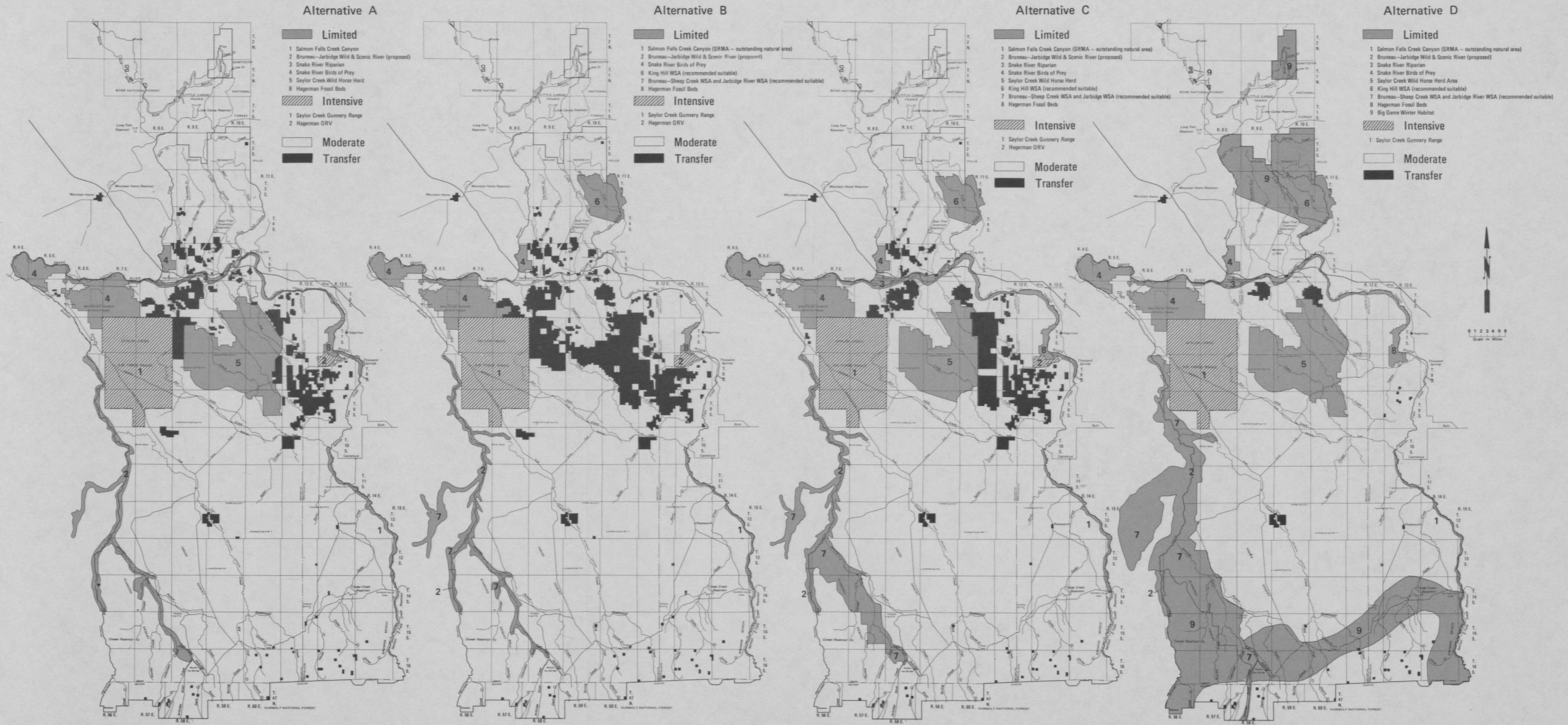
- | Existing | Utility Lines | Proposed |
|----------|--------------------------------|----------|
| ----- | Powerlines | ----- |
| ----- | Pipelines (Natural gas) | ----- |
| △ | Communication Sites | ----- |
| | Idaho Power Co. Proposal | ----- |
| | Western Power Council Proposal | ----- |

Avoidance Areas (Preferred Alternative)

