CASCADE

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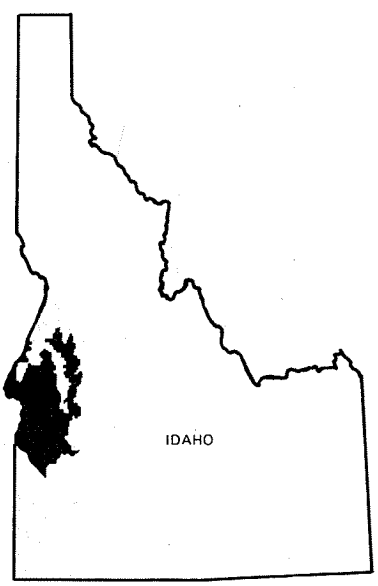
Resource Management Plan

and

Final Environmental Impact Statement



U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Boise District, Idaho
August 1987

BLM MISSION STATEMENT

"The Bureau of Land Management is responsible for the balanced management of the Public Lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American People. Management is based upon the principles of multiple-use and sustained yield; a combination of uses that takes into account the long term needs of future generations for renewable and non-renewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific and cultural values."

PROPOSED CASCADE RESOURCE MANAGEMENT PLAN

AND

FINAL ENVIRONMENTAL IMPACT STATEMENT

Prepared By

Bureau of Land Management
Department of the Interior

Delmar W. Vail

United States Department of the Interior

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

IN REPLY
REFER TO:

Enclosed for your review is the proposed Cascade Resource Management Plan and Final Environmental Impact Statement. This plan outlines the proposed management of 487,466 acres of public land in the Cascade Resource Area. The Proposed Plan is a refinement of the Preferred Alternative presented in the draft Resource Management Plan/Environmental Impact Statement published in August 1986. The Proposed Plan is BLM's proposed alternative.

With the exception of the wilderness recommendations, all parts of this Proposed Plan may be protested. Protests should be sent to the Director (760), Department of the Interior, Bureau of Land Management, 18th and C Streets N.W., Washington, D.C. 20240, prior to September 21, 1987 -- the end of the 30-day protest period -- and should include the following information:

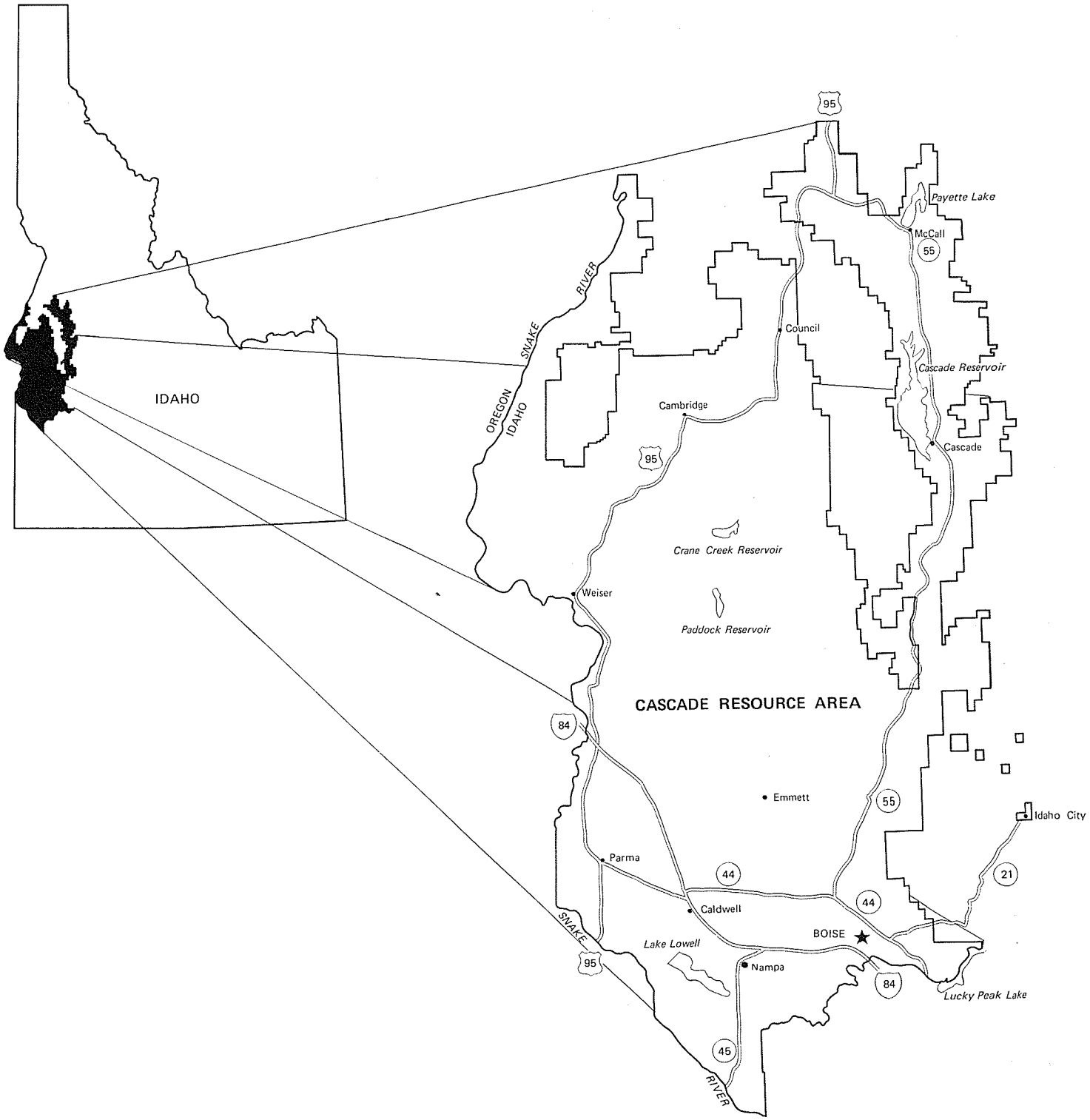
- The name, mailing address, telephone number, and interest of the person filing the protest.
- A statement of the issue or issues being protested.
- A statement of the part or parts being protested
- A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party or an indication of the date the issue or issues were discussed for the records.
- A short concise statement explaining why the BLM Idaho State Director's proposed decision is wrong.

At the end of the 30-day protest period, the Proposed Plan, excluding any portions under protest, shall become final. Approval shall be withheld on any portion of the plan under protest until final action has been completed on such protest. The final resource management plan is scheduled to be published with the record of decision in late 1987.

Sincerely yours,

J. David Brunner

MAP 1



GENERAL LOCATION MAP

READERS GUIDE TO DOCUMENT ORGANIZATION

This document is structured into two basic sections. Part I is the Proposed Resource Management Plan (RMP) for the Cascade Resource Area and was selected from the five alternative plans identified in the final environmental impact statement (FEIS), or Part II of the document.

This Proposed Plan is the preferred alternative (E) in the FEIS and is presented separately.

After consideration of public comments on the preferred alternative plan in the Draft RMP/EIS, the proposed Resource Management Plan was prepared with this Final Environmental Impact Statement (FEIS).

PART I

The Proposed 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 8). The Bureau's rationale for selecting this alternative plan is given on pages 9 through 18. An explanation of Multiple Use and Transfer Areas begins on page 18.

The specific management objectives and actions required to implement the plan begin on page 24. The three Areas of Critical Environmental Concern (ACECs) proposed in the plan are discussed on pages 31-38. The standard management guidelines for each resource or activity are discussed on pages 38 through 61.

Part I concludes with a discussion on support requirements, the consistency of the RMP with other plans, and finally, a short summary on implementation (pages 62-65).

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

The General Location Map for the plan is found facing page i. All other maps referenced as part of the plan are found at the end of Part I.

PART II

The Final Environmental Impact Statement (EIS), or Part II, describes and assesses the environmental impacts of five alternative plans for managing the 487,466 acres of public land resources in the Cascade 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.). References are made in Chapter 2 to various appendices which give the management actions and resource conditions of each alternative plan. An impact summary of each of the alternatives is presented at the end of Chapter 2.

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

CHANGES BETWEEN DRAFT PLAN/EIS AND PROPOSED PLAN/FINAL EIS

Revisions are incorporated into the Proposed Plan and Final EIS in response to public comments received on the draft EIS. These revisions include minor changes in the preferred alternative (E - Proposed Plan) and in other alternatives. Changes in Chapter 2 regard management actions while changes in other chapters are for accuracy, clarity and consistency. Brief discussions of the substantive revisions are presented below. Additional discussions may be found in the Response to Written Comments section in Chapter 5. Additional maps and appendices have also been included. Maps have been revised for accuracy.

Off-Road Vehicle Use

Alternative E (Proposed Plan) now includes an additional 13,240 acres west of Crane Creek Reservoir which would be designated as limited to designated roads and trails for ORV use. This area in the draft EIS (Alternative E) was identified as open to ORV use. The area was reevaluated in response to public comment to provide opportunity for semi-primitive recreation in this area. The revision is incorporated to accommodate this need in light of manageability concerns and potential conflicts between user groups.

Timber Harvest

Alternative E (Proposed Plan) now inclues an annual average allowable timber harvest level of 1.7 million board feet. The draft EIS (Alternative E) identified this harvest level as 1.0 million board feet which is the current harvest level. This revision is incorporated in response to public

comment to provide a greater harvest level and in light of potential impacts on other resource values, and the capability of the forest resource to produce this harvest volume on a sustained yield basis. Timber harvest of 1.7 million board feet would occur on the same 26,663 acres as previously identified for Alternative E.

Special Designations

In the draft EIS, alternatives B, C, D and E included 6 areas for Research Natural Area (RNA) designation. One of these areas, Peraphyllum Rock - 40 acres, was reevaluated in response to public comment regarding application of the criteria which qualify it as an RNA. The reevaluation resulted in dropping the RNA designation in these alternatives (B, C, D and E) since it was determined that the area did not meet the RNA qualifying criteria. The same special management actions have been retained for this area in the alternatives (B, C, D and E) to protect a sensitive plant species.

Two other areas identified for RNA designation in alternatives B, C, D and E are now expanded in all alternatives to provide better protection for sensitive plant species and enhance their function as research natural areas. These two areas are Summer Creek which has been expanded from 200 to 240 acres and Buckwheat Flats which has been expanded from 60 to 200 acres. The same special management actions for the original areas are also identified for the expanded areas.

One additional area, Prostrate Ceanothus, is now identified for special management in all alternatives. This is a 80 acre site containing a sensitive plant species. No special designation is identified for this area but special management actions are included for leasable minerals, rights-of-way and ORV use.

Recreation

One campground site of 5 acres at Paddock Reservoir has been added to alternatives D and E in response to public comment to provide additional recreational facilities in this area. Special management actions are identified for leasable minerals, rights-of-way and ORV use.

The Snake River Birds of Prey Conservation Area includes 640 acres in the southern tip of the Cascade Resource Area adjacent to the Snake River. This area is now identified in all alternatives as a Special Management Area. Special management actions for this area remain the same in all alternatives as identified in the draft EIS excpet that ORV use is now also identified as limited in Alternative B.

PART I

SUMMARY

PROPOSED PLAN (ALTERNATIVE E)

This Proposed Resource Management Plan (RMP) is developed to guide the management of public land resources in the Cascade Resource Area and to ensure that the public lands and resources are planned for and managed in accordance with the principles of multiple use and sustained yield and other principles as outlined in BLM planning regulations. The plan focuses on resolving the following three key issues identified by the public: range resource management, land tenure adjustment; and management of the Payette River Corridor. Special management concerns also addressed in the plan include access, off-road vehicles, fire management, timber base allocation and special designations.

Goal

The goal of the plan (preferred alternative) is to provide an optimum mixture of protection and enhancement of the natural environment and commodity resource utilization (renewable and nonrenewable).

Plan Summary

After a 5 year monitoring and adjustment period, livestock use would be stocked at 68,000 Animal Unit Months (AUMs), a 3% increase over current levels with the 20 year objective of stocking at 70,536 AUMs. Range improvements would include 15 miles of pipeline and 60 miles of fence. Vegetative treatments would be applied on 18,279 acres. Vegetative treatments would be conducted with methods and seed mixtures of grasses, forbs, and shrubs that benefit both wildlife and livestock. Full fire suppression management would be applied to the entire resource area. The 4-Mile wild horse herd would be managed to support 20 head at the end of 20 years.

Wildlife populations would increase for mule deer, elk and antelope. Habitat improvement projects would be done on 23,912 acres. Sage grouse and Columbian sharp-tailed grouse would benefit from improved ecological condition, reduced competition for forbs needed by grouse chicks and inclusion of wildlife needs in range improvement projects.

Riparian habitat improvement projects would be initiated along 7 miles and aquatic habitat improvement projects would be initiated along 11 miles of streams.

For land tenure adjustment, 17,604 acres would be made available for transfer from federal ownership. Of this, 560 acres would be available for potential agricultural development under the Desert Land Entry (DLE) program; 563 acres would be made available for sale, 10,107 acres for sale or exchange, and 6,374 acres for exchange only. Utility rights-of-ways (ROWs) would be restricted on 6,696 acres in the Cascade Resource Area.

Eight miles of the South Fork of the Payette River is recommended for study for possible inclusion into the National Wild and Scenic Rivers System (as a recreation river). Approximately 19,000 acres of the Payette River system would be designated as a Special Recreation Management Area.

Approximately 94% of the resource area would be open to leasable (oil and gas and geothermal) mineral exploration and development and 94% open to locatable mineral (gold, silver, etc.) entry. Withdrawals from mineral entry totaling 31,185 acres would be in effect.

Special designation (National Register of Historic Places) and management of cultural resource areas would be applied to nine cultural resource sites. Area of Critical Environmental Concern (ACEC) designation would be applied to the Boise Front, Long-billed Curlew Area and Columbian Sharp-tailed Grouse Habitat. Special management would be applied to five research natural areas.

An allowable cut level would be applied to 26,663 acres of forest land. Cutting would permit a harvest of approximately 1.7 million board feet annually. Limited firewood cutting would continue.

The Box Creek WSA will be managed so as not to impair its suitability for preservation as wilderness under the provisions of the Interim Management Policy and Guidelines for Lands Under Wilderness Review pending a final wilderness decision.

PART I

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PART I

PROPOSED RESOURCE MANAGEMENT PLAN

INTRODUCTION

The Cascade Resource Management Plan (RMP) is being prepared to provide the Bureau of Land Management, Boise District Office with a comprehensive framework for managing 487,466 acres of BLM-administered public land over the next 20 years.

The Cascade Resource Area (CRA) encompasses approximately 2.77 million acres of land bounded by the Snake River on the south and west, the boundary of the Payette National Forest (as far north as Oxbow Dam and Payette Lake), the boundary of the Boise National Forest to the east, the Mora Canal/Boise River to the south and the Ada-Canyon County line from the Mora canal to the Snake River. Of this area, 18% (487,466 acres) is public lands administered by the BLM, 7% (approximately 183,000 acres) is state lands and 75% (approximately 2,100,000 acres) is private or other land holdings. The public land holdings containing both scattered tracts and large blocks of land (Map 2) are located in Ada, Adams, Boise, Canyon, Gem, Payette, Valley and Washington Counties in Idaho.

The basic purposes of this plan are: 1) 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; and 2) to ensure that the objectives and actions are responsive to the major issues and achieve an equitable and proper balance of resource use and protection as determined through public participation, consultation, coordination, and cooperation.

PLANNING PROCESS

The planning process described in BLM Planning Regulations 43 CFR 1600 used for preparing the RMP contains nine steps. These steps and the dates they were completed are shown in Figure 1. The planning process started in October 1983 and will be completed by October 1987. 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.

ISSUES

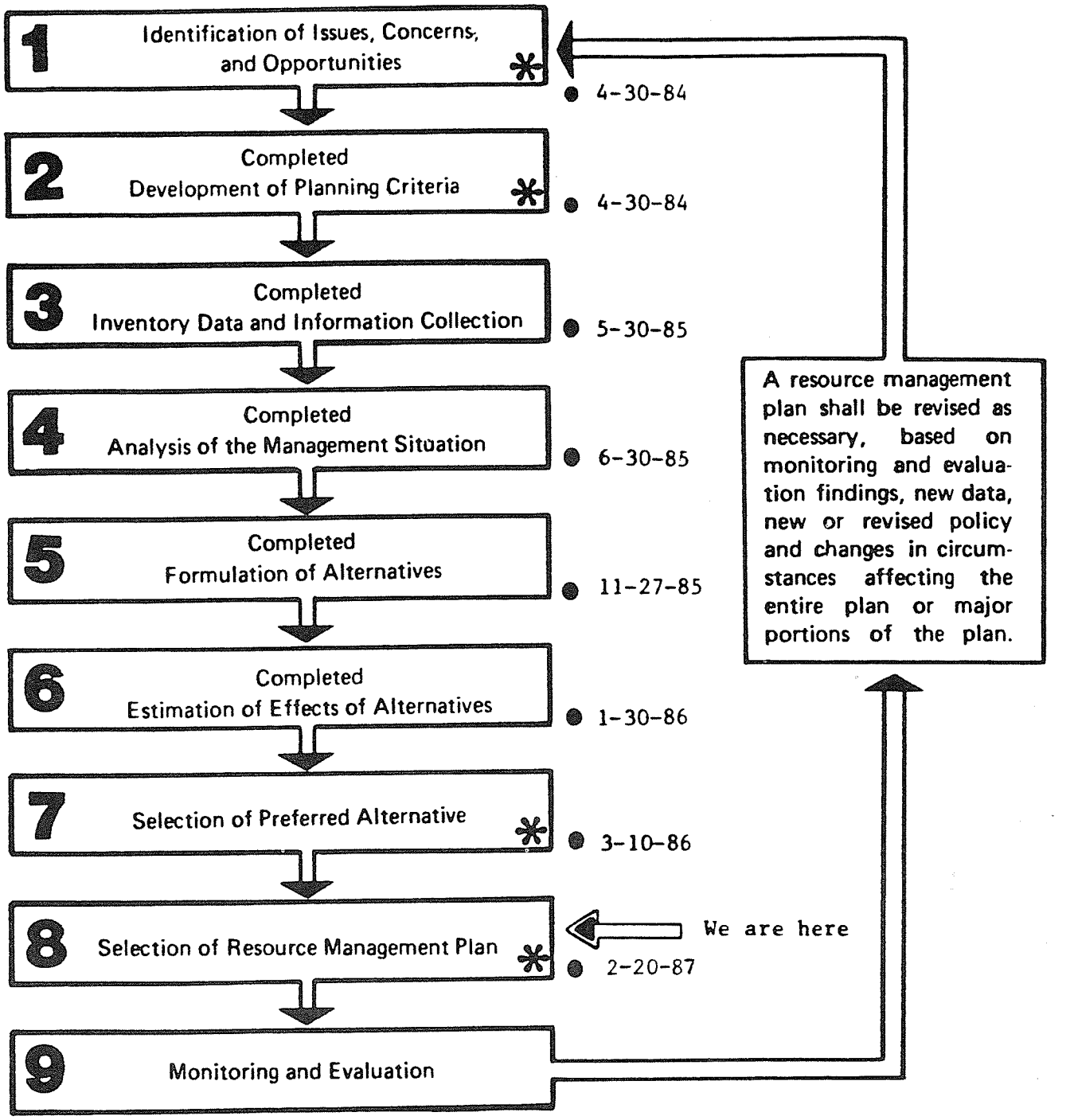
RANGELAND RESOURCE MANAGEMENT

Issue Analysis

The management of the rangeland resource involves the distribution of vegetation among consumptive and nonconsumptive uses. Nonconsumptive uses include protection of the watershed, maintenance of visual or esthetic values, providing for the physiological needs of the vegetation and satisfying habitat requirements of wildlife. The vegetation available for

Figure 1

STEPS IN THE RESOURCE MANAGEMENT PLANNING PROCESS



* Steps Requiring Public Participation

● Date Completed

consumptive uses includes production of forage for wildlife, livestock and wild horses. Other considerations in the management of the range resource include the protection of crucial wildlife habitat (including big game, upland, and sensitive species), the management of riparian and wetland/meadow areas, the development of projects to improve the forage resource base, the management of the wild horse herds and protection of threatened and endangered plants.

Competition exists between and among the interests. As an example, the livestock industry endorses management to increase forage production and in return increase the number of AUMs available. Other interests contend that not enough attention and protection is given to other important uses such as critical wildlife areas or watershed.

Issue Questions

In order to resolve this issue, this plan will address the following questions:

1. In what proportion will vegetation be provided for consumptive and nonconsumptive uses including livestock, wild horses, wildlife, watershed and esthetics?

2. In what proportion will increased vegetation be provided for consumptive and nonconsumptive uses?

3. What areas have the potential and what range improvement practices will be used to increase forage production?

4. What areas will be covered by management plans or intensive management?

5. How will ranges dominated by cheatgrass/medusa be managed?

6. What management and protection actions should be established for riparian, wet meadow, and natural areas?

7. What management actions are needed in critical wildlife and watershed areas?

8. What management objectives, including herd size and use areas, will be established for the wild horse herds?

9. What criteria should be established for fire rehabilitation?

RMP Action Contemplated

1. Identify areas that are currently understocked/overstocked or contain a forage utilization conflict. Propose adjustments as deemed necessary, monitor to further define the extent of the conflict and make appropriate adjustments based on the monitoring.

2. A list of conditions to be satisfied will be developed. Availability (use of) of vegetation will be based on these conditions.

3. Specific sites will have various potentials and be suitable for various treatments. Evaluate the various alternatives and designs of range improvements and identify any conflicts these alternatives may create. The general types, locations and extent of range and watershed improvements will be outlined.

4. Identify areas on which AMP's, HMP's, WHMP's or watershed management plans will be implemented.

5. Evaluate management techniques and monitor areas to determine whether effective management can be applied to this range.

6. Evaluate condition of these zones. Projects will be designed and established for the protection, improvement and maintenance of these areas. Which areas should be managed as natural areas (outstanding, research, etc.).

7. Evaluate AUM utilization, wildlife needs, vegetation condition and soil management and develop management objectives.

8. Determine viability of present horse herds. Determine if present management plans are adequate.

9. A list of constraints or guidelines will be developed for fire rehabilitation areas. Procedures will be detailed on a case by case basis.

LAND TENURE ADJUSTMENT

Issue Analysis

A significant portion of the public lands within the Cascade Resource Area consists of scattered isolated tracts with no legal access. Because of these characteristics, they are difficult and uneconomic to manage. The Federal Land Policy and Management Act of 1976 provides for the transfer (sale or exchange) of such tracts if they are not suitable for management by another Federal department or agency.

In spite of the authority and tract characteristics, segments of the public believe that these lands should be retained in Federal ownership to maintain the public land base or known resource values and preserve future management opportunities and options. Similarly, a second segment of the public believes the lands should be retained, or, if necessary exchanged to block-up existing public land holdings or acquire land with significant public values.

In contrast to the two above, a third segment of the public believes the tracts should be sold.

Issue Questions

The Cascade Resource Management Plan will address the question, "What lands should be sold, exchanged or retained to best serve the public interest and/or improve public land management?"

RMP Action Contemplated

Identify lands for disposal (sale or exchange) or retention.

FUTURE MANAGEMENT OF PUBLIC LANDS IN THE PAYETTE RIVER CORRIDOR

Issue Analysis

The Payette River System is an important resource area with numerous multiple-use concerns. The concerns involve existing and potential uses including recreation activities on and adjacent to the river, wildlife habitat (including fisheries), timber, minerals, hydroelectric power generation and water quality. There are conflicts between and among these various uses.

Administration of the public lands along the river is a complex issue because of the various interests; State of Idaho, BLM, Bureau of Reclamation, Federal Energy Regulatory Commission and the U.S. Forest Service.

The Payette River system is very popular and use levels for recreation are increasing because of the proximity to the Treasure Valley and the national recognition the river has received for its whitewater boating qualities.

Segments of the river have been identified as having potential for addition to the National Wild and Scenic Rivers System and appeared in the Nationwide Rivers Inventory, National Park Service, January, 1982.

Issue Questions

In order to resolve this issue, the plan will address the following questions:

1. Should the BLM recommend (via the Department of the Interior) that Congress amend the National Wild and Scenic Rivers Act to add the South Fork and Main Stem from the Sawtooth Wilderness Area boundary downstream to Banks, and/or the North Fork Payette from McCall downstream to slack water at Cascade Reservoir and from Cascade Dam downstream to confluence with mainstem at Banks, Idaho as a study river?

2. How should the public lands (BLM) along the river and within the Payette River corridor be managed?

3. What types and levels of recreation use should BLM plan and provide for on those public lands within the corridor?

RMP Action Contemplated

1. The RMP will recommend which segments of the Payette River system should be studied for inclusion in the National Wild and Scenic Rivers System and how the public lands in the corridor will be managed during the interim.

2. Recreation facility developments and use levels will be identified.

3. Make recommendations concerning existing withdrawals and any need for future withdrawals, such as for mineral segregation.

IDENTIFICATION OF FUTURE ISSUES

The Analysis of Management Situation has assessed future management opportunities. New issues/concerns/policy requirements may emerge at any time during the planning process, and if significant, will be added as an issue/concern for consideration in the RMP.

MANAGEMENT CONCERNS

Access

The public expressed an interest in having access to all public lands. The RMP will identify where access to public lands is needed.

Off-Road Vehicles

All public land will be placed in one of three categories - open, limited or closed. The Boise Front MFP designated all land in the planning unit as limited to designated roads and trails, and this classification will stand in the RMP. The Black Canyon MFP identified three areas as open ORV parks while the rest of the area is limited to designated roads and trails.

Fire Management

The RMP will identify specific areas where fire will be used as a vegetative management tool. The entire area has been identified for full suppression.

Timber Base Allocation

The RMP will evaluate changes in the commercial forest base and levels of timber harvest due to acreage lost through exchange or restrictions such as critical, threatened and endangered habitats. A range of harvest levels will be developed in the plan. One will be identified as the preferred level.

Wilderness

The Cascade Resource Area was reviewed for wilderness study area status. One area, Box Creek, adjacent to the Payette National Forest was previously identified because of its proximity to a Forest Service roadless area. There were no additional lands identified in the scoping process for consideration as wilderness under Section 202 of FLPMA. The Box Creek WSA (110-91A) will be analyzed in a separate wilderness document and not in this plan/EIS. To avoid impairment of wilderness values, it will be managed under the provisions of the Interim Management Policy and Guidelines for Lands Under Wilderness Review pending a final wilderness decision.

Special Designations

The RMP will identify areas for special designation and management (ACEC, National Register of Historic Places and Research Natural Areas).

APPROVED MFP PLANNING DECISIONS CARRIED THROUGH RMP

Boise Front MFP

Recreation

Vehicular use on public lands will be restricted to designated roads and trails as identified on the Step II overlay. Highland Valley Road and Shaw Mountain Road - will be closed to vehicular travel from January 1 - April 1 for deer winter range protection.

Black Canyon MFP

Recreation

Off-road vehicles - open areas identified on Step II overlay are: 1) Little Gem Cycle Park, and 2) Parma and Dewey ORV Parks. Limited Use Area - restrict motorized vehicles to existing roads and trails throughout the remainder of Black Canyon planning unit.

Wildlife

A long-billed curlew habitat area has been identified in the Black Canyon Planning Unit with management guidelines that include retention of the area in federal ownership, ORV restrictions during nesting season, litter control, and maintenance of the short grass types.

NON ISSUE/MANAGEMENT CONCERN PROGRAMS

Resource programs which have not surfaced as issues or management concerns will be addressed as follows in all alternatives.

Minerals

Areas now restricted/closed to mineral leasing, exploration, and development will continue to be so designated in all alternatives. Any additional segregations/restrictions (or revocations) on mineral activities will be evaluated during impact assessment and identified in Chapter 4.

Visual

Current visual resource management will apply to all alternatives.

Social and Economic

Social and economic concerns will be considered during all phases of the planning process, although no major concerns have been identified at this time.

Cultural and Paleontologic Resources

The RMP will provide for management and protection of these resources at generally the same level in all alternatives unless future information, policy, or public concerns dictate otherwise.

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.

Specific Idaho State-wide Planning Criteria (Idaho RMP Guidebook) and Instruction Memorandum ID-83-396 (governing land tenure adjustments) were followed. In addition, the following land disposal criteria were used to guide our land tenure related issues/questions.

1. Lands identified for transfer by sale may also be considered for disposal by means of the Recreation and Public Purposes Act, Desert Land Act, Carey Act, state-in-lieu selection, exchange or other means authorized by law.
2. Lands identified for transfer by "exchange only" will not be considered for disposal by other means.

SELECTION OF THE PREFERRED ALTERNATIVE

Livestock Grazing Management

The Preferred Alternative would make 449,059 acres available for livestock grazing. These lands would be retained in federal ownership and managed under moderate, intensive and limited management levels. Grazing levels would increase 6% over existing use at the end of 20 years. The amount of lands under stock driveway withdrawal would be reduced to 41,390 acres. Range improvement projects, AMP/CRMP updating and new AMPs would be scheduled for implementation within three time segments 0-5 years, 6-10 years, and 10-20 years.

Rationale

The proposed plan for livestock grazing was selected because it helps meet the rangeland resource management objectives of maintaining or improving the soil, esthetic, wildlife, vegetation and watershed resources. It identifies the potential for increases in livestock use if monitoring studies indicate that the basic resources (soil, vegetation, wildlife, water quality) are adequately being maintained or are improving.

Livestock production is a major component of the local economy. The Cascade Resource Area currently provides about 66,424 AUMs of forage for livestock. Generally, the resource area has limited potential for vegetative improvement through vegetation manipulation or more intensive livestock management due to soil and slope limitations and the invasion of native ranges by annual grasses; Medusahead wildrye and cheatgrass.

Land treatment proposals are included in the plan to improve rangeland condition for livestock, wild horses, wildlife and watershed. The outlook for increased forage production through land treatment is conservative because of limitations on site condition and the low potential for improving rangeland condition. Improvement on native ranges would generally result in ecological site condition class changes within the condition class rather than from one class to another, ie., changes in the fair condition class would improve from poor fair to high fair but not from fair to good. Rangeland that is predominantly annual grass is classified as poor condition. Vegetation manipulation projects to eliminate the annual grasses would improve forage condition but would not represent a change in ecologic site condition. Revegetation of the annual grass ranges would classify these areas as seedings.

Forage increases would also be realized through more intensive management practices especially in the areas with the greatest potential such as those with native vegetation, good soils and in the higher precipitation zones.

The proposed plan would initially stock the area with 66,424 AUMs of forage for livestock with a gradual increase over the 20 year period to 70,536 AUMs. The increase in available forage would occur through more intensive livestock management and range improvements. Monitoring studies would be carried out in those allotments receiving increased livestock management and range improvements to determine forage increases and stocking

levels. The increases are projected to occur even though the land base would be reduced over the present acreage as a result of transfers out of public ownership (sale and exchange) and limitations would be placed on livestock grazing by other resource activities, ie., sharp-tailed grouse habitat, crucial big game habitat, etc.

Prior to authorizing forage increases for livestock, rangeland condition would be monitored and evaluated to ensure basic soil and vegetative resources would be maintained or improved.

As land treatment projects are implemented and additional forage becomes available, grazing use would be shifted from areas of poor condition range within respective allotments, so the net result would be reduced grazing use in the poor condition areas. Grazing use shifts would be accomplished by salting, new water developments, fencing, herding, and other management techniques.

Range improvement projects would include mitigating measures to reflect site capabilities and protect other resource values.

Portions of existing livestock driveways are proposed to be eliminated because the need for them no longer exists.

Wild Horses

One wild horse area will be managed to maintain a viable wild horse herd size of 20 horses. Approximately 15,500 acres in the Four-Mile Creek Area will be managed to support this herd.

Rationale

Wild horses in the Four-Mile herd management area would be managed in accordance with the Wild Horse and Burro Act.

The present level of 10-12 horses would be allowed to increase to 20 horses in order to develop a more viable herd. Excess horses would be removed periodically to maintain the maximum number of twenty. If for any reason the capability did not exist to remove horses in excess of twenty, it is felt the herd area could support additional horses for a short duration without causing irreversible damage.

Under the plan, the West Crane horse herd would be removed and the horses disposed of in accordance with conditions of the Wild Horse and Burro Act. The yearlong grazing by wild horses has a negative impact on vegetation. Degradation of the vegetative resource is incompatible with livestock and wildlife management objectives for the area.

The decision to remove the West Crane wild horses from the herd area is based on the determination that uncontrollable horse use is not compatible with intensive grazing management in the West Crane allotment. It has not been possible to implement the grazing system for this allotment.

Wildlife Management

The preferred alternative will provide sufficient habitat to meet or exceed the population goals identified in the most current big game wildlife plans developed by the Idaho Department of Fish and Game. Special management areas or provisions are provided to protect sensitive wildlife species. Approximately 23,900 acres of lands (mostly in crucial habitat) will receive land treatments.

Rationale

Increases in big game numbers from the Idaho Department of Fish and Game management plans were evaluated to determine how projected increases would impact habitat on the public lands. In many of the crucial big game habitat areas, public lands only represent a portion of the total habitat needs. The projected increases on public lands were determined considering the land ownership pattern, habitat potential and compatibility with other resource programs.

Big game numbers in this alternative over the 20 year period would increase by the following percentages for the resource area: +22% elk, +33% deer. Antelope would increase from the current population of 50 animals to 175 animals.

The Black Canyon Curlew management area would receive priority attention for maintaining bird populations at about 1,000 nesting pairs. There may be activities proposed outside the curlew management area that disrupt curlews but efforts to maintain curlew habitat would be maximized in the designated curlew management area. Maintaining curlew habitat outside the curlew management area would be considered in proposing activities in these areas but would not be the dominant consideration as it will be within the curlew management area.

Riparian/Aquatic Resources

Approximately 11 miles of streams have been selected for instream improvements and 7 miles of streams for riparian stream bank planting improvements, while 11 miles of streams would be fenced. Other proposals for livestock management and watershed protection have included provisions that will help to improve the condition on 18 miles of perennial stream habitat and 124 miles of intermittent stream habitat.

Rationale

More intensive livestock management would aid in the maintenance and improvement of riparian/aquatic habitat on 142 miles of streams.

In addition, specific projects would be proposed to correct problems and improve condition on 14 miles of streams.

Standard operating procedures would be incorporated into all management proposals to ensure protection and/or improvement for riparian and fisheries habitat.

Threatened, Endangered, Candidate, Sensitive and Uncommon Plant Species

The preferred alternative recognizes the need to protect plant species through special management. Thirteen (13) areas have been identified to receive special management considerations that would limit land disturbing activities on these sites. Five of these areas are identified for special designation as Research Natural Areas (RNA) because of their values to the scientific and educational communities. Four of these RNAs support candidate, sensitive, or uncommon plant species and one RNA supports valuable plant communities. The remaining eight areas (with special management but without special designation) also support candidate, sensitive, or uncommon plant species.

Rationale

Special management on twelve areas (4 RNAs and 8 non-designated areas) would protect known candidate, sensitive or uncommon plant species. Special management on the remaining area (RNA) would protect it primarily for scientific and educational purposes.

Standard operating procedures would be followed in evaluating proposals to ensure compliance with the National Environmental Protection Act and the Endangered Species Act.

New populations of plant species would be protected as they are identified through site evaluations and other inventory programs in the resource area.

Soil and Water Quality

The preferred alternative has given special attention to areas classified as "Potential High Erosion Hazard Areas." Specific management actions have been included in the plan to recognize this situation, such as; limiting rangeland improvements, adjusting stocking levels, fire management activities and limiting ORV use in areas with granitic and sedimentary soil origins.

Rationale

Standard operating procedures would be followed to ensure management proposals are in compliance with soil and water quality standards.

Soils would be managed to maintain productivity and minimize erosion.

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

The 12,000 acre Boise Front ACEC would be designated and managed to help protect the critical watershed as well as other important resource values in the area.

Lands and Realty

Approximately 3 1/2% (17,604 acres) of the resource area is identified as being available for transfer from federal ownership.

Rationale

A significant portion of the Cascade Resource Area consists of small isolated parcels with no legal or physical access. Because of these characteristics many parcels are difficult and uneconomical to manage, and could meet the needs of other agencies or private individuals. However, because of their location, some of these isolated parcels are valuable for access to other lands, possess important wildlife habitat or provide open space qualities to surrounding lands and should be retained in public ownership.

All lands identified for disposal (sale or exchange) appear to meet the disposal criteria outlined in Sections 203 and 206 of FLPMA. The tracts will be evaluated through the NEPA process and will again be compared with the requirements of Sections 203 and 206 of FLPMA prior to disposal.

Tracts proposed for disposal through the agricultural development act would be fully evaluated for resource values and economic feasibility before an allowance determination is made.

Rights-of-Ways

Over 480,000 acres of the resource area is available for various types of rights-of-ways. Rights-of-way avoidance areas have been identified and include one cultural site, 15 developed recreation areas/facilities and 13 candidate, sensitive or uncommon plant species areas.

Rationale

The concept of avoidance areas is the most realistic approach for the Cascade Resource Area because of the fragmented land pattern. In essence the public lands are open for right-of-way proposals with a few minor exceptions to protect specific site values.

The size of the areas to be avoided are relatively small and in designing routes for linear right-of-ways such as powerlines it would be realistic to work around those areas.

Recreation

The preferred alternative recommends that 8 miles of the South Fork of the Payette River be studied for possible inclusion into the National Wild and Scenic River system as a recreation river.

Rationale

The South Fork of the Payette River (Banks, Idaho upstream to the boundary of the Sawtooth Wilderness Area) was identified on the Nationwide

River Inventory developed by the Heritage Conservation and Recreation Service/ National Park Service. It was determined that this segment meets the basic criteria as described in the Wild and Scenic Rivers Act.

The planning evaluation determined that because of past development the South Fork could not qualify for any ranking above the recreational component standard.

The plan recommendation therefore is that the South Fork of the Payette River be nominated for study as a recreational component in the Wild and Scenic Rivers System.

This recommendation recognizes the existing limitation of the resource and sets the standard for management of the public lands in the corridor. If Congress designates the South Fork of the Payette River as a study river, and the study eventually leads to designation as a component of the Wild and Scenic Rivers System the same management philosophy would prevail as during the interim period.

Since the BLM is not a principal land management agency on the North Fork of the Payette River, no recommendation regarding this river segment is made.

ORVs

Off-Road Vehicle recreation activities will continue to be provided for on public lands. Six specific areas will be ORV play areas or cycle parks. Off-road vehicle use in the resource area will be open (unrestricted) on 244,118 acres (50%), limited to designated or existing roads and trails on 241,215 acres (50%), and closed on 2,133 acres (less than 1%).

Rationale

The primary soil types in the Cascade Resource Area include granitics, basalts and sediments. Within each of these major soil types certain conditions exist that qualify areas in the high erosion category, with slope the major factor affecting the erosion capability.

It is felt that basalts, even those in the high erosion capability category, appear to be resilient to use by off-road vehicles. These areas have been designated as open to off-road vehicles recognizing that topographic and vegetation would drastically limit use in some areas. Where steep terrain and heavy vegetation occurs de-facto closures and limitations actually exist.

The sediments and granitic soil types are both susceptible to damage by off-road vehicles. These classes have been designated as limited to off-road vehicles again recognizing that terrain and vegetative factors would close certain areas to off-road use.

There are a few exceptions to the limited use class in the Dewey, Parma, Little Gem and Clay Peak Cycle Park areas because of the need to provide for concentrated vehicle use close to population centers.

Designation of these open play areas helps to divert this use from other more fragile areas and provide the opportunity to concentrate facilities to accommodate use.

The areas identified as closed to off-road vehicle use are those with candidate or sensitive plant species, proposed/existing developed recreation sites, and a motorcycle park buffer zone.

Developed Site

Twenty-one areas have been identified for various levels of recreation management. Facilities will be managed/developed at 16 specific sites within these areas (campgrounds, boat launch, trails, high ORV use areas).

Rationale

The plan identifies the need for designated sites primarily to accommodate increased demand on the important river systems (Weiser, Snake and Payette Rivers).

Because of the public land pattern in the Cascade Resource Area, most of the important recreation areas are located fairly close to population areas on lands administered by other state and federal agencies.

The recreationalist can utilize developed facilities provided by private enterprise, state parks or National Forest recreation sites while recreating on the adjacent public lands.

VRM

Visual resource classes in the resource area will be managed as follows: 81,000 acres as Class II; 383,466 acres as Class III; 23,000 acres as Class IV.

Rationale

The visual resource management system will be used to identify management proposals that may impact aesthetic values. The degree of alterations to the natural landscape would be guided by the criteria for the visual resource management classes in BLM Manual 8400.

Wilderness

The Box Creek WSA (111-91A) was not analyzed for wilderness in this document.

Rationale

The original wilderness inventory identified Box Creek as a wilderness study area because of its proximity to a National Forest roadless area. A seperate EIS for areas less than 5,000 acres will evaluate this area for further wilderness consideration.

No additional wilderness study areas were identified through the planning analysis under Section 202 of FLPMA.

Forest Management

Under the preferred alternative, 26,663 acres of suitable commercial forest lands would be managed for multiple use and sustained yield. The annual allowable cut would be approximately 1.7 million board feet.

Rationale

The commercial forest land base has been reduced by 5,232 acres including 5,139 acres for TPCC withdrawals, 70 acres for a seed orchard and 23 acres for campground withdrawal.

The proposed annual harvest of approximately 1.7 MMBF has been determined on the basis of demand for saw timber and the ability of the forest resource to produce this harvest level on a sustained yield basis. This commercial forest land base has more potential on a sustained yield basis to provide for a greater timber harvest but only with intensive timber management and a greater investment in forest development.

Sales of firewood in the resource area would be continued on a limited basis because of the associated administrative costs and the fragmented, scattered parcel locations which makes location of tracts on the ground difficult.

Minerals Management

Leasables

Oil, gas and geothermal mineral exploration and development is open on 456,289 acres (94%) of the resource area.

Rationale

Since mineral leasing is a discretionary program it is felt that any special resource protection needed can be accommodated by either not offering leases or mitigation in lease agreements. Therefore, it has not been necessary to close or restrict areas to lease consideration. Site specific evaluation would be made with all lease proposals.

Locatables

Exploration and/or development for gold, silver, lead, zinc, gypsum, diatomite, etc. in the resource area is open on 456,281 acres (94%).

Rationale

With the exception of existing withdrawals administered by other agencies there are no additional withdrawal proposals in the Cascade Resource Management Plan.

The surface management regulations at 43 CFR 3809 provide management the opportunity to protect resource values from undue degradation during mining exploration and development.

Salables

Sands, gravels and other salable minerals would be made available from three material sites and 16 free use sites.

Rationale

The plan recognizes a continuing demand for mineral materials and the policy to make these materials available where consistent with protection of other resource values.

The procedure for salables allows for protection of resource values through the sale agreement and for adequate site rehabilitation after the materials have been removed.

Paleontologic Resource Management

Paleontologic resources will be managed under current district guidelines.

Rationale

Prior to any action that might effect paleontologic resources the area would be evaluated for the existence of these values. Mitigation to protect these resources would be part of any proposals that might impair important values.

Cultural Resource Management

Nine sites will be protected through special designation and management.

Rationale

The preferred alternative identifies and provides protection for cultural resource values in accordance with existing laws, regulations and agreements with the State Historic Preservation Office (SHPO).

Eight of the sites will be nominated for consideration on the National Register of Historic Places. One site is already listed.

Standard operating conditions and cultural site clearance procedures would be applied prior to project authorization and during the development process.

Fire Control Management

With the exception of identified prescribed burn areas, full fire suppression policy will apply to the resource area.

Rationale

Because of the resource values, soil erosion capability and proximity of public lands to cities, towns and private residences, full suppression efforts would be applied to all wildfires in the Cascade Resource Area. The only exception to full suppression would be for specific site locations identified as having potential for prescribed burning practices.

Provisions would be made to recognize resource values in planning prescribed burns to meet the objectives of all resource programs. Wildfire rehabilitation efforts would be planned with other resource value objectives in mind.

Special Designation

Areas/Sites

Special designations include the following; 5 Research Natural Areas, 9 National Register of Historic Places, 3 Special Recreation Management Areas, 2 Extensive Recreation Management Areas, 1 Wild and Scenic River, 3 Areas of Critical Environmental Concern, 6 ORV play areas/parks, 4 Campgrounds, 3 Boat Launch Sites, 1 Picnic Site and 1 Interpretive Trail.

Rationale

In addition to the special designation mentioned under the threatened/endangered plant species section (research natural areas) and cultural resource management section (potential National Register sites), three areas qualify for special designation as Areas of Critical Environmental Concern (ACEC). These areas possess important resource values that are threatened or could be damaged by incompatible uses. The ACEC designation would serve to identify these areas as requiring special management attention. Special management is needed to maintain or improve existing resource condition.

No action to withdraw the areas from activities such as minerals, land transfer or agricultural development is deemed necessary. The regulations for leasable minerals and the surface management regulations for locatables would be adequate. The identification of the areas for retention in public ownership would prevent transfer of the lands under the various land laws. Disposal of all or portions of these areas would be allowed under the General Mining Law but would be unlikely due to low mineral potential.

MULTIPLE USE AND TRANSFER CLASSES

Management intensities for lands in the Resource Area are assigned to one of the following 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 significant resources which must be protected, and whether BLM would transfer

public lands from its jurisdiction. The second is to provide a basis for developing specific resource management objectives and actions for each multiple use area with general purpose and policy statements.

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 and that adequate public involvement is obtained.

Public lands are placed in the multiple use or transfer class that best reflects the specific resources and management priorities for the area. A description of these classes and their purposes, policies and the management areas' goals and guidelines are as follows:

Moderate Use Class

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

The general policies for managing a moderate use class are to provide for the production and use of forage, timber, minerals and energy, other consumptive resources, and recreation 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. Management areas covered by the moderate use class and their goals and guidelines are as follows:

M-1 General Rangeland Management Area

Description: Consists primarily of grassland and shrubland with minor inclusions of forest. It includes wet meadows, lands adjacent to perennial and intermittent streams, ponds, bogs, marshes, seeps, and springs, wildlife and fisheries habitat (including crucial habitat). It also includes lands for visual and recreational enjoyment, watershed and water quality protection, dry parks, and open grassland and shrubland varying in size from a few to thousands of acres. These lands provide wildlife, wild horse and livestock forage.

Goals and Guidelines: Emphasis will be on maintaining or enhancing forage production for livestock, wild horses, and wildlife while maintaining site productivity, water quality, and stream stability and providing for other uses. Utility ROW development will be allowed. Public lands within this area will be retained. ORV recreation use will be designated as limited, open or closed depending on specific situations in this area. Range management practices will include special measures to protect riparian values. Mineral activities will be fully allowed.

M-2 General Forest Management Area

Description: Consists of commercial forest lands of varying physical environments classified as suitable for sustained yield timber management through Timber Production Capability Classification (TPCC). It also includes nonsuitable commercial forest land as well as woodland withdrawn from timber management as a result of TPCC Classification. These areas may include cliffs, caves, rock outcrops, talus, and mature stands of timber growing on sites with severe limitations.

Goals and Guidelines: Emphasis will be on managing timber to maintain healthy stands, optimize timber growing potential, and regulate sustained timber production while maintaining site productivity, water quality, stream stability, and unique features for wildlife habitat, and providing for other uses. Livestock grazing generally will continue where use currently exists. Utility ROWs development will be allowed. A broad range of timber production activities will be permitted. Timber and range management practices will include special measures to protect riparian and other resource values found in this area. Public lands within this area will be retained in public ownership. ORV recreation use will be designated as limited, open or closed depending on specific situations in the area. Mineral activity will be fully allowed.

Intensive Use/Development Class

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

The general policies for managing an intensive use/development class are to provide for existing and projected demands for large scale or intensive use and development. These areas will be managed for a high intensity of use. These areas will be reserved for major or high density recreation sites or facilities, ORV intensive use areas, large scale or high intensive 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 but would be subject to federal mining laws governing patent unless withdrawn from mineral entry by the Secretary of Interior or by Congressional action.

I-1 Mineral Production Area

Description: Consists of lands for active or recently active mineral extraction and processing operations and the immediate surrounding vicinity.

Goals and Guidelines: Emphasis will be on providing for mineral production while protecting important wildlife values, restoring water quality and rehabilitating site productivity and stream stabilization through reclamation. Livestock grazing will not be permitted in areas where conflicts would exist. Utility ROW development will be allowed. Timber management activities will be unlikely. These lands generally will remain in

public ownership unless mineral values warrant patenting. ORV recreation use will be limited or closed.

I-2 Developed Recreation Area

Description: Consists of existing and potential recreation use areas that provide developed, minimal, or no facilities to support high density recreation activities.

Goals and Guidelines: Emphasis will be on maintaining and enhancing recreation sites while maintaining water quality, stream stability and important wildlife values. Livestock grazing may be permitted. Utility ROW development generally will not be permitted. Timber management activities will be limited to sanitation or salvage and will occur only when timber sales are scheduled for adjoining lands or when needed to meet other management goals for the area or if a safety hazard exists. Timber, range, and recreation management practices will include special measures to protect riparian values. Public lands within this area will remain in public ownership. ORV recreation use generally will be open for designated ORV areas but may be limited or closed at other developed sites.

Limited Use Class

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

The general policies for managing a limited use class are to fully protect and enhance 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 ROWs and installations, livestock grazing, or any other potentially conflicting use. Public lands in a limited use class will be retained in public ownership.

L-1 Historical, Cultural or Paleontologic Sites/Areas

Description: Consists of scattered sites on BLM lands that are of historic, cultural or paleontologic significance.

Goals and Guidelines: Emphasis will be on protection of these values. Livestock grazing generally may be permitted where established. Utility ROW development generally will not be permitted. Timber management activities will be prohibited on those sites added to the National Register of Historic Places. Withdrawal from mineral entry may be sought and limitations on other mineral operations may be imposed. Public lands within these areas will remain in public ownership. ORV recreation use may be either limited or closed depending on the values needing protection.

L-2 Special Management Areas

Description: Areas distinguished by special, unique, or natural characteristics which require some form of special management. Designations include Areas of Critical Environmental Concern (ACEC), Research Natural Areas, Special Recreation Management Areas, Wild and Scenic River, and Wild Horse Herd Areas.

Goals and Guidelines: Emphasis will be on maintaining the special, unique, or natural characteristics of each area while providing opportunities for dispersed recreation, research, observation, study, environmental education, and interpretation. Livestock grazing may be permitted but in some cases adjusted where already established. Utility ROW development generally will not be permitted. Timber management activities will be allowed if consistent with site-specific management goals. Withdrawal from mineral entry and other limitations may be sought. Public lands in these areas will remain in public ownership. ORV recreation use will be open, limited or closed depending on the management objectives for the specific sites.

Transfer Class

The purpose of a transfer class is to delineate public lands available for transfer out of federal ownership.

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.

Categories for Transfer

Lands available for transfer will be assigned to one of four categories. These categories are:

T-1: Sale Only - These lands may be designated for:

- Direct Sale - one party pay fair market value,
- Competitive Sale - open bid with highest bidder awarded offered lands,
  or
- Modified Competitive - adjacent landowner can meet highest bid and get offered lands.

T-2: Sale or Exchange - Same as T-1 or a land trade with another public agency or a private landowner.

T-3: Exchange Only - These lands generally are offered only if equal or better lands can be received by the BLM to meet various program objectives, i.e., wildlife habitat, recreational access.

T-4: Desert Land Entry (DLE) - These lands may be transferred through Desert Land Application for agricultural development.

T-5: Commercial Forest Lands - These lands may only be considered for the exchange of land (State or private) containing resource values of national significance such as, within boundaries of wilderness areas, wild and scenic rivers, historic, cultural or paleontologic areas, endangered species habitat or crucial wildlife habitat that can be managed by the BLM or for other commercial forest lands of equal value that would improve BLM management.

Retention Areas

All public lands not identified in a transfer category will be retained in public ownership and managed under one of the three multiple use categories. Those lands determined to be unsuitable for disposal, after detailed consideration, will be retained. Requests to consider lands for possible transfer, after plan approval, will be evaluated through the amendment procedure in accordance with the Code of Federal Regulations (43 CFR 1610.5-5) and BLM Manual 1616.22 and 1617.4A or B.

DESCRIPTION OF PLANNING AREA

The Cascade Resource Area is located within the administrative boundary of the Boise District. It is situated in west-central Idaho. The Resource Area is defined by the Snake River on the west and southwest; the Boise and Payette National Forest boundaries on the east; the northern line of Adams County on the north; and the Boise River-New York and Mora Canals - Ada/Canyon County line on the southeast.

The Resource Area encompasses a land base of approximately 2.77 million acres. This area includes all or portions of Ada, Adams, Boise, Canyon, Gem, Payette, Valley and Washington Counties. Land ownership consists of public lands (487,000 acres), State of Idaho (183,000 acres) and private (2.10 million acres).

In general, the public lands consist of scattered, unconsolidated tracts intermingled with the state and private lands. The Bureau of Land Management administers approximately 456,466 acres of the public lands. The remaining 31,000 acres are managed cooperatively with other federal agencies such as the Bureau of Reclamation, U.S. Fish and Wildlife Service, U.S. Geological Survey and Department of Defense.

The Cascade Resource Area is the most heavily populated in the Boise District, if not the state. According to the "1980 Census of Population," issued in June 1983, approximately 305,000 people or 32% of Idaho's population reside in the Resource Area. The majority of these people are located within the Treasure Valley in the Cities of Boise (the state's capital and largest city), Nampa and Caldwell. Other cities located in the Resource Area include Emmett, Payette, Weiser, McCall, Cascade, and Horseshoe Bend, Council and Cambridge.

The detailed environmental characteristics of the Resource Area are described in the Analysis of Management Situation documents available for review at the Boise District Office.

PREFERRED ALTERNATIVE E

The objective of this alternative is to provide an optimum mixture of protection and enhancement of the natural environment with commodity resource utilization (renewable and nonrenewable). Preservation of significant natural resource features is provided for along with moderate increases in commodity resource use.

A portion of the Payette River would be recommended for study for possible addition to the National Wild and Scenic River System.

The planning decisions for recreation and wildlife in the Boise Front and Black Canyon MFPs would be unchanged and protection of the habitat area for long-billed curlews in the Black Canyon area would be maintained.

Areas of special interest or fragile environments would be given special designation such as research natural areas and ACECs.

The 487,466 acres of public lands would be placed into one of four multiple use or transfer categories as follows:

328,453 acres Moderate, 3,004 acres Intensive
138,403 acres Limited, 17,604 acres Transfer

Livestock Resources

Objectives

Manage 449,059 acres of rangeland to provide forage for livestock and wild horses.

Livestock AUMs: 72,571 Active Pref., 66,424 Licensed
66,257 Initital, 68,000 5 yr., 70,536 20 yr.

Wild Horses-Numbers: 4 Mile 10 Initial, 20 20 yr.
West Crane Creek 12 Initial, 0 20 yr.
Wild Horses-AUMs: 20 yrs.: 4 Mile 240 ; West Crane 0

Actions

Stock Driveways: 40,763 existing maintained, 22,237 existing eliminated
(acres) 627 new added, 41,390 total available

Vegetative Manipulation:
5 yrs - 5,000 acres burn, spray and/or seed; 2,000 acres disc'd & seed
20 yrs - 18,279 acres burn, spray and/or seed; 6,000 acres disc'd & seed

Projects: 60 mi. fence, 66 reservoirs/wells/springs, 15 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
12 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer but under temporary nonrenewable basis until lands are transfered.

Special Considerations

Seed mixtures on vegetative manipulations will include grass, forb and shrub species that will benefit both livestock and wildlife.

Note: For analysis purposes for livestock use levels (AUMs), it was assumed that only the current land transfer applications being processed would be completed within the next 5 years and that no other land transfers would occur within the next 5 years. Consequently the 5-year forage level for livestock in the preferred alternative is not comparable with the 5-year forage level for livestock in Alternatives A, B, C, or D since it was assumed that all land transfers in these alternatives would be completed at the end of 5 years. See Appendix G for further information.

Watershed Resources

Objectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Designate 12,000 acres of the Boise Front as an ACEC and prepare/update the following activity plans - HMP, RAMP.

Vegetative Resources

Objectives

Protect Federal candidate and sensitive plants.

Protect and manage 13 specific sites containing candidate, sensitive or uncommon plants or valuable plant communities.

Improve general condition on 32% of all fair and 11% of all good condition rangeland.

Change or improve condition on 31% of the poor condition rangeland and maintain condition on remaining.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Exclude surface and subsurface ROWs in these areas known to contain candidate or sensitive plants.

Include no surface occupancy stipulations in all mineral leases.

Adjust livestock grazing practices and reduce livestock preferences in allotments in poor and fair condition.

Mechanically treat (through range and wildlife projects) areas of poor and fair condition rangeland that possess a high return potential.

Designate and manage 13 areas as follows:

Special Management Areas	Designations	Acres	Minerals (acres) Locatables Withdrawal	Leaseables Closed	Leaseables No Surf.	ROW Avoidance (acres) 1/ O	Surf	Sub	ORV Use (acres) 2/ O	L	C
1. Lost Basin Grassland 3/	RNA	65	0	0	65	0	65	65	0	0	65
2. Rebecca Sandhill 3/	RNA	410	0	0	410	0	410	410	0	0	410
3. Sand Hollow 4/	None	500	0	0	500	0	500	500	0	500	0
4. Summer Creek 4/	RNA	240	0	0	240	0	240	240	0	0	240
5. Peraphyllum Rock	None	40	0	0	40	0	40	40	0	0	40
6. Beacon Hill	None	20	0	0	20	0	20	20	0	20	0
7. Sagebrush Hill	None	10	0	0	10	0	10	10	0	0	10
8. Buckwheat Flats	RNA	200	0	0	200	0	200	200	0	0	200
9. 4th July Meadow	None	100	0	0	100	0	100	100	0	0	100
10. Sand Capped Knob	None	40	0	0	40	0	40	40	0	0	40
11. Goodrich Creek 3/	RNA	440	0	0	440	0	440	440	0	0	440
12. Pearl	None	400	0	0	400	0	400	400	0	400	0
13. Prostrate Ceanothus	None	80	0	0	80	0	80	80	0	80	0

1/ O = Overhead; Surf = Surface; Sub = Subsurface.
2/ O = Open, L = Limited, C = Closed.
3/ Exclude or limit livestock grazing.
4/ No water or salt blocks in area or on ridgeline.

Projects: 6 mi. fencing
5 acres for interpretive signing

Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known. Prepare five Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 181,640 acres of elk habitat, 275,250 acres of deer habitat and 4,400 acres of antelope crucial winter habitat and provide forage to support proposed populations of these animals.

Manage 185,860 acres of sage grouse habitat to improve brooding and nesting habitat.

Improve 23,912 acres of wildlife habitat through new seeding and interseeding existing areas and shrub plantings.

Provide special management on 61,000 acres of curlew and 32,960 acres of Columbian sharp-tailed grouse habitats to improve populations of these sensitive species.

Maintain existing habitats for other wildlife species.

Wildlife Unit Months:	7,124 Elk,	44,612 Deer,	1,800 Antelope
Expected Population:	191 yrlong Elk,	961 yrlong Deer,	175 yrlong Antelope
	1,208 winter Elk,	8,270 winter Deer,	

Actions

Vegetative Manipulation: 10,387 acres Shrub, Grass & Forb Seeding,
8,295 acres Burn, Disc & Seed,
2,230 acres Interseed,
3,000 acres Special Project Seeding

Projects: 30 mi. fence, 2 Guzzlers

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse; and deer (Boise Front).

Designate 61,000 acres of curlew habitat and 4,200 acres of sharp-tailed grouse habitat as ACECs.

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 16 stream miles of riparian habitat. Continue present management on 102 stream miles of riparian habitat.

Improve the condition of 14 miles of aquatic habitat and continue present management on 66 miles of aquatic habitat.

Actions

Adjust livestock grazing practices on riparian areas in allotments where riparian/aquatic projects are proposed.

Incorporate riparian pastures, grazing systems, and/or special measures in AMPs to improve all riparian and aquatic habitat.

Projects: 11 mi. fencing, 11 mi. instream work
7 mi. of stream bank planting

Lands and Realty

Objectives

Identify for transfer from federal ownership 17,604 acres of public lands (563 acres through sale (T1) and 10,107 acres through sale or exchange (T2) and 6,374 acres through exchange (T3), and 560 acres through DLE (T4)). Retain 469,862 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notification to livestock permittees once the final decision to transfer has been made.

Recreation Resources

Objectives

Provide or enhance recreation use at 21 areas.

Provide for ORV recreation activity on public lands.

Manage 2,600 acres of public lands along the Payette River as a Wild and Scenic River (recreational category).

Actions

Designate ORV recreation activity as open on 244,118 acres, limited (to existing or designated roads and trails) on 241,215 acres and closed on 2,113 acres.

Manage 11,084 acres of public lands recommended for transfer as limited to designated or existing roads and trails and 6,160 acres as open for ORV recreation, until lands are transferred.

Recommend the study of 8 miles of Payette River (South Fork) for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Obtain recreational access through easements and acquisition of lands.

Designate and manage 21 areas as follows:

Sites	Special Management Areas		Minerals (acres)			ROW 1/ Avoidance (acres)			ORV (acres) 2/		
			Locatables	Leasables							
	Type	Acres	Withdrawal	Closed	No Surf	O	Surf	Sub.	O	L	C
1. Cascade Uplands 3/	ERMA	334,000	0	0	0	0	0	0	241,498	88,039	5
2. Weiser River	Boat Launch	1	0	0	1	1	1	0	0	1	0
3. Clay Peak	Cycle Park	948	0	0	948	0	948	0	436	0	512
4. Oxbow 4/ Brownlee	SRMA	40,000	0	0	0	0	0	0	0	39,779	0
5. Steck	Campground 5/	11	0	0	11	11	11	0	0	0	11
6. Weiser Dunes	Play Area	200	0	0	0	0	200	0	200	0	0
7. Snake River	Boat Launch	10	0	0	10	10	10	0	0	10	0
8. Payette River 6/ Corridor	SRMA/WSR	19,000/ (2,600/ 8 mi)	0	0	0	0	0	0	0	18,984	0
9. North Fork	Campground 5/	10	0	0	10	10	10	0	0	0	10
10. Garden Valley	Boat Launch	1	0	0	1	1	1	0	0	1	0
11. South Fork	Campground 5/	3	0	0	3	3	3	0	0	0	3
12. Chief Parrish	Picnic Site	2	0	0	2	2	2	0	0	0	2
13. Boise Front 7/	SRMA/ACEC	12,000	0	0	0	0	0	0	0	11,995	0
14. Hulls Gulch	Interpret. Trail	5	0	0	5	0	5	0	0	0	5
15. Treasure Valley 8/	ERMA	72,000	0	0	0	0	0	0	0	68,780	0
16. Little Gem	Cycle Park	3,000	0	0	0	0	3,000 9/	0	2,100	900	0
17. Dewey	Play Area	30	0	0	0	0	30	0	30	0	0
18. Parma	Play Area	10	0	0	0	0	10	0	10	0	0
19. Pickles Butte	Play Area	180	0	0	0	0	180	0	180	0	0
20. Paddock Reservoir	Campground 5/	5	0	0	5	5	5	0	0	0	5
21. Birds of Prey	Natural Area	640	0	0	0	0	0	0	0	640	0

1/ O = Overhead; Surf = Surface; Sub = Subsurface.
2/ O = Open; L = Limited; C = Closed.
3/ Specific constraints covered under Weiser River, Clay Peak and Paddock Reservoir.
4/ Specific constraints covered under Steck, Weiser Dunes and Snake River.
5/ Exclude or limit livestock grazing.
6/ Specific constraints covered under North Fork, Garden Valley, South Fork and Chief Parrish.
7/ Specific constraints covered under Hulls Gulch.
8/ Specific constraints covered under Little Gem, Dewey, Parma and Pickles Butte.
9/ Except for electrical transmission towers in existing right-of-way.

Projects: Water and/or sanitary facilities - 8, launch ramp - 1, access - 8

Activity Plans: RAMPs for Oxbow-Brownlee, Boise Front and Payette River Corridor.

Cultural Resources

Objectives

Protect, through special designation and management, areas with significant cultural values.

Actions

Nominate eight sites to the National Register of Historic Places and manage as shown below.

Surface and subsurface ROWs will be routed to avoid cultural sites.

Sites	NR 1/ Acres	Minerals (acres) Locatables Withdrawal	Leaseables Closed	Leaseables No Surf	ROW Avoidance (acres) 5/ O	S	Sub	ORV Use (acres) 3/ O	L	C
1. Placerville Townsite	8 4/	8	0	8	0	8	8	0	8	0
2. Grays Creek	40	2/	0	2/	0	2/	2/	0	40	0
3. Indian Creek	20	2/	0	2/	0	2/	2/	0	20	0
4. Milk Creek	20	2/	0	2/	0	2/	2/	0	20	0
5. Cabin Creek	20	2/	0	2/	0	2/	2/	0	20	0
6. Quartzburg	386	2/	0	2/	0	2/	2/	0	386	0
7. Centerville	516	2/	0	2/	0	2/	2/	0	516	0
8. Pioneerville	581	2/	0	2/	0	2/	2/	0	581	0
9. Mineral	429	2/	0	2/	0	2/	2/	0	429	0

1/ National Register of Historic Places.
2/ Acreage to be determined by National Register nomination process.
3/ O = Open, L = Limited, C = Closed.
4/ National Register of Historic Places (existing).
5/ O = Overhread; S = Surface; Sub = Subsurface.

Projects: 5 mi. fencing
Activity Plans: CRMP (9)

Forest Resources

Objectives

Manage 26,663 acres of suitable commercial forest land for timber management and harvest.

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 5,232 acres of forest lands under CFL set asides. This includes 5,139 acres for TPCC withdrawal, 70 acres for seed withdrawal, and 23 acres for campground withdrawal.

Provide an annual harvest of approximately 1.7 MMBF.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 68 mi. of forest access road (3.4 miles annually)
Acquire access on one to two areas

Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest land will generally be through selective cutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 150-700 acres annually.

Mineral Resources

Objectives

Make 456,281 acres (94% of area) available for locatable exploration and development and 456,289 acres (94% of area) for leaseable mineral exploration and development.

Continue making available saleable minerals from three material sale sites and 16 free-use sites as needed.

Actions

Leaseables (acres)			Locatables (acres)		Salables (acres)	
Open	Closed	No Surface Occ.	Open	Withdrawn	Available	Unavailable
456,289	31,177	3,549	456,281	31,185	95	0

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

This plan recommends ACEC designation for three areas which met the criteria (of relevance and importance) to be considered for ACEC designations (Boise Front Area; Columbian Sharp-tail Grouse Habitat Area; and the Black Canyon Long-billed Curlew Management Area). The ACECs are shown on Map 2-3. The following summarizes the description and special requirements for the three ACECs recommended in the RMP. Additional information are available at the Boise District Office, BLM.

Name: Boise Front Area of Critical Environmental Concern

Purpose

The purpose for designating 12,000 acres of the Boise Front as an ACEC is to focus attention and identify management direction on this important natural resource. Management objectives are to protect and enhance the watershed resource, quality of wildlife habitat, variety of recreation opportunities, and scenic values.

Site Description

The Boise Front ACEC would encompass 12,000 acres in the hills and mountains lying immediately north and east of Boise, Idaho. The 12,000 acres are situated in a land ownership pattern with adjacent Forest Service, Idaho Fish and Game, State Department of Public Lands, and private lands. Elevations range from 3,200 feet at Lucky Peak reservoir to 5,680 feet near Lucky Peak. Topography is generally steep. A major portion of the land area contains slopes of 20 to 60 percent.

Soils in the area are formed in deeply weathered granite of the Idaho Batholith and are highly erosive and easily disturbed when dry or saturated.

Present vegetation includes cheatgrass and other annuals at the lower elevations, sagebrush and bitterbrush at mid elevations, and scattered stands of Douglas fir and ponderosa pine at higher elevations. Five major drainages usually provide streamflows throughout the year. Other stream courses are generally dry during the summer months with spring snowmelt and rainstorms contributing to seasonal streamflows. The major drainages and many smaller ones support riparian vegetation. Livestock use includes approximately 325 cattle in a rest/rotation grazing system managed by the Idaho Department of Fish and Game. Several bands of sheep trail across the area in spring and fall.

In 1959 after a fire eliminated much of the vegetative cover, two separate storms caused serious flooding and sediment damage to the northeast portion of the City of Boise. Following a costly cleanup, extensive watershed rehabilitation work was done by several agencies in a joint effort to stabilize the vulnerable resource. The terraces constructed as part of that effort are still visible from the City of Boise and vicinity as a reminder of the areas sensitivity to disturbance and forces of nature.

Resource Values

The Boise Front functions as an important ground water recharge area. Snow melt and rain waters enter the soil and percolate down through the granitic soils, faults and fractures and eventually create groundwater reservoirs. These subsurface reservoirs release water at numerous springs and support the perennial streams and riparian vegetation. Much of the subsurface flows accumulate in groundwater reservoirs which are available for Boise Valley users. The City of Boise is a major user of this groundwater and operates several groundwater wells for municipal use including geothermal heating.

The Boise Front is a crucial winter range for approximately 4,000 mule deer. The Highland Valley and Shaw Mountain roads are currently closed to vehicles from December 15 to April 1 to protect this herd. Upland game birds (quail, dove, chukar and Gray partridge), numerous small mammals, reptiles and non game birds are also found in the area. Two candidate (Federal Category II) plants, Aaseae's onion (Allium aaseae) and Mulford milkvetch (Astragalus mulfordea) have been identified in the area.

Recreation use on the Boise Front includes ORV activities, hunting, hiking, horseback riding, and interpretive uses along the Hulls Gulch National Recreation Trail.

The Boise Front is a scenic backdrop for the City of Boise and surrounding area. Although there are several powerlines traversing the area, they are generally not noticeable from a distance. More noticeable are the roads and trails, many of which have been established through unrestricted ORV use. It is currently managed as a Class II visual resource.

Cause for Concern

The combination of steep slopes and highly erodible granitic soils make the area extremely sensitive to changes in the vegetative community through surface disturbing activities. Disturbance of the vegetative community can lead to rill and gully erosion which are now evident on the Boise Front. Much of the serious rill and gully erosion has been attributed to disturbance caused by off road vehicle use. This erosion can reduce the function and value of the area as a watershed and groundwater recharge area. Springs and riparian vegetation may also be reduced. The current erosion problems are increasing and the ability of the area to fully function in its capacity as a watershed is threatened.

Surface disturbing activities which can lead to undesireable vegetative changes and erosion include unrestricted motorized and nonmotorized vehicle use, road construction and maintenance, mineral extraction, certain rights-of-way, fire occurrence, and suppression activities.

The scars from severe erosion can also reduce the attractiveness of the area as a scenic backdrop for viewers from the Boise vicinity and can reduce the quality of recreation activities.

Vehicle use and human disturbance during the winter months can reduce the effectiveness of winter habitat for deer populations by adding stress during a critical time.

Management Guidelines

Resource Use Limitations

The following resource use limitations will apply to the Boise Front ACEC to protect resource values:

1. Motorized and nonmotorized vehicle use will be limited to designated roads and trails.

2. The Highland Valley and Shaw Mountain roads will be closed to motorized and nonmotorized vehicle use from December 15 to April 1.

3. The upper portion of the 8th Street Road will be closed to 4-wheeled vehicles during the wet winter months.

4. The area will be managed to conform to Class II Visual Resource Management Guidelines.

5. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

The following activities will receive management emphasis to further protect resource values:

1. Closure and rehabilitation of certain roads and trails.

2. Maintenance and reconstruction of existing roads and trails.

3. Restriction of future rights-of-way to insure minimal erosion and visual intrusion.

4. Full fire suppression.

5. Rehabilitation of burned areas.

6. Installation of water control structures to reduce erosion where needed.

Name: Columbian Sharp-tailed Grouse Habitat Area of Critical Environmental Concern

Purpose

The purpose for designating 4,200 acres as an ACEC is to intensify habitat management for one of the last remaining populations of Columbian sharp-tailed grouse in western Idaho. The basic management objectives will be to improve, protect and enhance the quality of the habitat for this sensitive species.

Site Description

This ACEC would be located approximately 16 miles north of Weiser, Idaho on the south side of Hitt Mountain with USFS land, State land and private lands on the north, east and south.

It is bordered on the west by Mann Creek while Sage Creek and Deer Creek transect the area.

Topography is mostly rolling hills with some steep slopes adjacent to Mann and Sage Creeks. Elevation varies from 3,200 feet to 4,000 feet. Soils

are mixed and it is not uncommon to find pockets of loamy soil interspersed in shallow rocky soils.

The area presents a mosaic of vegetation types corresponding to the various soils. Vegetation associations include big sagebrush/grasses and mountain shrub patches with aspen, serviceberry, chokecherry, bittercherry and snowbrush shrubs, riparian zones with willow, rose and hawthorne shrubs with the northern areas of ponderosa pine with some Douglas-fir.

Resource Values

In addition to Columbian sharp-tailed grouse (Tympanuchus phasianellus columbianus), the area contains important spring, fall and summer habitat for mule deer which are common in the area. Concentrations of migrating mule deer use the area during the spring and fall. It is also important spring and fall elk range. The area has a rich diversity of wildlife. It supports a variety of mammals from coyotes to deer mice. Approximately 180 different species of birds have been observed on the area.

Causes for Concern

Columbian sharp-tailed grouse were once abundant and widespread throughout the northwest. This species has disappeared from most of its former range and it is now extinct in California, Oregon and Nevada and reduced to remnant populations over the remainder of its range.

Currently, remaining populations in Idaho are small and disjunct. In western Idaho, populations are extremely rare and are limited to Washington and Adams Counties. The largest known population in western Idaho is found in the vicinity of this ACEC. There are four known dancing grounds in the area and the fluctuating population numbers approximately 200 birds.

The Columbian sharp-tailed grouse has been designated as a "Species of Special Concern" by the Idaho Department of Fish and Game (IDF&G) and as a "Sensitive Species" by the U.S. Fish and Wildlife Service and Bureau of Land Management (BLM). BLM policy is to maintain or increase current population levels of sensitive species through habitat protection and enhancement.

Management Guidelines

Resource Use Limitations

1. Motorized vehicle use will be limited to designated roads and trails.

2. Livestock grazing will be adjusted to allow the range to reach and maintain optimal habitat condition.

3. Surface occupancy for all oil and gas, and geothermal leases will be determined on a site specific basis.

4. Seasonal occupancy stipulations will be applied on all oil and gas and geothermal leases.

5. Rights-of-ways construction activities for transmission lines, pipelines and other major projects will not be allowed during the nesting and brood-rearing periods.

6. No permanent new roads will be allowed in the area.

7. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

1. Develop a fully comprehensive habitat management plan for the area.

2. Fire rehabilitation and vegetative manipulation will be conducted with native species emphasized.

3. Maintenance of the bordering fences to manage livestock movement will be conducted annually.

4. Pursue acquisition of key habitat areas on State and private lands.

5. Place high fire suppression priority on the area.

Name: Long-Billed Curlew Habitat Area of Critical Environmental Concern

Purpose

The purpose for designating approximately 61,000 acres as an ACEC is to identify the area as crucial nesting habitat for Long-billed Curlew (*Numenius americanus*), a federally protected migratory species. The main management objective will be to maintain nesting habitat for the 1,000 curlew pairs that nest and raise their young in the area.

Site Description

The area is a low, rolling upland lying between the Boise, Payette and Snake River valleys. The area is characterized by choppy rolling topography which supports a semi-desert type vegetative community. Average rainfall is approximately 11 inches per year with most of the moisture falling from November to June.

The native habitat has been highly modified over the years. Historically, the area was a sagebrush/bunchgrass vegetation community. Livestock grazing, frequent wildfire and the invasion of exotic annual grasses have largely eliminated the shrubs and reduced perennial grasses.

In general, there are four cover types: 1) annual rangeland, 2) sagebrush, 3) crested wheatgrass, and 4) irrigated agriculture. The annual rangeland type is the key habitat for nesting curlews.

Resource Values

There are eight livestock operators that utilize the rangelands in the area. They graze both cattle and sheep on approximately 80,000 acres of state, private, and public lands. Grazing periods occur throughout the year with some operators grazing at various seasons of the year.

Recreation use on the area is divided into four areas. The area east of Little Freezeout is used by horse enthusiasts. In the past, some endurance rides have been held in this area. The area is also used by upland bird hunters in the fall. Limited ORV use also takes place. The area from Little Freezeout west to Sand Hollow is used by ORV enthusiasts. The Dewey ORV Park is located in this area. There is also some use by equestrians and upland bird hunters in the fall. The area west of Sand Hollow is heavily used by upland game hunters. There has also been some dog trials held in this area. Equestrians use the area while ORV use is heavy in the southwest corner of the area and a motorcross track is located in the northwest corner of the area. The areas north of the Black Canyon and west of the Sand Hollow freeway exits have dense populations of ground squirrels and are used by squirrel hunters in the spring.

Cause for Concern

Each year, Long-billed Curlew migrate into the area arriving about the third week in March. This large shore bird nests and raises its young in the annual grass habitat. The area supports about 1,000-nesting pairs, the largest nesting population in the western United States. Research on the population and habitat relationships was conducted in this area from 1977 to 1979. This research provided the base line information to manage this significant population.

A substantial decline in population and distribution of this species in the United States prompted its classification as a "Sensitive Species," by the BLM and a "Candidate Species" by the U.S. Fish and Wildlife Service. The Idaho Department of Fish and Game has designated this bird as a "Species of Special Concern." These classifications are an "early warning" that a species may be in trouble and if declines continue that official listing with maximum protection under the Endangered Species Act may be necessary. A habitat management plan was developed to assist in the conservation of crucial curlew habitat.

Management Guidelines

Resource Use Limitations

1. Motor vehicle use will be limited to designated roads and trails.

2. Seasonal occupancy stipulations will apply on all oil and gas and geothermal leases.

3. Rights-of-way construction activities for transmission lines, pipelines and other major projects will not be allowed during the nesting and brood-rearing periods.

4. Road construction will be limited and evaluated on a site specific basis.

5. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

1. Maintain sufficient good curlew habitat to support 1,000 nesting pairs during the breeding season.

2. Pursue the acquisition of key habitat of state and private lands through land exchange.

3. Enforce the ORV use limitations during the curlew nesting and brood-rearing periods.

4. Encourage intensive grazing systems that would improve curlew habitat in areas where vegetation is too high and too dense.

5. Use controlled burns as a management tool to maintain and improve curlew habitat.

6. Give curlew habitat priority consideration in all range improvement projects.

7. Encourage domestic sheep use on the area.

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 (SOP), policies, and management guidelines which will be applicable regardless of which alternative plan (A, B, C, D, or E) is selected for implementation.

Public Land Management

The public lands will be planned and managed under the principles of multiple use and sustained yield as required by FLPMA and other principles as outlined in BLM planning regulations. 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 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.

Although the following guidelines and procedures are the major tools to be used to minimize adverse impacts on public land and water resources, their

applications do not automatically equate to standards compliance (i.e., water quality standards, etc.). These guidelines are designed to ensure that beneficial uses are protected. The beneficial uses and the guidelines and procedures will be monitored so that if environmental degradation (impacts beyond what is expected as a result of decisions) occurs, revisions to SOPs will be made, adjustments to decisions will be made, or additional mitigating measures will be incorporated to reduce or eliminate these impacts to an acceptable level.

Lands

General

The public lands to be retained in Federal ownership will be managed by BLM according to the principles of multiple use and sustained yield. Those lands specifically identified in the plan as transfer areas will be managed on a custodial basis until transferred.

Public lands that are to be retained in federal ownership may be considered for Recreation and Public Purposes needs, private exchanges and state exchanges. Such action will follow amendment procedures as outlined in BLM Manual 1617.4.

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 land or "property" such as buildings)?

The environmental assessment or planning process will be followed to consider alternative methods such as rights-of-way or cooperative agreements for meeting the withdrawal/classification objectives.

Withdrawal modifications and extensions must provide for maximum possible multiple uses, with particular emphasis upon mineral exploration and development. When withdrawals are revoked, the lands continue to be in a retention category.

New withdrawals proposed will be handled on a case by case basis in accordance with Section 204 of the FLPMA, with full public participation.

Acquisitions

Lands to be acquired through exchange or purchase will be done in the furtherance of one or more of the resource programs including, but not limited to cultural, paleontologic, recreation, wildlife and soils.

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.

Lands may be acquired by BLM as authorized by law, but only within retention areas. Objectives for acquiring lands in connection with BLM programs are 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 Recreation and Public Purpose (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 as required by NEPA. 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. Pre-Classification

   An economic analysis must show a high likelihood that the lands can be farmed at a profit over a long term.

3. Classification

   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. If there is 60% or more SCS Classes I, II, or III 1/ soils in a 40-acre 2/ parcel, the parcel may be classified suitable for agricultural development. If there is more than 40% SCS Class IV or poorer soils in each 40-acre parcel, the entire parcel is unsuitable for classification.

b. Cropland in Capability Classes II through V (particularly subclass "e") that has an average annual erosion rate of more than three times that at which soil forms (4-5 tons per acre per year on the average for deep soils, lower for shallower soils) will be found unsuitable.

c. Any public lands containing known archaeological, paleontologic, or historical values determined to be unique or possibly significant will be found unsuitable for disposal pending further analysis.

d. Any public lands where rare, endangered, threatened, or sensitive species of plants or animals are known to live (or nest) will be found unsuitable for disposal, unless mitigation is possible.

e. Certain tracts of land identified for community needs such as landfills, gravel pits, sewage plants, schools, etc., will be found unsuitable for disposal for agriculture.

f. Certain tracts of land identified as valuable for wildlife habitat will be found unsuitable for disposal. The guidelines and analysis contained in the Environmental Statement (Agricultural Development for Southwest Idaho, February, 1980, Appendix 1-1), will be used to select the wildlife leave areas.

g. Public land that does not qualify for agricultural use or disposal under Desert Land Act or Carey Act because of other public purpose will be found unsuitable for disposal under these laws.

h. Certain tracts of land identified as having agricultural limitations based on slope and/or flood plain management will be found unsuitable.

1/ A minimum of 50 frost-free days (growing season) will be acceptable as the criteria for SCS Capability Class III soils when small grains and alfalfa is the typical cash crop grown in the area. All other criteria for Class III soils as defined by the SCS in Idaho will apply.

2/ Although land can be legally described in very small increments, the Department of Interior has long followed the practice of requiring disposals of the public lands to conform to the smallest regular legal subdivision (40 acres) or lot and of treating minor subdivisions as indivisible for administrative purposes. The authority of the Department to impose such a restriction by regulation has been upheld by the courts.

4. Post Classification (Allowance or Rejection)

   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.

5. Compliance

   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.

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

Public lands currently under DLE applications in this RMP disposal category that are relinquished or rejected will not be made available for further application for agricultural purposes but may be considered for sale or exchange.

Exchanges - Before an exchange can be consummated, the BLM must determine that the public interest will be well served by making the exchange as contemplated by Section 206 of FLPMA. 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% 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 may be considered for other forms of transfer. The general criteria for exchange disposal is as follows:

1. Exchanges will not be considered that would isolate any public lands.

2. Exchanges will not be considered that would dispose of significant cultural, paleontologic or recreation resources.

3. Exchanges will be considered only if they maintain the natural function of the floodplain.

Sales - Sales of public lands can be made upon consideration of the following criteria found in Section 203 of FLPMA:

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, cultural, paleontologic, 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 (a BLM appraisal).

Land Use Authorizations

Land use permits under Section 302 of FLPMA may be used after trespass settlement 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.

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 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 Cascade Resource Area except where specifically identified in the RMP for avoidance. Future locations for ROWs will be enouraged within or adjacent to existing ROWs 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.

Access

The Boise District will continue its ongoing program of identifying and obtaining BLM access across non-bureau lands where needed to accomplish bureau objectives.

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 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.

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 on 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. Areas disturbed during project construction will be reseeded with a mixture of grasses, forbs, and shrubs when necessary.

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 actions within floodplains and wetlands will include measures to preserve, protect, or restore their natural functions of water storage, groundwater recharge, fish and wildlife values, and water quality.

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

Mitigation measures implemented because of Resource Management Guidelines 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 E). The "M" allotments generally will be managed to maintain resource conditions (improvements may be done); "I" allotments generally will be managed to improve resource conditions; and "C" allotments will receive custodial management to prevent resource deterioration (improvements generally will not be made).

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 a grazing preference will be 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 will be made for those allotments where adequate information exists. In the other allotments where there is inadequate information, additional data will be collected 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, Allotment Management Plans or Coordinated Resource Management Plans (AMPs or CRMPs) are commonly used to present, in detail, the types of changes required in an allotment, and to establish a schedule for implementation. Actions set forth under the plan that affect the environment will be analyzed and compared to alternative actions. During the analysis, the proposal may be altered 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.

Existing AMPs will be reviewed in one year to determine if they need updating or revision. Those AMPs determined to be satisfactory as written will continue to be implemented and managed as written and reviewed again in 5 years. Those AMPs needing updating (minor changes) will be updated within 1 year of review. Those AMPs requiring revision will have new AMPs prepared within 3 years of review.

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 E and F) are guidelines to be used for the development of AMPs and CRMPs, and for monitoring prioritization. Adjustments, up or down, from these estimates may be made as a result of monitoring.

Initial stocking rates will be based on the five year average for each allotment. Those allotments with significant areas of poor condition range directly attributable to grazing will receive priority for monitoring programs. If sufficient data is available to determine that grazing levels are too high, adjustments will be made during the third and fifth years of a five year monitoring program. Allotments currently under an allotment management plan or a coordinated resource management plan will be stocked at the five year average and monitored to insure that stocking levels are consistent with other resource capabilities and needs. In those allotments where substantial nonuse has occurred in the past, and the five year average is lower than the preference, the indicated stocking level will be based on the 5-year average plus any forage increases through improvements in range condition and/or seedings.

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 are shown by allotment 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. Existing fences in big game habitat and not meeting current design standards, will be modified to allow big game passage.

Interseeding and reseeding projects with objectives to improve range condition to benefit wildlife or wildlife and livestock will use shrub, forb and grass seed mixtures that are normally found in that ecological zone.

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.

Grazing Systems

There are existing grazing systems on seven 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;
- resource characteristics including vegetation potential and water availability;
- operator needs; and
- implementation costs.
- resource values including wildlife, riparian and aquatic habitat, soils, etc.

Grazing systems available for consideration include rest rotation, deferred grazing, deferred rotation, and alternate grazing.

Wild Horses

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 by adjusting livestock AUMs. 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 is issued.

Threatened, Endangered, Candidate and Sensitive Plants

There are three sensitive and three candidate (for threatened or endangered listing status) plants in the CRA currently listed. Projects proposed in areas with known sensitive plants will include mitigating measures to protect the plants. If necessary, adjustments to grazing (numbers, rotations, season-of-use or other management techniques) will be used to protect plants.

Wildlife Resources

Priority for habitat improvement or maintenance will be given to Threatened, Endangered and Sensitive species. In accordance with the Endangered Species Act, the U.S. Fish and Wildlife Service will be consulted with on any action that may affect a federally listed, proposed or candidate species. Proposed actions which may adversely affect sensitive species will be modified to avoid adverse impacts or will provide mitigation for unavoidable adverse impacts.

Habitat to support viable populations of all native and desirable exotic wildlife species present in the resource area will be maintained.

The BLM is responsible for managing wildlife habitat on public lands. The Idaho Department of Fish and Game (IDF&G) is responsible for managing wildlife populations. Consequently, the BLM will continue to coordinate its activities and actions with the IDF&G. The IDF&G will be given the opportunity to review and comment on any proposed land disposal or vegetation manipulation (logging, prescribed burn, spray, plow, chain, etc.) at least one full year in advance of the planned action. Habitat Management Plans (HMP's) and cooperative agreements with the IDF&G as authorized by the Sikes Act will be the primary vehicles to implement major fish and wildlife management programs on public lands.

ORV recreation activity may be limited in crucial wildlife habitat. Closures to ORV activity will be implemented if the BLM or the Idaho Department of Fish and Game determines harassment to wildlife is occurring.

In crucial wildlife habitats (winter ranges, raptor nest sites, strutting grounds, fawning habitat, etc.), major construction and maintenance work will be scheduled to avoid or minimize disturbance to wildlife. The area and time stipulations are shown in Table 1. Occupancy for oil and gas activities will also be restricted in crucial wildlife habitats as shown in Table 1.

Table 1
Wildlife Habitat Occupancy Restrictions
(for Oil, Gas and Geophysical Exploration and Development
and all major construction -see also Map 9)

Species	No Occupancy Time Periods	Area
Game Species		
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
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 miles radius from lek
Sensitive Species		
Riparian Associated (River Otter, Mountain Quail)	Year Long	Within 500 ft. of riparian
Red-Band Trout/White Sturgeon	Year Long	Within 500 ft. of stream
Long-billed Curlew Nesting Areas	3/15 - 6/30	
Ferruginous Hawk and Swainson Hawk Nests	3/15 - 6/30	3/4 mile radius from nest
Osprey Nests	4/15 - 8/31	3/4 mile radius from nest
Western Burrowing Owl Nests	3/15 - 6/30	1/4 mile radius from nest
Endangered Species		
Bald Eagle/Peregrine		
Winter	12/1 - 3/31	
Nesting	Year Long	Within 1 mile of of nest
Species of Concern		
Golden Eagle Nest	2/1 - 6/30	Within 3/4 mile of nest
Prairie Falcon Nest	3/15 - 6/30	Within 3/4 mile of nest
Heron Rookeries	Year Long	Within 1/2 mile of rookery
Special Habitats		
Reservoirs, ponds, lakes, streams, wetlands, riparian	Year Long	Within 500 ft.

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 & Game, Bureau of Land Management, U.S. Forest Service).

Suppression of wildfire in crucial wildlife habitats will have a high priority. Fire rehabilitation seedings in crucial wildlife habitats will be multispecies, incorporating species to restore wildlife habitat values.

Prescribed burning will be designed to improve or at least not damage wildlife habitat.

Range management practices and developments will be designed or modified to maintain or improve crucial wildlife habitats. Livestock grazing management will incorporate the needs of key plant species important to wildlife.

All new rangeland fences will be built to allow for wildlife passage in accordance with district fence standards for deer and pronghorn antelope. Any existing fences obstructing wildlife movements will be brought into conformance with the adopted standards.

Wildlife escape devices will be installed on any water tanks or troughs that present a hazard to wildlife.

The construction of new roads into crucial wildlife habitats will be avoided. Permanent or seasonal road closures may be instituted where problems exist or are expected.

Areas disturbed during construction activities will be rehabilitated. Seedings will incorporate a mixture of plants adaptable to the site and beneficial to wildlife.

Elk

The "Elk-Timber Relationship of West Central Idaho" will be used to guide evaluation for proposed logging activities in elk habitat.

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

Mule Deer Habitat

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

Pronghorn Antelope

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

- Grazing systems designed with the concept of key plant species, preferred pronghorn forage species for forbs and shrubs will be included as key species.

- Vegetative manipulation projects will include mixtures of grasses, forbs and shrubs.

Sage Grouse

Where applicable, "Guidelines for Habitat Protection in Sage Grouse Range" and "Sage Grouse Management Practices" (Technical Bulletin No. 1) - Western States Sage Grouse Committee, June 1974, and 1982 respectively, will be followed. Also, "Habitat Requirements and Management Recommendations for Sage Grouse" Technical Note (USDI, BLM 1974) will be followed where applicable. These include:

- No sagebrush control work would be allowed on sage grouse nesting and wintering habitat 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, with 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.

- No control of sagebrush would be considered in any area known to have supported important wintering populations of sage grouse in the past 10 years.

- Seed mixtures for range improvement projects and fire rehabilitation projects will include a mixture of grasses, forbs and shrubs that benefit sage grouse.

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

Birds of Prey

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

Riparian and Aquatic Habitat

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

Provide a minimum 100 foot riparian buffer zone from the edge of any riparian habitat to protect riparian vegetation, fisheries, and water quality. Utilize this zone for the general exclusion of the following activities:

- New road construction that parallels streams - use best management practices when construction cannot be avoided,
- Timber harvest activities,
- Spraying of herbicides and pesticides, and
- Gravel extraction.

Utilize a 500 foot buffer zone from the edge of any riparian habitat, for the total exclusion of the following activities:

- Oil and gas occupancy of an exploration or development, and
- Introduction of chemical toxicants or sediments as a result of construction, agriculture, or mining (tailing deposits, holding ponds, etc.).

Suppression of wildfire in riparian habitats will have a high priority. Riparian areas burned will be rehabilitated through protection and, if necessary, seeded or planted.

Maintain State recommended instream flows for the maintenance and preservation of aquatic and riparian ecosystems. In all cases, allow no proposals that include dewatering of the streambed.

Grazing management practices will be designed and established to meet fisheries, riparian, and water quality needs in the development of new allotment management plans and in the revision of exiting allotment management plans. In those instances where management systems alone cannot meet objectives, provisions for fencing or other means of exclusion will be utilized. Allow no livestock related activities such as salting, 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.

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

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).

In those areas where fishery/riparian values are identified as high priority habitats such as perennial/intermittent streams with high potential, habitats with game species or "species of special concern," areas of high public visibility, unique or previous undisturbed habitats, and those habitats with high manageability potential, all other management practices will be designed to maintain the integrity of or improve those habitats.

Fire Management

Bureau Policy

The present Bureau policy is to aggressively suppress all new fires on or threatening public lands. Whenever multiple fires ignite simultaneously, priorities will be 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. 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 to reduce fire hazards. 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. When burning conditions and terrain are such that direct attack is not feasible, the suppression strategy is to burn out from existing natural barriers to establish control points.

Surface disturbing equipment, such as bulldozers, are utilized only when necessary and with management approval. First priority is clearing of existing roads and second priority is construction of new control lines. Surface disturbance will be limited to the absolute minimum in riparian areas.

On areas containing cultural values (designated or suspected sites), identified threatened or sensitive areas, or identified paleontologic sites, no mechanical surface disturbing equipment will be used.

Surface disturbing equipment will be allowed in Wilderness Study Areas only when necessary to prevent loss of human life or property within WSAs or to prevent the spread of fire to areas outside of WSAs where life or property may be threatened. All fire suppression activities will use caution to avoid unnecessary impairment of wilderness suitability values. Fire lines constructed in WSAs will be recontoured, reseeded with appropriate species, and waterbarred if necessary as soon as practicable. Natural firebreaks will be used whenever possible.

Full suppression will be used with sufficient force necessary to contain the fire during the first burning period. In the event multiple fires occur, the suppression priority identified below will be used and revised as needed. Suppression priority in the Cascade Resource Area curently is as follows:

1. Boise Front Watershed
2. Commercial timber
3. Crucial wildlife habitat
4. Developed recreation facilities and/or cultural areas
5. Payette River Corridor (South Fork)
6. Four-Mile Wild Horse habitat
7. Riparian habitat

Required actions for suppression are as follows:

- Continue present coordination and exchange of protection with adjacent National Forests and the Southern Idaho Timber Protective Association.

- Pursue an agressive prevention program to reduce the number of human-caused fires.

- Evaluate burned area for emergency rehabilitation and implement if feasible.

- Continue to work with fire management techniques for fire suppression, and in fire hazards, greenstripping, and fuels manipulations, including prescribed fire.

Wildfires which occur in areas identified for prescribed fire and meet predetermined prescriptions will be allowed to burn as a prescribed fire.

Rehabilitation, Greenstripping and Reduction Actions/Procedures

Public lands and resources affected by wildfires will be rehabilitated. The multiple use objectives identified in this land use plan will be evaluated for potential accomplishment through fire rehabilitation and greenstripping efforts. Fire rehabilitation and greenstripping efforts will incorporate, to the extent practicable, provisions to help accomplish those objectives as conditions allow. The following actions and procedurese will be applied:

1. Those areas having a high frequency of fires and/or having a high potential for fires, or having re-burns with annual grasses (mostly cheatgrass and medusahead wildrye) will utilize irregular buffer strips along roads and other important areas. These buffer strips will contain seed mixtures that are fire resistant and help meet watershed protection, wildlife and riparian objectives. These buffer strips or greenstripping will receive first priority for seeding prior to seeding the rest of the burned area.

2. Prescribed burns (proposed) may be reduced, postponed or cancelled in areas where they, in combination with recent burns, would cause significant cumulative impacts to wildlife or watershed conditions.

3. All grazing licenses issued that include areas recently burned and/or seeded will include a statement concerning the amount of rest needed in the seedings or burn area. Normally two years of rest will be necessary to enable recovery of these areas.

4. A Fire Fuels Break Plan will be developed as part of a fire activity plan after approval of the RMP.

5. The 8100 fund may be used to implement the Fire Fuels Break Plan where range, wildlife or watershed objectives are also met.

6. Seedings will include appropriate seed mixtures to replace wildlife habitat that is burned.

Cultural Resources

The Bureau of Land Management is required to identify, evaluate, protect and wisely manage cultural resources on public lands under its jurisdiction and to ensure that Bureau-initiated or Bureau-authorized actions do not inadvertently harm or destroy nonfederal 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. If properties that may be eligible for the National Register of Historic Places 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 (eligible for National Register), and/or the above mentioned methods are not considered adequate, the project may be abandoned.

ORV use will be limited to designated or existing roads and trails at all cultural sites.

All cultural sites known to be eligible for National Register nomination, or listed on the National Register will be protected from deterioration and from adverse impacts which may result from transfer from federal ownership.

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, ecological 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 (Gold, Silver, Lead, etc.)

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 Interior.

Saleable Minerals (Sand and Gravel)

Mineral material sales are discretionary actions. 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. Sale approval will be subject to environmental analysis and may include stipulations to protect other resources.