- 1 Saylor Creek Gunnery Range
- 2 Hagerman Fossil Beds
- 3 Sand Point Paleontological Area
- 4 Oregon Trail Rutted Segments
- 5 Bruneau Dunes State Park Periphery
- 6 Bruneau-Jarbridge Wild & Scenic River (Recommended)
- 7 King Hill WSA (Recommended Wilderness)
- 8 Bruneau-Sheep Creek WSA (Recommended Wilderness) additions
- 9 Jarbridge River WSA (Recommended Wilderness)
- 10 Dry Lake Beds Cultural District
- 11 Big Horn Sheep ACEC additions
- 12 Salmon Falls Creek SRMA - Outstanding Natural Area



JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT
 1984
 MAP 2-1
 MANAGEMENT ALTERNATIVES



Alternative A

- Limited
 - 1 Salmon Falls Creek Canyon
 - 2 Bruneau-Jarbidge Wild & Scenic River (proposed)
 - 3 Snake River Riparian
 - 4 Snake River Birds of Prey
 - 5 Saylor Creek Wild Horse Herd
 - 8 Hagerman Fossil Beds
- Intensive
 - 1 Saylor Creek Gunnery Range
 - 2 Hagerman ORV
- Moderate
- Transfer

Alternative B

- Limited
 - 1 Salmon Falls Creek Canyon (SRMA - outstanding natural area)
 - 2 Bruneau-Jarbidge Wild & Scenic River (proposed)
 - 4 Snake River Birds of Prey
 - 6 King Hill WSA (recommended suitable)
 - 7 Bruneau-Sheep Creek WSA and Jarbidge River WSA (recommended suitable)
 - 8 Hagerman Fossil Beds
- Intensive
 - 1 Saylor Creek Gunnery Range
 - 2 Hagerman ORV
- Moderate
- Transfer

Alternative C

- Limited
 - 1 Salmon Falls Creek Canyon (SRMA - outstanding natural area)
 - 2 Bruneau-Jarbidge Wild & Scenic River (proposed)
 - 3 Snake River Riparian
 - 4 Snake River Birds of Prey
 - 5 Saylor Creek Wild Horse Herd
 - 6 King Hill WSA (recommended suitable)
 - 7 Bruneau-Sheep Creek WSA and Jarbidge WSA (recommended suitable)
 - 8 Hagerman Fossil Beds
- Intensive
 - 1 Saylor Creek Gunnery Range
 - 2 Hagerman ORV
- Moderate
- Transfer

Alternative D

- Limited
 - 1 Salmon Falls Creek Canyon (SRMA - outstanding natural area)
 - 2 Bruneau-Jarbidge Wild & Scenic River (proposed)
 - 3 Snake River Riparian
 - 4 Snake River Birds of Prey
 - 5 Saylor Creek Wild Horse Herd Area
 - 6 King Hill WSA (recommended suitable)
 - 7 Bruneau-Sheep Creek WSA and Jarbidge River WSA (recommended suitable)
 - 8 Hagerman Fossil Beds
 - 9 Big Game Winter Habitat
- Intensive
 - 1 Saylor Creek Gunnery Range
- Moderate
- Transfer