Leaseable Minerals (Oil and Gas)

Energy and mineral leasing are discretionary actions. Approval of an application for lease 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.

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 (APD) and Notice of Staking (NOS) - Follow operating order #1 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.

Leaseable Mineral (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 for the public.

Wilderness (Box Creek WSA)

Preliminary Recommendations to Congress (Section 202 of FLPMA)

Only Congress can designate an area as wilderness. BLM recommends areas suitable 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 wilderness study areas in accordance with the Interim Wilderness Management Policy (IMP).

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.

Proposed Resource Management Plan

Areas Not Designated Wilderness

Areas determined to be nonsuitable for wilderness designation will be managed for other purposes. The tentative management scheme developed during the planning process will be given final consideration following release of the Box Creek WSA from further wilderness consideration.

Recreation

Recreation Management

BLM will manage recreation on the public lands. A variety of means to maintain or improve recreation opportunities will be considered including obtaining access through easements and acquisitions to quality resources on BLM lands. 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. Recreation facilities are provided to meet existing or anticipated demand, for public safety and to protect recreation resources.

Potential National Wild and Scenic Rivers

Federal land management agencies are responsible for evaluating certain rivers to determine suitability for inclusion in the National Wild and Scenic Rivers System. For those rivers determined to be suitable, the agencies will provide protection by preparing recommendations to have rivers studied and by taking immediate action to protect them. Prior to the time suitability recommendations have been acted upon by Congress, the rivers will be treated as though they were components of the National Wild and Scenic Rivers System. Public lands along the Payette River (North and South Forks) 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.

This will include allowing vertebrate paleontologic specimen collecting through a permit procedure and reviewing all EA's and CER's to determine if actions impact paleontologic resources. A bibliographic research will be made to help in determining the importance of the various paleontologic sites within the resource area.

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 BLM 8400. VRM Classes will be managed as shown on Map 3-8.

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. Harvesting methods utilizing clearcutting will be limited to a size of 40 acres or less and will be blended into the surrounding landscape.

Management guidelines for wildlife will be as follows:

No timber harvest access will be allowed prior to July 1 in elk calving areas.

All roads will be rehabilitated by outsloping, waterbarring, or seeding.

Roads will be closed in crucial wildlife areas.

Undergrowth will be left as intact as possible.

Stringers of trees of sufficient size and thickness to be used as sight barriers between cutting areas will be determined on a site specific basis.

The need to eliminate livestock grazing on cut areas for up to 3 years to allow shrub enhancement will be determined on a site specific basis.

Adequate hiding and thermal cover along major roads will be provided.

Maintain snag trees in timbered areas to the greatest extent practical to provide habitat for cavity nesting birds and other snag dependent species.

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 irrepairable 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 conjunction 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 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.

Noxious weed control will be conducted in accordance with integrated weed management guidelines and design features identified in the Northwest Area Noxious Weed Control Program Final Environmental Impact Statement of December, 1985. The Idaho State Director issued a Record of Decision on April 7, 1986 for this program.

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 for 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 (special recreation area management plans), wildlife (habitat management plans), and cultural resources (cultural resource management 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. Site-specific analysis will allow some projects to be considered under provisions of the categorical exclusion review process and others to be considered under the environmental assessment process. Environmental impact statements will be prepared on those actions which may significantly affect the quality of the human environment.

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 in the plan. Maintenance shall not result in expansion in the scope of resource uses or restrictions, or change the terms, conditions, or 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 assessment of the proposed change, or 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, granting of a right-of-way for a highway/transportation route, change in management objectives for an area or resource, or changes in special designations. 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 multiple use 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 may be needed to locate public land boundaries and appraisal reports would be needed to estimate value of lands offered for sale and exchange. 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.

Soil, Water, 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).

Livestock and Wild Horse Management

Engineering and fire management support would be needed for project layout, design, and implementation. Coordination with BLM wild horse distribution centers would be necessary prior to roundup.

Wildlife (Terrestrial and Aquatic)

Fire management support would be required to protect crucial habitats and to control prescribed burning projects. Idaho Department of Fish and Game coordination would be needed for all prescribed burn projects. Engineering and operations support for gap fencing, aquatic habitat structures and riparian area improvement projects would also be needed.

Fire Management

Support from Boise Interagency Fire Center and other fire fighting units for presuppression and suppression planning and equipment may be required.

Minerals (Energy and Nonenergy)

Cadastral services to locate public land boundaries and cultural and historical clearances 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, 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 consultation with affected state and local governments will continue prior to final disposal decisions.

The concept of identifying sensitive areas to be avoided has received support from state and local governments and some 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. Existing ROW locations and approved utility ROW routes identified in previous environmental impact statements still remain available for ROW developments.

Soil, Water, and Air

Action by BLM for protection of high 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.

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 are consistent with the overall objectives of the SCORP and the Idaho State Water Plan (Payette River protection). ORV actions appear to be consistent with existing state and local government plans and ordinances.

Special Designations

The protection of resources with significant recreation, wildlife, cultural, historical, and paleontologic values is 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, environmental assessments and required clearances for cultural and paleontologic resources will be prepared for all proposals. Those proposals identified to be in the public interest and that have minimal or no significant adverse impacts on other public resource values may be approved.

Areas identified as sensitive (selected wildlife habitats or riparian habitat zones, threatened or sensitive plant sites, sites having unique or special recreation, scenic beauty, cultural or paleontologic values) 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 will be prepared for all projects.

Soil, Water, and Air

Site specific projects will be reviewed for compliance with existing laws, rules, and regulations. Particular attention will be given to project design in areas of high erosion hazard potential. A water quality monitoring plan will be developed (See Appendix P).

Livestock and Wild Horse Management

Rangeland Program Summaries (RPS) will be issued and show summarized grazing levels and allotment categories. Site specific grazing use adjustments will be described in the RPSs developed. Allotment management plans will be developed on specific allotments, and will include benefit/cost analysis and environmental assessments of specific facilities and management actions. A monitoring plan will be developed (See Appendix P) and implemented. The wild horse herd and its habitat will be monitored and "round ups" will be scheduled at intervals that ensure maintenance of objective numbers and habitat quality.

Wildlife (Terrestrial and Aquatic)

Crucial habitats (big game winter ranges) will be monitored to ensure maximum opportunity for survival of local wildlife populations. ACEC designation and provisions will be applied to long-billed curlew and Columbian sharp-tailed grouse habitat. Project development will be programmed.

Fire Management

District fire crews will be used for initial suppression efforts. Additional fire fighters and support services of BIFC or other individuals could be called in to help suppress large uncontrolled fires. A fire management plan will be developed for the resource area.

Minerals (Energy and Nonenergy)

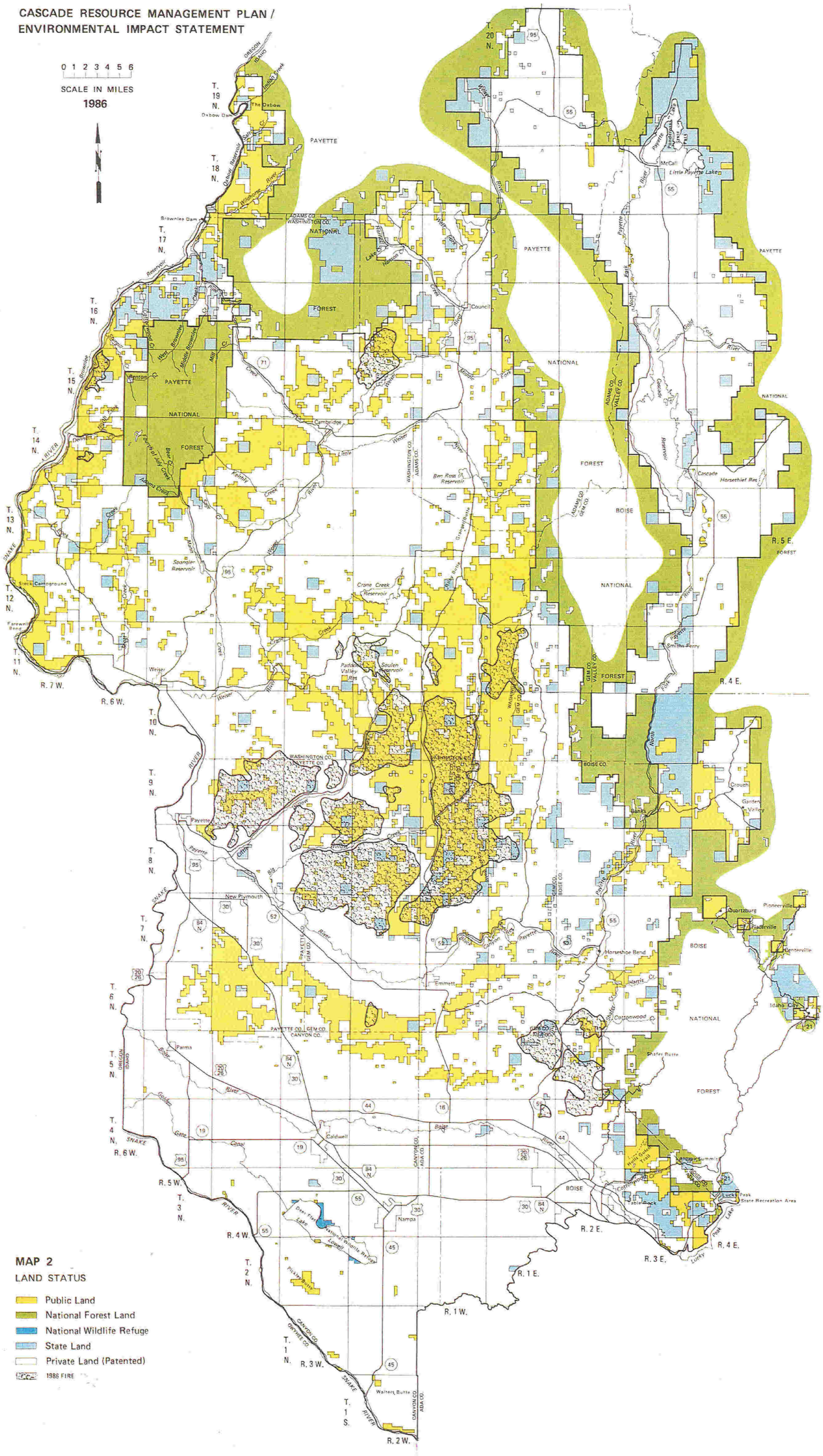
Procedures outlined in current laws and regulations (federal and state) will be applied to all applications. Mineral reports and environmental assessments will be prepared and appropriate clearances obtained. Standard and special stipulations will be followed.

Recreation

Projects identified through the RAMPs will be consistent with ROS (Appendix L) management objectives. Individual site plans will be prepared for new facility developments. An ORV plan and maps covering the resource area will be prepared showing areas closed or with limitations.

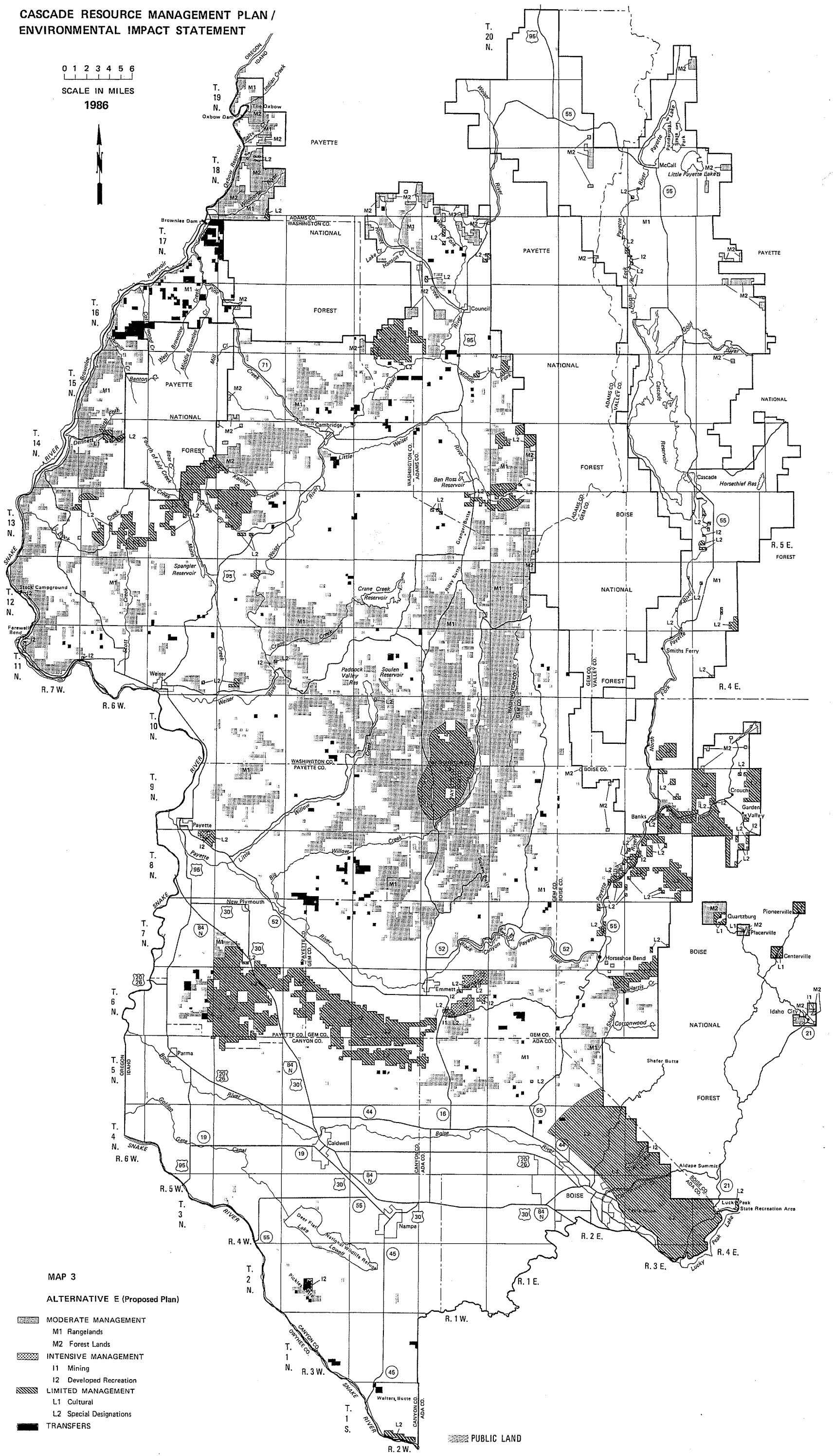
Special Designations

Department of the Interior approval for administrative actions will be sought for National Register of Historic Places designation. Congressional action for Wild and Scenic Rivers study will be sought by the Secretary of the Interior.

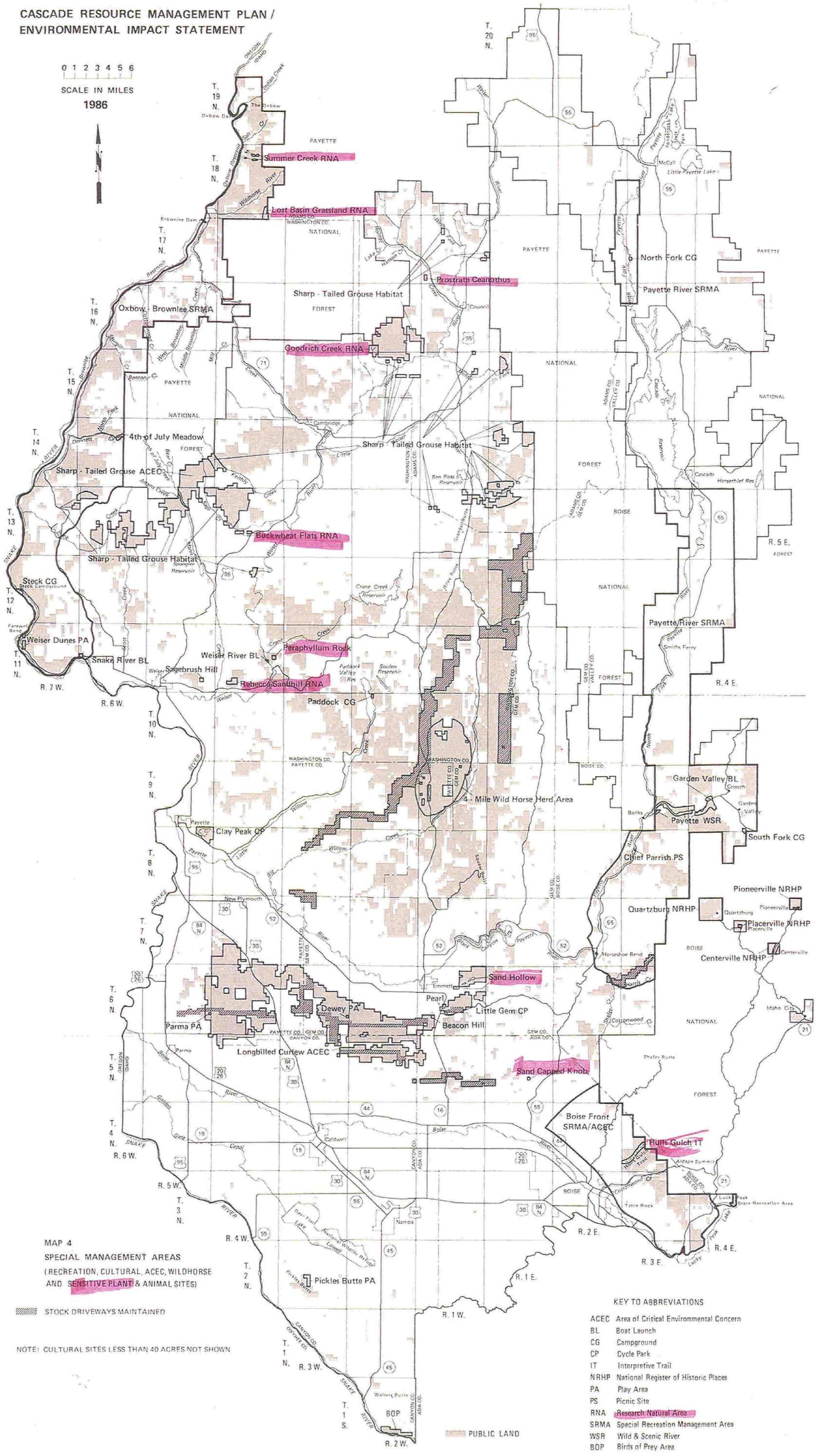


MAP 2
LAND STATUS

- Public Land
- National Forest Land
- National Wildlife Refuge
- State Land
- Private Land (Patented)
- 1986 FIRE


0 1 2 3 4 5 6
SCALE IN MILES
1986
N
T. 20 N.
T. 19 N.
T. 18 N.
T. 17 N.
T. 16 N.
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
T. 11 N.
T. 10 N.
T. 9 N.
T. 8 N.
T. 7 N.
T. 6 N.
T. 5 N.
T. 4 N.
T. 3 N.
T. 2 N.
T. 1 N.
T. 1 S.
R. 7 W.
R. 6 W.
R. 5 W.
R. 4 W.
R. 3 W.
R. 2 W.
R. 1 W.
R. 1 E.
R. 2 E.
R. 3 E.
R. 4 E.
R. 5 E.
OREGON
IDAHO
Oxbow Dam
The Oxbow
Brownlee Dam
Oxbow Reservoir
Brownlee Reservoir
Hells Canyon Dam
Hells Canyon Reservoir
Payette Lake
McCall
Little Payette Lakes
Council
Cambridge
Dennett
Ben Ross Reservoir
Cascade
Horsethief Res
Spangler Reservoir
Crane Creek Reservoir
Paddock Valley Res
Soulen Reservoir
Smiths Ferry
Weiser
Payette
New Plymouth
Emmett
Horseshoe Bend
Parma
Caldwell
Nampa
Deer Flat National Wildlife Refuge
Lake Lowell
Pickles Butte
Walters Butte
Shafer Butte
Aldape Summit
Lucky Peak State Recreation Area
Lucky Peak Lake
Boise
Garden Valley
Crouch
Banks
Quartzburg
Placerville
Pioneerville
Centerville
Idaho City
PAYETTE
NATIONAL
FOREST
BOISE
PUBLIC LAND
ADAMS CO.
WASHINGTON CO.
PAYETTE CO.
GEM CO.
VALLEY CO.
BOISE CO.
CANYON CO.
ADA CO.
OWYHEE CO.
SNAKE RIVER
MAP 3
ALTERNATIVE E (Proposed Plan)
MODERATE MANAGEMENT
M1 Rangelands
M2 Forest Lands
INTENSIVE MANAGEMENT
I1 Mining
I2 Developed Recreation
LIMITED MANAGEMENT
L1 Cultural
L2 Special Designations
TRANSFERS

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



MAP 4

SPECIAL MANAGEMENT AREAS

(RECREATION, CULTURAL, ACEC, WILDHORSE AND SENSITIVE PLANT & ANIMAL SITES)

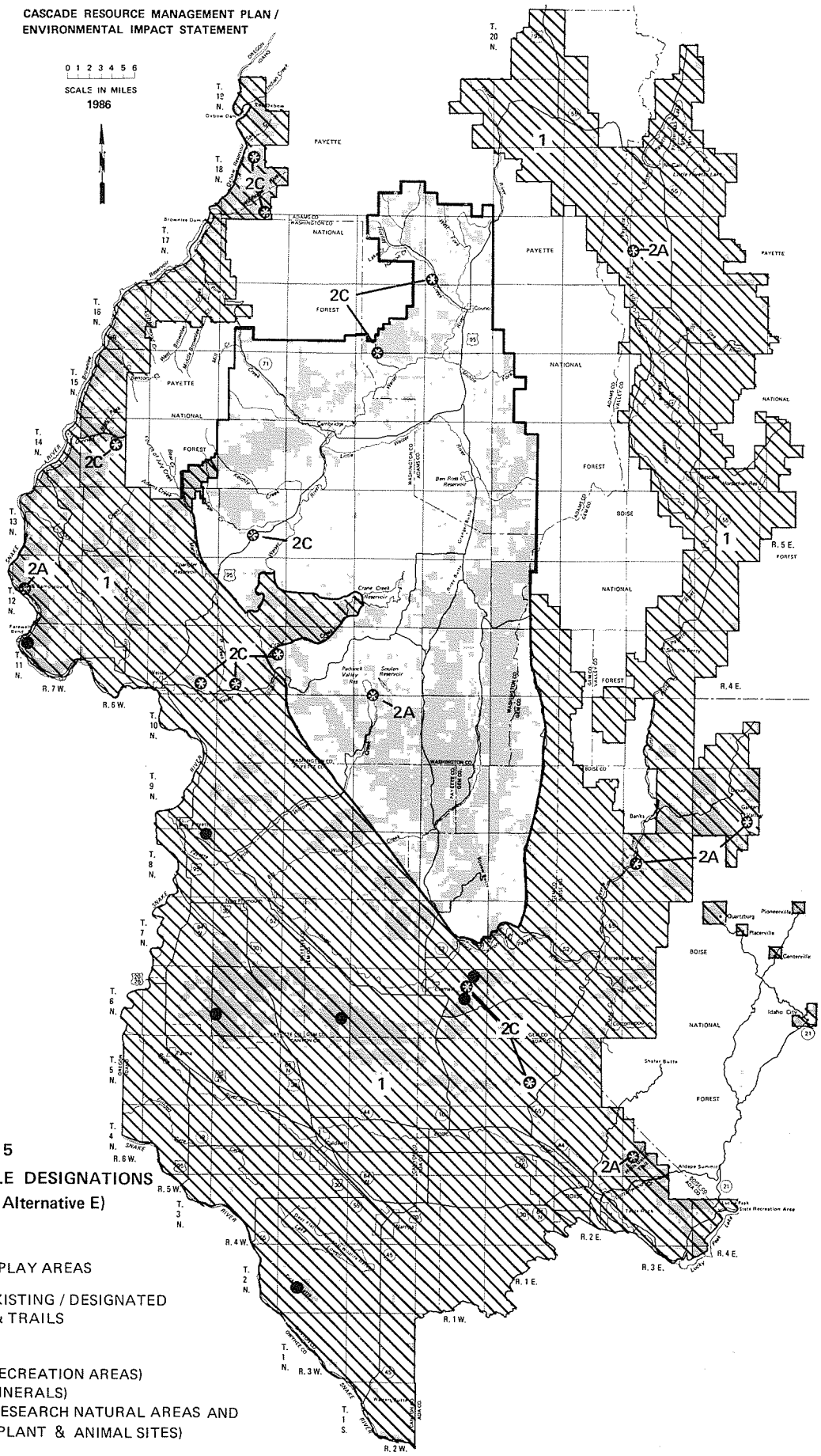
STOCK DRIVEWAYS MAINTAINED

NOTE: CULTURAL SITES LESS THAN 40 ACRES NOT SHOWN

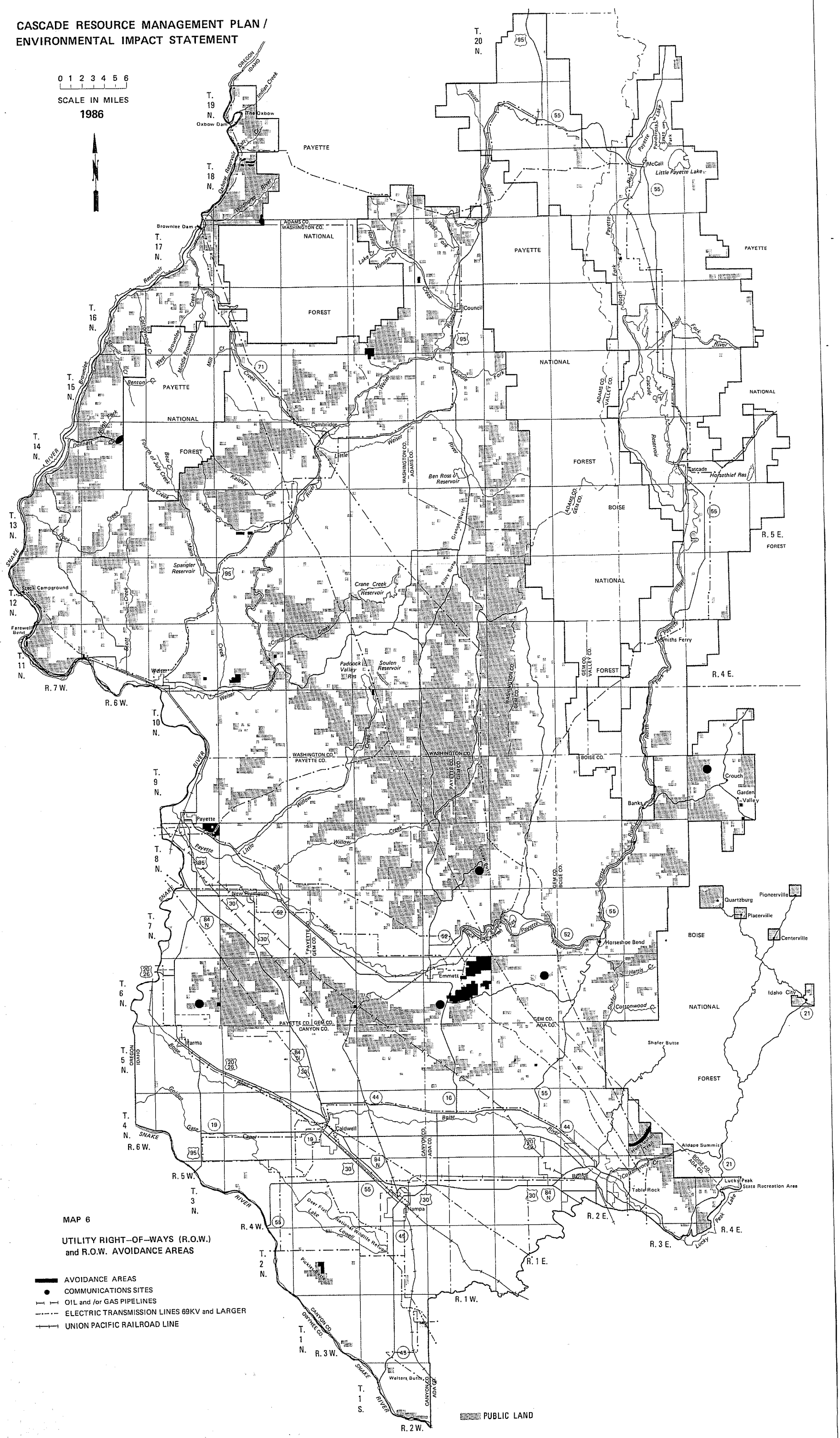
KEY TO ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
BL	Boat Launch
CG	Campground
CP	Cycle Park
IT	Interpretive Trail
NRHP	National Register of Historic Places
PA	Play Area
PS	Picnic Site
RNA	Research Natural Area
SRMA	Special Recreation Management Area
WSR	Wild & Scenic River
BOP	Birds of Prey Area

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



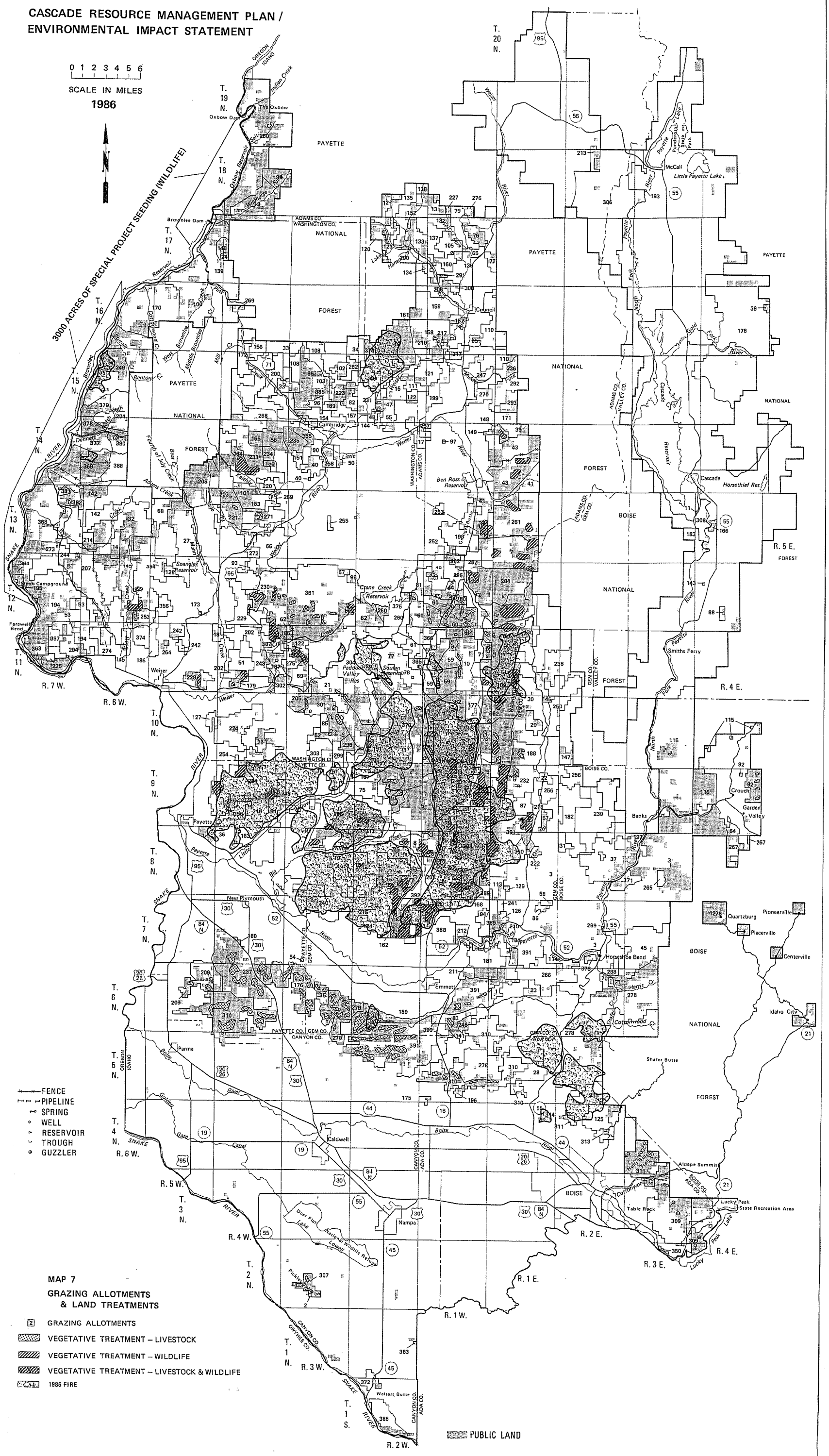
CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



MAP 6

UTILITY RIGHT-OF-WAYS (R.O.W.) and R.O.W. AVOIDANCE AREAS

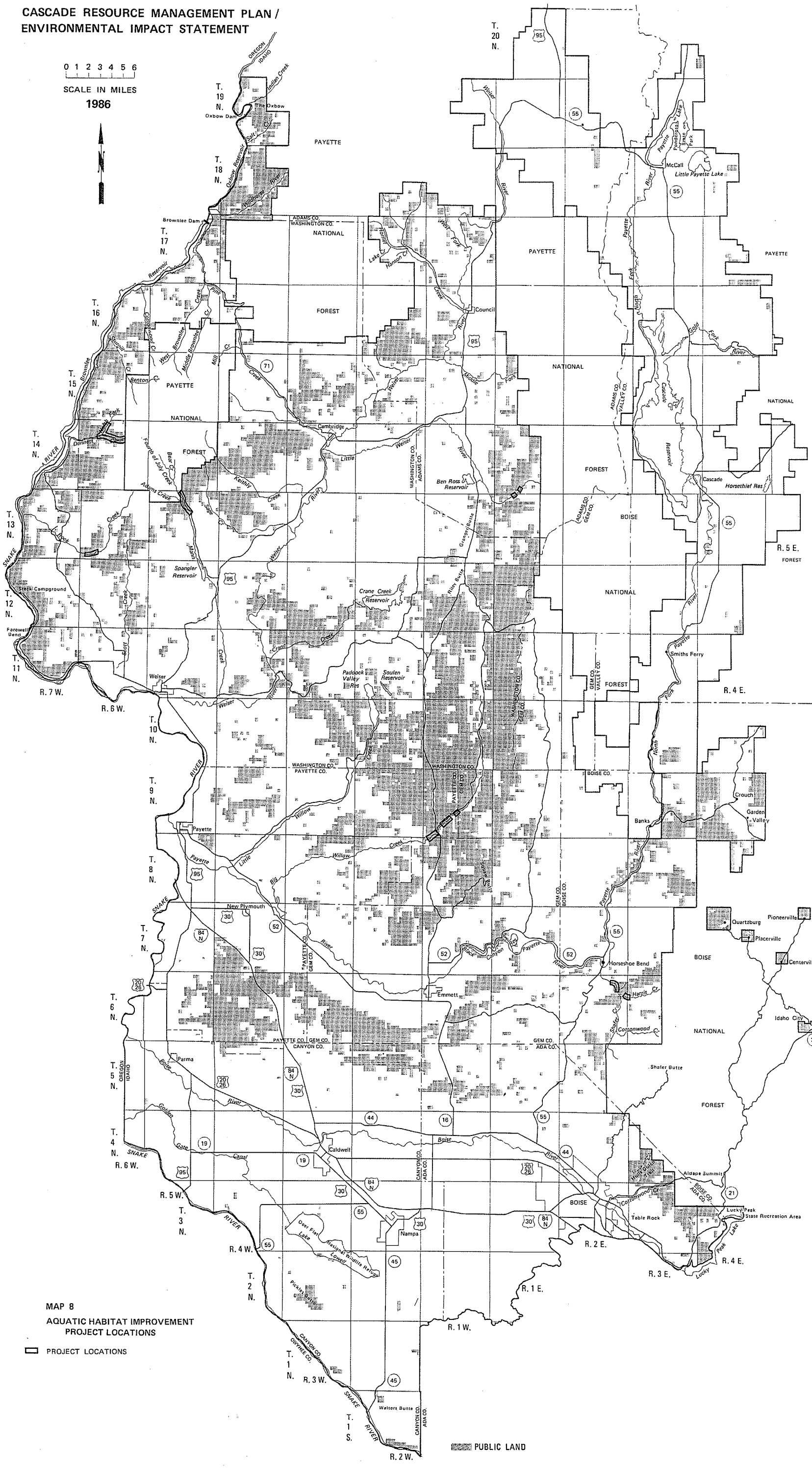
- AVOIDANCE AREAS
- COMMUNICATIONS SITES
- OIL and /or GAS PIPELINES
- ELECTRIC TRANSMISSION LINES 69KV and LARGER
- UNION PACIFIC RAILROAD LINE



MAP 7

GRAZING ALLOTMENTS
& LAND TREATMENTS

- GRAZING ALLOTMENTS
- VEGETATIVE TREATMENT – LIVESTOCK
- VEGETATIVE TREATMENT – WILDLIFE
- VEGETATIVE TREATMENT – LIVESTOCK & WILDLIFE
- 1986 FIRE

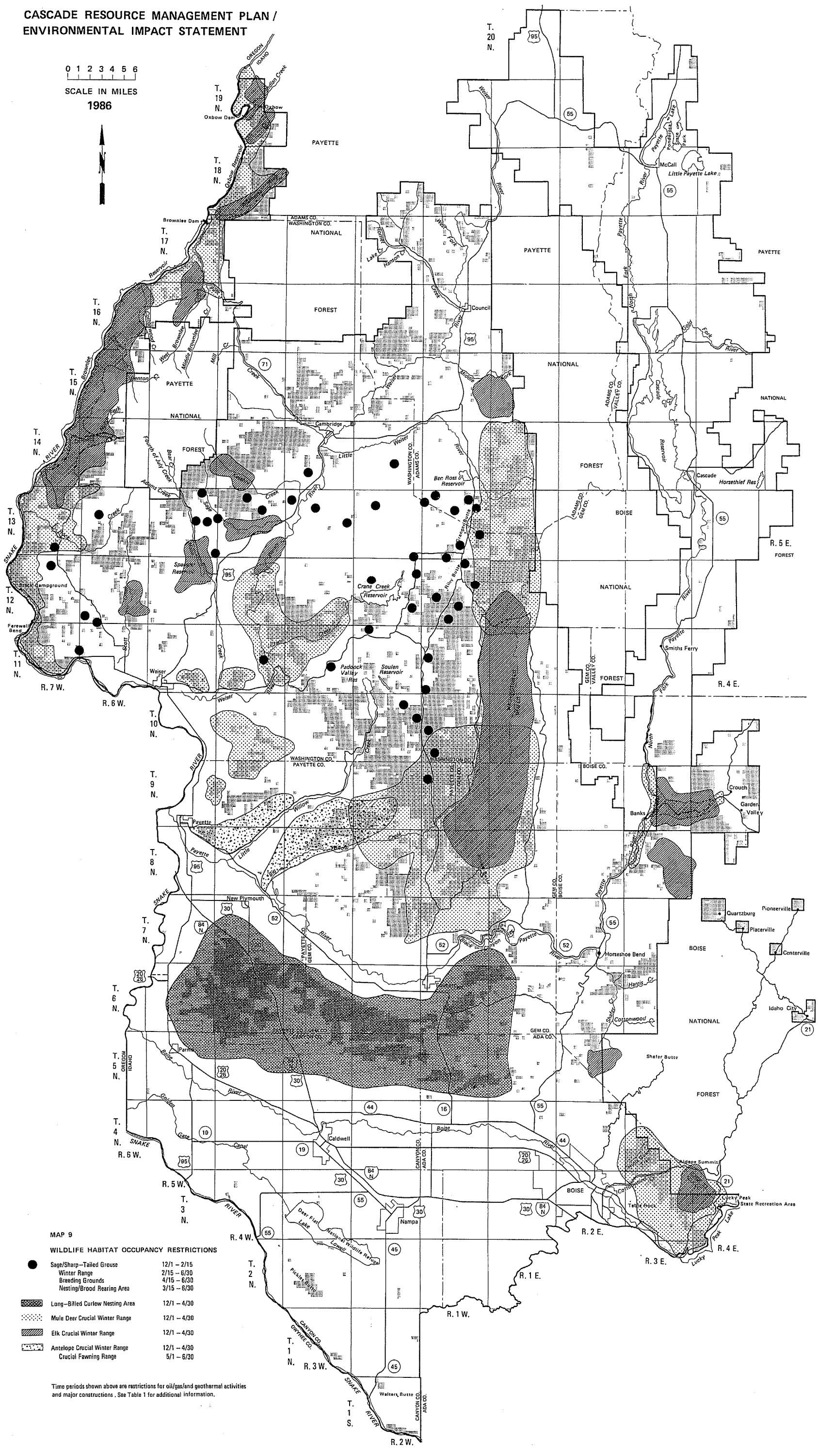


MAP 8

AQUATIC HABITAT IMPROVEMENT PROJECT LOCATIONS

PROJECT LOCATIONS

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



MAP 9

WIDLIFE HABITAT OCCUPANCY RESTRICTIONS

●	Sage/Sharp–Tailed Grouse	12/1 – 2/15
	Winter Range	2/15 – 6/30
	Breeding Grounds	4/15 – 6/30
	Nesting/Brood Rearing Area	3/15 – 6/30
	Long–Billed Curlew Nesting Area	12/1 – 4/30
	Mule Deer Crucial Winter Range	12/1 – 4/30
	Elk Crucial Winter Range	12/1 – 4/30
	Antelope Crucial Winter Range	12/1 – 4/30
	Crucial Fawning Range	5/1 – 6/30

Time periods shown above are restrictions for oil/gas/and geothermal activities and major constructions. See Table 1 for additional information.

PART II

FINAL ENVIRONMENTAL IMPACT STATEMENT

PROPOSED CASCADE RESOURCE MANAGEMENT PLAN
AND FINAL ENVIRONMENTAL IMPACT STATEMENT

Portions of Ada, Adams, Boise, Canyon, Gem, Payette,
Washington and Valley Counties, Idaho.

1. Responsible Agency: United States Department of the Interior
Bureau of Land Management

2. Draft ( ) Final (X)

3. Administrative Action (X) Legislative Action ( )

4. Abstract: This proposed resource management plan and final environmental impact statement describes and analyzes five alternatives for managing 487,466 acres of public land in the Cascade Resource Area, Boise District. Alternative A would continue present management. Alternative B would favor higher livestock stocking rates, more range improvements, agricultural development, and transfer of lands out of Federal ownership. Alternative C would favor habitat management to increase wildlife populations, and less commodity intensive management. Alternative D would be similar to Alternative B except that there would be a much greater intensity of management for all resources through higher monetary and intensive management programs in both commodity and noncommodity resources. Alternative E, the Preferred Alternative, would pursue a optimum approach to multiple use, allowing production and use of commodity resources and commercial use authorization while protecting fragile resources and wildlife habitat, preserving natural systems and cultural values, and allowing for nonconsumptive resource uses.

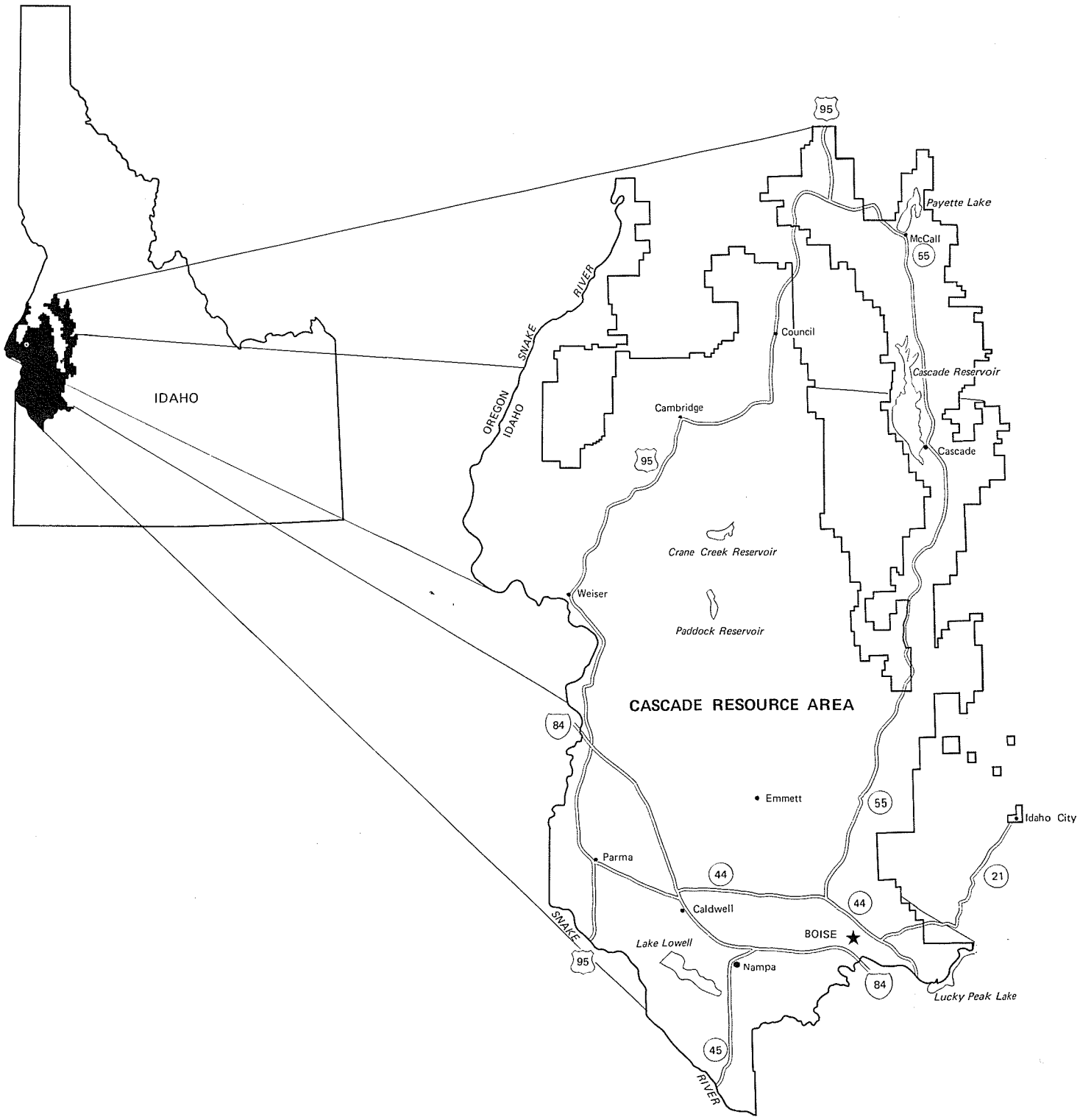
5. Comments have been requested and received from the following: See page 5-1 and 5-4 through 5-6.

6. Date Draft Plan and DEIS Made Available to EPA and Public: August 22, 1986.

7. For Further Information Contact:

Richard Geier, Area Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705
Telephone: (208) 334-1582

MAP 1-1



GENERAL LOCATION MAP

PART II

SUMMARY

This final Environmental Impact Statement (FEIS) describes five alternatives for managing 487,466 acres of public lands in the Cascade Resource Area (CRA), 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 Cascade Resource Area and ensure that these lands and resources are planned and managed in accordance with the principles of multiple use and sustained yield and other principles as outlined in BLM planning regulations. 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 five alternative plans are primarily focused on resolving the following key issues identified by the public: land tenure and adjustment, range resource management and future management of the Payette River Corridor. Special management concerns addressed include off-road vehicle use, timber management, and special designations.

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

The five alternatives are summarized as follows:

Alternative A

This alternative reflects the continuation of present management practices and programs now occurring on the public lands in the Cascade Resource Area. Changes in livestock management, land transfers and other programs would be handled as the need arises. Most of the objectives of the current MFPs have been accomplished. This is the "no action" alternative.

Land tenure adjustment would include a maximum of 2,200 acres considered for transfer from federal ownership. Included in this total would be 560 acres considered for agricultural development under the Desert Land Entry program. Utility rights-of-way would be restricted on 4,333 acres.

Broad based soil erosion would increase an average of 10% over current levels. A substantial increase in wind blown soil erosion could occur on 560 acres identified for transfer for agricultural development. Additional erosion would result on the 100 to 400 acres annually identified for timber harvest.

Livestock grazing would be maintained at the current five year average of 66,424 AUMs. New range improvements would be minimal and no land treatments would be initiated. Grazing management would generally remain unchanged. Grazing levels would be reduced to 66,014 over 20 years because of land transfers and restrictions on special designation areas.

Rangeland condition would show a long term decline on 3 to 5% of the area over 20 years. Wildfire and grazing would be the primary causes for this decline.

Two wild horse herds would be managed to support a total of 22 head at the end of 20 years.

Wildlife habitat conditions would decline over 20 years. Mule deer and elk habitat would only be able to support a 3% decline in populations.