JARBIDGE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

1984

MAP 2-5

OFF ROAD VEHICLE DESIGNATIONS

Alternative A

Alternative B

Alternative C

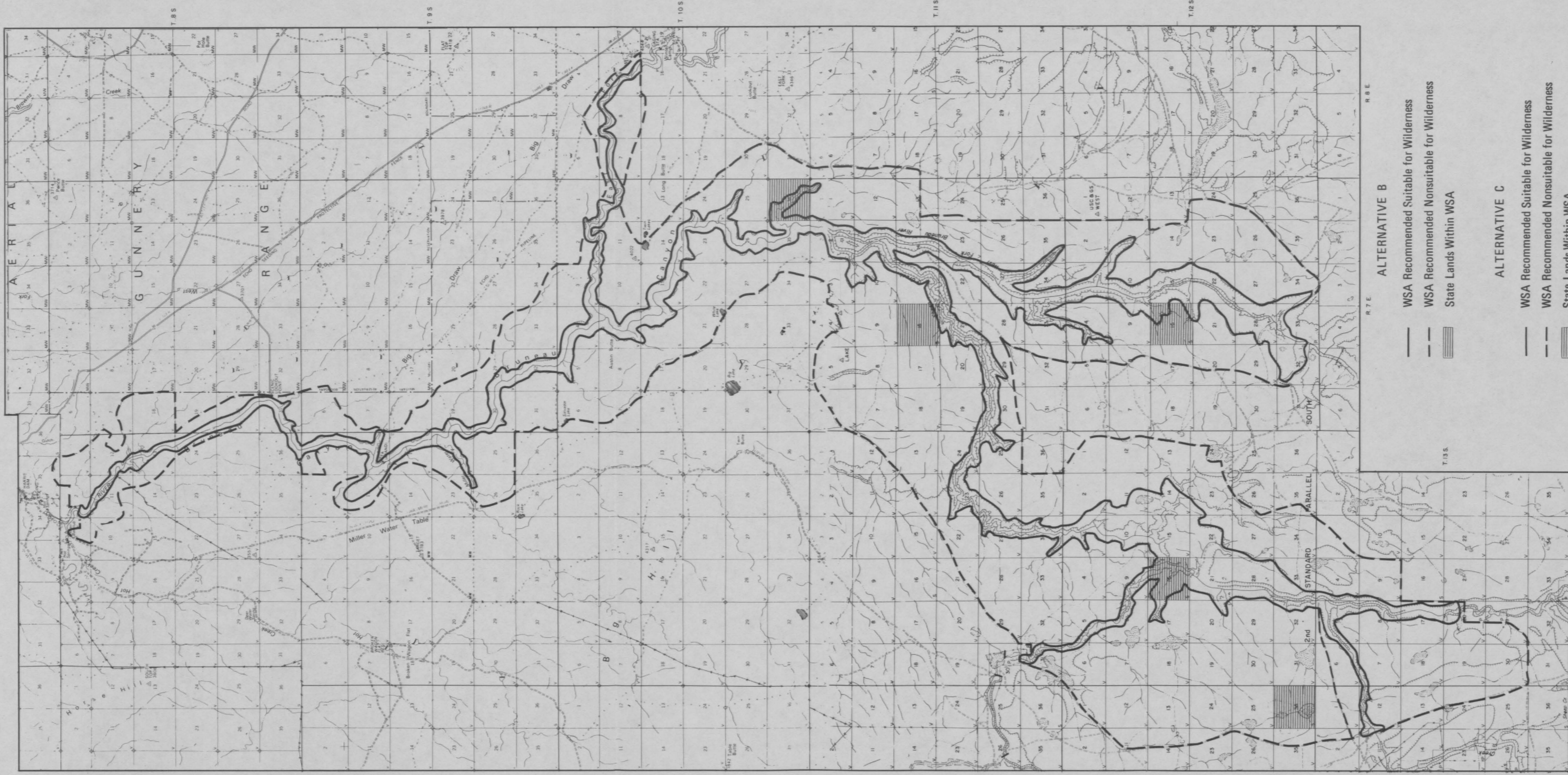
Alternative D



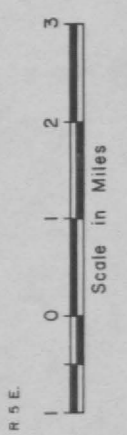
WSA 111-17 BRUNEAU RIVER / SHEEP CREEK



WSA 111-17 BRUNEAU RIVER / SHEEP CREEK



- ALTERNATIVE B**
- WSA Recommended Suitable for Wilderness
 - - - WSA Recommended Nonsuitable for Wilderness
 - ▨ State Lands Within WSA
- ALTERNATIVE C**
- WSA Recommended Suitable for Wilderness
 - - - WSA Recommended Nonsuitable for Wilderness
 - ▨ State Lands Within WSA



MAP J-4