Eleven miles of riparian and 14 miles of aquatic habitat would improve as a result of livestock management, fencing to control livestock, instream work, and streambank planting. Five miles of riparian habitat would be degraded due to livestock grazing. AMP revisions would benefit 71 and 73 miles of riparian and aquatic habitat, respectively.

There would be no prescribed burns to improve rangelands. The entire resource area would be under full fire suppression. Fire management costs would be about $109,300 annually.

Mineral activity would be open on 94% of the resource area for both leasable and locatable minerals. Withdrawals totaling 31,177 acres would be in effect.

Motorized vehicle recreation would be unrestricted on about 75% of the resource area, limited on 25%, and closed on less than 1%. Recreation use for all activities would increase from 622,000 activity occasions to 1,034,000 activity occasions by the year 2000. This increase would occur regardless of what alternative for managing public land is selected.

Cultural resource sites would be managed under standard operating procedures. The Placerville townsite on the National Register of Historic Places would receive additional protection. Other cultural sites would continue to deteriorate caused by livestock trampling, erosion, and vandalism. Paleontologic resources would be protected by standard operating procedures in this and all alternatives.

Two Research Natural Areas totaling 475 acres would be designated. Limiting ORV use and adjusting livestock management would protect candidate and sensitive plants in these areas.

Forest management would occur on 26,686 acres of suitable commercial timber lands. The timber annual harvest would be approximately 1 million board feet. Harvest would occur on up to 8,000 acres over 20 years. Recreation wood cutting would continue in this and all alternatives.

The Payette River corridor would be managed as a Special Recreation Management Area. The Payette River would not be recommended for National Wild and Scenic Rivers study.

This alternative would have little impact on the local economy. Total crop agriculture earnings and employment would increase by $529,700 and 24 jobs. These are both less than one-tenth of one percent of the 1983 RMP

area earnings and employment. Earnings and employment in the livestock industry would be unchanged from the existing situation. The capital value of AUMs would be reduced by $0.4 to $1.5 million. There would be no change in the recreation-related earnings and employment. There would be no change from the existing situation in lumber and wood products earnings and employment. Project costs needed to implement this alternative would be $442,000.

Alternative B

The emphasis in this alternative is on an intermediate level of development and a higher intensity of management than our current management level. The objective of the alternative would be to emphasize the use and development of public land resources, especially commodity resources such as livestock grazing, timber harvest, mineral and energy development, etc. Management would favor higher livestock use levels, more range improvements, more timber and other forest product offerings, increased land disposal for agricultural development and increased transfer of isolated or difficult to manage parcels out of federal ownership.

Land tenure adjustments would include a maximum of 40,489 acres considered for transfer. Utility rights-of-way would be restricted on 6,886 acres.

Broad based soil erosion would increase an average of 5% over current levels. Substantial wind blown soil erosion could occur on 560 acres identified for agricultural development transfer. Erosion from timber harvest activities would occur on 150-700 acres annually.

Livestock use would reach 71,076 AUMs at the end of 20 years. This would be a 7% increase from current levels. The adjustment includes losses due to land transfers and special designations and increases due to rangeland developments.

Rangeland condition would show long term improvement on 18 to 23% of the area.

One wild horse herd would be eliminated and one herd would be managed to support 20 animals at the end of 20 years.

Mule deer and elk habitat would improve mainly due to seedings to support 25% population increases. Other wildlife habitats would generally show a slight improvement.

Riparian habitat would improve on 9 miles due to habitat improvement projects and reduced livestock grazing and would decline on 12 miles due to increased livestock use. AMP revisions and new starts would benefit 176 miles of riparian habitat.

Habitat improvement projects would improve 10 miles of aquatic habitat. Twelve miles would be degraded due to increased livestock use. New and revised AMPs would benefit 178 miles of aquatic habitat.

Fire management costs would increase 5% to $115,000 annually.

Mineral activity would be open on 94% of the resource area for locatable and leasable minerals. Withdrawals would total 31,177 acres for leasables and 31,185 acres for locatables.

Motorized recreation would be open on 70% of the area, limited on 30%, and closed on less than 1%.

Eight cultural resources sites would be nominated to the National Register of Historic Places.

Five Research Natural Areas would be designated totaling 1,355 acres. Candidate, sensitive, or uncommon plants would be protected on four of these areas through managing livestock use, ORV use, and rights-of-way.

Three Areas of Critical Environmental Concern would be designated totaling 77,200 acres. Management emphasis would be directed towards long-billed curlew, Columbian sharp-tailed grouse, mule deer, and recreation.

Forest management would occur on 25,642 acres of commercial forest land. The annual harvest would be approximately 1.7 million board feet. Timber harvest would occur on up to 14,000 acres over 20 years.

Eight miles along the South Fork of the Payette River would be recommended for study for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Total crop agriculture earnings and employment would increase by $529,700 and 24 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of $6.7 million and 308 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of $7.6 million and employment of 354 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be $926,900 and 46 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be $1.9 million.

Alternative C

The objective of this alternative is to emphasize the protection and enhancement of the natural environment. Preservation of natural systems and nonconsumptive resource uses would be favored. Management would comply with the more stringent environmental protection standards. Wildlife and dispersed and nonmotorized recreation would be emphasized.

Land tenure adjustments would include a maximum of 17,324 acres considered for transfer. This total would include 5,108 acres of commercial forest land. Utility rights-of-way would be restricted on 10,326 acres. No lands would be transferred for agricultural development.

Broad based erosion rates would show an average decrease of 20% from current levels. Soil erosion from timber harvest activities would occur on 50 to 200 acres annually of commercial forest lands.

Livestock use would decline to 53,643 AUMs in 20 years. This decrease of 19% would occur due to land transfers, special designations, and decreases for watershed, range condition enhancement, and wildlife. Also included are increases due to livestock management, rangeland projects, and vegetative manipulation.

Rangeland condition would show a long term improvement on 20 to 25% of the area.

Two wild horse herds, one at 20 and one at 30, totaling 50 animals, would be maintained at the end of 20 years.

Changes in habitat condition would be expected to support a 35% increase in mule deer and elk populations. Other wildlife species would also be expected to increase due to better habitat conditions.

Reduced livestock stocking levels and riparian habitat improvement projects would improve riparian habitat along 12 stream miles. Increased livestock stocking levels would decrease habitat on 3 miles. New and revised AMPs would benefit 140 miles of riparian habitat.

Aquatic habitat would improve on 23 miles due to reduced stocking levels and aquatic habitat improvement projects. New and revised AMPs would benefit 142 miles of aquatic habitat.

Fire management costs would be about $109,300 annually, the same as present costs.

Mineral activity would be open on 93% of the area for both leasable and locatable minerals. Withdrawals would total 33,077 acres for leasables and 34,700 acres for locatables.

Motorized recreation would be limited on about 99% of the area, open on less than 1%, and closed on less than 1% of the area.

Eight cultural sites would be nominated to the National Register of Historic Places.

Five Research Natural Areas would be designated totaling 1,355 acres. Candidate, sensitive, or uncommon plants would be protected on four of these areas through management of livestock, mineral development, rights-of-way, and ORV use.

Three Areas of Critical Environmental Concern would be designated totaling 77,200 acres. Management emphasis would be directed toward long-billed curlew, Columbian sharp-tailed grouse, mule deer, and recreation.

Forest management would occur on 20,026 acres of suitable commercial forest land. The annual harvest would be approximately 1/2 million board feet. Timber harvest would occur on up to 4,000 acres over 20 years.

Fourteen miles along the North Fork and South Fork of the Payette River would be recommended for study for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

The Box Creek area would be designated and managed as an Outstanding Natural Area.

The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of $5.1 million and 235 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of $5.8 million and employment of 266 jobs. This alternative would not lead to any change in the recreation-releated earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be $257,500 and 13 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be $1.6 million.

Alternative D

This alternative is based on a high investment management option.

The alternative would increase the intensity of management of both commodity and noncommodity resources. Grazing opportunities, timber production and developed recreation would receive major investments. Higher investments would also be made for the improvement of wildlife habitat (terrestrial and riparian) and recreation opportunities of a dispersed nature.

A major effort would be made to control the invasion of medusahead rye into native vegetative areas and to reclaim infested areas that have high productive capability.

Land tenure adjustments would include a maximum of 35,727 acres considered for transfer. Utility rights-of-way would be restricted on 10,331 acres.

Broad based erosion rates would increase 10% over current levels. Wind blown soil erosion could substantially increase on 560 acres proposed for transfer for agricultural development. Soil erosion associated with timber harvest would occur on 200 to 1,200 acres annually.

Livestock use would increase 15% to 76,613 AUMs in 20 years. This increase would take into account decreases from land transfers and special designations and increases from rangeland improvements and vegetative manipulation.

Rangeland condition would show long term improvement on 14 to 19% of the area.

One wild horse herd would be eliminated and one would be managed to support 20 animals at the end of 20 years.

Elk and mule deer habitat would improve and be able to support a 20% population increase. Other wildlife habitats and populations would remain about the same or improve slightly.

Habitat improvement projects and reduced livestock use would improve 11 miles of riparian habitat. Increased livestock use would reduce riparian habitat along 17 stream miles. New and revised AMPs would benefit 204 miles of riparian habitat.

Aquatic habitat conditions would improve along 10 stream miles due to improvement projects and decrease along 14 stream miles due to increased livestock use. New and revised AMPs would benefit aquatic habitat along 206 stream miles.

Fire management costs would increase 5% to $115,000 annually.

Mineral activity would be open on 93% and 94% of the area for locatable and leasable minerals, respectively. Withdrawals of 31,177 acres and 32,800 acres for leasables and locatables would apply.

Motorized vehicle use would be limited on 99% of the area, open on less than 1%, and closed on less than 1%.

Eight cultural sites would be nominated to the National Register of Historic Places.

Five areas totaling 1,355 acres would be designated as Research Natural Areas. Restrictions on livestock grazing, mineral activity, rights-of-way, and ORVs would protect candidate, sensitive, or uncommon plants on four of these areas.

Three Areas of Critical Environmental Concern would be designated totaling 77,200 acres. Management emphasis would be directed toward long-billed curlew, Columbian sharp-tailed grouse, mule deer, and recreation.

Forest management would occur on 25,347 acres of suitable commercial forest land. The annual harvest would be approximately 2.9 million board feet annually. Timber harvest would occur on up to 24,000 acres over 20 years.

Eight miles along the South Fork of the Payette River would be recommended for study for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

The Box Creek area would be designated and managed as an Outstanding Natural Area.

Total crop agricultural earnings and employment would increase by $529,700 and 24 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of $6.9 million and 318 jobs. These are both less than one-half of one percent of the RMP area earnings and employment. The 20-year stocking level would lead to total earnings of $8.2 million and employment of 382

jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood product earnings and employment would be $1.5 million and 77 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be $2.5 million.

Alternative E (Preferred Alternative)

The objective of this alternative is to provide an optimum mixture of protection and enhancement of the natural environment with commodity resource utilization (renewable and nonrenewable). Preservation of significant natural resource features is provided for along with moderate increases in commodity resource use.

The planning decisions for recreation and wildlife in the Boise Front and Black Canyon MFPs would be unchanged and protection of the habitat area for long-billed curlews would be maintained the same as in all alternatives.

Land tenure adjustments would include a maximum of 17,604 acres considered for transfer. Utility rights-of-way would be restricted on 6,696 acres.

Broad based erosion rates would increase 2% over current levels. Wind blown soil erosion could increase substantially on 560 acres proposed for agricultural development. Timber harvest activities on 150 to 700 acres annually would also contribute to soil losses.

Livestock use would reach 70,536 AUMs in 20 years. This would be a 6% increase over current levels. Livestock AUM losses would be attributed to land transfers and special designations. Livestock use increases would come from land treatments, management practices, and range improvement projects.

Rangeland condition would show a long term improvement on 22 to 27% of the area.

One wild horse herd would be eliminated and one herd would be managed for 20 animals at the end of 20 years.

Improved habitat condition would support an increased population of 22% for elk and 33% for mule deer. Other wildlife species would also benefit in this alternative.

Reduced livestock use and habitat improvement projects would improve riparian habitat along 16 stream miles. Increased livestock use would reduce habitat condition along 4 stream miles. New and revised AMPs would benefit riparian habitat condition along 142 stream miles.

Aquatic habitat improvement projects would improve condition along 14 stream miles. New and revised AMPs would benefit aquatic habitat on 142 stream miles.

Fire management costs would increase about 3% to $112,000 annually.

Mineral activity would be open on 94% of the area for both leasable and locatable minerals. Withdrawals would total 31,177 acres for leasables and 31,185 acres for locatables.

Motorized recreation would be open on 50% of the area, limited on 50%, and closed on less than 1% of the area.

Eight cultural resource sites would be nominated to the National Register of Historic Places.

Five Research Natural Areas would be designated totaling 1,355 acres. Candidate, sensitive, or uncommon plants would be protected on four of these areas through management of mineral development, livestock use, rights-of-way, and ORVs.

Three Areas of Critical Environmental Concern would be designated totaling 77,200 acres. Management emphasis would be directed toward long-billed curlew, Columbian sharp-tailed grouse, mule deer, and recreation.

Forest management would occur on 26,663 acres of suitable commercial forest land. The annual timber harvest would be approximately 1.7 million board feet. Timber harvest would occur on up to 14,000 acres over 20 years.

Eight miles along the South Fork of the Payette River would be recommended for study for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Total crop agriculture earnings and employment would increase by $529,700 and 24 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of $7.2 million and 333 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of $7.7 million and employment of 357 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be $926,900 and 46 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be $1.8 million.

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CHAPTER 1

INTRODUCTION

Purpose and Need

The Cascade Resource Management Plan (RMP) is being prepared to provide the Bureau of Land Management, Boise District Office with a comprehensive framework for managing 487,466 acres of BLM-administered public land over the next 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 planned and 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.

This part of the document is the environmental impact statement (EIS) which addresses five 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 EIS provides an environmental analysis of the RMP which may be referenced for future activity planning and project implementation associated with the RMP. 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."

Description of Planning Area

The Cascade Resource Area is located within the administrative boundary of the Boise District. It is situated in west-central Idaho. The Resource Area is defined by the Snake River on the west and southwest; the Boise and Payette National Forest boundaries on the east; the northern line of Adams County on the north; and the Boise River-New York and Mora Canals - Ada/ Canyon County line on the southeast.

The Resource Area encompasses a land base of approximately 2.77 million acres. This land includes all or portions of Ada, Adams, Boise, Canyon, Gem, Payette, Valley and Washington Counties. Land ownership consists of public lands (487,466 acres), State of Idaho (183,000 acres) and private (2.10 million acres). In general, the 487,466 acres of public lands administered by BLM consist of scattered, unconsolidated tracts intermingled with the state and private lands.

The Cascade Resource Area is the most heavily populated in the Boise District, if not the state. According to the "1980 Census of Population," issued 6/83, approximately 305,000 people or 32% of Idaho's population reside in the Resource Area. The majority of these people are located within the Treasure Valley in the cities of Boise, the state's capital and largest city, Nampa and Caldwell. Other cities located in the Resource Area include Emmett, Payette, Weiser, McCall, Cascade, Horseshoe Bend, Council and Cambridge.

Changes Between Draft Plan/EIS and Proposed Plan/Final EIS

Revisions are incorporated into this final EIS in response to public comments received on the draft EIS. The revisions include minor changes in the preferred alternative (E) and in other alternatives in Chapter 2 regarding management actions and changes in other chapters for accuracy, clarity and consistency. Brief discussions of the substantive revisions are presented below. Additional discussions may be found in the Response to Written Comments section in Chapter 5. Additional maps and appendices have also been included. Maps have been revised for accuracy.

Off-Road Vehicle Use

Alternative E now includes an additional 13,240 acres west of Crane Creek Reservoir which would be designated as limited to designated roads and trails for ORV use. This area in the draft EIS (Alternative E) was identified as open to ORV use. The area was reevaluated in response to public comment to provide opportunity for semi-primitive recreation in this area. The revision was incorporated to accommodate this need in light of manageability concerns and potential conflicts between user groups.

Timber Harvest

Alternative E now includes an annual average allowable timber harvest level of 1.7 million board feet. The draft EIS (Alternative E) identified this harvest level as 1.0 million board feet which is the current harvest level. This revision was incorporated in response to public comment to provide a greater harvest level and in light of potential impacts on other resource values, and the capability of the forest resource to produce this harvest volume on a sustained yield basis. Timber harvest of 1.7 million board feet would occur on the same 26,663 acres as previously identified for Alternative E.

Special Designations

In the draft EIS, alternatives B, C, D and E included 6 areas for Research Natural Area (RNA) designation. One of these areas, Peraphyllum Rock - 40 acres, was reevaluated in response to public comment regarding application of the criteria which qualify it as an RNA. The reevaluation resulted in dropping the RNA designation in those alternatives (B, C, D and E) since it was determined that the area did not meet the RNA qualifying criteria. The same special management actions have been retained for this area in the alternatives (B, C, D and E) to protect a sensitive plant species.

Two other areas identifièd for RNA designation in alternatives B, C, D and E were expanded in all alternatives to provide better protection for sensitive plant species and enhance their function as research natural areas. These two areas are Summer Creek which was expanded from 200 to 240 acres and Buckwheat Flats which was expanded from 60 to 200 acres. The same special management actions for the original areas are also identified for the expanded areas.

One additional area has been identified for special management in all alternatives. This is an 80 acre site containing a sensitive plant species. No special designation is identified for this area but special management actions are included for leasable minerals, rights-of-way, and ORV use.

Recreation

One campground site of 5 acres at Paddock Reservoir has been added to alternatives D and E in response to public comment to provide additional recreational facilities in this area. Special management actions are identified for leasable minerals, rights-of-way and ORV use.

The Snake River Birds of Prey Conservation Area includes 640 acres in the southern tip of the Cascade Resource Area adjacent to the Snake River. This area is now identified in all alternatives as a Special Management Area. Special management actions for this area remain the same in all alternatives as identified in the draft EIS except that ORV use is now also identified as limited in Alternative B.

CHAPTER 2

ALTERNATIVES INCLUDING THE PREFERRED ALTERNATIVE

INTRODUCTION

The development of the alternatives for the Cascade Resource Management Plan was guided by the regulations of the National Environmental Policy Act (NEPA), the BLM resource management planning regulations and the Idaho Guidebook for preparing the RMP. These guidances require that alternatives be developed that addressed each issue. Of the alternatives developed, one alternative is a no action alternative which means a continuation of present levels of resource use. This alternative satisfies the requirement of BLM planning regulations (43 CFR 1610.4-5).

The basic goal for developing alternatives for the RMP was to prepare different combinations of resource use that addressed each issue and management concern. A range of resource utilization levels or intensities of management was developed for those resources that were issue related. Non-issue related resources only had minor or no differences in use levels or management intensity between the alternatives.

Each alternative had to satisfy standards (criteria) as outlined in the "Idaho Guidebook." These standards stated that each alternative must be a complete resource management plan for the public lands within the planning area and must:

- be reasonable;
- include multiple use and transfer area designations, all the resource management guidelines and goals, resource management objectives and required actions;
- provide for a certain level of resource protection, management use and development;
- be responsive to the issues (each issue must be addressed in at least one alternative or subalternative); and
- meet BLM requirements (all required alternatives for range, wilderness, or other programs must be incorporated in at least one alternative or subalternative).

ALTERNATIVES

There are five alternatives developed in this document. Alternative E has been selected as the Preferred Alternative. All alternatives respond to the planning questions that have been asked about the respective issues. Each alternative has categorized the public lands into one of four multiple use and transfer classes. The classes are discussed below.

Multiple Use and Transfer Classes

Each alternative will have its public lands assigned to one of these three multiple use or transfer classes: moderate use class, intensive use class, limited use class, or transfer class.

Description of Alternatives

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 significant resources which must be protected, and whether BLM would transfer public lands from its jurisdiction. The second is to provide a basis for developing specific resource management objectives and actions for each multiple use area with general purpose and policy statements.

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 purpose and policies of the multiple use or transfer class or classes involved and that adequate public involvement is obtained.

Public lands are placed in the multiple use or transfer class that best reflects the specific resources and management priorities for the area. The purposes of these classes are described below and to a greater degree, in Part I page 18 of the Plan.

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.

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 such as developed recreation, communication or power sites.

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.

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 five categories: Sale (T1), Sale or Exchange (T2), Exchange (T3), Agricultural Entry (T4), and Special Exchange Lands (T5).

ALTERNATIVES IN DETAIL

The following section describes the formatting used to present all five alternatives developed for the Cascade RMP. The format for the presentation of the alternatives is as follows: goal, resource activity, management objectives, management actions and special considerations. The activities that relate to the issues are addressed in the following sequence:

Livestock Resources Watershed Resources Vegetative Resources Wildlife Resources Riparian & Aquatic Resources	relate to	Issue:	Rangeland Resource Management
Lands and Realty	relate to	Issue:	Land Tenure Adjustment
Recreation Resources	relate to	Issue:	Payette River Corridor Management
Cultural & Paleontologic Resources Forest Resources Mineral Resources Off-Road Vehicles	relate to		Management Concerns and general management

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. The Preferred Alternative appears in both Part I (The Plan) and Part II (FEIS).

OBJECTIVES/ACTIONS COMMON TO ALL ALTERNATIVES

The following planning decisions from the approved Boise Front and Black Canyon management framework plans (MFPs) would apply to all alternatives:

Boise Front MFP

Recreation

Vehicular use on public land would be restricted to designated roads and trails as identified on the MFP Step II overlay. Highland Valley Road and Shaw Mountain Road would be closed to vehicular travel from December 15 to April 1 for deer winter range protection.

Black Canyon MFP

Recreation Off-Road Vehicles

Open ORV use areas identified on Map 2-4 are: 1) Little Gem Cycle Park, and 2) Parma and Dewey ORV parks. Limited ORV use would restrict motorized vehicles to existing roads and trails throughout the remainder of the planning unit.

Wildlife

A long-billed curlew habitat area has been identified in the Black Canyon Planning Unit with management guidelines that include retention of the area in federal ownership, ORV restrictions, litter control, maintenance of short grass types and development of the habitat management plan.

Description of Alternatives

The following objectives and actions would apply to all alternatives:

Watershed

Objectives

Improve or maintain the condition of annual and native ranges.

Protect high erosion hazard (HEH) areas and the banks of streams, lakes and reservoirs.

Actions

Prevent or control surface disturbing activities on soils with high or very high soil erosion hazard ratings.

Seed disturbed areas (burn or mechanical) with selected plant species.

Limit ORV activity in most areas of High Erosion Hazard (HEH) potential to existing or designated roads and trails.

Establish grazing management systems for critical HEH areas.

Limit mechanical rangeland treatments in HEH areas.

Wildlife

Objectives

Protect crucial habitat of federal and state listed "endangered, threatened or sensitive" species.

Protect crucial habitat of big game and upland game bird species.

Actions

Allow no disturbance during crucial time periods (see special stipulations).

Initiate special management for crucial habitat areas.

Riparian and Aquatic

Objectives

Protect stream, lake and reservoir banks from disturbance, erosion or pollution.

Actions

Provide buffer zones along stream banks and implement guidelines for activities occurring within this zone.

Lands and Realty

Objectives

Optimize public use and management of the public lands under the principles of multiple use and sustained yield.

Actions

Remove unneeded withdrawals on public lands.

Provide opportunities for utility rights-of-way. Encourage future rights-of-way to be located within or adjacent to existing rights-of-way. Restrict rights-of-way in areas with high resource values.

Cultural Resources

Objectives

Protect cultural resources.

Actions

Design and locate projects to minimize impacts.

Salvage those sites where avoidance is not practical. Consult with the SHPO on possibly significant sites.

Paleontologic

Objectives

Protect paleontologic values found on public lands and ensure that they remain available for collection as appropriate.

Actions

Allow no mechanical disturbance (including fire equipment) on scientifically significant paleontologic sites.

Collection of vertebrate fossils will be by permit only for professional use.

Allow no surface occupancy (leasable minerals) on sites with known paleontologic values.

Surface or subsurface ROWs will be designed and routed to avoid paleontologic sites.

ORV activity will be limited to existing roads and trails on known paleontologic sites.

Description of Alternatives

Recreation

Objectives

Provide for a variety of recreation opportunities.

Action

Continue management of intensive use areas for ORV activities, boat launching, and camping.

Continue to make all lands available for casual, dispersed recreation use.

Visual

Objectives

Protect the scenic values of public lands, particularly along the Payette River Scenic Route and along the South Fork of the Payette River.

Manage 81,000 acres under Class II, 383,466 acres under Class III and 23,000 acres under Class IV VRM guidelines.

Actions

All land manipulation (burns, seeding, timber harvest, etc.) or project development (fences, transmission towers, etc.) will be designed to have no or minimal visual impacts (blend into setting) particularly along the Payette River (all forks).

Fire

Objectives

Protect the public resources from damages due to wildfire (natural or human caused).

Use prescribed fire to help meet livestock and wildlife objectives.

Reduce frequency of and potential for fire, especially human-caused uncontrolled wildfire.

Rehabilitate all burned areas where feasible.

Actions

Take full suppression action on all fires. High intensity suppression actions will be taken where fire danger is rated as extreme, or when high resource values are threatened. Schedule prescribed fire to improve vegetative production or wildlife habitat.

Pursue an aggressive prevention program.

Give full consideration to wildlife and livestock needs when rehabilitating burned areas.

Create buffer strips (greenstripping) utilizing vegetative species resistant to fire spread. Buffer strips would be established to reduce fire size and occurrence on large expanses of annual grasses. Strips would also be used to protect remaining valuable brush habitat.

Minerals

Objectives

Insure that energy and nonenergy minerals development is encouraged in a manner that satisfies national and local needs and provides for economically and environmentally sound exploration, extraction, and reclamation practices.

Actions

Continue to allow energy and nonenergy mineral leasing and development.

Work with mining claimants to minimize or eliminate adverse environmental impacts.

Encourage the use of existing materials sites as needed and allow new sites to be developed in an environmentally sound manner.

ALTERNATIVE A

This alternative reflects the continuation of present management practices and programs now occurring on the public lands in the resource area. Changes to present stocking levels, land sales or exchanges, etc. would be handled on a case by case basis as most of the objectives and actions of the current MFPs have been accomplished. This alternative is the "no action" alternative.

The 487,466 acres of public lands would be placed into one of four multiple use or transfer categories as follows:

370,230 acres Moderate, 3,321 acres Intensive
111,715 acres Limited, 2,200 acres Transfer

Livestock Resources

Objectives

Manage 461,686 acres of rangeland to provide forage for livestock and wild horses.

Maintain current condition of rangeland vegetation.

Livestock-AUMs: 72,571 Active Pref., 66,424 Licensed
66,014 5 yr., 66,014 20 yr.

Wild Horses-Numbers: 4 Mile 10 Initial, 10 20 yr.
West Crane Creek 12 Initial, 12 20 yr.
Wild Horses-AUMs: 20 yrs.: 4 Mile 120 ; West Crane Creek 144

Actions

Stock Driveways: 63,000 existing maintained, 0 existing eliminated
(acres) 0 new added, 63,000 total available

Vegetative Manipulation:
5 yrs - 0 acres burn, spray and/or seed; 0 acres disc and seed
20 yrs - 0 acres burn, spray and/or seed; 0 acres disc and seed

Projects: 12 mi. fence, 4 water developments, 6 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
0 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer until these lands are transferred.

Special Considerations

Seed mixtures used to rehabilitate wildfires will include grass, forb and shrub species that will benefit both livestock and wildlife.

Watershed Resources

Objectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Update the following activity plans - HMP, RAMP.

Vegetative Resources

Objectives

Protect candidate and sensitive plants.

Protect and manage 13 specific sites containing candidate, sensitive, or uncommon plants or valuable plant communities.

Maintain the existing condition of rangeland vegetation.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Adjust livestock grazing practices in allotments that could shift to a lower condition class if present practices were to continue.

Protect candidate and sensitive plants in areas being managed for other uses that threaten the plants existence (i.e. mining) through mitigation.

Description of Alternatives

Designate and/or manage 13 areas as follows:

Special Management Areas	Designations	Acres	Minerals (acres) Locatables Withdrawal	Leasables Closed	Leasables No Surf.	ROW Avoidance (acres) O	Surf	Sub	ORV Use (acres) O	L	C
1. Lost Basin Grassland 1/	RNA	65	0	0	0	0	0	0	0	65	0
2. Rebecca Sandhill 1/	RNA	410	0	0	0	0	0	0	0	410	0
3. Sand Hollow 2/	None	500	0	0	0	0	0	0	0	500	0
4. Summer Creek 2/	None	240	0	0	0	0	0	0	0	240	0
5. Peraphyllum Rock	None	40	0	0	0	0	0	0	0	40	0
6. Beacon Hill	None	20	0	0	0	0	0	0	0	20	0
7. Sagebrush Hill	None	10	0	0	0	0	0	0	0	10	0
8. Buckwheat Flats	None	200	0	0	0	0	0	0	0	200	0
9. 4th July Meadow	None	100	0	0	0	0	0	0	0	100	0
10. Sand Capped Knob	None	40	0	0	0	0	0	0	0	40	0
11. Goodrich Creek 1/	None	440	0	0	0	0	0	0	0	440	0
12. Pearl Site	None	400	0	0	0	0	0	0	0	400	0
13. Prostrate Ceanothus	None	80	0	0	0	0	0	0	0	80	0

1/ Exclude or limit livestock grazing.
2/ No water or salt blocks in area or on ridgeline.

Projects: 1 area to have plants removed for replanting (site 12 above)
6 mi. fencing
2 acres for interpretive signing

Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known. Prepare two Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 186,300 acres of elk habitat, 281,500 acres of deer habitat and 4,400 acres of antelope crucial winter habitat and provide forage to support proposed populations.

Manage 186,900 acres of sage grouse habitat to maintain existing brooding and nesting habitat.

Provide special management to maintain 61,000 acres of curlew habitat through implementation of the HMP. Improve 4,200 acres of sharp-tailed grouse habitat by developing and implementing an HMP on the Sage Creek allotment.

Maintain existing habitats for other wildlife species.

Wildlife Unit Months:	5,516 Elk,	29,420 Deer,	600 Antelope
Expected Population:	143 yearlong Elk,	694 yearlong Deer,	50 yearlong Antelope
	950 winter Elk,	5,890 winter Deer	

Actions

Vegetative Manipulation: 0 acres Shrub, Grass & Forb Seeding, 0 acres Burn, Disc & Seed, 0 acres Interseed, 0 acres Special Project Seeding

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse; and deer (Boise Front).

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 11 stream miles of riparian habitat. Continue present management on 106 stream miles of riparian habitat.

Improve the condition of 14 miles of aquatic habitat and continue present management on 67 miles of aquatic habitat.

Actions

Incorporate riparian pastures and/or special measures in AMPs to improve all riparian and aquatic habitat.

Projects: 14 mi. fencing, 11 mi. instream work
18 mi. of stream bank planting

Lands and Realty

Objectives

Identify for transfer from federal ownership 2,200 acres of public lands (243 acres through sale (T1); 1,397 acres through sale or exchange (T2); 0 acres through exchange; and classify 560 acres for potential DLE development). Retain 485,266 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notifications to livestock permittees once the final decision to transfer has been made.

Cultural Resources

Objective

Protect, through standard operating procedures, areas with significant cultural values.

Actions

Manage nine cultural sites as shown below:

Sites	Acres	Minerals (acres) Locatables Withdrawal	Minerals (acres) Leasables Closed	Minerals (acres) Leasables No Surf	ROW Avoidance (acres) 1/ O	ROW Avoidance (acres) 1/ S	ROW Avoidance (acres) 1/ Sub	ORV Use (acres) 4/ O	ORV Use (acres) 4/ L	ORV Use (acres) 4/ C
1. Placerville Townsite 2/	8	8	0	0	0	3/	3/	0	8	0
2. Grays Creek	40	0	0	0	0	0	0	0	40	0
3. Indian Creek	20	0	0	0	0	0	0	0	20	0
4. Milk Creek	20	0	0	0	0	0	0	0	20	0
5. Cabin Creek	20	0	0	0	0	0	0	0	20	0
6. Quartzburg	386	0	0	0	0	0	0	0	386	0
7. Centerville	516	0	0	0	0	0	0	0	516	0
8. Pioneerville	581	0	0	0	0	0	0	0	581	0
9. Mineral	429	0	0	0	0	0	0	0	429	0

1/ O = Overhead; S = Surface; Sub = Subsurface.
2/ National Register of Historic Places (existing).
3/ Acreage to be determined by National Register determination process (reevaluation).
4/ O = Open; L = Limited; C = Closed.

Projects: 0 mi. fencing
Activity Plans: 0

Recreation Resources

Objectives

Provide or enhance recreation at 21 areas.

Provide for ORV recreation activity on public lands.

Actions

Designate ORV recreation activity as open on 362,892 acres, limited on 123,989 acres and closed on 585 acres. ORV recreation activity will remain open on 680 acres, and limited on 2,000 acres proposed for transfer until lands are transferred.

Designate and manage 21 areas as follows:

Sites	Special Management Areas		Minerals (acres)			ROW 1/ Avoidance (acres)			ORV (acres) 2/		
			Locatables	Leasables							
	Type	Acres	Withdrawal	Closed	No Surf	O	Surf	Sub	O	L	C
1. Cascade Uplands 3/	ERMA	334,000	0	0	0	0	0	0	328,790	1,261	0
2. Weiser River	Boat Launch	1	0	0	1	1	1	0	0	1	0
3. Clay Peak	Cycle Park	948	0	0	0	0	948 4/	948	436	0	512
4. Oxbow 5/ Brownlee	SRMA	40,000	0	0	0	0	0	0	0	39,777	0
5. Wild Horse	Camp-ground	2	0	0	2	2	2	0	0	0	2
6. Steck	Camp-ground	11	0	0	11	11	11	0	0	0	11
7. Weiser Dunes	Play Area	200	0	0	0	0	200	0	200	0	0
8. Snake River	Boat Launch	10	0	0	10	10	10	0	0	10	0
9. Payette River 6/ Corridor	SRMA	19,000	0	0	0	0	2,600	0	16,384	2,600	0
10. North Fork	Camp-ground	10	0	0	10	10	10	0	0	0	10
11. Garden Valley	Boat Launch	1	0	0	1	1	1	0	0	1	0
12. South Fork	Camp-ground	3	0	0	3	3	3	0	0	0	3
13. Chief Parish	Picnic Site	2	0	0	2	2	2	0	0	0	2
14. Boise Front 7/	SRMA	12,000	0	0	0	0	0	0	0	11,995	0
15. Hulls Gulch	Interprt Trail	5	0	0	5	0	5	0	0	0	5
16. Treasure Valley 8/	ERMA	72,000	0	0	0	0	0	0	8,964	58,856	0
17. Little Gem	Cycle Park	3,000	0	0	0	0	0	0	2,100	900	0
18. Dewey	Play Area	30	0	0	0	0	30	0	30	0	0
19. Parma	Play Area	10	0	0	0	0	10	0	10	0	0
20. Pickles Butte	Play Area	500	0	0	0	0	500	0	500	0	0
21. Birds of Prey	Natural Area	640	0	0	0	0	0	0	640	0	0

1/ O = Overhead; Surf = Surface; Sub = Subsurface.
2/ O = Open; L = Limited; C = Closed.
3/ Specific constraints covered under Weiser River and Clay Peak.
4/ Except for Electrical Transmission towers within Existing ROW.
5/ Covered under Snake River, Steck, Weiser Dunes and Wild Horse.
6/ Specific constraints covered under North Fork, Garden Valley, South Fork and Chief Parish.
7/ Specific constraints covered under Hulls Gulch.
8/ Specific constraints covered under Little Gem, Dewey, Parma and Pickles Butte.

Projects: Water and/or Sanitary facilities 6, launch ramp 3, access 6

Activity Plans: Interagency Cooperative Management Plan, RAMPs for Payette River Corridor, Boise Front, and Oxbow Brownlee SRMAs.

Analyze the Box Creek WSA (110-91A) for wilderness suitability through a statewide EIS. Consider the USFS (Payette National Forest) recommendations for the adjacent roadless area called Lick Creek (WSA 4-455).

Forest Resources

Objectives

Manage 26,686 acres of suitable commercial forest land for timber management and harvest.

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 5,209 acres of forest lands under CFL set asides. This includes 5,139 acres for TPCC withdrawal and 70 acres for seed orchard withdrawal.

Provide an annual harvest of approximately 1.0 MMBF.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 40 mi. of forest access road (2 miles annually)
Acquire access to one to two areas
Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest land will generally be through selective cutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 100-400 acres annually.

Mineral Resources

Objectives

Make 456,289 acres (94% of area) available for locatable exploration and development and 456,289 acres (94% of area) for leasable mineral exploration and development.

Continue making available saleable minerals from three material sale sites and 16 free-use permit sites as needed.

Actions

Leasables (acres)			Locatables (acres)		Salables (acres)	
Open	Closed	No Surface Occ.	Open	Withdrawn	Available	Unavailable
456,289	31,177	45	456,281	31,185	95	0

ALTERNATIVE B

The emphasis in this alternative is on an intermediate level of development and a higher intensity of management than our current management level.

The objective of the alternative would be to emphasize the use and development of public land resources, especially commodity resources such as livestock grazing, timber harvest, mineral and energy development, etc. Management would favor higher livestock levels, more range improvements, more timber and other forest product offerings, increased land disposal for agricultural development and increased transfer of isolated or difficult to manage parcels out of federal ownership.

Management would comply with minimal standards acceptable for environmental protection while still operating within the framework of multiple-use and sustained yield (guidance common to all alternatives).

Motorized vehicle access and related recreation use would receive priority over primitive/dispersed recreation. Minimal restriction would be placed on ORVs.

The Payette River (8 miles-South Fork) would be recommended for National Wild and Scenic Rivers study as a recreation river. Opportunities for increased river use (float and power boating) would be encouraged and provided for.

The Four Mile Wild Horse Herd Area would be the only herd area managed.

Areas of special interest or fragile environments would be given special designation such as Research Natural Area and ACEC.

The 487,466 acres of public land would be placed into one of four multiple use or transfer categories as follows:

312,211 acres Moderate, 2,821 acres Intensive
131,945 acres Limited, 40,489 acres Transfer

Livestock Resources

Objectives

Manage 425,144 acres of rangeland to provide forage for livestock and wild horses.

Livestock AUMs: 72,571 Active Pref., 66,424 Licensed
61,872 5 yr., 71,076 20 yr.

Wild Horses-Numbers: 4 Mile 10 Initial, 20 20 yr.
West Crane Creek 12 Initial, 0 20 yr.
Wild Horses-AUMs: 20 yrs: 4 Mile 240 ; West Crane Creek 0

Actions

Stock Driveways: 40,763 existing maintained, 22,237 existing eliminated
(acres) 627 new added, 41,390 total available

Vegetative Manipulation:
5 yrs - 6,000 acres burn, spray and/or seed; 2,000 acres disc'd & seed
20 yrs - 23,400 acres burn, spray and/or seed; 3,000 acres disc'd & seed

Projects: 148 mi. fence, 20 water developments, 12 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
18 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer until these lands are transferred.

Special Considerations

Seed mixtures on vegetative manipulations will include grass, forb and shrub species that will benefit both livestock and wildlife.

Watershed Resources

Objectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Designate 12,000 acres of the Boise Front as an ACEC and prepare/update the following activity plans - HMP, RAMP.

Vegetative Resources

Objectives

Protect candidate and sensitive plants.

Protect and manage 13 specific sites containing candidate, sensitive, or uncommon plants or valuable plant communities.

Improve the general condition on 28% of all fair condition and 8% of all good condition rangeland.

Change or improve condition on 25% of the poor condition rangeland and maintain existing condition on all other rangelands.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Description of Alternatives

Exclude surface and subsurface ROWs in those areas known to contain candidate or sensitive plants.

Adjust livestock grazing practices in allotments that could shift to a lower condition class if present practices were to continue.

Mechanically treat (through range and wildlife projects) areas of poor and fair condition rangeland that possess a high return potential.

Designate and/or manage 13 areas as shown:

Special Management Area	Designations	Acres	Minerals (acres) Locatables Withdrawal	Minerals (acres) Leasables Closed	Minerals (acres) Leasables No Surf	ROW Avoidance (acres) 3/ O	ROW Avoidance (acres) 3/ Surf	ROW Avoidance (acres) 3/ Sub	ORV Use (acres) O	ORV Use (acres) L	ORV Use (acres) C
1. Lost Basin Grassland 1/	RNA	65	0	0	0	0	65	65	0	65	0
2. Rebecca Sandhill 1/	RNA	410	0	0	0	0	410	410	0	410	0
3. Sand Hollow 2/	None	500	0	0	0	0	500	500	0	500	0
4. Summer Creek 2/	RNA	240	0	0	0	0	240	240	0	240	0
5. Peraphyllum Rock	None	40	0	0	0	0	40	40	0	40	0
6. Beacon Hill	None	20	0	0	0	0	20	20	0	20	0
7. Sagebrush Hill	None	10	0	0	0	0	10	10	0	10	0
8. Buckwheat Flats	RNA	200	0	0	0	0	200	200	0	200	0
9. 4th July Meadow	None	100	0	0	0	0	100	100	0	100	0
10. Sand Capped Knob	None	40	0	0	0	0	40	40	0	40	0
11. Goodrich Creek 1/	RNA	440	0	0	0	0	440	440	0	440	0
12. Pearl Site	None	400	0	0	0	0	400	400	0	400	0
13. Prostrate Ceanothus	None	80	0	0	0	0	80	80	0	80	0

1/ Exclude or limit livestock grazing.
2/ No water or salt blocks in area or on ridgeline.
3/ O = Overhead; Surf = Surface; Sub = Subsurface.

Projects: 6 mi. fencing
Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known. Prepare five Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 181,640 acres of elk habitat, 274,810 acres of deer habitat and 3,960 acres of antelope crucial winter habitat and provide forage to support proposed populations of these animals.

Manage 183,020 acres of sage grouse habitat to improve brooding and nesting habitat.

Improve 22,262 acres of wildlife habitat through new seeding and interseeding existing areas and shrub plantings.

Provide special management on 61,000 acres of curlew and 32,960 acres of Columbian sharp-tailed grouse habitats to improve populations of these sensitive species.

Maintain existing habitats for other wildlife species.

Wildlife Unit Months:	7,256 Elk,	41,956 Deer,	1,800 Antelope
Expected Population:	188 yrlong Elk,	913 yrlong Deer,	100 yrlong Antelope
	1,250 winter Elk,	7,750 winter Deer,	

Actions

Vegetative Manipulation: 9,764 acres Shrub, Grass & Forb Seeding
7,672 acres Burn, Disc & Seed
2,006 acres Interseed,
2,820 acres Special Project Seeding

Projects: 20 mi. fence, Guzzlers - 1

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse; and deer and elk (Boise Front).

Designate 61,000 acres of curlew habitat and 4,200 acres of Columbian sharp-tailed grouse habitat as ACECs.

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 9 stream miles of riparian habitat. Continue present management on 101 stream miles of riparian habitat.

Improve the condition of 10 miles of aquatic habitat and continue present management on 58 miles of aquatic habitat.

Actions

Adjust livestock grazing practices on riparian areas in allotments where riparian/aquatic projects are proposed.

Incorporate riparian pastures, grazing systems and/or special measures in AMPs to improve all riparian and aquatic habitats.

Projects: 10 mi. fencing, 6 mi. instream work
6 mi. of stream bank planting

Description of Alternatives

Lands and Realty

Objectives

Identify for transfer from federal ownership 40,489 acres of public lands (563 acres through sale (T1); 33,409 acres through sale or exchange (T2); 5,957 acres through exchange; and classify 560 acres for potential DLE/CA development (T4). Retain 446,977 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notifications to livestock permittees once the final decision to transfer has been made.

Cultural Resources

Objectives

Protect, through special designation and management, areas with significant cultural values.

Actions

Nominate eight sites to the National Register of Historic Places and manage as shown below.

Surface and subsurface ROWs will be routed to avoid cultural sites.

Sites	NR 1/ Acres	Minerals (acres) Locatables: Withdrawal	Minerals (acres) Leasables: Closed	Minerals (acres) Leasables: No Surf	ROW Avoidance (acres) 2/: O	ROW Avoidance (acres) 2/: S	ROW Avoidance (acres) 2/: Sub	ORV Use (acres) 5/: O	ORV Use (acres) 5/: L	ORV Use (acres) 5/: C
1. Placerville Townsite	8 3/	8	0	8	0	8	8	0	8	0
2. Grays Creek	40	4/	0	4/	0	4/	4/	0	40	0
3. Indian Creek	20	4/	0	4/	0	4/	4/	0	20	0
4. Milk Creek	20	4/	0	4/	0	4/	4/	0	20	0
5. Cabin Creek	20	4/	0	4/	0	4/	4/	0	20	0
6. Quartzburg	386	4/	0	4/	0	4/	4/	0	386	0
7. Centerville	516	4/	0	4/	0	4/	4/	0	516	0
8. Pioneerville	581	4/	0	4/	0	4/	4/	0	581	0
9. Mineral	429	4/	0	4/	0	4/	4/	0	429	0

1/ National Register of Historic Places.
2/ O = Overhead; S = Surface; Sub = Subsurface.
3/ National Register of Historic Places (existing).
4/ Acreage to be determined by National Register determination process.
5/ O = Open; L = Limited; C = Closed.

Projects: 5 mi. fencing
Activity Plans: CRMP (9)

Recreation Resources

Objectives

Provide or enhance recreation at 20 areas.

Provide for ORV recreation activity on public lands.

Manage 2,600 acres of public lands along the Payette River as a Wild and Scenic River (recreation river category).

Actions

Designate ORV recreation activity as open on 339,552 acres, limited (to existing or designated roads and trails) on 147,329 acres and closed on 585 acres.

ORV recreation activity will remain open on the 31,695 acres and limited on 9,720 acres of lands proposed for transfer until lands are transferred.

Recommend the study of 8 miles of Payette River (South Fork) for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Description of Alternatives

Designate and manage 20 areas as follows:

Sites	Special Management Areas		Minerals (acres)			ROW 1/			ORV (acres) 2/		
			Locatables	Leasables		Avoidance (acres)					
	Type	Acres	Withdrawal	Closed	No Surf.	O	Surf	Sub.	O	L	C
1. Cascade Uplands 3/	ERMA	334,000	0	0	0	0	0	0	306,566	26,921	0
2. Weiser River	Boat Launch	1	0	0	1	1	1	0	0	1	0
3. Clay Peak	Cycle Park	948	0	0	948	0	948 4/	948	436	0	512
4. Oxbow 5/ Brownlee	SRMA	40,000	0	0	0	0	0	0	0	39,777	0
5. Wild Horse	Campground 6/	2	0	0	2	2	2	0	0	0	2
6. Steck	Campground 6/	11	0	0	11	11	11	0	0	0	11
7. Weiser Dunes	Play Area	200	0	0	200	0	200	0	200	0	0
8. Snake River	Boat Launch	10	0	0	10	10	10	0	0	10	0
9. Payette R. Corridor 7/	SRMA/WSR	19,000/ (8 mi.)	2,600	0	2,600	2,600	2,600	2,600	16,384	2,600	0
10. North Fork	Campground 6/	10	0	0	10	10	10	0	0	0	10
11. Garden Valley	Boat Launch	1	0	0	1	1	1	0	0	1	0
12. South Fork	Campground 6/	3	0	0	3	3	3	0	0	0	3
13. Chief Parrish	Picnic Site	2	0	0	2	2	2	0	0	0	2
14. Boise Front 8/	SRMA/ACEC	12,000	0	0	0	0	0	0	0	11,995	0
15. Hulls Gulch	Interpret. Trail	5	0	0	5	0	5	0	0	0	5
16. Treasure Valley 9/	ERMA	72,000	0	0	0	0	0	0	0	68,320	0
17. Little Gem	Cycle Park	3,000	0	0	0	0	500	0	2,100	900	0
18. Dewey	Play Area	30	0	0	30	0	30	0	30	0	0
19. Parma	Play Area	10	0	0	10	0	10	0	10	0	0
20. Birds of Prey	Natural Area	640	0	0	0	0	0	0	0	640	0

1/ O = Overhead; Surf = Surface; Sub = Subsurface.
2/ O = Open; L = Limited; C = Closed.
3/ Specific constraints covered under Weiser River and Clay Peak.
4/ Except for Electrical Transmission Towers in Existing ROW.
5/ Specific constraints covered under Snake River, Steck, Weiser Dunes and Wild Horse.
6/ Exclude or limit livestock grazing.
7/ Specific constraints covered under North Fork, Garden Valley, South Fork and Chief Parrish.
8/ Specific constraints covered under Hulls Gulch.
9/ Specific constraints covered under Little Gem, Dewey and Parma.

Projects: Water and/or Sanitary facilities 6, launch ramp 3, Access 6

Activity Plans: RAMPs for 3 SRMAs.

Forest Resources

Objectives

Manage 25,642 acres of suitable commercial forest land for timber management and harvest.

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 6,253 acres of forest lands under CFL set asides. This includes 4,923 acres for TPCC withdrawal, 70 acres for seed orchard withdrawal, 1,240 acres for National Wild and Scenic Rivers System and 20 acres for campground withdrawal.

Provide an annual harvest of approximately 1.7 MMBF.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 68 mi. of forest access road (3.4 miles annually)
Acquire access on one to two areas

Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest land will generally be through selective cutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 150-700 acres annually.

Mineral Resources

Objectives

Make available 456,281 acres (94% of area) available for locatable exploration and development and 456,289 acres (94% of area) for leasable mineral exploration and development.

Continue making available salable minerals from three material sale sites and 16 free-use sites as needed.

Description of Environment

Actions

Leasables (acres)			Locatables (acres)		Salables (acres)	
Open	Closed	No Surface Occ.	Open	Withdrawn	Available	Unavailable
456,289	31,177	3,841	456,281	31,185	95	0

ALTERNATIVE C

The objective of this alternative is to emphasize the protection and enhancement of the natural environment. Preservation of natural systems and nonconsumptive resource uses would be favored by management actions.

Commercial forest lands identified for exchange (T5) would only be considered for exchange with lands in Idaho that contain such nationally significant resource values as wilderness, wild and scenic rivers, historic, cultural, paleontologic, endangered species habitat or crucial wildlife habitat that can be managed by the BLM or other commercial forest land of equal value that would improve BLM management.

Dispersed recreation activities would be encouraged instead of developed or motorized use. More restrictions would be placed on access to the public lands.

The Box Creek Wilderness Study Area would be designated and managed as an outstanding natural area.

The Payette River (14 miles) would be recommended for study as an addition to the National Wild and Scenic Rivers System as a recreation river. Float boat activity would be favored over power boat use, and access to the river would be limited. The maximum acreage authorized for protection under the National Wild and Scenic Rivers Act would be recommended for designation.

Areas of special interest or fragile environments would be given special designation such as Research Natural Areas and ACEC.

The 487,466 acres of public lands would be placed into one of four multiple use or transfer categories as follows:

307,436	acres Moderate,	3,321	acres Intensive
159,385	acres Limited,	17,324	acres Transfer

Livestock Resources

Objectives

Manage 459,824 acres of rangeland to provide forage for livestock and wild horses.

Livestock-AUMs: 72,571 Active Pref., 66,424 Licensed
47,345 5 yr., 53,643 20 yr.

Wild Horses-Numbers: 4 Mile 10 Initial, 20 20 yr.
West Crane Creek 12 Initial, 30 20 yr.
Wild Horses-AUMs: 20 yrs. -- 4 Mile 240 ; West Crane Creek 360

Description of Alternatives

Actions

Stock Driveways: 0 existing maintained, 63,000 existing eliminated
(acres) 0 new added, 0 total available

Vegetative Manipulation:
5 yrs - 3,000 acres burn, spray and/or seed; 1,500 acres disc'd & seed
20 yrs - 13,000 acres burn, spray and/or seed; 6,000 acres disc'd & seed

Projects: 79 mi. fence, 9 water developments, 6 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
12 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer until these lands are transferred.

Special Considerations

Seed mixtures on vegetative manipulations will include grass, forb and shrub species that will benefit both livestock and wildlife.

Watershed Resources

Objectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Designate 12,000 acres of the Boise Front as an ACEC and prepare/update the following activity plans - HMP, RAMP.

Vegetative Resources

Objectives

Protect candidate or sensitive plants.

Protect and manage 13 specific sites containing candidate, sensitive, or uncommon plants or valuable plant communities.

Improve general condition on 35% of all fair and 38% of all good condition rangeland.

Change or improve condition on 16% of the poor condition rangeland and maintain condition on remaining.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Exclude surface and subsurface ROWs in those areas known to contain candidate or sensitive plants. Include no surface occupancy stipulations in all mineral leases.

Adjust livestock grazing practices and reduce livestock preferences in allotments in poor and fair condition.

Mechanically treat (through range and wildlife projects) areas of poor and fair condition rangeland that possess a high return potential.

Designate and/or manage 13 areas as follows:

Special Management Area	Designations	Acres	Minerals (acres) Locatables Withdrawal	Leasables Closed	Leasables No Surf.	ROW Avoidance (acres) 1/ O	Surf	Sub	ORV Use (acres) O	L	C
1. Lost Basin Grassland 2/	RNA	65	65	0	65	0	65	65	0	0	65
2. Rebecca Sandhill 2/	RNA	410	410	0	410	0	410	410	0	0	410
3. Sand Hollow 3/	None	500	0	0	500	0	500	500	0	500	0
4. Summer Creek 3/	RNA	240	240	0	240	0	240	240	0	0	240
5. Peraphyllum Rock	None	40	0	0	40	0	40	40	0	0	40
6. Beacon Hill	None	20	0	0	20	0	20	20	0	20	0
7. Sagebrush Hill	None	10	0	0	10	0	10	10	0	0	10
8. Buckwheat Flats	RNA	200	200	0	200	0	200	200	0	0	200
9. 4th July Meadow	None	100	0	0	100	0	100	100	0	0	100
10. Sand Capped Knob	None	40	0	0	40	0	40	40	0	0	40
11. Goodrich Creek 2/	RNA	440	440	0	440	0	440	440	0	0	440
12. Pearl	None	400	0	0	400	0	400	400	0	400	0
13. Prostrate Ceanothus	None	80	0	0	80	0	80	80	0	80	0

1/ O = Overhead; Surf = Surface; Sub = Subsurface.
2/ Exclude or limit livestock grazing.
3/ No water or salt blocks in area or on ridgeline.

Projects: 6 mi. fencing
5 acres for interpretive signing

Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known.
Prepare five Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 185,080 acres of elk habitat, 276,890 acres of deer habitat and 4,400 acres of antelope crucial winter habitat and provide forage to support proposed populations of these animals.

Manage 186,900 acres of sage grouse habitat to improve brooding and nesting habitat.

Improve 23,912 acres of wildlife habitat through new seeding and interseeding existing areas and shrub plantings.

Provide special management on 61,000 acres of curlew and 32,960 acres of Columbian sharp-tailed grouse habitats to improve populations of these sensitive species.

Maintain existing habitats for other wildlife species.

Wildlife Unit Months:	7,836 Elk,	45,312 Deer,	2,400 Antelope
Expected Population:	203 yrlong Elk,	986 yrlong Deer,	200 yrlong Antelope
	1,350 winter Elk,	8,370 winter Deer,	

Actions

Vegetative Manipulation:
- 10,387 acres Shrub, Grass & Forb Seeding,
- 8,295 acres Burn, Disc & Seed,
- 2,230 acres Interseed,
- 3,000 acres Special Project Seeding

Projects: 10 mi. fence, 3 Guzzler

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse; deer and elk on Boise Front and Oxbow Reservoir.

Designate 61,000 acres of curlew habitat and 4,200 acres of sharp-tailed grouse habitat as ACECs.

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 12 stream miles of riparian habitat. Continue present management on 107 stream miles of riparian habitat.

Improve the condition of 23 miles of aquatic habitat and continue present management on 57 miles of aquatic habitat.

Actions

Adjust livestock grazing practices on riparian areas in allotments where riparian/aquatic projects are proposed.

Incorporate riparian pastures, grazing systems, and/or special measures in AMPs to improve all riparian and aquatic habitat.

Projects: 13 mi. fencing, 9 mi. in stream work
15 mi. of stream bank planting

Lands and Realty

Objectives

Identify for transfer from federal ownership 17,324 acres of public lands (243 acres through sale (T1) and 5,775 acres through exchange (T3) and 11,306 acres through special exchange (T5)). Retain 470,142 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notifications to livestock permittees once the final decision to transfer has been made.

Lands identified T5 will only be available for exchange for lands determined to be of national significance, endangered or crucial wildlife habitat or commercial forest lands of equal or better value that would improve resources management of BLM lands. The total of 11,306 acres in this category includes 5,108 acres of commercial forest land.

Cultural Resources

Objectives

Protect, through special designation and management, areas with significant cultural values.

Actions

Nominate eight sites to the National Register of Historic Places and manage as shown below.

Surface and subsurface ROWs will be routed to avoid cultural sites.

Sites	NR 1/ Acres	Minerals (acres) Locatables Withdrawal	Leasables Closed	Leasables No Surf	ROW Avoidance (acres) 4/ O	S	Sub	ORV Use (acres) 5/ O	L	C
1. Placerville Townsite 2/	8	8	0	8	0	8	8	0	8	0
2. Grays Creek	40	3/	0	3/	0	3/	3/	0	40	0
3. Indian Creek	20	3/	0	3/	0	3/	3/	0	20	0
4. Milk Creek	20	3/	0	3/	0	3/	3/	0	20	0
5. Cabin Creek	20	3/	0	3/	0	3/	3/	0	20	0
6. Quartzburg	386	3/	0	3/	0	3/	3/	0	386	0
7. Centerville	516	3/	0	3/	0	3/	3/	0	516	0
8. Pioneerville	581	3/	0	3/	0	3/	3/	0	581	0
9. Mineral	429	3/	0	3/	0	3/	3/	0	429	0

1/ National Register of Historic Places.
2/ National Register of Historic Places (existing).
3/ Acreage to be determined by National Register nomination process.
4/ O = Overhead; S = Subsurface; Sub = Subsurface.
5/ O = Open; L = Limited; C = Closed.

Projects: 5 mi. fencing
Activity Plans: CRMP (9)

Recreation Resources

Objectives

Provide or enhance recreation at 22 areas.

Provide for ORV recreation activity on public lands.

Manage 4,500 acres of public lands along the Payette River as a Wild and Scenic River (recreation river category).

Actions

Designate ORV recreation activity as open on 3,276 acres, limited (to existing or designated roads and trails) on 481,620 acres and closed on 2,570 acres.

Manage 17,324 acres of public lands recommended for transfer as limited, to designated or existing roads and trails for ORV recreation, until lands are transferred.

Recommend the study of 14 miles of Payette River (6 miles North Fork, 8 miles South Fork) for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Designate and manage 22 areas as follows:

Sites	Special Management Area		Minerals (acres)			ROW 1/ Avoidance (acres)			ORV (acres) 2/		
			Locatables	Leasables							
	Type	Acres	Withdrawal	Closed	No Surf.	O	Surf	Sub.	O	L	C
1. Cascade Uplands 3/	ERMA	334,000	0	0	0	0	0	0	0	330,490	0
2. Weiser River	Boat Launch	1	0	0	1	1	1	0	0	1	0
3. Clay Peak	Cycle Park	948	0	0	948	0	948 4/	948	436	0	512
4. Oxbow 5/ Brownlee	SRMA	40,000	0	0	0	0	0	0	0	39,777	0
5. Wild Horse	Campground 6/	2	0	0	2	2	2	0	0	0	2
6. Steck	Campground 6/	11	0	0	11	11	11	0	0	0	11
7. Weiser Dunes	Play Area	200	0	0	200	0	200	0	200	0	0
8. Snake River	Boat Launch	10	0	0	10	10	10	0	0	10	0
9. Payette River 7/ Corridor	SRMA/WSR	19,000/ (4,500/ 14 mi.)	4,500	4,500	0	4,500	4,500	4,500	0	19,000	0
10. Box Creek 8/	ONA	440	440	0	440	440	440	440	0	0	440
11. North Fork	Campground 6/	10	0	0	10	10	10	0	0	0	10
12. Garden Valley	Boat Launch	1	0	0	1	1	1	0	0	1	0
13. South Fork	Campground 6/	3	0	0	3	3	3	0	0	0	3
14. Chief Parrish	Picnic Site	2	0	0	2	2	2	0	0	0	2
15. Boise Front 9/	SRMA/ACEC	12,000	0	0	0	0	0	0	0	11,995	0
16. Hulls Gulch	Interpret. Trail	5	0	0	5	0	5	0	0	0	5
17. Treasure Valley 10/	ERMA	72,000	0	0	0	0	0	0	0	67,820	0
18. Little Gem	Cycle Park	3,000	0	0	3,000	0	3,000 4/	0	2,100	900	0
19. Dewey	Play Area	30	0	0	30	0	30	0	30	0	0
20. Parma	Play Area	10	0	0	10	0	10	0	10	0	0
21. Pickles Butte	Play Area	500	0	0	500	0	500	0	500	0	0
22. Birds of Prey	Natural Area	640	0	0	0	0	0	0	0	640	0

1/ O = Overhead; Surf = Surface; Sub = Subsurface.
2/ O = Open; L = Limited; C = Closed.
3/ Specific constraints covered under Weiser River and Clay Peak.
4/ Except for Electrical Transmission Towers in Existing ROW.
5/ Specific constraints covered under Steck, Weiser Dunes and Wild Horse.
6/ Exclude or limit livestock grazing.
7/ Specific constraints covered under Box Creek, Garden Valley, South Fork and Chief Parrish.
8/ Allow no harvest of timber or wood products. Protect free flow of Box Creek.
9/ Specific constraints covered under Hulls Gulch.
10/ Specific constraints covered under Little Gem, Pickles Butte, Dewey and Parma.

Projects: Water and/or sanitary facilities - 7, launch ramp - 3, access - 7

Activity Plans: RAMPs for Oxbow-Brownlee, Payette River Corridor, and Boise Front.

Forest Resources

Objectives

Manage 20,026 acres of suitable commercial forest land for timber management and harvest.

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 11,869 acres of forest lands under CFL set asides. This includes 4,628 acres for TPCC withdrawal, 70 acres for seed orchard withdrawal, 1,748 acres for the National Wild and Scenic Rivers System, 20 acres for campground withdrawal, 5,108 acres for special land exchange and 295 acres for outstanding natural area.

Provide an annual harvest of approximately .5 MMBF.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 20 mi. of forest access road (1 mile annually)
Acquire access on one to two areas

Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest land will generally be through selective cutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 50-200 acres annually.

Mineral Resources

Objectives

Make 452,677 acres (93% of area) available for locatable exploration and development and 454,389 acres (93% of area) for leasable mineral exploration and development.

Continue making available salable minerals from three material sale sites and 16 free-use sites as needed.

Actions

Leasables (acres)			Locatables (acres)		Salables (acres)	
Open	Closed	No Surface Occ.	Open	Withdrawn	Available	Unavailable
454,389	33,077	7,726	452,586	34,880	95	0

ALTERNATIVE D

This alternative is based on a high investment management option.

The alternative would increase the intensity of management of both commodity and noncommodity resources. Grazing opportunities, timber production and developed recreation would receive major investment. Higher investments would also be made for the improvement of wildlife habitat (terrestrial and riparian) and recreation opportunities of dispersed nature.

A major effort would be made to control the invasion of medusahead rye into native vegetative areas and to reclaim infested areas that have high productive capability.

The annual harvest of timber will be increased to 2.9 MMBF through the use of intensive management practices on all suitable commercial forest lands.

The Box Creek Wilderness Study Area would be designated and managed as an outstanding natural area.

The issues of land tenure and the Payette River as well as the other resource management programs would be the same as identified in Alternative B.

Additional recreation development would result from investment in recreation facilities for camping, boating and public access.

Areas of special interest or fragile environments would be given special designation such as Research Natural Area and ACEC.

The 487,466 acres of public lands would be placed into one of four multiple use or transfer categories as follows:

316,473 acres Moderate, 3,321 acres Intensive
131,945 acres Limited, 35,727 acres Transfer

Livestock Resources

Objectives

Manage 427,176 acres of rangeland to provide forage for livestock and wild horses.

Livestock-AUMs: 72,571 Active Pref., 66,424 Licensed
63,942 5 yr., 76,613 20 yr.

Wild Horses-Numbers: 4 Mile 10 Initial, 20 20 yr.
West Crane Creek 12 Initial, 0 20 yr.
Wild Horses-AUMs: 20 yrs.: 4 Mile 240 ; West Crane Creek 0

Actions

Stock Driveways: 40,763 existing maintained, 22,237 existing eliminated
(acres) 627 new added, 41,390 total available

Vegetative Manipulation:
5 yrs - 8,000 acres burn, spray and/or seed; 3,000 acres disc & seed
20 yrs - 31,000 acres burn, spray and/or seed; 6,000 acres disc & seed

Projects: 191 mi. fence, 40 water developments, 36 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
23 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer until these lands are transferred.

Special Considerations

Seed mixtures on vegetative manipulations will include grass, forb and shrub species that will benefit both livestock and wildlife.

Watershed Resources

Objectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Designate 12,000 acres of the Boise Front as an ACEC and prepare/update the following activity plans - HMP, RAMP.

Vegetative Resources

Objectives

Protect candidate and sensitive plants.

Protect and manage 13 specific sites containing candidate, sensitive, or uncommon plants or valuable plant communities.

Improve general condition on 21% of all fair and 3% of all good condition rangeland.

Change or improve condition on 25% of the poor condition rangeland and maintain condition on remaining areas.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Description of Alternatives

Exclude surface and subsurface ROWs in those areas known to contain candidate or sensitive plants. Include no surface occupancy stipulations in all mineral leases.

Adjust livestock grazing practices in allotments in poor and fair condition.

Mechanically treat (through range and wildlife projects) areas of poor and fair condition rangeland that possess a return potential.

Designate and/or manage 13 areas as follows:

Special Management Area	Designations	Acres	Minerals (acres) Locatables Withdrawal	Leasables Closed	Leasables No Surf.	ROW Avoidance (acres) O	Surf	Sub	ORV Use (acres) O	L	C
1. Lost Basin Grassland 1/	RNA	65	65	0	65	0	65	65	0	0	65
2. Rebecca Sandhill 1/	RNA	410	410	0	410	0	410	410	0	0	410
3. Sand Hollow 2/	None	500	0	0	500	0	500	500	0	500	0
4. Summer Creek 2/	RNA	240	240	0	240	0	240	240	0	0	240
5. Peraphyllum Rock	None	40	0	0	40	0	40	40	0	0	40
6. Beacon Hill	None	20	0	0	20	0	20	20	0	20	0
7. Sagebrush Hill	None	10	0	0	10	0	10	10	0	0	10
8. Buckwheat Flats	RNA	200	200	0	200	0	200	200	0	0	200
9. 4th July Meadow	None	100	0	0	100	0	100	100	0	0	100
10. Sand Capped Knob	None	40	0	0	40	0	40	40	0	0	40
11. Goodrich Creek 1/	RNA	440	440	0	440	0	440	440	0	0	440
12. Pearl	None	400	0	0	400	0	400	400	0	400	0
13. Prostrate Ceanothus	None	80	0	0	80	0	80	80	0	80	0

1/ Exclude or limit livestock grazing.
2/ No water or salt blocks in area or on ridgeline.

Projects: 6 mi. fencing
5 acres for interpretative signing

Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known.
Prepare five Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 181,640 acres of elk habitat, 274,810 acres of deer habitat and 3,960 acres of antelope crucial winter habitat and provide forage to support proposed populations.

Manage 183,020 acres of sage grouse habitat to improve brooding and nesting habitat.

Improve 23,912 acres of wildlife habitat through new seeding and interseeding existing areas and shrub plantings.

Provide special management on 61,000 acres of curlew and 32,960 acres of Columbian sharp-tailed grouse habitats to improve populations of these sensitive species.

Maintain existing habitats for other wildlife species.

Wildlife Unit Months:	6,960 Elk,	40,272 Deer,	1,200 Antelope
Expected Population:	180 yrlong Elk,	876 yrlong Deer,	100 Antelope
	1,200 winter Elk,	7,440 winter Deer	

Actions

Vegetative Manipulation:
- 10,387 acres Shrub, Grass & Forb Seeding
- 8,295 acres Burn, Disc & Seed
- 2,230 acres Interseed,
- 3,000 acres Special Project Seeding

Projects: 30 mi. fence, 2 Guzzlers

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse.

Designate 61,000 acres of curlew habitat and 4,200 acres of sharp-tailed grouse habitat as ACECs.

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 11 stream miles of riparian habitat. Continue present management on 94 stream miles of riparian habitat.

Improve the condition of 10 miles of aquatic habitat and continue present management on 55 miles of aquatic habitat.

Actions

Adjust livestock grazing practices on riparian areas in allotments where riparian/aquatic projects are proposed.

Incorporate riparian pastures and/or special measures in AMPs to improve all riparian and aquatic habitat.

Projects: 14 mi. fencing, 8 mi. instream work
17 mi. of stream bank planting

Lands and Realty

Objectives

Identify for transfer from federal ownership 35,727 acres of public lands (243 acres through sale (T1); 28,750 acres through sale or exchange (T2); 6,174 acres through exchange (T3); and classify 560 acres for potential DLE/CA development (T4)). Retain 451,739 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notifications to livestock permittees once the final decision to transfer has been made.

Cultural Resources

Objectives

Protect, through special designation and management, areas with significant cultural values.

Actions

Nominate eight sites to the National Register of Historic Places and manage as shown below.

Surface and subsurface ROWs will be routed to avoid cultural sites.

Sites	NR 1/ Acres	Minerals (acres) Locatables Withdrawal	Leasables Closed	Leasables No Surf	ROW Avoidance (acres) 2/ O	S	Sub	ORV Use (acres) 3/ O	L	C
1. Placerville Townsite	8 4/	8	0	8	0	8	8	0	8	0
2. Grays Creek	40	5/	0	5/	0	5/	5/	0	40	0
3. Indian Creek	20	5/	0	5/	0	5/	5/	0	20	0
4. Milk Creek	20	5/	0	5/	0	5/	5/	0	20	0
5. Cabin Creek	20	5/	0	5/	0	5/	5/	0	20	0
6. Quartzburg	386	5/	0	5/	0	5/	5/	0	386	0
7. Centerville	516	5/	0	5/	0	5/	5/	0	516	0
8. Pioneerville	581	5/	0	5/	0	5/	5/	0	581	0
9. Mineral	429	5/	0	5/	0	5/	5/	0	429	0

1/ National Register of Historic Places.
2/ O = Overhead; S = Surface; Sub = Subsurface.
3/ O = Open; L = Limited; C = Closed.
4/ National Register of Historic Places (existing).
5/ Acreage to be determined by National Register determination process.

Projects: 5 mi. fencing
Activity Plans: CRMP (9)

Recreation Resources

Objectives

Provide or enhance recreation at 23 areas.

Provide for ORV recreation activity on public lands.

Manage 2,600 acres of public lands along the Payette River as a Wild and Scenic River (recreation river category).

Actions

Designate ORV recreation activity as open on 3,276 acres, limited (to existing or designated roads and trails) on 481,615 acres and closed on 2,575 acres.

Manage 35,727 acres of public lands recommended for transfer as limited to designated or existing roads and trails for ORV recreation until lands are transferred.

Recommend the study of 8 miles of Payette River (South Fork) for possible inclusion into the National Wild and Scenic River System as a recreation river.

Obtain recreational access through easement and acquisition of lands.

Designate and manage 23 areas as follows:

Sites	Special Management Area		Minerals (acres)			ROW 1/ Avoidance (acres)			ORV (acres) 2/		
			Locatables	Leasables							
	Type	Acres	Withdrawal	Closed	No Surf.	O	Surf	Sub.	O	L	C
1. Cascade Uplands 3/	ERMA	334,000	0	0	0	0	0	0	0	330,485	5
2. Weiser River	Boat Launch	1	0	0	1	1	1	0	0	1	0
3. Clay Peak	Cycle Park	948	0	0	948	0	948 4/	948	436	0	512
4. Oxbow 5/ Brownlee	SRMA	40,000	0	0	0	0	0	0	0	39,777	0
5. Wild Horse	Campground 6/	2	0	0	2	2	2	0	0	0	2
6. Steck	Campground 6/	11	0	0	11	11	11	0	0	0	11
7. Weiser Dunes	Play Area	200	0	0	200	0	200	0	200	0	0
8. Snake River	Boat Launch	10	0	0	10	10	10	0	0	10	0
9. Payette River 7/ Corridor	SRMA/WSR	19,000/ (2,600/ 8 mi.)	2,600	2,600	0	2,600	2,600	2,600	0	19,000	0
10. Box Creek 8/	ONA	440	440	0	440	440	440	440	0	0	440
11. North Fork	Campground 6/	10	0	0	10	10	10	0	0	0	10
12. Garden Valley	Boat Launch	1	0	0	1	1	1	0	0	1	0
13. South Fork	Campground 6/	3	0	0	3	3	3	0	0	0	3
14. Chief Parrish	Picnic Site	2	0	0	2	2	2	0	0	0	2
15. Boise Front 9/	SRMA/ACEC	12,000	0	0	0	0	0	0	0	11,995	0
16. Hulls Gulch	Interpret. Trail	5	0	0	5	0	5	0	0	0	5
17. Treasure Valley 10/	ERMA	72,000	0	0	0	0	0	0	0	67,820	0
18. Little Gem	Cycle Park	3,000	0	0	3,000	0	3,000 4/	0	2,100	900	0
19. Dewey	Play Area	30	0	0	30	0	30	0	30	0	0
20. Parma	Play Area	10	0	0	10	0	10	0	10	0	0
21. Pickles Butte	Play Area	500	0	0	500	0	500	0	500	0	0
22. Paddock Reservoir	Campground	5	0	0	5	5	5	0	0	0	5
23. Birds of Prey	Natural Area	640	0	0	0	0	0	0	0	640	0

1/ O = Overhead; Surf = Surface; Sub = Subsurface.
2/ O = Open; L = Limited; C = Closed.
3/ Specific constraints covered under Weiser River, Clay Peak, and Paddock Reservoir.
4/ Except for Electrical Transmission Towers in Existing ROW.
5/ Specific constraints covered under Steck, Weiser Dunes, Wild Horse and Snake River.
6/ Exclude or limit livestock grazing.
7/ Specific constraints covered under Box Creek, Garden Valley, South Fork and Chief Parrish.
8/ Allow no harvest of timber or wood products. Protect free flow of Box Creek.
9/ Specific constraints covered under Hulls Gulch.
10/ Specific constraints covered under Little Gem, Pickles Butte, Dewey and Parma.

Projects: Water and/or Sanitary facilities 8, Launch Ramp 3, Access 8

Activity Plans: RAMPs for Oxbow-Brownlee, Box Creek, Payette River Corridor, and Boise Front.

Forest Resources

Objectives

Manage 25,347 acres of suitable commercial forest land for timber management and harvest.

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 6,548 acres of forest lands under CFL set asides. This includes 4,923 acres for TPCC withdrawal, 70 acres for seed orchard withdrawal, 1,240 acres for the National Wild and Scenic Rivers System, 20 acres for campground withdrawal, and 295 acres for outstanding natural area.

Provide an annual harvest of approximately 2.9 MMBF through the use of full intensive management practices on all suitable commercial forest land.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 116 mi. of forest access road (5.8 miles annually)
Acquire access on one to three areas.

Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest lands will be through selective and clearcutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 200-1,200 acres annually.

Mineral Resources

Objectives

Make available 454,666 acres (93% of area) available for locatable exploration and development and 456,289 acres (94% of area) for leasable mineral exploration and development.

Continue making available salable minerals from three material sale sites and 16 free-use sites as needed.

Description of Alternatives

Actions

Leasables (acres)			Locatables (acres)		Salables (acres)	
Open	Closed	No Surface Occ.	Open	Withdrawn	Available	Unavailable
456,289	31,177	7,731	454,486	32,980	95	0

ALTERNATIVE E

(PREFERRED ALTERNATIVE)

The objective of this alternative is to provide an optimum mixture of protection and enhancement of the natural environment with commodity resource utilization (renewable and nonrenewable). Preservation of significant natural resource features is provided for along with moderate increases in commodity resource use. This is the preferred alternative.

A portion of the Payette River would be recommended for study for possible addition to the National Wild and Scenic River System.

Areas of special interest or fragile environments would be given special designation such as Research Natural Areas and ACEC.

The 487,466 acres of public lands would be placed into one of four multiple use or transfer categories as follows:

328,453 acres Moderate, 3,004 acres Intensive
138,405 acres Limited, 17,604 acres Transfer

Livestock Resources

Objectives

Manage 449,059 acres of rangeland to provide forage for livestock and wild horses.

Livestock-AUMs: 72,571 Active Pref., 66,424 Licensed
66,257 Initial, 68,000 5 yr., 70,536 20 yr.

Wild Horses-Numbers: 4 Mile 10 Initial, 20 20 yr.
West Crane Creek 12 Initial, 0 20 yr.
Wild Horses-AUMs: 20 yrs.: 4 Mile 240 ; West Crane 0

Actions

Stock Driveways: 40,763 existing maintained, 22,237 existing eliminated
(acres) 627 new added, 41,390 total available

Vegetative Manipulation:
5 yrs - 5,000 acres burn, spray and/or seed; 2,000 acres disc'd & seed
20 yrs - 18,279 acres burn, spray and/or seed; 6,000 acres disc'd & seed

Projects: 60 mi. fence, 66 water developments, 15 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
12 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer until these lands are transferred.

Special Considerations

Seed mixtures on vegetative manipulations will include grass, forb and shrub species that will benefit both livestock and wildlife.

Note: For analysis purposes for livestock use levels (AUMs), it was assumed that only the current land transfer applications being processed would be completed within the next 5 years and that no other land transfers would occur within the next 5 years. Consequently the 5-year forage level for livestock in the preferred alternative is not comparable with the 5-year forage level for livestock in Alternatives A, B, C, and D since it was assumed that all land transfers in those alternatives would be completed at the end of 5 years. See Appendix G for further information.

Watershed Resources

Objectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Designate 12,000 acres of the Boise Front as an ACEC and prepare/update the following activity plans - HMP, RAMP.

Vegetative Resources

Objectives

Protect candidate or sensitive plants.

Protect and manage 13 specific sites containing candidate, sensitive, or uncommon plants or valuable plant communities.

Improve general condition on 32% of all fair and 11% of all good condition rangeland.

Change or improve condition on 31% of the poor condition rangeland and maintain condition on remaining.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Exclude surface and subsurface ROWs in those areas known to contain candidate or sensitive plants. Include no surface occupancy stipulations in all mineral leases.

Adjust livestock grazing practices and reduce livestock preferences in allotments in poor and fair condition.

Mechanically treat (through range and wildlife projects) areas of poor and fair condition rangeland that possess a high return potential.

Designate and/or manage 13 areas as follows:

Special Management Area	Designations	Acres	Minerals (acres) Locatables Withdrawal	Leasables Closed	Leasables No Surf.	ROW Avoidance (acres) 1/ O	Surf	Sub	ORV Use (acres) 2/ O	L	C
1. Lost Basin Grassland 3/	RNA	65	0	0	65	0	65	65	0	0	65
2. Rebecca Sandhill 3/	RNA	410	0	0	410	0	410	410	0	0	410
3. Sand Hollow 4/	None	500	0	0	500	0	500	500	0	500	0
4. Summer Creek 4/	RNA	240	0	0	240	0	240	240	0	0	240
5. Peraphyllum Rock	None	40	0	0	40	0	40	40	0	0	40
6. Beacon Hill	None	20	0	0	20	0	20	20	0	20	0
7. Sagebrush Hill	None	10	0	0	10	0	10	10	0	0	10
8. Buckwheat Flats	RNA	200	0	0	200	0	200	200	0	0	200
9. 4th July Meadow	None	100	0	0	100	0	100	100	0	0	100
10. Sand Capped Knob	None	40	0	0	40	0	40	40	0	0	40
11. Goodrich Creek 3/	RNA	440	0	0	440	0	440	440	0	0	440
12. Pearl	None	400	0	0	400	0	400	400	0	400	0
13. Prostrate Ceanothus	None	80	0	0	80	0	80	80	0	80	0

1/ O = Overhead; Surf = Surface; Sub = Subsurface.
2/ O = Open; L = Limited; C = Closed.
3/ Exclude or limit livestock grazing.
4/ No water or salt blocks in area or on ridgeline.

Projects: 6 mi. fencing
5 acres for interpretive signing

Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known.
Prepare five Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 181,640 acres of elk habitat, 275,250 acres of deer habitat and 4,400 acres of antelope crucial winter habitat and provide forage to support proposed populations of these animals.

Manage 185,860 acres of sage grouse habitat to improve brooding and nesting habitat.

Improve 23,912 acres of wildlife habitat through new seeding and interseeding existing areas and shrub plantings.

Provide special management on 61,000 acres of curlew and 32,960 acres of Columbian sharp-tailed grouse habitats to improve populations of these sensitive species.

Maintain existing habitats for other wildlife species.

Wildlife Unit Months:	7,124 Elk,	44,612 Deer,	1,800 Antelope
Expected Population:	191 yrlong Elk,	961 yrlong Deer,	175 yrlong Antelope
	1,208 winter Elk,	8,270 winter Deer,	

Actions

Vegetative Manipulation: 10,387 acres Shrub, Grass & Forb Seeding,
8,295 acres Burn, Disc & Seed,
2,230 acres Interseed,
3,000 acres Special Project Seeding

Projects: 30 mi. fence, 2 Guzzler

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse; and deer (Boise Front).

Designate 61,000 acres of curlew habitat and 4,200 acres of sharp-tailed grouse habitat as ACECs.

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 16 stream miles of riparian habitat. Continue present management on 102 stream miles of riparian habitat.

Improve the condition of 14 miles of aquatic habitat and continue present management on 66 miles of aquatic habitat.

Actions

Adjust livestock grazing practices on riparian areas in allotments where riparian/aquatic projects are proposed.

Incorporate riparian pastures, grazing systems, and/or special measures in AMPs to improve all riparian and aquatic habitat.

Projects: 11 mi. fencing, 11 mi. instream work
7 mi. of stream bank planting

Lands and Realty

Objectives

Identify for transfer from federal ownership 17,604 acres of public lands (563 acres through sale (T1) and 10,107 acres through sale or exchange (T2) and 6,374 acres through exchange (T3), and 560 acres through DLE (T4)). Retain 469,862 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notifications to livestock permittees once the final decision to transfer has been made.

Recreation Resources

Objectives

Provide or enhance recreation at 21 areas.

Provide for ORV recreation activity on public lands.

Manage 2,600 acres of public lands along the Payette River as a Wild and Scenic River (recreation river category).

Actions

Designate ORV recreation activity as open on 244,118 acres, limited (to existing or designated roads and trails) on 241,215 acres and closed on 2,133 acres.

Manage 11,084 acres of public lands recommended for transfer as limited to designated or existing roads and trails and 6,160 acres as open for ORV recreation, until lands are transferred.

Recommend the study of 8 miles of Payette River (South Fork) for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Obtain recreational access through easement and acquisition of lands.

Description of Alternatives

Designate and manage 21 areas as follows:

Sites	Special Designations		Minerals (acres)			ROW 1/ Avoidance (acres)			ORV (acres) 2/		
			Locatables	Leasables							
	Type	Acres	Withdrawal	Closed	No Surf	O	Surf	Sub.	O	L	C
1. Cascade Uplands 3/	ERMA	334,000	0	0	0	0	0	0	241,498	88,039	5
2. Weiser River	Boat Launch	1	0	0	1	1	1	0	0	1	0
3. Clay Peak	Cycle Park	948	0	0	948	0	948	0	436	0	512
4. Oxbow 4/ Brownlee	SRMA	40,000	0	0	0	0	0	0	0	39,779	0
5. Steck	Campground 5/	11	0	0	11	11	11	0	0	0	11
6. Weiser Dunes	Play Area	200	0	0	0	0	200	0	200	0	0
7. Snake River	Boat Launch	10	0	0	10	10	10	0	0	10	0
8. Payette River 6/ Corridor	SRMA/WSR	19,000/ (2,600/ 8 mi)	0	0	0	0	0	0	0	18,984	0
9. North Fork	Campground 5/	10	0	0	10	10	10	0	0	0	10
10. Garden Valley	Boat Launch	1	0	0	1	1	1	0	0	1	0
11. South Fork	Campground 5/	3	0	0	3	3	3	0	0	0	3
12. Chief Parrish	Picnic Site	2	0	0	2	2	2	0	0	0	2
13. Boise Front 7/	SRMA/ACEC	12,000	0	0	0	0	0	0	0	11,995	0
14. Hulls Gulch	Interpret. Trail	5	0	0	5	0	5	0	0	0	5
15. Treasure Valley 8/	ERMA	72,000	0	0	0	0	0	0	0	68,780	0
16. Little Gem	Cycle Park	3,000	0	0	0	0	3,000 9/	0	2,100	900	0
17. Dewey	Play Area	30	0	0	0	0	30	0	30	0	0
18. Parma	Play Area	10	0	0	0	0	10	0	10	0	0
19. Pickles Butte	Play Area	180	0	0	0	0	180	0	180	0	0
20. Paddock Reservoir	Campground 5/	5	0	0	5	5	5	0	0	0	5
21. Birds of Prey	Natural Area	640	0	0	0	0	0	0	0	640	0

1/ O = Overhead; Surf = Surface; Sub = Subsurface.
2/ O = Open; L = Limited; C = Closed.
3/ Specific constraints covered under Weiser River, Clay Peak, and Paddock Reservoir.
4/ Specific constraints covered under Steck, Weiser Dunes and Snake River.
5/ Exclude or limit livestock grazing.
6/ Specific constraints covered under North Fork, Garden Valley, South Fork and Chief Parrish.
7/ Specific constraints covered under Hulls Gulch.
8/ Specific constraints covered under Little Gem, Pickles Butte, Dewey and Parma.
9/ Except for electrical transmission towers in existing right-of-way.

Projects: Water and/or sanitary facilities - 8, launch ramp - 3, access - 8

Activity Plans: RAMPs for Oxbow-Brownlee, Payette River Corridor, and Boise Front.

Cultural Resources

Objectives

Protect, through special designation and management, areas with significant cultural values.

Actions

Nominate eight sites to the National Register of Historic Places and manage as shown below.

Surface and subsurface ROWs will be routed to avoid cultural sites.

Sites	NR 1/ Acres	Minerals (acres) Locatables Withdrawal	Leasables Closed	Leasables No Surf	ROW Avoidance (acres) 5/ O	S	Sub	ORV Use (acres) 3/ O	L	C
1. Placerville Townsite 4/	8	8	0	8	0	8	8	0	8	0
2. Grays Creek	40	2/	0	2/	0	2/	2/	0	40	0
3. Indian Creek	20	2/	0	2/	0	2/	2/	0	20	0
4. Milk Creek	20	2/	0	2/	0	2/	2/	0	20	0
5. Cabin Creek	20	2/	0	2/	0	2/	2/	0	20	0
6. Quartzburg	386	2/	0	2/	0	2/	2/	0	386	0
7. Centerville	516	2/	0	2/	0	2/	2/	0	516	0
8. Pioneerville	581	2/	0	2/	0	2/	2/	0	581	0
9. Mineral	429	2/	0	2/	0	2/	2/	0	429	0

1/ National Register of Historic Places.
2/ Acreage to be determined by National Register nomination process.
3/ O = Open, L = Limited, C = Closed.
4/ National Register of Historic Places (existing).
5/ O = Overhead; S = Surface; Sub = Subsurface.

Projects: 5 mi. fencing
Activity Plans: CRMP (9)

Forest Resources

Objectives

Manage 26,663 acres of suitable commercial forest land for timber management and harvest.

Description of Alternatives

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 5,232 acres of forest lands under CFL set asides. This includes 5,139 acres for TPCC withdrawal, 70 acres for seed orchard withdrawal and 23 acres for campground withdrawal.

Provide an annual harvest of approximately 1.7 MMBF.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 68 mi. of forest access road (3.4 miles annually)
Acquire access on one to two areas

Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest land will generally be through selective cutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 150-700 acres annually.

Mineral Resources

Objectives

Make 456,281 acres (94% of area) available for locatable exploration and development and 456,289 acres (94% of area) for leasable mineral exploration and development.

Continue making available salable minerals from three material sale sites and 16 free-use sites as needed.

Actions

Leasables (acres)			Locatables (acres)		Salables (acres)	
Open	Closed	No Surface Occ.	Open	Withdrawn	Available	Unavailable
456,289	31,177	3,549	456,281	31,185	95	0

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

This plan recommends ACEC designation for three areas which met the criteria (of relevance and importance) to be considered for ACEC designations (Boise Front Area; Columbian Sharp-tail Grouse Habitat Area; and the Black Canyon Long-billed Curlew Management Area). The ACECs are shown on Map 2-3. The following summarizes the description and special requirements for the three ACECs recommended in the RMP. Additional information is available at the Boise District Office, BLM.

Name: Boise Front Area of Critical Environmental Concern

Purpose

The purpose for designating 12,000 acres of the Boise Front as an ACEC is to focus attention and identify management direction on this important natural resource. Management objectives are to protect and enhance the watershed resource, quality of wildlife habitat, variety of recreation opportunities, and scenic values.

Site Description

The Boise Front ACEC would encompass 12,000 acres in the hills and mountains lying immediately north and east of Boise, Idaho. The 12,000 acres are situated in a land ownership pattern with adjacent Forest Service, Idaho Fish and Game, State Department of Public Lands, and private lands. Elevations range from 3,200 feet at Lucky Peak reservoir to 5,680 feet near Lucky Peak. Topography is generally steep. A major portion of the land area contains slopes of 20 to 60 percent.

Soils in the area are formed in deeply weathered granite of the Idaho Batholith and are highly erosive and easily disturbed when dry or saturated.

Present vegetation includes cheatgrass and other annuals at the lower elevations, sagebrush and bitterbrush at mid elevations, and scattered stands of Douglas-fir and ponderosa pine at higher elevations. Five major drainages usually provide streamflows throughout the year. Other stream courses are generally dry during the summer months with spring snowmelt and rainstorms contributing to seasonal streamflows. The major drainages and many smaller ones support riparian vegetation. Livestock use includes approximately 325 cattle in a rest/rotation grazing system managed by the Idaho Department of Fish and Game. Several bands of sheep trail across the area in spring and fall.

In 1959 after a fire eliminated much of the vegetative cover, two separate storms caused serious flooding and sediment damage to the northeast portion of the City of Boise. Following a costly cleanup, extensive watershed rehabilitation work was done by several agencies in a joint effort to stabilize the vulnerable resource. The terraces constructed as part of that effort are still visible from the City of Boise and vicinity as a reminder of the areas sensitivity to disturbance and forces of nature.

Description of Alternatives

Resource Values

The Boise Front functions as an important groundwater recharge area. Snow melt and rain waters enter the soil and percolate down through the granitic soils, faults and fractures and eventually create groundwater reservoirs. These subsurface reservoirs release water at numerous springs and support the perennial streams and riparian vegetation. Much of the subsurface flows accumulate in groundwater reservoirs which are available for Boise Valley users. The City of Boise is a major user of this groundwater and operates several groundwater wells for municipal use including geothermal heating.

The Boise Front is a crucial winter range for approximately 4,000 mule deer. The Highland Valley and Shaw Mountain roads are currently closed to vehicles from December 15 to April 1 to protect this herd. Upland game birds (quail, dove, chukar and Gray partridge), numerous small mammals, reptiles and non game birds are also found in the area. Two candidate (Federal Category II) plants, Aaseae's onion (*Allium aaseae*) and Mulford milkvetch (*Astragalus mulfordea*) have been identified in the area.

Recreation use on the Boise Front includes ORV activities, hunting, hiking, horseback riding, and interpretive uses along the Hulls Gulch National Recreation Trail.

The Boise Front is a scenic backdrop for the City of Boise and surrounding area. Although there are several powerlines traversing the area, they are generally not noticeable from a distance. More noticeable are the roads and trails, many of which have been established through unrestricted ORV use. It is currently managed as a Class II visual resource.

Cause for Concern

The combination of steep slopes and highly erodible granitic soils make the area extremely sensitive to changes in the vegetative community through surface disturbing activities. Disturbance of the vegetative community can lead to rill and gully erosion which are now evident on the Boise Front. Much of the serious rill and gully erosion has been attributed to disturbance caused by off road vehicle use. This erosion can reduce the function and value of the area as a watershed and groundwater recharge area. Springs and riparian vegetation may also be reduced. The current erosion problems are increasing and the ability of the area to fully function in its capacity as a watershed is threatened.

Surface disturbing activities which can lead to undesireable vegetative changes and erosion include unrestricted motorized and nonmotorized vehicle use, road construction and maintenance, mineral excavation, certain rights-of-way, fire occurrence, and suppression activities.

The scars from severe erosion can also reduce the attractiveness of the area as a scenic backdrop for viewers from the Boise vicinity and can reduce the quality of recreation activities.

Vehicle use and human disturbance during the winter months can reduce the effectiveness of winter habitat for deer populations by adding stress during a critical time.

Management Guidelines

Resource Use Limitations

The following resource use limitations will apply to the Boise Front ACEC to protect resource values:

1. Motorized and nonmotorized vehicle use will be limited to designated roads and trails.

2. The Highland Valley and Shaw Mountain roads will be closed to motorized and nonmotorized vehicle use from December 15 to April 1.

3. The upper portion of the 8th Street Road will be closed to 4-wheeled vehicles during the wet winter months.

4. The area will be closed to disposal of mineral materials under the Materials Act of 1947, as amended (Alternative B only).

5. The area will be managed to conform to Class II Visual Resource Management Guidelines.

6. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

The following activities will receive management emphasis to further protect resource values:

1. Closure and rehabilitation of certain roads and trails.

2. Maintenance and reconstruction of existing roads and trails.

3. Restriction of future rights-of-way to insure minimal erosion and visual intrusion.

4. Full fire suppression.

5. Rehabilitation of burned areas.

6. Installation of water control structures to reduce erosion where needed.

Name: Columbian Sharp-tailed Grouse Habitat Area of Critical Environmental Concern

Purpose

The purpose for designating 4,200 acres as an ACEC is to intensify habitat management for one of the last remaining populations of Columbian

sharp-tailed grouse in western Idaho. The basic management objectives will be to improve, protect and enhance the quality of the habitat for this sensitive species.

Site Description

This ACEC would be located approximately 16 miles north of Weiser, Idaho on the south side of Hitt Mountain with USFS land, State land and private lands on the north, east and south.

It is bordered on the west by Mann Creek while Sage Creek and Deer Creek transect the area.

Topography is mostly rolling hills with some steep slopes adjacent to Mann and Sage Creeks. Elevation varies from 3,200 feet to 4,000 feet. Soils are mixed and it is not uncommon to find pockets of loamy soil interspersed in shallow rocky soils.

The area presents a mosaic of vegetation types corresponding to the various soils. Vegetation associations include big sagebrush/grasses and mountain shrub patches with aspen, serviceberry, chokecherry, bittercherry and snowbrush shrubs, riparian zones with willow, rose and hawthorne shrubs with the northern areas of ponderosa pine with some Douglas-fir.

Resource Values

In addition to Columbian sharp-tailed grouse (*Tympanuchus phasianellus columbianus*), the area contains important spring, fall and summer habitat for mule deer which are common in the area. Concentrations of migrating mule deer use the area during the spring and fall. It is also important spring and fall elk range. The area has a rich diversity of wildlife. It supports a variety of mammals from coyotes to deer mice. Approximately 180 different species of birds have been observed on the area.

Causes for Concern

Columbian sharp-tailed grouse were once abundant and widespread throughout the northwest. This species has disappeared from most of its former range and is now extinct in California, Oregon and Nevada and reduced to remnant populations over the remainder of its range.

Currently, remaining populations in Idaho are small and disjunct. In western Idaho, populations are extremely rare and are limited to Washington and Adams Counties. The largest known population in western Idaho is found in the vicinity of this ACEC. There are four known dancing grounds in the area and the fluctuating population numbers approximately 200 birds.

The Columbian sharp-tailed grouse has been designated as a "Species of Special Concern" by the Idaho Department of Fish and Game (IDF&G) and as a "Sensitive Species" by the U.S. Fish and Wildlife Service and Bureau of Land Management (BLM). BLM policy is to maintain or increase current population levels of sensitive species through habitat protection and enhancement.

Management Guidelines

Resource Use Limitations

1. Motorized vehicle use will be limited to designated roads and trails.

2. Livestock grazing will be adjusted to allow the range to reach and maintain optimal habitat condition.

3. Surface occupancy for all oil and gas, and geothermal leases will be determined on a site specific basis.

4. Seasonal occupancy stipulations will be applied on all oil and gas and geothermal leases.

5. Rights-of-ways construction activities for transmission lines, pipelines and other major projects will not be allowed during the nesting and brood-rearing periods.

6. No permanent new roads will be allowed in the area.

7. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

1. Develop a fully comprehensive habitat management plan for the area.

2. Fire rehabilitation and vegetative manipulation will be conducted with native species emphasized.

3. Maintenance of the bordering fences to manage livestock movement will be conducted annually.

4. Pursue acquisition of key habitat areas on State and private lands.

5. Place high fire suppression priority on the area.

Name: Long-Billed Curlew Habitat Area of Critical Environmental Concern

Purpose

The purpose for designating approximately 61,000 acres as an ACEC is to identify the area as crucial nesting habitat for Long-Billed Curlew (*Numenius americanus*), a federally protected migratory species. The main management objective will be to maintain nesting habitat for the 1,000 curlew pairs that nest and raise their young in the area.

Site Description

The area is a low, rolling upland lying between the Boise, Payette and Snake River valleys. The area is characterized by choppy rolling topography which supports a semi-desert type vegetative community. Average rainfall is approximately 11 inches per year with most of the moisture falling from November to June.

Description of Alternatives

The native habitat has been highly modified over the years. Historically, the area was a sagebrush/bunchgrass vegetation community. Livestock grazing, frequent wildfire and the invasion of exotic annual grasses have largely eliminated the shrubs and reduced perennial grasses.

In general, there are four cover types: 1) annual rangeland, 2) sagebrush, 3) crested wheatgrass, and 4) irrigated agriculture. The annual rangeland type is the key habitat for nesting curlews.

Resource Values

There are eight livestock operators that utilize the rangelands in the area. They graze both cattle and sheep on approximately 80,000 acres of state, private, and public lands. Grazing periods occur throughout the year with some operators grazing at various seasons of the year.

Recreation use on the area is divided into four areas. The area east of Little Freezeout is used by horse enthusiasts. In the past, some endurance rides have been held in this area. The area is also used by upland bird hunters in the fall. Limited ORV use also takes place. The area from Little Freezeout west to Sand Hollow is used by ORV enthusiasts. The Dewey ORV Park is located in this area. There is also some use by equestrians and upland bird hunters in the fall. The area west of Sand Hollow is heavily used by upland game hunters. There has also been some dog trials held in this area. Equestrians use the area while ORV use is heavy in the southwest corner of the area and a motorcross track is located in the northwest corner of the area. The areas north of the Black Canyon and west of the Sand Hollow freeway exits have dense populations of ground squirrels and are used by squirrel hunters in the spring.

Cause for Concern

Each year, Long-billed Curlew migrate into the area arriving about the third week in March. This large shore bird nests and raises its young in the annual grass habitat. The area supports about 1,000-nesting pairs, the largest nesting population in the western United States. Research on the population and habitat relationships was conducted in this area from 1977 to 1979. This research provided the base line information to manage this significant population.

A substantial decline in population and distribution of this species in the United States prompted its classification as a "Sensitive Species," by the BLM and a "Candidate Species," by the U.S. Fish and Wildlife Service. The Idaho Department of Fish and Game has designated this bird as a "Species of Special Concern." These classifications are an "early warning" that a species may be in trouble and if declines continue that official listing with maximum protection under the Endangered Species Act may be necessary. A habitat management plan was developed to assist in the conservation of crucial curlew habitat.

Management Guidelines

Resource Use Limitations

1. Motor vehicle use will be limited to designated roads and trails.

2. Seasonal occupancy stipulations will apply on all oil and gas and geothermal leases.

3. Rights-of-way construction activities for transmission lines, pipelines and other major projects will not be allowed during the nesting and brood-rearing periods.

4. Road construction will be limited and evaluated on a site specific basis.

5. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

1. Maintain sufficient good curlew habitat to support 1,000 nesting pairs during the breeding season.

2. Pursue the acquisition of key habitat on state and private lands through land exchange.

3. Enforce the ORV use limitations during the curlew nesting and brood-rearing periods.

4. Encourage intensive grazing systems that would improve curlew habitat in areas where vegetation is too high and too dense.

5. Use controlled burns as a management tool to maintain and improve curlew habitat.

6. Give curlew habitat priority consideration in all range improvement projects.

7. Encourage domestic sheep use on the area.

ALTERNATIVES CONSIDERED BUT NOT DEVELOPED

Four additional alternatives were considered by the RMP interdisciplinary team but were not developed or analyzed in the plan because they did not meet the criteria for selection. Alternatives not developed are as follows:

Maximum Livestock Grazing

This alternative would have developed livestock grazing to the maximum extent possible without consideration for other resource needs and/or demands. It included rehabilitating all lands infested with medusahead rye.

This alternative was not developed further because:

Description of Alternatives

1. Past, current and expected funding suggested that this alternative would not be economically feasible. It would require a high investment level to treat all lands invaded by medusahead rye (greater than $50.00 per acre on the best sites to $100.00 on poorer sites). A benefit/cost analysis using the current grazing fee charges would not prove beneficial.

2. It would not meet the provisions of existing laws and regulations for providing for multiple use of the public lands. This alternative would have catastrophic impact on crucial wildlife habitat as available AUMs would be given to livestock.

3. Existing social acceptance of providing for wildlife habitat on public lands for nature study, hunting and overall enjoyment by the areas population and the people of the State of Idaho would make the alternative unacceptable. Public comments received during the early stages of the planning process favored giving wildlife consideration in our plans.

This alternative would not meet the public's interest.

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.

This alternative was not further developed because:

1. All the currently developed alternatives would meet the reasonable numbers for wildlife populations desired by the Idaho Department of Fish and Game.

2. The development of maximum wildlife habitat on public lands would create major increases in wildlife numbers that would have significant impacts (adverse) on adjacent private lands because the private land contains a major amount of winter habitat (50%+) that would have to support the wintering wildlife. This would be in direct conflict with private landowners management of private wintering livestock ranges.

Public comments received during early stages of the planning process identified that population explosions were a problem particularly in wintering areas. A maximum wildlife production alternative is counter to solving this concern and would not solve the issue. An alternative designed to increase wildlife populations and provide winter wildlife habitat needs will be developed.

Maximum Environmental Protection

This alternative would have limited any outside influence 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.

It was not developed because:

1. Much of the vegetative resources have been disturbed and invaded by exotic vegetative species which do not contribute to the natural habitat of endemic species. The treatment of entire areas invaded by exotic species (medusahead rye) is currently not feasible in light of existing and expected funding levels over the duration of this planning and management cycle.

2. Much of the land pattern is fragmented and affected by management activities (generally non natural) occurring on adjacent private lands.

3. Based upon current and expected funding levels and past program funding levels this alternative would be unfeasible to implement. Excessive costs would be required beyond a reasonable level to provide boundary fencing and no benefiting program would have the funds for such costs.

Public input received during early stages of planning process centered upon recognition of all uses at moderate management levels. As a result of this public input, the above would not be an acceptable alternative.

No Livestock Grazing

This alternative would have removed the grazing of livestock from the public lands in the resource area. This alternative was eliminated from consideration early in the planning process. It was determined that it is both unreasonable and not feasible in light of local social, economic and environmental conditions. The rationale for not considering this alternative is:

1. The resource area is made up of both blocked and fragmented public lands. About 336 of the allotments exist on this land base (487,500 acres). Extensive fencing of the public land boundary would be required to keep livestock off of the public lands from adjacent private lands and U.S. Forest Service allotments. This fencing cost would be prohibitive and unreasonable and the enforcement of no grazing would be unrealistic as well as unmanageable. This fencing would also have an adverse impact on movement of wildlife particularly if fences had to be built to meet sheep specifications.

2. Livestock grazing is an important industry in the eight county area that the resource area lies within. It contributes $43 million and 1,553 jobs to the regional economy of west-central Idaho. Given this economic significance and the general social acceptance of livestock grazing by the people in this area and the State of Idaho, there would be no realistic support for this alternative.

3. Although a no grazing alternative would, in part, satisfy a portion of the range management issue, it would not have resulted in major rangeland improvements. This is due to the magnitude of poor condition rangeland resulting from invasion of medusahead rye grass and not as a result of livestock on the rangeland.

4. Livestock grazing has long been recognized as a legitimate use of the public lands. The removal of this use from a multiple use resource area, where forage in fair or better condition exists, cannot be justified.

5. Public input received during public meetings, supported management actions that recognized all uses on public lands. No - "No Grazing" type management actions were proposed.

RELATIONSHIP TO NEPA GOALS

The alternatives described in this RMP/EIS all would achieve the requirements of sections 101 and 1023(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, C, D and E would limit the range of uses and the environment. Alternative E, 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.

All actions taken to implement the Preferred Alternative (Alternative E) would be monitored as outlined in Appendix P.

COMPARATIVE SUMMARY

A comparison between alternatives is shown on the following page.

COMPARATIVE SUMMARY

Resource	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
SOILS - Erosion Rate	Up to 10% increase.	5% increase.	20% decrease.	10% increase.	2% increase.
WATER QUALITY	Slight improvement.	Slight decline.	Moderate improvement.	Slight decline.	Slight improvement.
VEGETATION - Rangeland Condition	Decline on 3 to 5% of the area.	Improvement on 18 to 23% of the area.	Improvement on 20 to 25% of the area.	Improvement on 14 to 19% of the area.	Improvement on 22 to 27% of the area.
CANDIDATE AND SENSITIVE PLANTS	2 Research Natural Areas-475 acres. Slight protection.	5 Research Natural Areas-1,355 acres. Moderate protection.	5 Reserach Natural Areas - 1,355 acres. Full protection.	5 Research Natural Areas-1,355 acres. Full protection.	5 Research Natural Areas-1,355 acres. Moderate protection.
RIPARIAN HABITAT - Miles changed - primary cause	106 - maintain 11 - improve-AUM/projects 5 - decrease-AUM 71 - improve-AMP	101-maintain 9 - improve-AUM/projects 12 - decrease-AUM 176 - improve-AMP	107 - maintain 12 - improve-AUM/projects 3 - decrease-AUM 140 - improve-AMP	94 - maintain 11 - improve-AUM/projects 17 - decrease-AUM 204 - improve-AMP	102 - maintain 16 - improve-AUM/projects 4 - decrease-AUM 142 - improve-AMP
AQUATIC HABITAT - Miles changed - primary cause	67 - maintain 14 - improve-projects 73 - improve-AMP	58 - maintain 10 - improve-projects 12 - decrease-AUM 178 - improve-AMP	57 - maintain 23 - improve-AUM/projects 142 -improve-AMP	55 - maintain 10 - improve-projects 14 - decrease-AUM 206 - improve-AMP	66 - maintain 14 - improve-projects 142 - improve-AMP
WILDLIFE Population Changes that Habitat would Support — Elk	5% decrease	25% increase	35% increase	20% increase	22% increase
Mule Deer	5% decrease	25% increase	35% increase	20% increase	33% increase
Antelope	No change	50 animal increase	150 animal increase	50 animal increase	125 animal increase
Sage Grouse	Slight decrease	Slight increase	Moderate increase	Slight increase	Slight increase
Sharp-tailed Grouse	Slight decrease	Slight increase	Moderate increase	Slight increase	Slight increase
Curlew	Little change	Slight decrease	Little change	Little change	Little change
LIVESTOCK - 20-year AUM	66,014	71,076	53,643	76,613	70,536
WILD HORSES - Herd Size 20 years — 4-Mile	10	20	20	20	20
West Crane	12	0	30	0	0
LANDS — Sale	243	563	243	243	563
Sale/Exchange	1,397	33,409	0	28,750	10,107
Exchange	0	5,957	5,775	6,174	6,374
DLE	560	560	0	560	560
Special Exc.	0	0	11,306	0	0
TOTAL	2,200	40,489	17,324	35,727	17,604
RIGHTS-OF-WAY - Acres restricted & resource values	4,333 Cultural, recreation.	6,886 Candidate & sensitive plants, cultural, recreation.	10,326 Candidate & sensitive plants, cultural, recreation.	10,331 Candidate & sensitive plants, cultural, recreation.	6,696 Candidate & sensitive plants, cultural, recreation.
CULTURAL - National Register of Historic Places	No new sites nominated. One site reevaluated.	8 sites nominated. One site reevaluated.	8 sites nominated. One site reevaluated.	8 sites nominated. One site reevaluated.	8 sites nominated. One site reevaluated.
WILD AND SCENIC RIVERS - Recommend for study	None.	South Fork Payette - 8 miles.	South Fork Payette - 8 miles. North Fork Payette - 6 miles.	South Fork Payette - 8 miles.	South Fork Payette - 8 miles.
RECREATION - Off-road vehicle designations	Open - 75% Limited - 25% Closed - Less than 1%	Open - 70% Limited - 30% Closed - Less than 1%	Open - Less than 1% Limited - 99% Closed - Less than 1%	Open - Less than 1% Limited - 99% Closed - Less than 1%	Open - 50% Limited - 50% Closed - Less than 1%
MINERALS - Acreage open — Locatable	94%	94%	93%	93%	94%
Leasable	94%	94%	93%	94%	94%
FORESTRY -					
Commercial Forest Lands	26,686	25,642	20,026	25,347	26,663
Annual Harvest	1 million board feet	1.7 million board feet	1/2 million board feet	2.9 million board feet	1.7 million board feet
Roads needed annually	2 miles	3.4 miles	1 mile	5.8 miles	3.4 miles
FIRE - Annual suppression costs	$109,300	$115,000	$109,300	$115,000	$112,000
ECONOMICS -					
Direct Earnings					
Crop Agriculture	$ 207,800	$ 207,800	$ 0	$ 207,800	$ 207,800
Livestock (20-year)	$ 2,700,000	$ 2,900,000	$ 2,200,000	$ 3,100,000	$ 2,900,000
Recreation (20-year)	$ 4,700,000	$ 4,700,000	$ 4,700,000	$ 4,700,000	$ 4,700,000
Lumber/Wood	$ 215,000	$ 387,000	$ 107,500	$ 645,000	$ 387,000
Total Earnings					
Crop Agriculture	$ 529,700	$ 529,700	$ 0	$ 529,700	$ 529,700
Livestock (20-year)	$ 7,200,000	$ 7,600,000	$ 5,800,000	$ 8,200,000	$ 7,700,000
Recreation (20-year)	$10,600,000	$10,600,000	$10,600,000	$10,600,000	$10,600,000
Lumber/Wood	$ 515,000	$ 926,900	$ 257,500	$ 1,500,000	$ 926,900
Direct Employment					
Crop Agriculture	7	7	0	7	7
Livestock (20-year)	96	103	77	111	104
Recreation (20-year)	392	392	392	392	392
Lumber/Wood	10	18	5	30	18
Total Employment					
Crop Agriculture	24	24	0	24	24
Livestock (20-year)	333	354	266	382	357
Recreation (20-year)	884	884	884	884	884
Lumber/Wood	26	46	13	77	46
AUM/Capital Value					
Low (20-year)	$ 3,700,000	$ 4,000,000	$ 3,000,000	$ 4,300,000	$ 3,900,000
High (20-year)	$16,500,000	$17,800,000	$13,400,000	$19,200,000	$17,600,000
Management Costs	$ 442,000	$ 1,900,000	$ 1,600,000	$ 2,500,000	$ 1,800,000

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.

RANGELAND RESOURCES

Soils

The soil resources in the Cascade RMP are extremely diverse. This diversity is a result of the variability in parent materials, slope, aspect, location on slope, elevation, climate, vegetative patterns, and time in place.

The soils in the RMP area may be separated into three main groups based on source of parent material and geology. The most extensive group are the soils formed in basalt residuum and colluvium. Many of these soils have been influenced by loess in the upper section of the profile. These soils dominate the north half of the RMP area (Washington, Adams and northern Gem counties). They are very shallow to deep, gently sloping to steep, well drained loam and clay loam soils. Many have greater than 35 percent rock fragments in the profile. They are typified by dark colored surface horizons and well developed subsurface horizons. They occur on old terraces, hills and mountains.

The next largest group consists of soils formed in mixed alluvium and lake laid deposits of the Idaho and Payette formations. These soils occur in the Black Canyon area and the hills and terraces extending north of the Emmett valley into the lower portion of Washington and Gem Counties and portions of Boise County. The soils in the Black Canyon area are moderately deep to deep, very gently sloping to moderately sloping, well-drained silt loams. Many are underlain by a hardpan at depths of 20 to 40 inches. They are typified by light colored surface horizons and moderate to well developed subsurface horizons. These soils are mildly to strongly alkaline. They occur on dissected terraces.

The soils north of the Emmett valley are moderately deep to deep, very gently sloping to steep, well-drained loams grading to coarse sandy loams. These soils are typified by light to dark surface horizons and subsurface horizons with weak to strong development. Alkalinity ranges from mild to strong. They occur on hilly dissected terraces.

The last major group consists of soils formed in residuum and colluvium derived from granitics of the Idaho Batholith. These soils occur on the mountains and foothills of the Boise Front and areas of Boise County. They are moderately deep to very deep, sloping to very steep, well-drained coarse textured soils. They are typified by having light to dark colored surface horizons and weak or no development in the subsurface horizons. The soils in the mountain areas of Boise County (particularly the forested areas) have colder temperatures and receive more moisture than those on the Boise Front.

Soils information for the RMP area was obtained from Soil Conservation Service (SCS) published soil surveys for Gem County Area (1965), Canyon County Area (1972), Payette County Area (1976), Ada County Area (1980), and the Valley Area (1981). Information for Washington and Adams County was obtained from an on-going survey by the SCS in those counties. Publication date for that survey is scheduled for 1989. Boise County soil information was obtained through field work conducted by the BLM in 1984.

Additional soil information and detailed soil maps for the RMP area are on file with the Boise District Office or can be obtained from the SCS.

Of the 487,466 acres in the RMP area, 311,952 acres or 64 percent have been classified as having a high or very high erosion hazard rating[1/] (see Appendix A for a breakdown by allotment). The analysis was done on a map unit bases with each map unit assigned an erosion hazard rating. If over 30 percent of the map unit had a high or very high erosion hazard rating, the entire map unit was rated respectively. These ratings were based on the erosion susceptibility factor (k)[2/] and slope. Soils on slopes exceeding 30 percent were considered to have a high erosion potential. Soils steeper than 60 percent were rated very high. The rationale behind this is in the event the vegetative cover or soil surface is disturbed, these soils would be highly susceptible to water/wind erosion. Most areas designated with a high or very high erosion hazard are due primarily to the slope factor and not the (k) factor.

Wind erosion is not significant in the RMP area. Some soils developed from sediments are in a moderate or high wind erodability group but these areas are small in extent and are not subject to prolonged high velocity surface winds.

The present erosion situation over the majority of the RMP area where ground cover is sufficient is within the tolerance limits acceptable for rangeland. These are between 1 to 3 tons/acre/year depending on soil characteristics and environmental conditions. The RMP area averages approximately two tons/acre/year soil loss. The current estimated soil loss

1/ The erosion hazard rating is the susceptibility of a soil to erosion when bare of vegetation.

2/ Soils with a (k) factor greater than .45 were considered to have a high erosion potential.

using the Universal Soil Loss Equation (USLE) for the three main soil groups discussed in the physical profile are as follows:

Soils on basalt	- 1.5 to 2.0 tons/acre/year
Soils on sediments	- 2.0 to 2.5 tons/acre/year
Soils on granitics	- 2.0 to 2.5 tons/acre/year
Average for entire RMP area	- 2.0 tons/acre/year

Erosion rates as calculated by the USLE are a function of many factors, most importantly, soil erodability (K factor), slope length and steepness, amount of cover, and rainfall intensity. It is important to note that the above figures are estimates and do not indicate absolute values. No actual measurements have been made and the calculations have been applied over a very broad and diverse landscape. It is also important to note that the USLE calculates long term average rainstorm caused erosion and will not necessarily reflect erosion caused by snowmelt runoff. Spring runoff may contribute significantly to the amount of soil erosion, especially at higher elevations in the RMP area. The USLE is used to measure soil loss from both sheet and rill erosion and does not take into account gully erosion.

Most of the current specific erosion problems are on soils derived from sedimentary and/or granitic parent materials. These are portions of the Boise Front, Black Canyon, and the southern portion of the Crane Creek planning unit. These soils are on steep, poorly vegetated slopes. Past damage has been caused by excessive livestock concentrations in certain areas, fire and fire suppression activities, vehicle use on unpaved roads, on two track trails, and ORV activity. Rill and gully erosion due to ORV use is a serious problem on the Boise Front area.

Another area of concern is along the Snake River canyon and its associated drainages in Washington and Adams counties. These soils, formed in basalt, occur on steep and very steep slopes. Past grazing practices and wildfires have altered or reduced much of the native vegetation. The combination of steep slopes and poor vegetative condition has led to an increase in soil loss and decreased soil productivity.

Many soils in the RMP area with a high or very high erosion hazard are associated with a poor ecological vegetative condition, approximately 65 percent, particularly the sedimentary soils and the lower elevation gently sloping soils on basalt. These areas are characterized by an increase in annual grass species (cheatgrass and/or medusahead wildrye[1/]) and a decrease in perennial species. These areas also include sites that are sparsely vegetated compared to their potential due to some past actions or event. Areas that have a poor ecological vegetative condition have proven less effective in protecting the soil resource. Both plant composition and density are important in their effect on water infiltration rates. Plant density provides a protective vegetative and litter cover for the soil

1/ This is most prominent on the sedimentary areas. Medusahead wildrye seems to prefer soils with heavy textured surface and/or subsurface layers.

surface. This cover intercepts rain drops and dissipates impact velocity. Rain drop impact has a two fold effect on soils. First it causes particle detachment and displacement, and second it causes compaction of the soil surface by sealing pores. Both these actions affect infiltration and runoff. Pearse and Wooley (1936) found that fibrous rooted species (grasses) had greater infiltration rates than tap rooted species (shrubs and forbs). Perennial grass species are more effective than annual grass species. Annual species would provide basically the same surface protection, but are more susceptible to elimination by fire thereby exposing the soil. Perennial species have a much more substantial root system to bind the soil. Also perennial bunchgrasses catch more snow than annuals because of their upright nature, while annuals tend to lie flatter to the soil surface and bend over.

When infiltration rates are decreased the result is an increase in runoff and subsequent soil loss. Eventually this detached soil material enters streams, rivers and other bodies of water degrading these systems.

Also affecting infiltration is the amount of compaction and the resulting increase in bulk density of the soil surface. Trampling by livestock, ORV use, and road building are direct causes of compaction. Under moist soil conditions (spring and early summer) even light trampling can effectively compact the soils. This is especially critical on soils with heavy textured surface horizons. Soil compaction can also reduce vegetative productivity and vigor.

These impacts may be mitigated through identification of compaction prone soils and by appropriate management techniques such as season of use and location of livestock concentration areas. Rauzi and Hansen (1966) observed that concentrations of livestock led to the overuse of vegetation and soil compaction in areas such as floodplains, streamsides, reservoirs, and water facilities. Livestock concentrations around water facilities can lead to long term disturbance of soils and removal of vegetative ground cover. This is already evident in the RMP area.

Another form of erosion similar to water erosion in effect is trampling displacement. Like water erosion, trampling displacement is more evident as slopes increase. The RMP area is very prone to this form of erosion due to the many steep sideslopes utilized by livestock. This form occurs most readily when soils are very wet or very dry.

Implementation of grazing systems may have long-term beneficial effects on soils. Grazing systems that incorporate rest are more effective than annual season long use in most cases. Rest from livestock grazing during critical growing periods would improve plant vigor, reproduction, and litter accumulation thereby increasing the effective ground cover and adding beneficial organic matter to the soil. This would reduce amounts of bare ground and cause beneficial changes in soil structure, permeability and productivity. Demand for vegetative production for livestock and wildlife objectives result in an increased emphasis on soil productivity.

Mechanical treatments and rangeland burning expose large areas of bare soil to erosion initially, but an increase in vegetative cover after the first year lowers the potential for runoff and erosion.

Fire control measures such as dozer built firelines create drainage ways that concentrate overland flow and increase the velocity of water, leading to an increase in erosion. Surface disturbance associated with fire control may be mitigated by such practices as water barring and reseeding. This is especially important on the steep sedimentary and granitic soils. There generally will be a short-term soil loss before fire lines are revegetated.

Road construction can be a major source of erosion. Improper design, poor maintenance, soil compaction, road use, weather, and runoff can result at times in severe erosion problems. Sediment transported from these areas can impact the quality of streams and the associated aquatic community. Roads should be designed and constructed to prevent such damage. Areas with a high probability of road failure should be avoided.

ORV closures and limited use designations protect the watershed by decreasing disturbance and maintaining soil stability. ORV use outside of limited areas results in areas of compacted and displaced soil along with unnatural drainage channels that lead to increased runoff and erosion. This problem is very evident on the Boise Front and in the sedimentary soils in Gem and Payette counties. ORV use of public lands would result in significant impacts to the soils and watershed. Adverse impacts that may occur are reduction of forage production and loss of the hydrological function of the soils. The most obvious accelerated erosion and topsoil losses are caused by this land use. ORV limitations over the entire RMP area have a high probability of reducing such damage.

Activities that may cause an increase in runoff, soil compaction, and erosion or a decrease in water quality or soil productivity may be designed to avoid or mitigate long term impacts to an environmentally acceptable level. Soil resources are evaluated case-by-case as part of activity and project planning. See Appendices A and B and Map 3-3 for additional soils information.

As a result of wildfires during the summer of 1986 and the subsequent alteration of vegetative cover, erosion rates for those areas affected will be increased. Due to quick regrowth in the months following the fires and emergency reseeding efforts on critical erosion areas these increases will be on the order of 1 to 2 tons/acre/year above the normal average. The areas should stabilize in 2 to 3 years.

Air Quality

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.

Affected Environment

Water Quality

Surface water quality of the perennial streams of the Cascade Resource Area fluctuates widely due to many natural and man caused factors. Because of the many factors involved such as snowmelt runoff, storm events, hydroelectric projects, irrigation returns, road building, mining and livestock grazing, water quality may vary from year to year. Two seasons of "point in time" sampling are only an indication of the low flow quality of these perennial streams on those dates sampled. All samples were taken on BLM land and due to the nature of land ownership patterns, upstream activities impacting water quality will be reflected in these results. Twenty-one perennial streams were sampled during the summer of 1983 and 1984 during low streamflows. Sites and parameters sampled are available at the Boise District Office.

Overall, water quality of these perennial streams sampled was good. However, values for ammonia (4 sites), mercury (2 sites), iron (2 sites), total inorganic nitrogen (12 sites), ortho-phosphate (4 sites), turbidity (2 sites), total dissolved solids (1 site), and fecal coliform bacteria (11 sites) approached or exceeded standards used by the Idaho Department of Health and Welfare (1984).

Sedimentation was unacceptable (more than 25% of stream bottom substrate covered by fine sediments) on eight of the 21 sites evaluated. Streambed sedimentation was evaluated by an ocular method for substrate size percentage on the major perennial streams throughout the area. Most streams had sufficient gradient and flow volume to flush sediment downstream and prevent the covering of gravel and rubble by fine particles. Low gradient areas of the North Fork Payette River and the Weiser River are covered by fine sediments with the North Fork being almost totally a sand substrate. Agriculture is a major contributor to this problem.

Elsewhere poor watershed conditions due to range fires and livestock grazing, and eroding streambanks caused by loss of vegetative cover in riparian areas are the major causes of sedimentation. Best management practices for riparian ecosystems described in the resource management guidelines can substantially reduce sediment reaching streambeds.

Activities associated with agriculture, grazing, mining, timber harvest, road construction, and ORV use and natural events such as snowmelt, storm events, and fire are factors that influence water quality regardless of land ownership. When these factors occur on non-BLM lands upstream from BLM lands, water quality parameters will continue to fluctuate and water quality will continue to change on BLM lands.

The boundaries of the Cascade Resource Area encompasses 2.77 million acres. The BLM manages 487,466 acres of public lands within this boundary which is 18% of the total land. Upstream land ownership and management entities outside of the Cascade Resource Area boundary include the U.S. Forest Service, State of Idaho, and the private sector. Because of BLM's scattered land ownership pattern, limited percentage of land ownership, and lack of control on upstream land management practices and their subsequent influence on downstream water quality parameters, different BLM land use

plans and management practices are not likely to substantially affect specific water quality parameters in a predictable, consistent manner. Consequently, water quality impact predictions in Chapter 4 resulting from the various BLM land use plan alternatives and management practices are addressed in terms of qualitative changes in overall water quality rather than in terms of site specific quantitative changes in specific water quality parameters. Regardless of which land use plan is implemented, the BLM is committed to monitoring water quality parameters and adjusting management practices to work towards improving water quality.

Vegetation

A range survey (modified SCS condition class survey with estimated production levels by soil mapping unit) was conducted in 1985. LANDSAT Multi-spectral scanner Digital Image Analysis combined with field verification and SCS soil information was used to establish vegetational mapping units and condition class.

Because time and funding restraints precluded the tabulation and assessment of slope and topography effects on total available forage an assumption will be made that the 5-year average demand is the same as the estimated current forage production. Monitoring studies will be used to verify the current carrying capacity and/or to establish the need for a change in active demand.

The various cover types inventoried were combined into the following types:

1. mixed grass
2. sagebrush/mixed grass
3. mountain brush/perennial grass
4. perennial grass/deciduous brush/or riparian
5. conifer/forest brush/perennial grass
6. conifer closed canopy
7. mixed annual grass
8. dense medusahead grass
9. riparian grassland
10. sparse sagebrush/medusahead grass
11. sagebrush/perennial grass

These 11 types were used to produce a present vegetation map for the entire resource area. See Maps 3-1 and 3-2 and Appendices C, D and E for further information.

Of particular interest in this inventory is the ability to locate and distinguish non-native homogeneous stands of medusahead grass (*Taeniatherum caputmedusae*) and cheatgrass brome (*Bromus tectorum*) from native plant communities. This inventory has established baseline information for monitoring the changes in distribution of these two species.

The vegetation zones along with the approximate area represented in the resource area include the following:

Sage/Grass Zone	75%
Wheatgrass/Bluegrass Zone	5%
Ponderosa Pine Zone	5%
Douglas-Fir Zone	10%
Spruce/Fir Zone	5%

Current condition acres by allotment were derived by a range survey and Landsat. Trend information, however, is generally lacking on most of the resource area. Several isolated 3x3 foot trend plots have been established in various parts of the resource area, however, not enough are present in key use areas to make immediate use level adjustment decisions. The range survey will serve as baseline data for future allotment condition monitoring.

Ecological condition classes for the Cascade Resource Area rangelands have been estimated from the survey data as follows:

	Excellent	Good	Fair	Poor	Burned	Seeded	Total
Total Acres	1,922	33,301	210,315	196,329	2,234	9,730	453,731
%	1/2	7	47	43	1/2	2	100

Wildfires during the summer of 1986 were responsible for changes in the vegetative community on about 95,516 acres in the RMP area. The major change that resulted was the loss of the sagebrush/bitterbrush component. Revegetation efforts are underway to reestablish these species. In addition, it is assumed that annual grass and/or forb species will invade or increase their extent. This would result in a decrease in ecological condition in some areas. The extent that this would occur is unknown at this time. The information contained on Maps 3-1 and 3-2 and in Appendix E reflect conditions prior to the 1986 fire season.

Candidate and Sensitive Plant Species

Sensitive plant species are designated by a committee of technical botanists from throughout the state. Sensitive species are those whose restricted range, habitat requirements, or low population numbers make them vulnerable to elimination. The U.S. Fish and Wildlife Service maintains the federal lists of threatened and endangered plants as well as the candidates to those lists. There are no federally listed threatened or endangered plants in the Cascade Resource Area. There are two category 2 candidate species which are plant species with insufficient biological information on hand to support listing at this time. These category 2 candidate species are *Astragalus mulfordiae* and *Haplopappus radiatus*. There is one category 1 candidiate species which is a plant species with sufficient biological information on hand to list as either threatened or endangered. This category 1 species is *Allium aaseae*.

Allium aaseae is threatened by surface mining and heavy ORV use. *Allium aaseae* is also present on private lands which have heavy ORV use and have been and are currently being destroyed by urbanization. *Astragalus mulfordiae* is likewise threatened by ORV use and by urbanization.

Sensitive plant species in the Cascade Resource Area on BLM lands include: Allium tolmiei (variety platyphyllum), Astragalus vallaris, Camassia cusickii, Ceanothus prostratus, Peraphyllum ramosissimum and Primula cusickiana. Camassia cusickii and Primula cusickiana are also category 3c species which are taxa that have proven to be more widespread or abundant than previously believed or not subject to any identifiable threat. In addition, several sensitive plants are known from nearby or adjacent private lands. These adjacent sensitive plants include: Bacopa rotundifolia, Epipactis gigantea, Lindernia dubia, and Mimulus ringens. Carex aboriginum is a category 2 species historically located on private lands.

Uncommon plants found in the Cascade Resource Area include Rannuculus oresterus and Eriogonum thymoides.

Candidate and Sensitive Plant Species in the Cascade Resource Area

Latin Name	Common Name	Category
Allium aaseae	Aase's onion	C1
Allium tolmiei	Tolmiei's onion	Sensitive
Astragalus mulfordiae	Mulford's milkvetch	C2
Haplopappus radiatus	Snake River goldenweed	C2
Astragalus vallaris	Snake River milkvetch	Sensitive
Camassia cusickii	Cusick's camas	Sensitive & 3c
Ceanothus prostratus	Prostrate ceanothus	Sensitive
Peraphyllum ramosissimum	Squaw apple	Sensitive
Primula cusickiana	Cusick's primrose	Sensitive & 3c

Following is a description of the areas containing known populations of these candidate and sensitive plant species.

Hulls Gulch Nature Trail

Allium aaseae occurs as several small populations along the trail on the Boise Front.

Rebecca Sand Hill

This is a hill with very deep sandy soil containing tree-like bitterbrush on the hill top and a vigorous needle and thread grassland on the south aspect. This hill supports the largest known population of Mulford's milkvetch, Astragalus mulfordiae. Apparently, this steep sandy hill has escaped heavy grazing. It is also crucial deer winter range in excellent range condition.

Lost Basin Grassland

An area in excellent range condition that is part National Forest and part BLM lands. It is the southern extent of the Pacific Northwest bunchgrass vegetation type, which lacks sagebrush. It is protected from grazing by cliffs and very steep side slopes. Allium tolmiei (variety platyphyllum), a sensitive species, is found here.

Affected Environment

Goodrich Creek Mosaic

An area of mixed bunch grassland Eriogonum, Lomatium, a shrub community type in good range condition. In addition, there is a good riparian zone along Goodrich Creek. This area was burned by wildfire during the 1986 fire season. It will be allowed to recover naturally from the fire. No land treatments or seedings will be allowed in this area.

Beacon Hill

A small population of Allium aaseae on a south slope. This area also has suitable sandy soils which lack Allium aaseae. These suitable sites have had A. aaseae bulbs transplanted in an effort to study and establish new populations.

Pearl Site

An area with sandy soils with scattered populations of Allium aaseae. This represents over half the known populations of this onion. This area is also within the Little Gem Cycle Park. Mining and ORV use along with overgrazing and the subsequent spread of annuals, such as medusahead and cheatgrass threaten the future existence of Allium aaseae. Several areas appear to have been prime Allium aaseae sites which are presently eroded and support thistles, Kochia, and other weeds. The area has also been burned several times, and the vegetation has not recovered.

Buckwheat Flat

An Eriogonum thymoides community exists in relatively good range condition. It is a community type that is easily disturbed, due to its shallow soils and lack of steep slopes. Eriogonum thymoides, at one time, was considered to be a threatened plant species but has been dropped to uncommon status. It is a long-lived woody low growth shrub and appears to have very slow regeneration after being disturbed. Allium tolmiei is also found here.

Sand Capped Isolated Tract

A 40-acre isolated tract with a population of Allium aaseae. It is surrounded by private land, the creek bottom below is a sprinkler-irrigated pasture, and the slope is unfenced.

4th of July Meadow

This area contains the Snake River goldenweed, Haplopappus radiatus, which is a sensitive plant species. The general area is highly impacted by numerous disturbances such as road building, grazing, and weed invasion. The goldenweed persist despite these disturbances. The goldenweed occurs in the areas where there is good range condition.

Sagebrush Hill

This area contains a small population of Astragalus mulfordiae. It is on a steep hill and appears to be protected by its topographic position.

Sand Hollow

This area contains the highly erosive sandy habitat of Aase's Onion. The habitat in this area is currently being damaged by heavy dirt-bike use, and is entirely within the Little Gem Cycle Park. Such disturbance of the very loose, coarse sandy soil of Aase's Onion habitat results in the exposure of the onion's roots. This causes the desiccation of the plant and its death - often prior to the plants completion of flowering and seed maturation. Motorcycle use will continually erode and destroy Allium aaseae and its habitat.

The Sand Hollow mosaic consists of two areas. These two areas are both 1-1/2 mile bands on BLM land on the north side of Sand Hollow. These areas contain ridgeline and upper slopes of coarse loamy sand which is the only type of soil in which Aase's Onion has been found. An estimated 9,350 Aase's Onion plants are living in these two bands. This Sand Hollow population consists of nearly 40% of the entire Aase's Onion species.

Summer Creek Mosaic

This 200 acre conglomerate of seven sites contains Snake River milkvetch (Astragalus vallaris) and Cusick's Camas (Camassia cusickii). The milkvetch grows on ridgelines, and the camas is found in rugged, exposed stream bottoms. The distribution of both of these plants is restricted to rugged areas by heavy grazing. Both plants complete their life cycle by mid-June. This area also contains some large old growth mountain mahogany and bitterbrush.

Peraphyllum Rock

This rocky hill contains 21 Squaw Apple (Peraphyllum ramosissium) plants. There are no seedlings present. The area is heavily browsed.

Prostrate Ceanothus

This site is an isolated tract of land containing Ceanothus prostratus. This is the only known site within the State of Idaho containing this shrub which is disjunct from the Siskiyou Mountains of southwest Oregon.

Riparian Habitat

Riparian surveys were conducted in the Cascade Resource Area on approximately 124 drainage miles. This included 57 miles of perennial streams and 67 miles of intermittent streams.

Using the woody riparian survey method, vegetation condition ratings are as follows:

Poor	- 2.3 miles
Fair	- 35.1 miles
Good	- 78.3 miles
Excellent	- 4.7 miles
Unsuitable	- 1.6 miles

Since the survey method is designed to assess impacts to woody riparian vegetation from ungulate use, those areas identified as low fair to poor condition pertain only to ungulate use and not to site potential. Site potential is assessed at the time of survey. The field form contains existing canopy and potential canopy sections, where an estimate of potential canopy cover can be made.

The small amount of miles rated as poor condition was due generally to the resource area's topography, land ownership, and livestock use patterns. BLM ownership is well scattered in upland high moisture areas where vegetative growth excels. Public land occurs only on short reaches of drainages. The majority of these reaches rated good to excellent.

In lowland areas, with lowered soil moisture occurrence, BLM ownership is more blocked, but many drainages contain only herbaceous vegetation. Where woody riparian vegetation was present, condition classes ranged from fair to good with one drainage (Spring Creek) rating unsuitable due to more than 30% dead or decadent. The majority of lowland areas are in private ownership. It is in these areas where livestock concentrate and trail, and where much of the observed poor riparian condition exists.

Many ephemeral drainages have scatterings of woody riparian vegetation. The success of these plants is dependent on site potential. Site potential includes the presence, absence, and timeliness of soil moisture. Reaches of drainages lacking in woody riparian vegetation were not surveyed.

Upland perennial drainages typically start on Forest Service lands and cross BLM. These areas contain conifers, deciduous species, shrubs, and forbs. Lowland perennial/ephemeral drainages are found at lower elevations. Woody vegetation may be present along with shrubs and forbs.

Short steep ephemeral drainages are found on the west slopes of hills and mountains boarding the western edge of the Snake River. These drainages normally drain spring snow melt and have little to no value as fish habitat. Occurrence of woody riparian vegetation is scattered.

Natural factors such as fire and climatic events can reduce or eliminate woody riparian vegetation. Livestock grazing can suppress the regeneration of woody riparian species following these situations.

Aquatic/Fisheries Habitat

Approximately 81 miles of perennial streams were surveyed in the Cascade Resource Area. Perennial streams and rivers with 0.5 miles or more of continuous BLM ownership were evaluated and rated for the quality of six habitat features that are important components of a salmonid fishery. The Snake River and reservoir fisheries were compiled from literature reviews. There are no known federal threatened or endangered aquatic species in the resource area.

There are 33 species of fish found within the Cascade Resource Area. Sixteen of these species have been introduced into Idaho with 13 of these being warmwater fish to add to the recreational fishery of lowland reservoirs and rivers.

Redband trout, a BLM "sensitive species" and an Idaho "species of special concern" is found throughout the resource area and is managed by the Idaho Department of Fish and Game to protect populations and genetic integrity. The white sturgeon, also a "sensitive species" and "species of special concern," inhabits the free-flowing Snake River above Brownlee Reservoir. Habitat within the area is marginal at best however individuals from good upriver populations may move into this area.

The aquatic habitat and fishery resources of the CRA can be discussed in four parts corresponding to the Boise River, Payette River, Weiser River watersheds and the Snake River reservoirs below the town of Weiser.

The Boise River watershed has 4 miles of BLM land fronting streams and reservoirs. Scattered parcels are located at Quartzburg and Placerville on Granite Creek; Pioneerville and Centerville on Grimes Creek; and at Idaho City near Mores Creek. Fisheries values vary in these creeks and are managed by IDF&G as a coldwater put-and-take fishery. Non-point source pollution resulting from road construction, silviculture, livestock grazing and mining on non-BLM lands has impacted these creeks by increased sediment loads. Little impact to water quality results from BLM management actions of these parcels.

Two minor perennial streams with approximately 2 miles of BLM ownership each are located on the Boise front. Hulls Gulch and Cottonwood Creek have no fishery values, however are noteworthy from a water quality perspective. Livestock grazing, recreational vehicle use, road construction, range fires and mining activities which occur on public lands within these two drainages contribute to high sediment loads and bacteria levels.

Lucky Peak Reservoir, seven miles east of Boise, is a 2,850 surface acre reservoir designed for flood control and irrigation storage. Approximately 4 miles of shoreline is under BLM management. Livestock grazing is the dominate land use activity and has little impact on the fishery or water quality. Lucky Peak has warmwater and coldwater fishing opportunities.

The Payette River watershed has approximately 46 miles of river and stream fisheries and approximately 2,400 surface acres of reservoir fisheries within BLM ownership. Small, widely scattered parcels exist along 25 different streams and rivers. Eight miles of shoreline at Black Canyon Reservoir and one mile of shoreline at Paddock Valley Reservoir are managed for livestock grazing.

Fishery habitat in this watershed is quite varied and ranges from timber lined trout stream habitat of 6,000 feet elevation to the warmwater reservoir habitats of the lowlands. A good network of roads makes this diverse fishery accessible on a year-round basis. The relatively high elevation and greater precipitation in parts of the Payette River watershed where most stream segments are located results largely in good to excellent stream habitat conditions. Livestock use patterns and good livestock distribution has allowed for the development of a good streamside shrub component. Because of the good streamflows and high gradients some streams and their fisheries may be impacted by small hydroelectric generating facility development. Population increases will put additional pressures on the aquatic resources.

Recreational fishing is important to the economy of the area. In an effort to maintain or enhance fishing opportunities Idaho Department of Fish and Game stocks hatchery raised trout in many of the resource areas waters.

The Weiser River watershed has about 28 miles of streams on BLM lands. Streams in the lower elevations do not provide good quality habitat. Irrigation diversions reduce natural streamflows. Water temperatures are elevated because of reduced flows and lack of shade. Water quality is degraded from livestock and agricultural uses. The upper Weiser River and the Little Weiser River support game fish species. Most of the other lower elevation streams support nongame fish or no fish.

Streams in the higher elevations generally have good aquatic habitat and trout populations. The streams have moderate to high gradients and good instream cover. Livestock use, access roads, and upstream logging practices have all contributed to minor impacts.

The Snake River watershed has about 10 stream miles on public lands. Aquatic habitat ranges from poor to excellent. The poor quality streams are degraded mainly by heavy livestock use and some mining activity. Most of the habitat supports trout populations.

FISH FOUND IN THE CASCADE RESOURCE AREA

Common Name	Scientific Name	Origin
White sturgeon	Acipenser transmontanus	native
Coho salmon	Oncorhynchus kisutch	introduced
Chinook salmon	Oncorhynchus tshawytscha	native
Kokanee	Oncorhynchus nerka	native
Mountain whitefish	Prosopium williamsoni	native
Redband trout	Salmo sp.	native
Rainbow trout	Salmo gairdneri	native
Cutthroat trout	Salmo clarki	native
Brown trout	Salmo trutta	introduced
Brook trout	Salvelinus fontinalis	introduced
Bull trout	Salvelinus confluentus	native
Chiselmouth	Acrocheilus alutaceus	native
Carp	Cyprinus carpio	introduced
Peamouth	Mylocheilus caurinus	native
Northern squawfish	Ptychocheilus oregonensis	native
Longnose dace	Rhinichthys cataractae	native
Speckled dace	Rhinichthys osculus	native
Redside shiner	Richardsonius balteatus	native
Bridgelip sucker	Catostomus columbianus	native
Largescale sucker	Catostomus macrocheilus	native
Black bullhead	Ictalurus melas	introduced
Brown bullhead	Ictalurus nebulosus	introduced
Channel catfish	Ictalurus punctatus	introduced
Tadpole madtom	Noturus gyrinus	introduced
Flathead catfish	Pylodictis olivaris	introduced
Pumpkinseed	Lepomis gibbosus	introduced
Warmouth	Lepomis gulosus	introduced
Bluegill	Lepomis macrochirus	introduced
Smallmouth bass	Micropterus dolomieui	introduced
Largemouth bass	Micropterus salmoides	introduced
Black crappie	Pomoxis migromaculatus	introduced
Yellow perch	Perca flavescens	introduced
Mottled sculpin	Cottus bairdi	native

Wildlife

A list of all known or potential wildlife species that may occur in the resource area is available in the Boise District Office. Emphasis will be directed only to those species which could be substantially affected either adversely or beneficially, by one or more of the alternatives.

Affected Environment

Approximately 95,000 acres of public lands north of Emmett, Idaho were burned by wildfires during the 1986 fire season. This area supported numerous populations of upland game and non-game wildlife species. It also includes approximately 66,000 acres of crucial mule deer and crucial elk winter range. Because of the fire that affected their traditional habitats, the wintering herds have moved into less traditional areas. A major shrub restoration program is now underway to help restore the severely reduced shrub component in the traditional wintering areas and to rehabilitate the range to pre-burn conditions. The graphics under the affected wildlife species in Chapter 4 displaying the acreages of wildlife habitat in various conditions reflects habitat conditions prior to the 1986 fire season.

Elk

The entire resource area including all land ownerships contains about 582,000 acres of elk winter habitat and an estimated population of about 3,500 animals. The herd composition is generally improving and the Idaho Department of Fish and Game goal for these populations is a 20% increase in the next 20 years.

Habitat use on BLM lands occurs mainly in the winter. Approximately 1,000 elk winter on BLM lands and about 150 elk use BLM lands on a yearlong basis. The largest concentration of wintering elk occurs along the Snake River between Weiser and Hells Canyon Dam. These areas have the highest use during severe winter weather conditions. This area is considered crucial elk winter range. There are approximately 166,000 acres of crucial elk winter habitat identified in the resource area. Of this acreage, 74,000 acres or 45% of the habitat is managed by BLM. Some early spring use does occur on BLM land. This use usually occurs before the snow has receded in the adjoining forested areas.

Elk prefer coniferous habitat but can be found in the interface between forest and non-forest communities. Throughout the year, they utilize ponderosa pine, grassland-shrub and grassland habitat types. In some areas during severe winters, agricultural lands are very important for herd survival. Primarily, elk are grazing animals. In the spring and summer, grass and forbs make up their diet. In fall and winter, dry grasses and browse are utilized. Forage areas seem to be in good condition but thermal and hiding cover seem to be limited.

Approximately 70% of the crucial winter habitat is currently in fair to good condition. About 55% of the winter habitat is in fair to good condition.

Mule Deer

Mule deer are the most abundant big game species in the RMP area. They are widely distributed and occupy a variety of habitat types. Approximately 7,000 mule deer utilize BLM lands. Eleven percent utilize BLM lands on a yearlong basis while 89% only use the area during winter months. The Idaho Fish and Game goal for these populations is a 30% increase over the next 20 years.

Winter habitat is the most critical factor for the deer population in the RMP area. There are approximately 697,000 acres of winter habitat in the resource area. Approximately 281,500 acres are lands administered by BLM. Approximately 53% of this winter habitat is considered crucial winter range. The Snake River breaks from Weiser north and areas along Four-Mile Creek and Little Willow Creek north of Emmett traditionally have large wintering herds of deer.

Mule deer are closely tied to riparian habitats. In the summer, they provide hiding cover, shade, fawning cover and a food source. In winter, thermal cover, a food source and hiding cover are provided before deep snows occur. The condition of these riparian zones affects the carrying capacity of the land for deer. Like deer, livestock concentrate in these areas because of availability of succulent forage, shade and cover. Where these zones have been depleted by grazing rapid improvement can occur by reducing livestock pressure.

Mule deer feed on what is available. In the spring, grasses are utilized until forbs are available. Browse and forbs are preferred in the summer with all resources being used in the winter. The limiting factor in most deer populations is winter browse. Major browse species available include sagebrush, bitterbrush, rabbitbrush, chokecherry, service berry, ponderosa pine and rose. Woody vegetation is also necessary to provide fawning areas, hiding, and thermal cover needed by healthy deer populations.

In the past, frequent wildfires have eliminated or severely reduced shrub composition and weakened native perennial grasses and forbs. Over utilization by livestock in combination with the fires have reduced native species and have permitted the invasion of medusa and cheatgrass. Presently, extensive medusa ranges occupy areas which were traditionally native shrub grasslands.

About 55% of crucial winter habitat and 70% of winter habitat is in fair to good condition.

Antelope

The antelope population in the resource area numbers approximately 50 animals which roam over approximately 150,000 acres. The Idaho Department of Fish and Game have designated this area for transplants and the population should improve over the next 20 years.

The current wintering areas are located just north of Highway 52 along Big Willow and Little Willow Creeks. The areas cover approximately 20,550 acres with 4,400 acres of BLM land and 16,150 acres of private land.

The most commonly used habitats are grassland, grassland-shrub and shrub. Sagebrush and rabbitbrush are important components of the winter diet. Grass and forbs are the principle diet components in spring and summer while forbs and browse are equal in importance for fall diets. Most of the antelope habitat is marginal which is demonstrated by low production. The cause of low production seems to be degradation of habitat due to overutilization by livestock and wildfires. Lack of suitable fawning

areas and the scarcity of forbs in an area dominated by medusa and cheatgrass also contribute to low herd production. Suitable forage and thermal cover is lacking in winter ranges.

About 96% of the winter range is in poor condition.

Sage Grouse

Sage grouse are found throughout the area north of the Payette River. There are approximately 186,245 acres of sage grouse habitat in the RMP area. The sage grouse habitat has been subject to sheep and cattle grazing for many years. The lack of forbs may have an added effect on the quality of the habitat. In some areas the lack of mature sagebrush may also be a limiting factor for nesting areas and winter thermal cover. Overall, 40% of the habitat in the resource area is in poor condition. Nesting habitat is fair in most areas. There are approximately 50 active and historical strutting grounds (mating areas) located throughout the resource area.

The population trend shows a steady decline. The main cause of this seems to be from a continual loss of habitat. This loss is due to sagebrush eradication, the overall conversion of native habitat to agriculture and most recently, to range fires. In recent years the population has experienced further declines due to adverse winter and spring weather conditions.

Other Wildlife

Other important wildlife species found in the area include black bear, mountain lion, blue grouse, Franklin grouse, ring-necked pheasant, Hungarian partridge, chukar partridge, wild turkeys, ducks and geese. Since these species would not be significantly impacted, they will not be discussed further.

Populations of ruffed grouse, valley quail, and mourning dove are affected by conditions in riparian zones. Their requirements would be met in all alternatives and will not be discussed further.

Various raptor species are found throughout the resource area. Approximately 640 acres of the Snake River Birds of Prey Natural Area are within the southern part of the Cascade Resource Area.

Sensitive Animal Species

Columbian Sharp-tailed Grouse

The Columbian sharp-tailed grouse is almost extinct in western Idaho. The remnant populations are small and scattered. The entire population is estimated at less than 300 birds. The largest known concentration is located 14 miles north of Weiser in the Sage Creek drainage. Four of the five known dancing grounds are located in this area. The fifth known dancing ground is located in the Rock Creek drainage, west of Sage Creek. Other small scattered populations are located around Council. The decline of this native species is directly associated with loss of habitat. Two

primary reasons for this loss is overgrazing of native range and conversion of range to agricultural lands.

There are approximately 119,260 acres of sharp-tailed grouse habitat identified in the resource area. Of this acreage, approximately 28% (32,960 acres) is managed by the BLM. Currently 55% of the habitat on BLM land is in fair to good condition.

Other Sensitive Species

Other sensitive species found in the area include bobcat, river otter, osprey, burrowing owl, and mountain quail. Since these populations would not be impacted by any of the alternatives, they will not be discussed further.

Endangered and Candidate Species

There are two species found in the area which occur on the Federal threatened and endangered lists. These are the bald eagle and peregrine falcon which are listed as endangered.

Nesting bald eagles are found in the vicinity of Cascade Lake. They may also occur in the vicinity of Hells Canyon Dam. Wintering habitat for approximately 100 eagles is located primarily along the Snake, Boise, Weiser and Payette River systems. Winter counts have varied over the years but seem to indicate a decrease in the use of available winter habitat. The Oxbow Dam stretch of the Snake River system is the most important habitat used by wintering bald eagles in the RMP area. The general habitat condition is only fair, due to the lack of roosting and perching trees.

Peregrine falcons no longer occur naturally in the area but are sometimes seen during migration. Efforts have been made to establish a nesting pair of falcons near Cascade Lake.

There are also four candidate species found in the area. They are the Swainson's hawk, ferruginous hawk, long-billed curlew, and Idaho ground squirrel. The raptor species nest throughout the resource area.

Curlew populations in the RMP area are relatively high. There are approximately 1,500 to 2,000 breeding pairs utilizing the grasslands in the resource area. One thousand of these are found in the Black Canyon Curlew Area. This is one of the largest breeding populations in the United States. Optimum habitat for curlew is wide open areas with very short vegetation. In most cases, optimum habitat for curlew is the worst habitat for most species. The lower the vegetation structure the better the habitat for the curlew.

The Idaho ground squirrel will be addressed when site specific proposals may have an impact on their habitat.

Since neither of the endangered or any of the candidate species, with the exception of the long-billed curlew, would be affected by any of the alternatives, they will not be discussed further. The long-billed curlew is discussed throughout the document.

Livestock

The Cascade Resource Area consists of 2,771,188 acres of which 487,466 acres are public lands. The grazing program in the area includes virtually all of the public land acreage, a majority of the 182,534 acres of state land and portions of 2,101,228 acres of private lands.

There are 338 allotments in the area that have a current total active preference of 72,571 AUMs (Animal Unit Months) for livestock forage. The five year average use is for 66,424 AUMs which is 6,147 AUMs less than active preference.

The 338 grazing allotments are utilized by 244 livestock ranching permittees. The grazing preference used by each ranges from 4 AUMs to over 4,253 AUMs.

An allotment stratification by management intensity (MIC) has been completed. Results are as follows:

Management Category	Number of Allotments	Percent of Allotments	BLM Acres in Category	Percent of Resource Area
Maintain	52	15	46,647	9
Improve	78	23	356,101	73
Custodial	208	62	62,172	13
Unallotted			22,546	5
TOTALS	338	100	487,466	100

There are currently 7 allotment management plans (AMPS) in the area. These AMPs were developed and began operation prior to 1975. Grazing systems were developed ranging from rest rotation to deferred use to season long use.

There are several designated stock driveways within the area. They are used extensively by about 20,000 trailing sheep two times a year. There are presently approximately 63,000 acres in the stock driveways. See Map 7 and Appendices E, F, and G for further information.

Most of the 95,516 acres of public land that were burned by wildfires during 1986 were grazed by livestock. The fire rehabilitation efforts which were subsequently initiated including seeding the more severely burned areas. Livestock non-use is seeded and adjacent areas, and deferred use, particularly on native ranges, were initiated to allow seeding establishment and native range regrowth.

Wild Horses

The Cascade Resource Area currently recognizes and manages two wild horse herds: The Four Mile Herd and the West Crane Herd.

The Four Mile wild horse herd fluctuates between 10 and 75 animals depending upon the ability of the BLM to gather and adopt them out. The horses graze on about 18,500 acres in common with 1 livestock permittee licensed for 4,700 AUMs. To reduce the effects of increased wild horse numbers the permittee has taken voluntary non-use of 424 AUMs since 1977. This has in turn reduced depredation of private lands and critical mule deer winter range. In 1982 and 1984 horses were gathered in Four Mile and the present population is approximately 10-12 head.

In January 1987, the Four Mile wild horse herd was removed. This entire herd of 16 horses was removed to prevent damage to the public rangeland and adjacent private land following the 1986 wildfires. Seeding a portion of the range used by the wild horses is included in fire rehabilitation efforts. Temporary livestock non-use was initiated to allow seeding establishment. The Four Mile wild horse herd is proposed to be reestablished once sufficient forage becomes available for their support.

The West Crane wild horse herd currently extends its range over about 10,280 acres. The herd generally has 10-25 animals. They compete with about 1,748 AUMs of livestock (cattle, sheep and horses) forage needs on the allotment utilized by 7 permittees. To facilitate the forage of wild horses, wildlife and livestock, the livestock carrying capacity was reduced 24% in 1977. Pasture management has been unsuccessful in the past because of the wild horses. Fences have been broken through and horses range throughout the allotment. Consequently range forage conditions have decreased in many of the pastures. Horses were gathered in 1977 and 1982 and the present population numbers between 15 and 20 head.

LANDS AND REALTY RESOURCES

Lands

The RA currently has 5 pending DLE applications and one allowed entry on file for a total of 560 acres. Of the total acreage, 120 acres is an allowed entry, 400 acres have been classified suitable for entry, and 40 acres remain to be classified. The allowed entry was allowed in 1984 prior to the beginning of this RMP effort. Final proof has been held and the patent is pending.

There are three exchange proposals currently pending in the RA. The first exchange is a State proposal to acquire 6,251 acres of public land for 6,171 acres of State land. The exchange would consolidate State and public lands. The second exchange is a private proposal to acquire 120 acres of public land for 160 acres of private land. The offered private land is identified for acquisition in the Boise Front MFP to facilitate watershed and grazing management and the selected public land has been recommended for sale or exchange in accordance with the Black Canyon MFP. The third exchange is a private proposal to acquire 83 acres of public land for 14 acres of private land. The selected public land has been recommended for sale or exchange in accordance with the Black Canyon MFP. The exchange would improve management by blocking public lands.

There are nine outstanding R&PP leases; five are for sanitary landfills, one sand and gravel storage site, one motorcycle park, one proposed school site, and one shooting range.

Rights-of-Ways

The RA is traversed by numerous man-made developments including at least eight utility transmission lines (69 KV and greater), two buried gas lines, the Union Pacific Railroad system, numerous paved highways and roads such as I-84, U.S. 95 and Highway 55, and several major irrigation structures such as the New York and Mora Canals, Black Canyon Irrigation Canal and the Farmers Union Canal.

In addition to the linear developments there are also five authorized communication sites. These include sites on Squaw Butte and Crown Point and one site each northeast of Parma, south of Emmett and west of Crouch.

The RA currently has one issued and two pending leases. All three are for occupancy.

A significant number of permits have been issued. Currently 19 permits are existing and include a variety of users, including agriculture (7), anemometer site (1), occupancy (1), airstrip (2), apiary (7), and seismic data collection site (1).

Withdrawals

Approximately 31,000 acres of public land are withdrawn from disposal and are managed cooperatively or solely by other federal agencies such as the Bureau of Reclamation, U.S. Fish and Wildlife Service, U.S. Geological Survey, Federal Energy Regulatory Commission, and Department of Defense. As directed by Section 204(L) of the Federal Land Policy and Management Act of 1976, these withdrawals are being systematically reviewed to determine if they still serve their intended purpose.

Section 204(a) of FLPMA also authorizes the Secretary of the Interior to make, modify, extend, or revoke withdrawals such as those establishing stock driveways. Currently, the RA has approximately 63,000 acres withdrawn from disposal for stock driveway purposes.

The RA also has one pending withdrawal application filed by the U.S. Fish and Wildlife service. The application was filed in 1972 with the intent of closing an unspecified number of acres on the Payette River to mining.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

The Cascade Resource Area has been inventoried for cultural resources at the Class II and III levels. Thirty-five prehistoric and five historic sites were discovered during this inventory. Prehistoric sites included quarrys, workshops, habitation sites and undefined lithic scatters, typical

of late archaic sites of the northern Great Basin with possible paleo and Cascade components. Historic sites included rock structures (cairns) and scatters of historic debris associated with late 19th and early 20th century ranching activities. Sites discovered during the inventory have been evaluated to determine condition. The results of this evaluation show that 20% are in poor condition, 40% in fair condition and 30% in good condition. None of the cultural resource sites evaluated were in excellent condition and 10% had been destroyed. Agents of deterioration which are currently or have in the past caused impacts to sites are erosion (40%), livestock trampling (50%), road construction (27%) and reservoir construction (3%).

Livestock trampling is impacting cultural resource sites located between 3300' and 4500' elevations within 1/4 mile or adjacent to springs and perennial streams (high cultural resource site density areas) more heavily than elsewhere in the resource area.

Erosion (wind and water) contributes to the deterioration of sites already impacted by livestock trampling and water erosion impacts sites located on the banks of drainages and in areas subjected to recurrent flooding.

Important cultural resource sites in the Cascade Resource Area are identified below.

There is one cultural resource site in the Cascade Resource Area on BLM administered public land which has been placed on the National Register of Historic Places (NRHP). This is the Placerville Historical District consisting of historic structures within the townsite of Placerville representing late 19th and early 20th century mining activities in the Boise Basin.

The Placerville Historic District was accepted to the NRHP based on the architectural features of existing historic structures. The archaeological potential of this district has not been determined. The BLM manages approximately 8 acres within the 100 acre Historic District. No other cultural sites in the Cascade Resource Area are currently receiving special protection.

The Greys Creek cultural resource site consists of a large lithic scatter running along the bank of Grey's Creek for approximately 400 meters, and is 40,000 square meters total area. An intermittent tributary of Grey's Creek runs through a portion of the site, exposing buried artifacts. The artifact assemblage includes large bifaces, blades and projectile points which indicate a late archaic period of occupation. A portion of the site is on private land on which a corral has been constructed and livestock graze the area on both private and BLM administered land. The Greys Creek site is deteriorating rapidly from the effects of livestock trampling and erosion.

The Indian Creek cultural resource site is located on a terrace adjacent to an intermittent tributary to Indian Creek and consists of an abundance of secondary and final shaping flake debitage of black fine grained basalt and obsidian. One intact projectile point (Cascade) was collected. A circular grinding stone 11" in diameter with a worn circular depression in the center 4" wide and 3" deep was observed on the site. The site is being seriously

damaged by the effects of livestock trampling and erosion. The Indian Creek site is deteriorating from the impacts of livestock trampling and erosion. This site may represent cultural influences different from the typical Great Basin culture normally associated with this area.

The Milk Creek cultural resource site is an extensive lithic workshop/ campsite. Abundant secondary basalt flake debitage litters the ground and lesser amounts of primary debitage are also present. Some obsidian final shaping debitage has been observed. The site is adjacent to a manmade reservoir which impounds an intermittent spring flow. The reservoir is about 30 x 30 meters in area and probably sits on portions of the original site. The context of observed artifacts is questionable because the area of highest artifact concentration apparently lies in excavated materials in the area now occupied by the reservoir. The context and condition of the site have also been affected by the large numbers of cattle that have severely trampled the area around the reservoir. The Milk Creek site is in poor condition.

The Cabin Creek cultural resource site is a large campsite on both sides of an intermittent drainage running into Cabin Creek. The site is heavily disturbed by livestock trampling and erosion. Lithic material includes fine-grained basalt, black ignimbrite, obsidian and multi-colored chert. Cores, primary, secondary and finishing flakes are present as well as finished tool forms. Many utilized flakes, an obsidian biface base, a spokeshave and an obsidian biface fragment were observed as well as an excellent groundstone mortar (left in place) and fire cracked rock. Flakes are eroding out of the streambank to a depth of about one meter. Historic artifacts are also present. The Cabin Creek site is deteriorating from the effects of livestock trampling and erosion.

Pioneerville, Quartzburg, Centerville, and Mineral are historic townsites which represent early settlement and mining activity in Idaho. The BLM manages only portions of the sections in which townsites are located (Pioneerville: 581.8 acres; Quartzburg: 385.75 acres; Centerville: 515.79 acres; Mineral: 428.97 acres).

Paleontologic Resources

The Cascade area has not been researched for paleontologic materials. All sedimentary formations are known to have produced specimens. Many localities are known to produce leaf specimens and/or petrified wood. Fossil vertebrate finds have been highly significant but locality data is limited. Other fossil materials include the invertebrates. At present, pelecypods and snails are the only invertebrates known from the Cascade Resource Area.

A general interest in paleontology in the Cascade Resource Area continues. Hobby collecting of petrified wood is very popular with fossil leaf collecting of secondary interest. Vertebrate collecting is presently limited to professional research.

There are no areas presently closed to collecting. Little information on localities and their significance is available as no paleo inventory has been completed on the area.

RECREATION RESOURCES

Recreation

Power and floatboating, fishing, and water play sports are all popular and occur on a variety of water bodies. Major rivers include the Payette, Snake, Boise and Weiser. Major lakes and reservoirs include Payette, Cascade, Paddock, Lowell, Black Canyon, Crane Creek, Oxbow, Brownlee and Lucky Peak. Numerous other smaller streams and ponds also offer opportunities. Segments of the North and South Forks of the Payette River totaling 106 miles are under consideration for inclusion into the National Wild and Scenic Rivers System. They have both been recommended as having potential for inclusion in a State Natural and Recreation System through the National Park Service's evaluation of the remaining potential river additions. One segment of the North Fork is continuous Class V whitewater and has been judged by kayaker afficionados to be one of the most challenging, and accessible runs anywhere in the world.

Hunting for big/small game, upland birds and waterfowl is a major use. Also popular is biking, horseback riding, camping, rock-collecting and sightseeing. Hanggliding is popular from Squaw Butte, Pickles Butte and the Boise Front. The state championships are held yearly from Squaw butte. Annual field dog trials and horse endurance rides have been held regularly in the resource area, and draw local and non-local participants. Off-road vehicle use is another major recreational use in the Cascade Resource Area. Aside from its dispersed use throughout the Area, concentrated use of "play areas" for ORVs have emerged in nine areas. These areas are located near the towns of Weiser, Payette, Parma, Emmett, Nampa, Eagle and Boise.

Snow-based activities are limited due to the lower elevations of most BLM lands. Snowmobiling and cross-country skiing opportunities are available in the upper elevations of the Boise Front and in northern areas of the resource area.

The Cascade Resource Area is divided into three Special Recreation Management areas (Boise Front, Oxbow-Brownlee and Payette River Corridors) and two Extensive Recreation Management areas (Treasure Valley and Cascade Uplands). In addition, one Wilderness Study Area has been identified north of McCall.

Boise Front SRMA (12,000 acres)

In Boise's "backyard" is one of the most popular and intensively used recreation areas in the state. BLM facilities include one interpretive National Recreation Trail (5 miles), approximately 20 miles of multi-purpose trails and an ORV parking area with loading ramp. An additional 40-50 miles of roads and trails are used for recreation but lie within the jurisdiction of local, state or other federal agencies. Popular recreational activities on the Boise Front include ORV use, hunting, horseback-riding, hanggliding, hiking, sightseeing and environmental education. Water sports, fishing and boating take place on Lucky Peak Reservoir. As the population of Boise and the Treasure Valley grows, so does the recreational pressure on the Boise Front. Historically, there has been a conflict with the various user

groups, specifically between the ORV enthusiasts and other users. One ski area operates in the area, and state operated water sports, picnic and boat ramp facilities are located in the extreme southern portion of the SRMA along Lucky Peak Reservoir. The 1983 SCORP population growth estimate for Ada County (1980-2000) is about 57%.

Oxbow-Brownlee SRMA (40,000 acres)

This SRMA is comprised of Oxbow and Brownlee Reservoirs on the Snake River. They form the boundary between Idaho and Oregon, and are popular for fishing, boating and water sports. The hills adjacent to the reservoir receive hunting, rockhounding, and ORV use. Also within the SRMA are 200 acres of sand dunes at Olds Ferry, which receive ORV use. BLM facilities in the SRMA consist of one campground and picnic area with a boat dock and ramp on Brownlee Reservoir. Other facilities consist of two privately owned campgrounds with boat ramps. Several more campgrounds with boat ramps on Brownlee Reservoir are located on the Oregon side. Commercial carp fishing is occurring in the reservoirs but does not appear to conflict with the sport-fishing activities. ORV use in the sand dune area is apparently having little vegetative impact but increased use in the steep ridges and canyons adjacent to the water is manifesting itself in unplanned trails and hillclimbs with subsequent erosion problems and visual impacts. BLM's Steck Campground is heavily used by local and non-local visitors. This high use has necessitated more intensive management each year. The 1983 SCORP population growth estimate for the vicinity (1980-2000) is 16 to 25%.

Payette River Corridors SRMA (19,000 acres)

This area consists of the narrow river valleys containing segments of the North Fork, South Fork and main Payette River. Public land ownership along the north fork and mainstem is sparse and scattered, but more substantial along the south fork. The primary recreation uses are float boating, jet boating, fishing, other water sports and sightseeing. The segment of the north fork from Smiths Ferry to Banks is a world class Class V whitewater kayaking river, while other segments of the river offer a full range of kayaking, rafting, canoeing, and jet boating opportunities. Existing recreation facilities in this SRMA include five federal and one state campground and several unimproved public access points. There are no improved BLM facilities. Access to some of the isolated public lands is a problem, especially those large blocks lying on the south side of the South Fork of the Payette River. The 1983 SCORP population growth estimate for the vicinity (1980-2000)) is 7 to 34%.

Cascade Uplands Extensive Recreation Management Area (334,000 acres)

This is the largest of the RMAs within the Cascade Resource Area. It is primarily comprised of foothills and mountains. The historic townsites of Idaho City, Quartzburg, Centerville, Placerville and Pioneerville lie within this ERMA and receive varying degrees of tourist visits. Prominent water bodies for recreational use include Paddock, Payette and Cascade Reservoirs, the Weiser River and a segment of the North Fork of the Payette River.

Existing recreational facilities within the area include four federal and nineteen private campgrounds, several federal, state and local picnic areas and two ski areas. There are no improved BLM facilities in the RMA. Popular recreational uses in the area include boating, fishing and other water sports on the lakes, rivers and streams, all types of hunting, horseback-riding, hanggliding from Squaw Butte, rockhounding, hiking, cross-country skiing and ORV use. Snowmobiling is concentrated in the northern and higher elevation regions of the area. One intensively used motorcycle area has been leased under an R&PP to the Payette County Recreational District. The area is now a cycle park and improvements consist of trails, parking, restrooms, loading ramp and a BMX bicycle race track. The major problem in the ERMA is the abundance of scattered tracts of public lands and subsequent access and management. The 1983 SCORP population growth estimate for the vicinity (1980-2000) is 16 to 25%.

During the summer of 1986, 66,500 acres of public lands in the Cascade Uplands Extensive Recreation Management Area were burned by wildfires. The threat of erosion caused by off-road vehicle use necessitated an ORV closure in the area during the period of highest soil moisture (fall-winter-spring) while reseeding and rehabilitation efforts are in progress. The closure is expected to remain in effect until summer, 1987.

Treasure Valley Extensive Recreation Management Area (72,000 acres)

The majority of the land within this area is privately owned agricultural land. The public lands are primarily low, rolling hills, some small buttes, and a section of foothills to the Boise Ridge. It is the most densely populated area of the state and contains the towns of Boise, Nampa, Caldwell and Emmett. Recreational highlights on public lands in the area include hanggliding from Pickles butte, fishing and boating in the Snake, Boise and Payette Rivers, Black Canyon Reservoir, and Lake Lowell, hunting, horseback-riding (especially north of Eagle and south of Emmett) and ORV use. Although ORV use is dispersed throughout the area, several intensive use areas exist including areas north of Parma, south of Emmett and south of Nampa at Pickles Butte. There is also the Little Gem Cycle Park several miles east of Emmett. There are no improved facilities in the park other than a parking area and trails. The cycle park is a combination of private and public lands. Recreational facilities within the ERMA include six private and two local jurisdiction campgrounds, seven picnic areas and four water sports areas. Numerous public access points exist along rivers, canals and Lake Lowell. Future population growth in this area can only increase recreational pressure, not only within this ERMA but in adjacent areas as well. The 1983 SCORP population growth estimate for the vicinity (1980-2000) is 34 to 57%.

Box Creek Wilderness Study Area (110-91A)

A Wilderness Study Area, Box Creek (#110-91A), is located in the northern part of the Cascade Uplands ERMA. It is only 440 acres, but adjacent to the Lick Creek RARE II unit. The BLM area is similar to the Forest Service administered area in landform and vegetation, both consisting of rolling to extremely steep and broken terrain supporting mixed conifer forests of primarily Douglas-fir and subalpine fir; pine, spruce, larch and aspen. The

forest cover is broken frequently by large granite outcrops. The major drainage is Box Creek.

Visual

The public land has been inventoried to determine the quality of the visual resources in the Cascade 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. Locations of the classes are shown on Map 3-8. The acreages of public land in each VRM class would be the same in each alternative as they are now. The VRM classes and approximate acreages are: Class II - 81,000 acres; Class III - 383,466 acres; Class IV - 23,000 acres. Refer to Appendix K for explanation of VRM classes.

Recreation Opportunity Spectrum (ROS)

The Cascade Resource Area has been classified as follows:

Roaded Natural	- 445,391 acres
Semi-Primitive Motorized	- 42,075 acres

The Recreation Opportunity Spectrum is explained in Appendix L. It will not be discussed further in this document.

MINERAL RESOURCES

Leasables

Oil and Gas

The Cascade Resource Area has had much interest and activity in oil and gas exploration since the turn of the century. Shows of oil and gas have been made and leasing activity has continued to the present time in the sedimentary units of the Cascade area. Shows of methane gas that have been detected in over 200 water wells throughout southwestern Idaho indicate presence of small accumulations of flammable gas possibly suitable for domestic energy needs of individual residences.

Currently low prices of oil and gas have had the effect of greatly reduced petroleum exploration all over the U.S. Leasing and exploration in an extremely speculative area as the Cascade RA will most likely be minimal in the immediate future. Beyond the immediate future, exploration in the Cascade RA will probably be cyclical and vary with the economics of the oil and gas industry. There are currently few leases within the Cascade Resource Area. There is no geophysical or drilling activity occurring at this time. See Map 3-11 for areas of oil and gas potential.

There are no producing oil or gas wells in Idaho at this time.

No major areas currently exist as completely closed to leasing. Much of the area is, however, seasonally restricted because of wildlife habitat requirements. See Map 9 for areas seasonally restricted. This has adversely affected one geophysical operation. It is assumed for analysis purposes that oil and gas activities will continue at about the current level. Small recreation sites totaling 45 acres are currently subject to no surface occupancy restrictions.

Geothermal

The Cascade Resource Area has not had any significant geothermal interest previous to the mid 1970's. Geothermal resources in the resource area have not been developed beyond limited low temperature uses such as space heating and bathing. Production wells are currently limited to the Boise Geothermal project. Exploration and research in the CRA has been insufficient to completely define the nature and extent of geothermal resources. However, surface temperatures of springs within the CRA are as high as 92°C (198°F) with many ells in the 20°-40°C (68°-104°F) range. The primary known hydrothermal systems within the CRA occur at Crane Creek, Boise, and northwest of Weiser. See Map 3-12 for areas of geothermal potential.

There are no active drilling or exploration projects in the resource area at this time. The current availability of economic oil and gas energy sources has resulted in a low demand for alternative energy sources such as geothermal. While energy trends have proven difficult to project, it is believed that the demand for geothermal energy will remain low for the foreseeable future. A national shortage of oil and gas could result in increased demand with resultant increase in exploration for geothermal resources in the CRA.

No major areas currently exist as completely closed to geothermal leasing. Much of the resource area is however seasonally restricted because of wildlife habitat requirements. See Map 9 for areas seasonally restricted. It is assumed for analysis purposes that geothermal activities will continue at about the current level.

Other leasable minerals in the area include coal and hard rock leasing on acquired lands. The coal resource is a low grade uneconomic deposit Near Horseshoe Bend. Hard rock leasing activity has been limited to minor areas within the National Forest lands and has not lead to any mineral production. These other leasable minerals will not be addressed further.

Locatables

The Cascade Resource Area has had extensive mineral interest and activity for over 125 years. Twenty-one mining districts affect lands within or immediately adjacent to the resource area. Most of the districts were set up for placer gold. One was set up for coal and one for mercury. The others were lode deposits containing such minerals as gold, silver, lead and copper.

Other locatable minerals of interest in the area include zinc, molybdenum, manganese, iron, bismuth, monazite, gypsum, diatomite and others. None of these deposits are known to be economic under the existing market conditions.

Mining exploration and production has been sporadic over time but a general interest has been consistent. Over 2,700 mining claims presently affect or are within one mile of lands with minerals managed by the Cascade Resource Area.

Current locatable minerals production in the resource area consists of "hobby minerals" (nodules, geodes, agate, opal, etc.), minor placer gold production, one active lode gold claim and significant silica sand production.

Withdrawals currently affect 6% of the public lands within the resource area. This is not currently a significant impact as compared to the general economic situation for the minerals industry at this time. It is assumed for analysis purposes that locatable mineral activity will increase slightly.

Salables

The Cascade Resource Area has had highly significant production of mineral materials. Sand and gravel and quarry rock for road construction and maintenance, has been the major use of salable minerals found on public lands within the resource area. Cinders for road use, potting soil and decorative purposes and basalt drain rock have also been sold from the public lands within the Cascade Resource Area.

Other salable minerals of interest in the area include clay, petrified wood, sand and building stone. None of these are currently being sold from public lands within this resource area.

Exploration for and production of salable minerals is strongly tied to local market conditions. Production has been sporadic but has generally increased with increased population and improved economic conditions. There are currently 3 mineral material sale sites, 16 free use sites, and 2 community pit sites in the Cascade Resource Area.

Current salable mineral material production in the resource area consists of sand, sand and gravel, basalt quarry rock and cinders. Most of the production is free use to local road districts for maintenance of county roads.

No areas that are managed by BLM within the Cascade Resource Area are currently closed to mineral material production. It is assumed for analysis purposes that interest and need will continue at about the current level.

FOREST RESOURCES

Timber

The Cascade Resource Area contains 31,895 acres of commercial forest lands capable of producing at least 20 cubic feet of wood per acre per year of commercial tree species. The commercial trees growing on these Commercial Forest Lands (CFL) are ponderosa pine, Douglas-fir, grand fir, lodgepole

pine, subalpine fir, and Engelmann spruce. The CFL was identified through a Timber Production Capability Classification (TPCC) process in two reports completed in 1977 and 1980 covering separate parts of the Cascade Resource Area. The classification criteria and acreage summations of these reports are considered superior to the acreage summations of the 1975 forest inventory and are used in this analysis.

The TPCC determined that 26,686 acres or 84% of the total CFL is capable of sustaining long-term timber production. These lands are referred to as Suitable Commercial Forest Land. An additional 70 acres is being managed as a seed orchard.

The remaining 5,139 acres or 16% of the total CFL were determined through TPCC to be incapable of sustained long-term timber production. These lands are referred to as Non-suitable Commercial Forest Land. They are mostly fragile lands or lands which cannot reforest adequately.

The Cascade Resource Area contains 873 acres of woodland. Woodland is land producing trees that are not typically utilized as sawtimber. Woodland can include non-suitable commercial forest land but cannot include CFL in the allowable cut-base. Woodland includes the minor acreages of deciduous forests such as aspen, cottonwood, and cherry and lands that cannot be reforested within 15 years.

According to the 1975 forest inventory, with multiple use restrictions on 6,750 acres for topography, watershed and scenic corridors, the Resource Area can support a decadal cut of 17 million board feet without intensive management and 29 million board feet with intensive management. This eequates to an annual allowable cut of approximately 1.7 and 2.9 million board feet respectively.

During the past several years, based on funding and personnel, the decadal cut was 10 million board feet which equates to an annual allowable cut of approximately 1.0 million board feet.

During the 1986 fire season approximately 69 acres of commercial forest lands were affected by wildfires. Salvage logging operations are planned on some of those affected acres.

FIRE MANAGEMENT

Wildfires have burned approximately 132,204 acres in the fifteen-year period of 1970-1985 in the Cascade Resource Area.

Analysis of available data indicate that the Cascade Resource Area has an average of 39.9 fires per year, based on the fifteen-year average. Forty-one percent of these fires occur during the month of July, followed by 30% of the fires occurring in the month of August. The months of June and September have a fire occurrence of 13% and 11%, respectively.

Approximately 8,814 acres is the average acreage burned per year in the resource area. The 1985 wildfires consumed an above-average acreage of 10,110 acres. The largest average acreage burned has been the month of

August with an average of 4,062 acres, followed closely by the month of July with an average of 3,653 acres. Burned acreages for June and September average about 519 acres and 542 acres, respectively. The average fire size is approximately 221 acres for the fifteen-year period.

In 1986, wildfires consumed approximately 220,961 acres within the Cascade Resource Area. Approximately 95,516 acres were public lands administered by BLM, 13,000 acres were State of Idaho lands and 112,445 acres were privately owned lands. The number of wildfires in 1986 approximated the previous 15-year annual average but the size of the fires was far greater. Available information suggests that this level of wildfire activity, mostly caused by lightning, may be a 20-year event. The 1986 fire season data have not been incorporated into the statistics for the previous 15-year period.

During the fall of 1986 the Boise District prepared an Emergency Fire Rehabilitation Plan and Environmental Assessment. The Fire Rehabilitation Plan calls for seeding approximately 11,500 acres using both aerial and mechanical methods. Most of the grass/forb seedings are planned during 1987. Additional shrub seedings and plantings are planned over a 5-year period. Fire rehabilitation efforts were initiated during the fall of 1986. Fire boundaries are shown on the following maps: 2, 7, 2-2, 3-1, 3-2, 3-3, and 3-5.

ECONOMICS

Introduction

The Cascade RMP area is a highly diverse area that encompasses all or parts of eight counties in southwestern Idaho. There are 29 incorporated cities in the area, with populations that range from under 25 to over 100,000. Total population in the eight-county area is estimated at 326,000 (Bureau of the Census 1985). Ada County accounts for 58% (189,300). Canyon County accounts for another 27% (87,800). Payette County, which is the next largest county, accounts for only 5%.

Earnings

Total earnings in the eight-county area in 1983 were $2.3 billion (Bureau of Economic Analysis 1985). This consisted of $2.2 billion in nonfarm earnings and $0.1 billion in farm earnings. Earnings distributed by industry is shown below.

1983 Earnings by Rank

Industry	Earnings (000s)	Rank
Services	$422,316	1
State and Local Government	276,615	2
Retail Trade	262,219	3
Durable Manufacturing	253,971	4
Construction	219,045	5
Finance, Insurance, Real Estate	151,986	6
Nondurable Manufacturing	144,156	7
Federal Government (Civilian)	112,541	8
Farm	96,317	9
Federal Government (Military)	8,836	10
Other 1/	388,751	--

1/ Ag Services, Mining, Transportation and Public Utilities, Wholesale Trade

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis. 1985. Earnings by Industry 1978-1983, Regional Economics Information System, April 1985.

Within the eight-county area the services portion of the economy is the largest (in terms of earnings), followed by state and local government, retail trade, and durable manufacturing.

This level of 1983 nonfarm earnings represents a 28% increase since 1979. After adjusting for the effects of inflation (using the implicit GNP price deflator) this becomes a decline of 3% in real dollars. The 1983 farm earnings represent a 1% decline since 1979. This becomes a 25% decline after adjusting for inflation.

Employment

The data presented here is for wage and salary employment only. Data on proprietors (both farm and nonfarm) are not available.

Total wage and salary employment in the eight-county area in 1983 was 121,078 (Bureau of Economic Analysis 1985). This consisted of 3,450 farm jobs and 117,628 nonfarm jobs. Employment distribution by industry is shown below.

Employment By Rank

Industry	Wage & Salary Employment	Rank
Services	23,648	1
Retail Trade	21,246	2
State and Local Government	18,843	3
Manufacturing	17,236	4
Wholesale Trade	7,675	5
Finance, Insurance, Real Estate	7,533	6
Transportation & Public Utilities	7,530	7
Construction	6,039	8
Federal, Civilian Government	4,570	9
Farm	3,450	10
Federal, Military Government	1,545	11
Other (Ag Services, Mining)	2,123	--
Total	121,078	

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis. 1985. Full-Time and Part-Time Employees by Major Industry 1978-1983, Regional Economics Information System, April 1985.

Within the eight-county area the services portion of the economy is the largest (in terms of wage and salary employment), followed by retail trade, state and local government, and manufacturing.

The level of 1983 farm employment represents a 9% increase since 1979. The 1983 nonfarm employment level represents a 5% decline since 1979.

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. The U.S. Water Resources Council published gross output multipliers for Bureau of Economic Analysis (BEA) economic areas in January of 1977. The economic area that includes the Cascade RMP area is Area 159. This includes all of southwest Idaho and parts of southeast Oregon. These multipliers (shown in Appendix N) 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 earnings in order to estimate economic impact. This is done through the use of earnings to gross output ratios. These ratios have been calculated based on U.S. Water Resources Council procedures and are shown in Appendix O.

Crop Agriculture

In 1983, cash receipts from agricultural marketings in the RMP area totaled $467.3 million. Of this total, $179.4 million was from crop production (BEA 1985). Based on this, it is estimated that 38.4% of total farm income and employment results from crop production. This would mean

that in 1983 crop agriculture earnings was $37.0 million while employment was 1,325.

Livestock

In 1983 the cash receipts from marketing of meat animals (primarily cattle and calves, sheep and lambs) accounted for 45% of total farm cash receipts. This varied by county from a low of 34% in Gem County to a high of 89% in Valley County. Assuming that farm earnings are in the same proportion as cash receipts, total earnings from meat animals in the eight-county area would be 45% of total farm earnings, or $43.3 million.

The 1982 Census of Agriculture indicated that there are approximately 84,823 beef cattle and calves and 22,726 sheep and lambs in the eight-county RMP area. This would be 89,368 animal units. This means that each animal unit generates earnings of $485.

The permittees in the Cascade RMP area have a total herd size of 51,581 cattle and 5,650 sheep. This would be 52,711 animal units which would generate earnings of $25.6 million. This would be 59% of the total eight-county meat animal earnings and 27% of total farm earnings.

Total current BLM AUMs in the eight-county area are 66,424. This would support 5,535 animal units which would generate earnings of $2.7 million. This would be 11% of permittee earnings, 6% of eight-county area meat animal earnings, and 3% of total farm earnings. Large reductions in available forage, as occurred with the wildfires in the summer/fall of 1986 would reduce these levels of earnings and force permittees to either reduce herd sizes or find alternative (and more expensive) feed sources. Occurrences such as this would be short term in nature, not generally extending over more than 1-2 years.

It is also assumed that 45% of total farm employment in the RMP area is meat animal related (based on the relationship between receipts and earnings discussed above). This means that total meat animal employment would be 1,553 (wage and salary only). Employment is assumed to be in the same percentages as earnings for permittees and BLM-AUM related employment.

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 right for a single cow on the public range now sells for anywhere from $1500 to $3000 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 at between $944 and $1,163 per animal unit, depending on area, in New Mexico. Bureau of Land Management values varied from $667 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).

Based on the active preference in the RMP area, it is estimated the capital value of BLM AUMs would be between $4.1 and $18.2 million.

Recreation

Expenditures in the recreational activities of the region primarily impact the retail trade and services sectors of the economy. The 1980 Survey of Hunting and Fishing (U.S. Fish and Wildlife Service 1980) data indicates that in destination-type expenditures (meals, lodging, transportation, ammunition, land use fees, etc.) the retail trade sector is affected the most. The direct impact of a dollar of recreation expenditure by type of activity is shown below.

Distribution of Recreation Expenditures

Sector	Fishing	Big Game	Small Game	Migratory Birds	Other Hunting
Transportation	$ .01	$ .02	$ .00	$ .00	$ .00
Retail Trade	.95	.97	.99	.99	.99
Services	.04	.01	.01	.01	.01

A wide variety of recreational activities take place on public lands in the RMP area. The level of recreation use on public lands has been estimated at 622,000 activity occasions. Data in the 1980 National Survey of Hunting and Fishing for Idaho identifies expenditures for hunting and fishing by type of expenditure. Destination-type expenditures were $9.43/

day for fishing a $12.24/day for hunting. Additionally, non-consumptive use of wildlife had destination-type expenditures of $12.76/day. The average of these three, $11.50/day, was used to estimate total expenditures. The definitions for an "activity occasion" and a "day" in the reports by the Idaho Department of Parks and Recreation and the U.S. Fish and Wildlife Service appear to be roughly the same. Thus, the values for expenditures per day have been directly applied to the number of activity occasions. Total expenditures would be $7.2 million. This level of expenditures converts to earnings of $2.8 million using the earnings to gross output ratio for the retail trade sector of the economy.

Employment estimates were developed by comparing the 1983 retail trade earning in the RMP area with the wage and salary retail trade employment. This estimates earnings per job at about $12,000. This is somewhat inflated due to the lack of data on retail trade proprietors. The employment generated by the recreation activities on public lands in the RMP area would be 233 jobs.

Lumber and Wood Products

The Idaho Department of Employment estimated lumber wages and employment at $90.8 million and 4,228 jobs (Idaho Department of Employment 1984). Two of the counties in the RMP area, Ada and Canyon, are not considered timber producing counties by the Idaho Forest Industry Council (I.F.I.C. 1984). These two counties account for 59% of employment and wages in the lumber industry. This is largely due to the location of the headquarters of Boise Cascade Corporation in Ada County (Boise). Excluding these two counties leaves employment and wages in the RMP area lumber industry of 1,738 jobs and $37.3 million. In a study of the Idaho Forest Industry (Youngblood 1983) it was found that there are 10.48 man years per million board feet of lumber processed. This would mean that 166 million board feet of lumber would have been processed to maintain the 1983 employment level in the wood products industry in the RMP area (excluding Ada and Canyon Counties).

The 1983 lumber earnings would represent 23% (all eight counties) of the total manufacturing sector of the RMP area economy. Excluding Ada and Canyon Counties this would drop to 9%.

The current allowable cut in the Cascade RMP is approximately 1.0 million board feet. This would generate roughly 10 jobs and earnings of $215,000. This would be less than 1% of the 1983 lumber earnings for the RMP area (excluding Ada and Canyon Counties).

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.

A 20 year time frame has been used for the assessment of environmental consequences for the long term unless otherwise stated. The following elements of the environment were analyzed but are not addressed since no significant impacts were identified: climate, topography, flood plains, prime or unique farmlands, and social conditions.

ALTERNATIVE A

RANGELAND RESOURCES

Soils

Broad based erosion rates would show little significant change from the current average of 2.0 tons/acre/year. Increases of up to 0.20 tons/acre/year (10 percent) are estimated over the long-term (20 year period) under current management. This increase is within the estimated average soil loss tolerance of 2 to 3 tons/acre/year. Certain uses and actions could result in high amounts of erosion on specific areas with both short and long term effects. These areas would be a small percent of the RMP area and would not have a pronounced effect on the overall average rate.

One of the greatest impacts on soils would occur on limited and open ORV use areas. Areas most affected would be the Boise Front, Clay Peak and Little Gem cycle parks, Weiser Dunes, Pickles Butte, Parma, and Dewey play areas. Moderate to severe rill and gully erosion could be expected to occur.

Agricultural use on 560 acres of transferred public lands could cause localized but significant long-term increases in soil loss. Off-site soil movement on farmed areas is expected to be at least 10 times higher than on rangeland (SCS 1984). Removal of vegetative cover and surface disturbance would result in a significant increase in wind blown particulate matter which would decrease the air quality in communities in the vicinity of the development. An increase in off-site soil movement caused by water would be anticipated based on experience with previous agricultural developments.

Construction and use of 2 miles/year of roads over a 20 year period for timber harvest would be on the highly erosive granitic soils. This would result in a short-term (one to three year) significant increase in soil loss and sediment yield to streams. Megahan and Kidd (1972) found that temporary logging roads on high erosion hazard granitic slopes in Idaho greatly

accelerated on-site surface and mass erosion, causing downstream sediment yields to increase an average of over 45 times for a 6 year study period. Roads and skid trails are the major source of soil loss and sediment during and after timber harvest operations. Erosion and compaction would be minimized by ripping, water barring, reseeding, and closing roads and skid trails after harvest. If clearcutting is utilized, areas would be limited to 40 acres or less. Clearcutting would have the greatest adverse impact on soils because of the substantial decrease in groundcover which increases the potential for accelerated erosion. Selective cutting, where a substantial number of trees are left, can have the least impact on soils. Timber harvest would occur on 100-400 acres annually with an annual cut of approximately 1 million board feet.

Broad based increases in soil erosion would be in part due to the continuing increase in poor range condition, particularly where perennial range species give way to annual species. See "Affected Environment" - Soil section for effects of composition and density on soil erosion. Areas which are highly subject to wildfires, principally the annual range areas, would show accelerated short-term (one to two year) erosion rates as fire removes vegetative cover and fire suppression activities disturb the soil surface. Long-term rates would return to prefire levels or better depending on rehabilitation efforts and success. The moderate to steeply sloping sedimentary and granitic soils of the Boise Front and Black Canyon area may pose serious erosion problems if wildfire removes vegetative cover. Erosion rates in excess of 5 tons/acre are likely.

Full fire suppression and rehabilitation efforts would gradually reduce the total number of acres burned annually. This would reduce soil erosion attributed to wildfires.

Livestock utilization at current levels (66,014 AUMs) over a 20 year period would cause only slight increases (less than 0.2 tons/acre/year) on the broad based erosion level. Livestock grazing would result in continued loss of vegetative cover and soil productivity. Soil compaction would continue to be a problem, especially around water facilities, streambanks, reservoirs, and other livestock concentration areas. The continued grazing practice on steep (slopes greater than 30%) high erosion hazard areas have a high probability of increasing erosion rates in these areas. The 6 miles of proposed pipelines for range improvement would cause short-term (1 year) soil and vegetation disturbances. These would consist of compaction, mixing of soil layers, and removal of vegetative cover.

Right-of-ways (ROWs) would cause varying degrees of disturbance in the RMP area. No significant impact on soil is expected from construction of pipelines, powerlines and telephone lines after the construction is finished. Roads, especially unsurfaced roads, may cause both short and long-term erosion problems. The probability of this happening is very high.

Mineral development and production may cause locally substantial soil erosion depending on the size of the project. Access road construction and other surface disturbing activities would be the primary causes. Overall impacts on soils attributed to mineral activities is not expected to be significant since mineral activity projected over the next 20 years is expected to remain at about the current levels.

Fencing 14 miles and streambank planting of 18 miles of riparian habitat would improve vegetative cover and reduce soil compaction and trampling damage to streambanks. Runoff and soil movement would also be reduced. For a comparison of actions affecting soils by alternative, see Appendix B.

Air Quality

There would be no long-term adverse effects to air quality under this alternative. A one to two day localized decrease in air quality would occur due to burning of slash piles after timber harvest.

Lands transferred for agricultural production would result in an increase in wind blown particulate matter. Associated with crop production is the use of pesticides and fertilizers which would add pollutants to the air for short periods.

Water Quality

Parameters such as ammonia, total inorganic nitrogen, and fecal coliform that are influenced by livestock grazing would slightly improve due to the proposed 14 stream miles of riparian exclosures and the inclusion of 73 stream miles in revised allotment management plans. High fecal coliform count and sedimentation from streambank grazing activities would be eliminated from those stream reaches excluding livestock and reduced in those streams within revised AMPs.

A short-term increase in sedimentation would likely occur on a range of 4-16 miles of streams due to timber harvest activities. A slight increase in sedimentation would occur over the long term on the same 4-16 miles as above from the proposed 40 miles of road construction.

Range fires contribute to high sediment loads in streams due to the loss of upland and riparian vegetative cover. This impact would be minimized by full fire suppression and rehabilitation efforts.

Sedimentation in streams would likely increase in moderate amounts in areas of open ORV use in high erosion hazard areas. Accelerated sedimentation would be a long term impact in those streams with inadequate flushing flows. A slight increase in sedimentation would likely occur in streams in areas of limited and closed ORV use.

Resource management guidelines for the maintenance and protection of riparian and aquatic habitats would have long term positive benefits on the quality of water on public lands by improving management of riparian areas.

Overall, water quality on public lands from this level of management would slightly improve.

Vegetation

The overall rangeland condition would show a decline on 3 to 5% of the RMP area over the projected 20 year period. The decline may not always reflect a total drop in condition class (ie. fair to poor). Many areas would experience a slight decline in rangeland condition but not enough to

change ratings. Approximate breakdown where decreases are projected are: good decreased - 2% (700 acres), fair decreased - 3% (6,246 acres), poor decreased - 3% (6,150 acres). See Appendix R for a comparison of vegetation condition changes by alternative. For current range condition by allotment see Appendix E and Map 3-2. Trend data are not available.

The greatest decline in condition is expected on the 208,205 acres of fair condition rangeland (45% of the RMP area). This would be primarily due to an increase in annual species (cheatgrass and medusahead wildrye) and a decrease in perennial species (dominantly bunchgrasses) and shrubs (most importantly antelope bitterbrush). Most areas of fair condition range are composed of perennial and annual grasses with or without a shrub/brush component. These are highly susceptible to wildfire, over grazing, and surface disturbing activities. By far wildfires pose the greatest threat. Post fire conditions on many areas favor the rapid increase of annual species and decrease of the less competitive perennial species. This would mainly affect the steep, rough and/or shallow soil areas that would not be reseeded due to limitations. Areas suitable for reseeding following wildfire would be seeded with a non native seed mixture. Depending on success and management of seedings these areas should return to fair or better range condition. Full fire suppression and rehabilitation efforts would gradually reduce the total number of acres burned annually.

Little substantial decline in range condition is projected within 20 years from maintaining current grazing levels. 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. Fair condition areas would show the most decline. Selective grazing by livestock of the most palatable, less plentiful perennial species causes a decrease in their vigor and number allowing annuals to increase.

Off-road vehicle activity would adversely impact range condition on high use areas which tend to be small and scattered. Man caused wildfires and surface disturbance would be the major causes. Generally these areas are in poor condition. Off-road vehicle use in good range condition areas would disturb the soil and vegetation and allow annual species to become established. This would increase the fire danger in these areas.

Most of the 211,639 acres of poor condition range (45% of the RMP area) are dominated by annual grass species. The decline in these areas would be primarily due to selective grazing and/or wildfire removing any remaining native plant species and further invasion of annuals. Exceptions are those areas that are rehabilitated after wildfire by seedings. The post rehabilitation condition would be subject to the success of the seeding and species seeded. Many of these areas are expected to show little success and continue to be dominated by annuals.

The 61,000 acres designated as curlew habitat (Black Canyon area) will be managed to maintain the existing short vegetative cover. Rehabilitation efforts will be designed to meet management objectives.

The 4,200 acres of Columbian sharp-tailed grouse habitat would improve in condition due to special management. Over 70% of the fair and poor condition rangeland is expected to increase in class. Areas currently in

good condition would improve but to the extent of becoming excellent is undetermined.

Candidate and Sensitive Plant Species

Designation and management of 2 research natural areas totaling 475 acres would provide protection and increased vigor of some candidate and sensitive plant populations and increase public awareness of these areas.

Limiting ORV use and conducting site specific right-of-way clearances on 2,545 acres should provide for the continued existence of candidate, sensitive, or uncommon plant species. Some species may increase in numbers due to the protection provided while other plant species would be stabilized but would not have an opportunity to increase. Some species may decrease in numbers outside of these areas because small scattered populations and undiscovered populations would not be protected from grazing, ORV use, annual grass invasion or other hazards.

Due to the lack of restrictions on mineral development on 2,545 acres, some individual plants or small populations could be destroyed. Procedural compliance with the Endangered Species Act of 1973 might keep these impacts below the level of significance to the species as a whole.

Riparian Habitat

The Resource Management Guidelines for the various programs should maintain overall existing riparian habitat quality and minimize impacts of actions in riparian areas.

Land transfer proposal in this alternative would not impact the base of 122 miles of surveyed drainages.

Habitat quality would be maintained on 106 miles of the 122 miles surveyed while 11.0 miles would improve to the next higher condition class due to a combination of reduced stocking levels and aquatic habitat improvement projects. Loss of habitat value due to increased stocking levels would occur on 5 miles of stream riparian habitat.

Revision of 7 existing AMPs would result in some improvement of riparian habitat on 5 miles of perennial streams by including livestock grazing strategies that promote the vigor of streamside woody vegetation, an important component of streambank stability. This management strategy would also benefit 66 miles of surveyed and unsurveyed intermittent riparian habitats.

Proposed timber harvest level of approximately 1 MMBF and the associated 40 miles of road construction would have minimum impact on riparian habitat along the 3-12 miles of potentially impacted perennial streams and 1-4 miles of intermittent drainages within the total harvest acreages. Resource management guidelines would protect riparian vegetation by providing a no-cut buffer strip along drainages and prohibiting road construction within riparian areas (except for crossing where absolutely necessary).

Environmental Consequences

ORV use in the limited ORV use areas would occur on 25% of the area and would have a slight impact on riparian vegetation within these areas. Drainages are often used as travel corridors for wildlife and humans. With no restrictions on 75% of the area, riparian areas with this open use classification would likely be moderately impacted resulting in long term disturbance of vegetation and soils and short term disturbance of riparian associated wildlife.

Full fire suppression and rehabilitation efforts would have a long term beneficial impact because loss of riparian vegetation due to wildfires would be minimized and gradually reduced.

Loss of riparian habitat attributed to a slight increase in mining activities would be minimal.

Aquatic/Fisheries Habitat

The surveyed aquatic/fisheries habitat base for this alternative is 81 miles of perennial stream. To maintain the high degree of habitat quality on 67 miles of surveyed streams Resource Management Guidelines were developed to minimize impacts. Improvement of degraded habitat to good condition would occur on 14 miles of surveyed streams due to proposed aquatic habitat improvement projects.

Revision of 7 existing AMPs would result in improvements of approximately 5 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation, an important component of streambank stability. This management would also benefit 68 miles of surveyed and unsurveyed intermittent streamside habitats.

Proposed timber harvest level of approximately 1 MMBF and the associated 40 miles of road construction would impact 3-12 miles of the 39 miles of perennial streams within the total harvest acreages. Also impacted would be 1-4 miles of intermittent drainages. Short term increased sedimentation levels associated with this level of timber harvest would be minimized by Resource Management Guidelines and the rehabilitation of major disturbed areas. A slight increase in stream sedimentation over the long term would result from road construction in high erosion hazard areas and adjacent to perennial drainages. All roads would be stabilized and closures would be considered on a case-by-case basis to further minimize sediment loads.

Restrictions imposed on ORV use on 25% of the area by limited and closed use designations would minimize soil disturbance and associated stream sedimentation. Open use class on 75% of the area would result in a moderate increase in sediment loads in those streams in high erosion hazard use areas.

Although mining activity can be very destructive to the riparian and aquatic community, future mining associated impacts would be minimized by following Resource Management Guidelines.

Redband trout populations would increase over the long term on segments of 6 creeks due to livestock exclusion fencing. Habitat components important for salmonid spawning and rearing would likely improve as

livestock grazing pressure on 14 miles of riparian habitat is eliminated. Livestock grazing strategies that are incorporated into AMPs to promote the vigor of woody streamside vegetation would help maintain existing good riparian habitat and would be expected to improve existing poor and fair condition riparian habitat. A corresponding increase in redband trout populations in perennial streams within these AMP areas would likely occur.

Impacts on redband trout populations over the long term due to timber harvest activities and ORV use would likely be slight. Resource Management Guidelines would minimize soil disturbance and sedimentation in streams. Flushing streamflows would likely be adequate to prevent fine sediment accumulation in spawning gravels.

Warmwater and coldwater gamefish species confined to reservoir habitats would not be impacted by management actions in this alternative.

Wildlife

Elk

Elk habitat has been analyzed in two categories: fall/winter habitat and crucial winter habitat. Crucial habitat are areas utilized in severe conditions and are the most important to herd survival. Under current management practices, a slight increase in the poor condition class would be expected over 20 years. This would occur due to invasion of medusahead wildrye following wildfire and over-utilization of the range by livestock.

Livestock grazing at proposed levels of 66,655 AUMs would cause some loss of cover and forage. The most severely impacted would be winter habitat which is grazed in the fall.

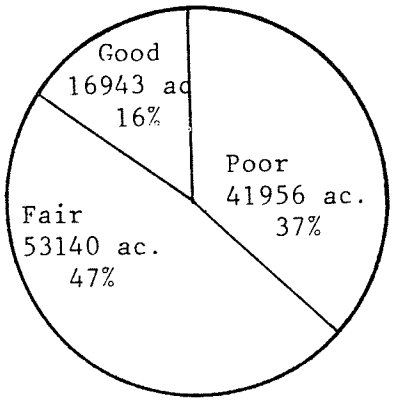
Commercial timber harvest is proposed on up to 8,000 acres of BLM lands over 20 years. Of these acres, approximately 7,180 acres would be located on deer and elk winter ranges. Approximately 2,338 acres would be in elk fall/winter ranges and 3,657 acres in crucial areas of the winter range. A selective cut program would be used for timber harvest. Selective cutting could be beneficial to elk and deer habitat. Increased sunlight penetration in logged areas increases production of palatable forage. Elk use may be enhanced through selective cutting in certain forested habitat types. Minimal impacts are expected in elk crucial winter habitat areas because of selective cutting and other timber management practices.

Under current management habitat condition would slowly decline over 20 years. It is estimated that the habitat would only be able to support 1,093 elk which is a 5% decrease over present populations. This would not meet the population goal of a 20% increase over 20 years set for the habitat by the Idaho Department of Fish and Game.

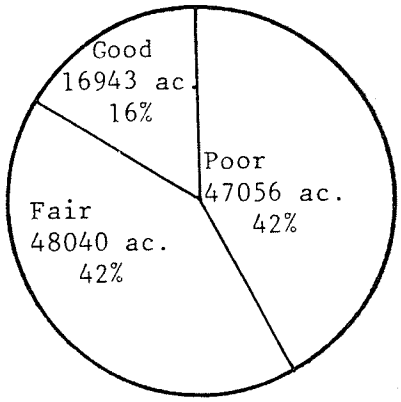
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Elk Fall/Winter

Existing Situation

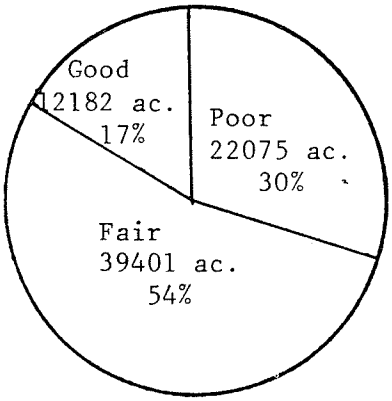


End of 20 Years

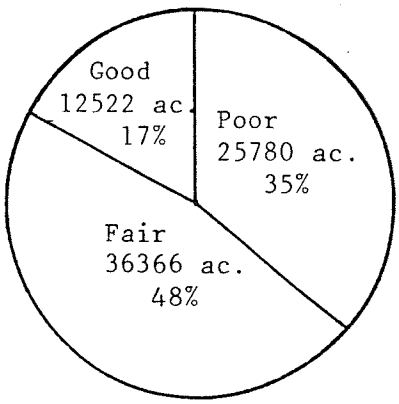


Elk Crucial Winter

Existing Situation



End of 20 Years



Mule Deer

As with elk habitat, the most important mule deer habitat has been analyzed in two categories: fall/winter habitat and crucial winter habitat. Under present management practices, an estimated 5% of the acres now in fair condition would be degraded to a poor condition class.

The present stocking levels of 66,655 AUMs would cause loss of forage and cover on mule deer winter ranges. With no change in grazing practices crucial ranges such as the Four-Mile Creek and Willow Creek drainage would continue to be in poor condition. The degradation of the habitat would mainly be caused by the invasion of medusahead wildrye in severely over-utilized areas and burned areas.

Riparian zones which are important habitat both in winter and summer would continue to be degraded in some areas by livestock use. The 30 miles of fencing and 28 miles of stream planting would improve fawning habitat in summer and thermal cover in winter.

Approximately 7,180 acres of the proposed timber sale areas would be in elk and mule deer winter range. Approximately 108 acres would be in mule

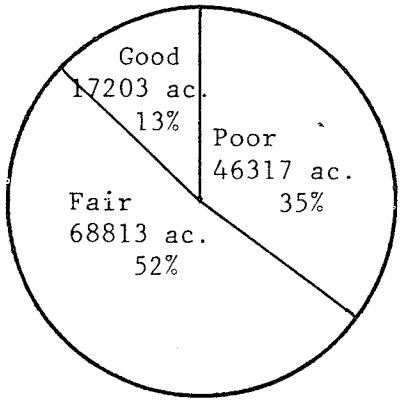
deer fall/winter ranges and 1,091 would be in crucial areas where deer concentrate during severe weather conditions. In most cases, deer and elk crucial winter ranges overlap. Selective cutting and other forest management practices should minimize the impacts on mule deer winter habitat and crucial winter habitat. Mule deer use on an area may increase due to increased shrub growth in cut areas.

Under current management, habitat condition would slowly decline over the next 20 years. It is estimated that the habitat would only be able to support 6,584 mule deer which is a 5% decrease over present populations. This would not meet population goals of a 30% increase over 20 years set for the habitat by the Idaho Department of Fish and Game.

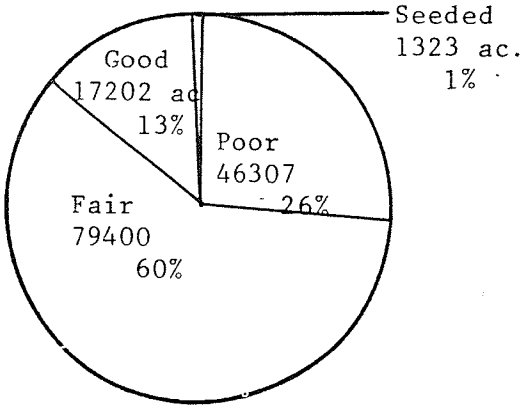
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Mule Deer Fall/Winter

Existing Situation

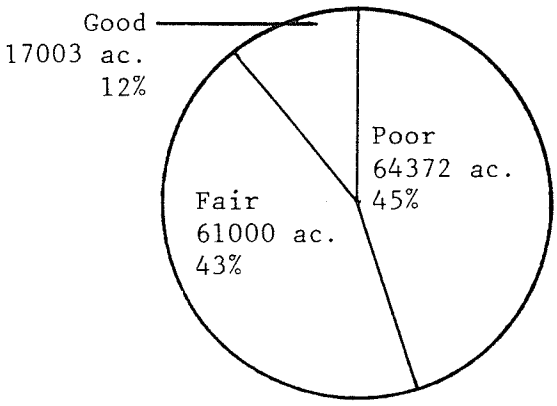


End of 20 Years

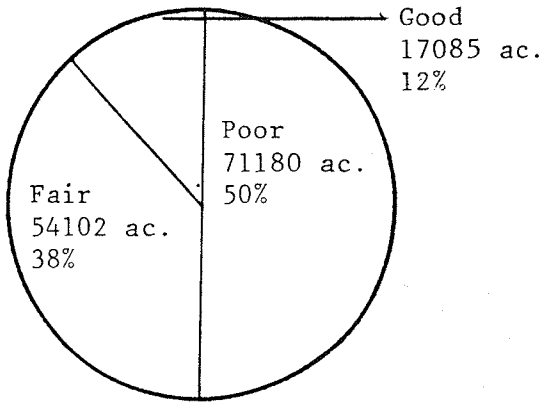


Mule Deer Crucial Winter

Existing Situation



End of 20 years



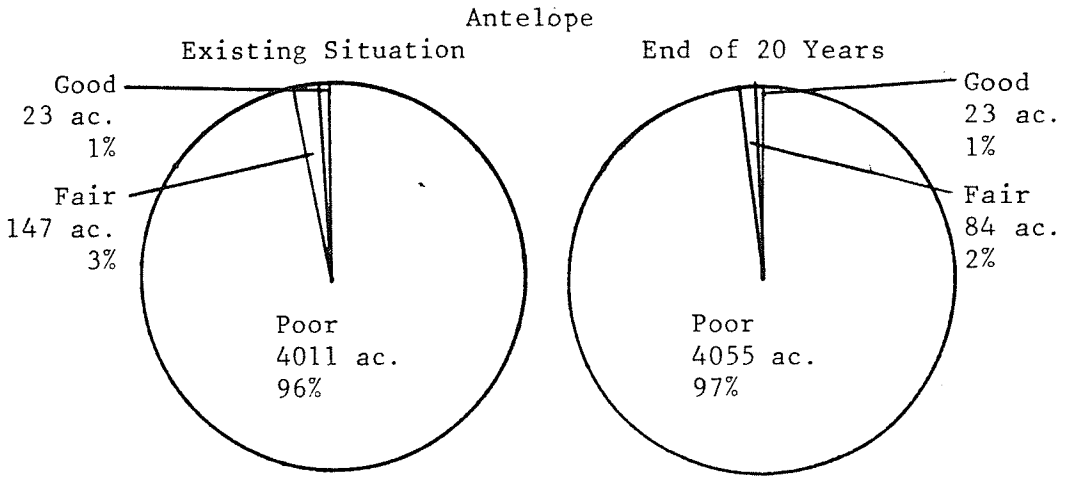
Environmental Consequences

Antelope

Crucial antelope winter habitat lies between the Little Willow Creek and Big Willow Creek drainages. Currently, 96% of this winter range is in poor condition. Habitat condition under current management practices is expected to decrease slightly over the next 20 years. This can be attributed to livestock grazing and continued infestation of medusahead wildrye. Poor range condition and severe climatic conditions could severely inhibit population growth of this herd.

Current management would not meet the population goal of 150 animals set for the area by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



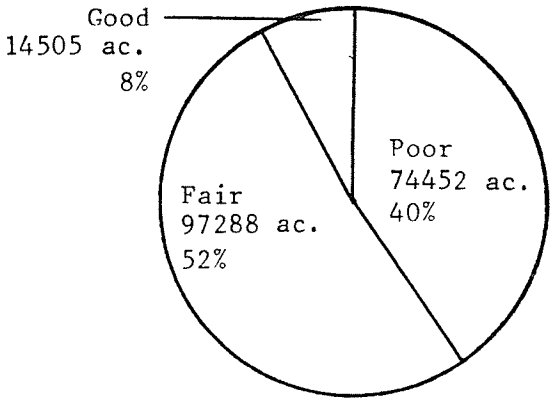
Sage Grouse

Current grazing practices and wildfire would continue to degrade sage grouse habitat. The trend seems to indicate that habitat condition would continue to decline. The decline would be caused by invasion of medusahead wildrye and cheatgrass and loss of sagebrush cover.

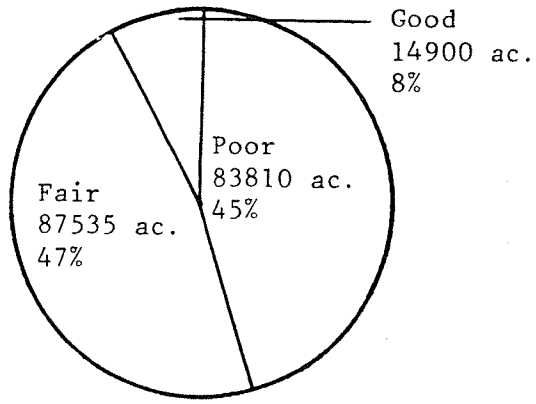
The acreages and percentages of existing and projected 20-year habitat conditions are shown below.

Sage Grouse

Existing Situation



End of 20 Years



Sensitive Animal Species

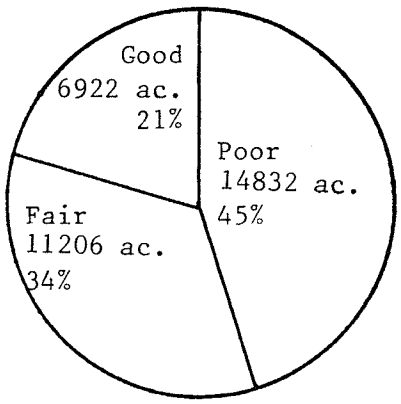
Columbian Sharp-tailed Grouse

The continuation of current grazing practices would slightly increase the poor condition class of sharp-tail habitat. Under present management the habitat condition is expected to continue to decline. As loss of crucial habitat continues, populations will also decline.

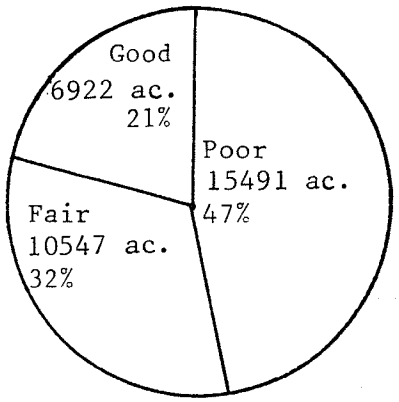
The acreage and percentages of existing and 20-year projected habitat conditions are shown below.

Columbian Sharp-tailed Grouse

Existing Situation



End of 20 Years



Environmental Consequences

Long-billed Curlew

A 61,000 acre long-billed curlew habitat area is located in the Black Canyon Planning Unit. Special management guidelines for the area include retention of the area in federal ownership, ORV restrictions, and maintenance of a short grass ecosystem. Curlew utilize areas that are in the poorest condition class. This alternative would not effect any curlew habitat.

Birds of Prey

This alternative would not affect raptor habitat in the Birds of Prey area.

Livestock

The stocking level of 66,424 AUMs is the 5-year average use. This would be adjusted downward as the proposed land transfers occur.

Transfer of 2,680 acres of federal range would result in a loss of approximately 248 AUMs (Appendix F). Three allotments would be adversely affected by sales, exchanges, and DLE's.

Special designation areas would further reduce livestock grazing on 915 acres of federal range with an additional 162 AUMs of forage lost.

Wild Horses

Wild horse herds will be maintained at current levels (Four Mile herd, ten horses/120 AUMs; West Crane herd, twelve horses/144 AUMs).

LANDS AND REALTY RESOURCES

Lands

Land transfer would consist of 243 acres for sale, 1,397 acres for sale or exchange, and 560 acres for Desert Land Entry for a total of 2,200 acres.

Of the lands identified for sale, 80 acres would be a sanitary landfill for Ada County and 160 acres already under R&PP lease to the Parma Rod and Gun Club would be patented. The remaining three acres are scattered occupancy and agricultural trespass parcels that have been surveyed and lotted. Transfer of land by sale would generate approximately $21,600 based on current appraisal for the 80 acres to be sold to Ada County, estimates of the value of the small parcels that total 3 acres, and the 160 acres for the Parma Rod and Gun Club.

The lands proposed for transfer by sale or exchange are generally small isolated parcels that appear to meet the disposal criteria in Section 203(a)(1) of FLPMA. Their disposal would reduce problem management areas and/or consolidate land ownership patterns, thereby improving management and reducing management costs. The larger parcels would be examined for exchange possibilities before sale is considered, although any parcel would be available for exchange.

Land transfer for agricultural use (Desert Land Entry) would result in a few additional trespass cases, but because of the limited number of acres to be transferred under this category, it would not be a significant increase. The average administrative cost for a trespass case is $1,250, resulting in increased costs of approximately $3,750 on an estimated three trespass cases.

Rights-of-Ways

Overhead, surface and/or subsurface rights-of-way would be restricted on 4,333 acres of public land due to conflicts with significant cultural or recreation sites, and a portion of the Payette River Special Recreation Management Area (see respective Tables in Chapter 2). The areas precluded or restricted are generally small acreages and there would be few conflicts with major utility rights-of-way since rights-of-way could be rerouted slightly to avoid these areas. Hydroelectric development would be precluded on 14 miles of the Payette River within the Special Recreation Management Area.

Withdrawals

All lands presently withdrawn for livestock driveways (approximately 63,000 acres) would remain in that status or be continued if due to expire within the term of this plan. There is one C&MU classification in the resource area encompassing 37.31 acres. This parcel was acquired under a Section 8 (Taylor Grazing Act) exchange. When the order opening the lands to the administration of the public land laws was published, a C&MU classification was placed on it at the same time, precluding disposal. This parcel contains no unique resources and revoking the classification would put it in the same status of general retention as the other public lands adjacent to it.

Additional withdrawals may be forthcoming if Congress designates the Payette River as a Wild and Scenic River. The final acreage withdrawn may be more or less than that proposed in this plan.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

Cultural resource sites in critical need of special management (Grey's Creek, Indian Creek, Milk Creek, Cabin Creek, Mineral, Quartzburg, Centerville and Pioneerville) would continue to be protected only by BLM standard operating procedures. The effects of vandalism, livestock trampling, erosion and other agents of deterioration would continue causing the loss of scientific information within a short time. Since no monitoring of these sites is performed, no information concerning the rate of deterioration is available.

Additional inventory needed to determine the boundaries of these sites for National Register nomination would not be performed, and presently unknown cultural resource sites within these areas would not receive the additional protection afforded them by inclusion on the National Register.

Paleontologic Resources

The Cascade Resource Area paleontologic inventory is not complete. A review of the data presently available indicates that, once the inventory is completed and site clearances become standard practice, the required protection of the resource would be sufficient to keep the impacts minimal. No direct negative impacts to the resource are presently known. The greatest impact would be the possible loss of paleontologic resources on 2,680 acres proposed for transfer from federal ownership. Even with paleontologic clearances, unknown paleontologic resources could be lost, destroyed or closed off from scientific study.

RECREATION RESOURCES

Recreation

Based on the State Comprehensive Outdoor Recreation Plan (1983) data, the overall demand for recreation opportunities in the Cascade Resource Area is expected to increase 54-78% by the year 2000. This would result in demand increasing from the current 622,000 activity occasions to approximately 1,034,000 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 recreational activities would vary somewhat between alternatives, but overall demand throughout the CRA would be unaffected by any of the alternatives.

There would be 362,892 acres open to ORV use, 123,989 acres limited and 585 acres closed. Included are 2,000 acres which would be limited and 680 acres that would be open until the lands are transferred. The limited use areas would consist of the following acreages: Boise Front SRMA (11,995), Idaho City mines (40), Oxbow-Brownlee SRMA (39,777), Payette River Corridor (2,600), boat launches (12), Black Canyon Planning Unit (65,000 - includes long billed curlew habitat area), identified cultural sites (2,020), and candidate and sensitive plant sites or RNAs (2,545 - includes 900 acres within Little Gem Cycle Park). The 585 acres closed to ORVs would be developed recreation sites (28), the Silica Sands mineral site (40), the Hulls Gulch Nature Trail (5), and the Clay Peak Cycle Park buffer zone (512).

ORV use on the Boise Front SRMA is currently limited to designated roads and trails. Rehabilitation of the approximately 10 miles of closed roads and trails on the Boise Front might decrease unauthorized ORV use by as much as 15-20% (BLM lands only), with proportionate increases in the visual and aesthetic qualities and watershed integrity. An annual seasonal closure of approximately four miles of roads and trails for Boise Front winter deer habitat currently in effect would continue with minimal impact on recreational ORV use.

Impacts on ORV recreation by limiting use in the Oxbow-Brownlee SRMA, Payette River Corridor, cultural sites and candidate and sensitive plant sites would be minimal since little use off trails and roads in these areas is occurring now or is expected to occur in the near future (snowmobiles excepted).

Limitations on 61,000 acres of public land in the Curlew Management Area (part of the 65,000 acre Black Canyon Planning Unit) currently in effect would continue with minimal impact on recreational ORV use.

Minerals related surface occupancy in developed and intensively used recreation areas could adversely impact recreation use on 3,785 acres. Surface occupancy could reduce the quality and quantity of vehicle use opportunities on 3,740 acres provided for in 5 intensive ORV use areas. This impact would be slight to moderate depending on the degree of development and surface occupancy. Recreation opportunities on 45 acres of campgrounds, boat launches, and the Hulls Gulch Nature Trail would be substantially reduced in quality or even eliminated by surface occupancy.

A projected increase in big game numbers through improved habitat is expected to increase big game hunting opportunity. Opportunities for non-consumptive uses would also increase.

Granting the Pickles Butte DLE could decrease upland bird hunting opportunities by as much as 40% on the 1,440 acres of public lands in that area.

Construction of 40 miles of timber harvest access roads (2 miles annually for 20 years) would increase recreational access into these areas on those roads that would remain open for timber management purposes.

Identification of special designation areas would cause a slight increase in hiking, sightseeing, and other casual visitor uses.

Visual

More intensive management of the Boise Front SRMA (12,000 acres) could enhance the quality of the visual resource of the area by as much as 10-15%.

Improved riparian habitat on 82 miles of streams would improve the visual resource.

Harvesting approximately 1 MMBF of timber and the resulting access roads may negatively impact the visual resource. Less obtrusive selective cutting would be the primary harvest method, although some clearcuts, not to exceed 40 acres each, may be proposed. All timber sales would be guided by the appropriate VRM class guidelines. Impacts from timber harvest would be minimal.

Transferring 2,680 acres of land from federal ownership could result in impacts on the visual resource. See discussion in Alternative B.

MINERAL RESOURCES

Leasables

Oil and Gas

Approximately 100,000 acres of BLM land within this resource area have been classified as prospectively valuable for oil and gas. Considering a 12

month availability 1,200,000 acre/months of access exist. About 19,000 acres would continue to be affected by crucial deer winter range stipulations (closed 12/1 to 4/30) and 5,000 acres would continue to be closed from 2/15 to 6/30 to protect bird nesting and breeding areas. This would be a total protective closure of 117,500 acre months or approximately 10% of the available access. Since weather and soil conditions normally do not allow off-road activities before 4/15 each year the impact from the stipulations would not be significant.

The no surface occupancy restrictions on recreation sites totaling 45 acres would not be a significant impact.

Based on the lack of any commercial oil or gas wells in Idaho, the 35 dry holes in the resource area, the low potential of the area, and the above analysis, the overall impacts of continued oil or gas leasing and development would be insignificant.

Geothermal

Approximately 94% of the resource area would remain open for leasing under this alternative. The areas closed to geothermal leasing would be the existing 31,177 acres of withdrawn lands. Impacts from time stipulations would not be significant because the periods of closure generally match the period that has poor weather and soil conditions which limit access.

Although various lands within the resource area have been classified as prospectively valuable for geothermal resources, the only KGRA within the area has been declassified and there are no geothermal leases within the whole resource area.

Based on the lack of any commercial geothermal electric projects in Idaho, the lack of any known large reservoirs in the area, the declining interest in geothermal resources and the above analysis, the overall impacts on the availability of geothermal leases and development would be insignificant.

Locatables

The resource area would have 94% of its lands open to mining activity. Those areas closed to mining would be the existing withdrawals of 31,177 acres plus an additional 8 acres for cultural site protection.

A total of 2,200 acres of land are proposed for transfer from federal ownership under this alternative. No lands having valid mining claims or mineral potential would be transferred from federal ownership unless they are patented under the mining laws, the mineral estate is paid for, or lands of equal overall values are obtained. The impact from land transfer on the availability of lands for mineral location and development would, therefore, be considered insignificant.

An analysis of the location of and activity on the existing mining claims and areas of mineral interest compared to an analysis of the actions proposed under this alternative indicates that there would not be any significant impacts on the availability of locatable minerals.

Salables

Mineral Materials

Mineral material needs within the resource area have not been very high except in the Weiser area. No increase in need or decrease in overall availability would result from the actions under this alternative. Some existing pits will, however, be depleted within the timespan of this plan.

The impacts from this alternative on mineral material resources would be insignificant.

FOREST RESOURCES

Timber

There are a total of 31,895 acres of commercial forest land. Approximately 16% or 5,139 acres have been determined through the Timber Production Capability Classification (TPCC) to be incapable of sustained long-term timber production. Included in those acres are lands that are classified as fragile or lands which cannot be reforested adequately. Seventy acres would continue to be used for a seed orchard. This leaves 26,686 acres of suitable commercial forest land, which is capable of sustaining long-term timber production, to be used for timber management and harvest. These 26,686 acres would be selectively cut, over an area of 100-400 acres to yield approximately one million board feet (1 MMBF) of timber annually. This would require construction of 2 miles of roads per year to achieve the annual cut. Roads not needed for timber management would be closed following harvest.

The timber yield over the next 20 years would be 20 MM Bdft.

FIRE MANAGEMENT

Fire occurrence of 40 wildfires per year with a size of about 221 acres each for a total of 8,814 acres per year would be about average for this alternative. The total cost for full suppression in the resource area would be approximately $109,300 per year. There would be a gradual reduction in the annual acreages of wildfires burned, because of the effects of fuel breaks, and because of rehabilitation and greenstripping effects, including reseeding of fire resistant species, which would retard or reduce the larger fires. Refer to Resource Management Guidelines for Fire.

ECONOMICS

Crop Agriculture

With this alternative there would be 560 acres of agricultural development. Based on past experiences, it is assumed that this development would occur in a gradual manner over 10 years. The BLM's Agricultural Development Economic Computer model was used to estimate sales from crop production with this alternative. A crop rotation of Alfalfa establishment - 1%, Alfalfa - 5%, Barley - 17%, Winter Wheat - 17%, Potatoes - 22%, Sugar Beets - 17%, and Dry Edible Beans - 21% was used in this analysis. This

resulted in an average per acre sales of $969 (see the appendix for a complete description of the process used to arrive at this amount). This means that the total annual crop sales from 560 acres would be $542,600.

Utilizing the earnings to gross output ratio for crops, this level of annual sales would generate direct earnings of $207,800. This would represent 0.2% of the RMP area farm earnings. The total earnings that would be generated, including interindustry interactions and household spending (the multiplier effect) would be $529,700. This would be 0.02% of the total RMP area 1983 earnings. See the appendix for a description of how these calculations were made.

Employment gains were estimated by comparing the 1983 farm earnings with the 1983 wage and salary employment to arrive at a earnings per job figure. The earnings per job in the farm sector of the economy would be $28,000. This is inflated to some degree due to the lack of data on the number of farm proprietors. The direct earnings would lead to a gain in farm employment of 7 jobs. This would be 0.2% of the 1983 farm wage and salary employment. The total (all industries) earnings per job figure is $19,000. Again, this is somewhat inflated due to the non-inclusion of data on proprietors. The total earnings gain would lead to an increase of 24 jobs. This would be 0.02% of the RMP area 1983 wage and salary employment.

Livestock

The 5-year and 20-year livestock forage level would be 66,014 AUMs. This would support 5,501 animal units which would generate earnings of $2.7 million. This would be 11% of the total permittee earnings, 6% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be $7.2 million. This would be 0.3% of total RMP area 1983 earnings.

Based on farm earnings per job of $28,000 the direct earnings would generate 96 jobs. This would be 2.8% of the 1983 farm wage and salary employment. The total earnings would generated 333 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This stocking level represents a capital value of between $3.7 and $16.5 million.

Recreation

The current level of recreation use (622,000 activity occasions) leads to expenditures of $7.2 million. Utilizing the earnings to gross output ratio for retail trade this would convert to earnings of $2.8 million. This would be 1.1% of the RMP area 1983 retail trade earnings. By the year 2000 the number of activity occasions would be up to 1,034,000 generating expenditures of $11.9 million. This would be earnings of $4.7 million or 1.8% of retail trade earnings.

Initially total earnings (including the multiplier effect) would be $6.4 million or 0.3% of the total RMP area 1983 earnings. By the year 2000 total earnings would be $10.6 million. This would be 0.5% of the total RMP area 1983 earnings.

Employment gains were estimated by comparing the 1983 retail trade earnings with the 1983 retain trade wage and salary employment to arrive at a earnings per job figure. The earnings per job in the retail trade sector of the local economy would be $12,000. This is inflated to some degree due to the lack of data on the number of retail trade proprietors. Initially the direct employment resulting from recreation activity would be 235 jobs. This would be 1.1% of the 1983 retail trade wage and salary employment. By the year 2000 the direct employment would be 392 jobs or 1.8% of the 1983 retail trade wage and salary employment.

Initially, the total employment (including the multiplier effect) would be 425 jobs or 0.4% of the RMP area, total wage and salary employment. By the year 2000 total recreation-related employment would be 884 jobs. This would be 0.7% of the 1983 wage and salary employment in the RMP area.

Lumber and Wood Products

Approximately 1.0 million board feet of wood products would be harvested annually with this alternative. This would generate earnings of $215,000. This would be 0.08% of the RMP area durable manufacturing 1983 earnings. The total earnings (including the multiplier effect) would be $515,000. This would be 0.02% of the total RMP 1983 earnings.

The harvest level would lead to 10 jobs (Youngblood 1983). This would be 0.06% of the 1983 manufacturing wage and salary employment. Total employment (including the multiplier effect) would be 26. This would be 0.02% of the total 1983 RMP area wage and salary employment.

Management Costs

Range and wildlife improvements associated with this alternative would cost approximately $442,000.

Summary

This alternative would have little impact on the local economy. Total crop agriculture earnings and employment would increase by $529,700 and 24 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Earnings and employment in the livestock industry would be unchanged from the existing situation. The capital value of AUMs would be reduced by $0.4 to $1.5 million. There would be no change in the recreation-related earnings and employment. There would be no change from the existing situation in lumber and wood products earnings and employment. Project costs needed to implement this alternative would be $442,000.

ALTERNATIVE B

RANGELAND RESOURCES

Soils

Broad based long-term erosion rates would show an average increase of 0.1 tons/acre/year (5%) over current levels. This increase is within the estimated average soil loss tolerance of 2 to 3 tons/acre/year. The erosional processes described for land use actions in the Affected Enviromment and Alternative A would be the same for this alternative, but the area size and/or magnitude of the impact may vary considerably (Appendix B). Specific uses and actions would be responsible for significant short and/or long-term erosion on isolated areas. These would be ORV use, timber harvest, road building, agricultural development, range projects, and mineral exploration and/or development.

Impacts from ORV use would be similar to those described for Alternative A. The extent of impacts woud differ (see Appendix B).

Commercial timber harvest is proposed on 150-700 acres annually with allowable annual cuts of approximately 1.7 million board feet. Selective cutting would generally be used with clearcutting as an option. To accomplish this harvest 3.4 miles/ year of roads, over a 20 year period, would be built. Resulting impacts would be similar to those described in Alternative A and Affected Environment. The extent of impacts would be greater (see Appendix B).

The transfer of public lands include 560 acres for agricultural development. The impacts associated with farming would be the same as those described in Alternative A.

Impacts due to ROWs would be the same as Alternative A.

Mineral exploration and development would be open on 456,281 acres for locatables and 456,289 acres for leasables. Impacts would be the same as described in Alternative A.

Range condition improvement is projected for 23% of the RMP area. See Chapter 2 - Livestock, Vegetation, and Wildlife, Alternative B for details of improvements. Where range condition is improved through enhancement of vegetative density and/or composition, erosion rates would be reduced. Rates would decrease from 0.1 to as much as 1 ton/acre/year. The amount would depend on the degree of vegetative improvement, the success, and the following management of the area. Where annual range is converted to seedings the susceptibility to wildfires would be greatly reduced.

Where burning, spraying, discing or any combination of the three are used, with or without seeding, a short-term (one to two year) increase in soil loss would result. This would be due to loss of vegetative cover and surface disturbance. But as vegetation becomes reestablished and density and/or composition improved, long-term erosional decreases would be expected. Twelve miles of pipelines are proposed.

Livestock AUM increases of 7% are proposed over a 20 year period. By incorporating grazing systems and with the proposed range improvement projects this increase would result in a very slight increase in erosion rates (up to 0.05 tons/acre/year) on grazed lands. Erosion would show the largest increases around livestock concentration areas and on steep hillsides.

Fencing 10 miles and streambank planting of 6 miles of riparian habitat would affect soils as described in Alternative A.

Designation of the Boise Front ACEC and the Sage Creek ACEC would provide special management for these areas (see appropriate ACEC). This management would enhance vegetative condition, increase watershed proficiency, and reduce soil loss.

Air Quality

There would be no long-term adverse affects to air quality under this alternative. A one to two day localized decrease in air quality would occur due to prescribed burning for rangeland improvements and slash burning after timber harvest.

Where spraying of herbicides is used to control brush and/or annual grasses a one to two hour reduction in air quality would result.

Lands transferred for agricultural production would result in an increase in wind blown particulate matter. Associated with crop production is the use of pesticides and fertilizers which would add pollutants to the air for short periods.

Water Quality

Parameters such as ammonia, total inorganic nitrogen, and fecal coliform that are influenced by livestock grazing would slightly increase due to a decrease in habitat quality on 2 miles of streams. Water quality would be maintained or very slightly improved on 25 miles of perennial stream and 153 miles of intermittent streams due to management in revised and new AMPs.

A short-term increase in sedimentation would likely occur on a range of 7-29 miles of streams due to timber harvest activities. A slight increase in sedimentation would occur over the long term on the same 7-29 miles as above from the proposed 68 miles of road construction.

Range fires contribute to high sediment loads in streams due to the loss of upland and riparian vegetative cover. This impact would be minimized by full fire suppression and rehabilitation efforts.

Sediment in streams would likely increase moderately in 70% of the area due to the open ORV use classification in high erosion hazard areas. Accelerated sedimentation would be a long term impact in those streams with inadequate flushing flows. A slight increase in sedimentation would likely occur in streams in areas with limited and closed ORV classification.

Resource management guidelines for the maintenance and protection of riparian and aquatic habitats would have long term positive benefits on the

quality of water on public lands by improving management of riparian areas.

Overall, water quality on public lands from this level of management would slightly decline.

Vegetation

The long-term vegetative condition would show an overall improvement on 18 to 23% of the RMP area. This increase would not always reflect a total change in condition class. In many areas the general condition would improve but not enough to change classes. On approximately 14% of the poor condition range this change would reflect a seeding. Approximate breakdown where improvements are projected would be: poor changed or improved - 25% (45,000 acres), fair improved - 28% (55,400 acres), good improved - 8% (2,700 acres). See Appendix R for a comparison of vegetation condition changes by alternative. Trend data is not available.

The encroachment of annual grasses (medusahead wildrye and cheatgrass) into fair and poor condition rangeland would continue. This would be most prominent on the sedimentary and lower elevation basalt soils. These areas tend to be very susceptible to invasion once disturbed (wildfires or heavy use by livestock). Full fire suppression and rehabilitation efforts would gradually reduce the total number of acres burned annually.

Increasing livestock AUMs by 7% over 20 years is proposed. By incorporating grazing systems along with range improvement projects this increase would not adversely affect the projected condition increase. The projected increases do however depend on the success of range improvement projects and how effectively grazing systems are utilized. These increases in condition would be most notable on the fair condition rangeland. A majority of the RMP area would show good response to management due to productive soils and having an average annual precipitation of greater than 13 inches.

Rangeland and wildlife improvements would affect 10% of the RMP area. These and the acres affected are listed in Chapter 2 - Livestock, Vegetation, and Wildlife. The success of rangeland seedings where poor condition annual range is converted is questionable at this point in time.

Impacts associated with ORV use would be the same as described in Alternative A.

The curlew habitat area and Columbian sharp-tailed grouse habitat area would be affected as discussed in Alternative A.

Candidate and Sensitive Plant Species

The designation and management of 5 research natural areas totaling 1,355 acres would provide protection and increased vigor for several candidate, sensitive, or uncommon plant populations. These areas may act as centers of dispersal for the plant species. Public awareness would also be increased in these areas.

Limiting ORV use and excluding surface and subsurface rights-of-way on 2,545 acres should provide for the continued existence of candidate,

sensitive, or uncommon plant species. Some species may increase in number due to the protection provided while other plant species would be stabilized but would not have an opportunity to increase. Some species may decrease in numbers outside of these areas because small scattered populations and undiscovered populations would not be protected from grazing, ORV use, annual grass invasion or other hazards.

The increased grazing pressure would destroy some plant populations. This increased grazing would further the invasion of exotic weedy annuals by the selective grazing of the more palatable perennial species. Exotic weedy annuals compete with native flora, negatively impacting native plant populations. Annuals increase the probability of wild fires which cause a perpetuation of annual grass ranges and poor ecological conditions. Some plant species could be eliminated or reduced in areas recurrently burned.

Due to the lack of restrictions on mineral development on 2,545 acres, some individual plants or small populations could be destroyed. Procedural compliance with the Endangered Species Act of 1973 would keep these impacts below the level of significant to the species as whole.

Riparian Habitat

Resource management guidelines for various programs should maintain overall existing riparian habitat quality and minimize impacts of actions in riparian areas.

Land transfer proposal would not impact the base of 122 miles of surveyed drainages. Two miles of unsurveyed perennial habitat would be transferred from public ownership. Habitat quality would be maintained on 101 miles of the 122 miles surveyed while 9 miles would improve to the next higher condition class due to a combination of reduced stocking levels and aquatic habitat improvement projects. Loss of habitat value due to increased stocking levels would occur on 12 miles of stream riparian habitat.

Revision of 7 existing AMPs and the proposed 18 new AMPs would result in some improvement of riparian habitat on approximately 25 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 151 miles of surveyed and unsurveyed intermittent riparian habitats.

Proposed timber harvest level of approximately 1.7 MMBF and the associated 68 miles of road construction would have a minimum impact on riparian habitat along 5-22 miles of the potentially impacted 39 miles of perennial streams and 2-7 miles of the 13 miles of intermittent drainages within the total harvest acreages. Resource management guidelines would protect riparian vegetation by providing a no-cut buffer strip along drainages and prohibiting road construction within riparian areas (except for crossings where absolutely necessary).

ORV use in the limited areas would occur on 30% of the area and would have a slight impact on riparian vegetation within those areas. Drainages are often used as travel corridors by wildlife and humans. With no use restrictions on 70% of the area, riparian areas within these open use areas

would likely be moderately impacted resulting in long term disturbance to vegetation and soils and short term disturbance to riparian associated wildlife.

Full fire suppression and rehabilitation efforts would have a long term beneficial impact because loss of riparian vegetation due to wildfires would be minimized and gradually reduced.

Loss of riparian habitat attributed to a slight increase in mining activities would be minimal.

Aquatic/Fisheries Habitat

Due to land transfer proposals in this alternative, 2 perennial stream miles would be eliminated from the 81 miles of the surveyed aquatic/ fisheries habitat base. Habitat quality would be maintained on 58 miles of the remaining 56 miles.

Improvement of habitat condition to good would occur on 10 miles of surveyed miles due to proposed aquatic habitat improvement projects. The remaining 12 miles would show a loss of habitat condition to the next lower condition class due to increased stocking rates.

Revision of 7 existing AMPs and the proposed 18 new AMPs would result in the improvement of approximately 25 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 153 miles of surveyed and unsurveyed intermittent streamside habitats.

Proposed timber harvest level of approximately 1.7 MMBF and the associated 68 miles of road construction would impact 5-22 miles of the 39 miles of perennial streams within the total harvest acreage. Also impacted would be 2-7 miles of intermittent drainages. Short term increased sedimentation levels associated with this level of timber harvest would be minimized by Resource Management Guidelines and the rehabilitation of major disturbed areas. A moderate increase in stream sedimentation over the long term would result from road construction, particularly in high erosion hazard areas and adjacent to perennial drainages. All roads would be stabilized and closure considered on a case-by-case basis to further minimize impacts.

ORV use on high erosional hazard areas would be in the limited use class on 28% of the area to minimize soil loss to drainages. The remaining 72% of the area would be in the open use class. A moderate amount of sediment could be expected to reach perennial streams with these levels of use.

Redband trout populations would increase over the long term on segments of 3 creeks due to livestock exclusion fencing. Habitat components important for salmonid spawning and rearing would likely improve as livestock grazing pressure on 9 miles of riparian habitat is eliminated. Decreased habitat condition on 12 stream miles due to increased stocking levels would cause a slight decrease in redband trout populations in those stream reaches over the long term. Livestock grazing strategies that are incorporated into AMPs to promote the vigor of woody streamside vegetation would help maintain existing

good riparian habitat and would be expected to slightly improve existing poor and fair condition riparian habitat. A corresponding increase in redband trout populations in perennial streams within these AMP areas would likely occur.

Impacts on redband trout populations over the long term due to timber harvest activities and ORV use would likely be moderate. Resource Management Guidelines would minimize soil disturbance and sedimentation in streams. Flushing streamflows would likely be adequate to prevent fine sediment accumulation in spawning gravels.

Warmwater and coldwater gamefish species confined to reservoir habitats would not be impacted by management actions in this alternative.

Wildlife

Elk

Both fall/winter ranges and crucial winter ranges would show a slight improvement in this alternative. This improvement would be located mostly in the northern portions of the ranges in the higher precipitation zones.

In crucial winter ranges, there are 10,000 acres of range and wildlife seeding proposed. Approximately 1,100 acres of range program seedings are proposed in elk fall/winter ranges. There are also about 2,800 acres of aerial seedings that are proposed for the Snake River Breaks. These seedings would improve the carrying capacity of the range for both wildlife and livestock.

There are 2,293 acres of timber sales proposed in the fall/winter ranges. Impacts from these sales should be minimized by following the Resource Management Guidelines.

In crucial winter ranges, 8,190 acres of timber sales are proposed. There are also 68 miles of roads proposed in deer and elk habitat to facilitate these sales. Negative impacts could occur from decreasing crucial habitat. Roads would make more areas accessible to the public during hunting season and put more pressure on the population.

There are 4,660 acres of crucial habitat proposed to be offered for sale or exchange. This would have slightly negative impacts by decreasing habitat availability by 6%.

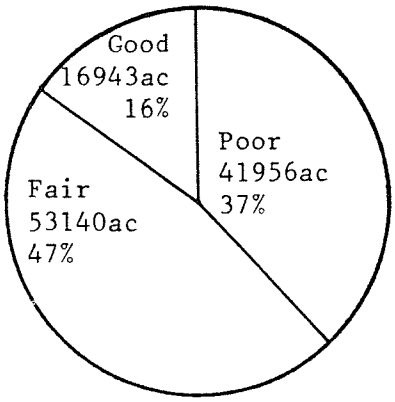
The 7% increase in livestock AUMs over the 20 year period would have minimal impact on elk populations and its habitat.

Overall there would be fences, water developments and pipelines identified in the livestock program, increased range and wildlife seedings beneficial to elk, improved livestock management, and 18 new AMPs. These factors combined with the current situation of over 65% of the area in fair to good condition, would provide habitat which should be able to support a 25% increase over current populations. This would exceed population goals set for the habitat by the Idaho Department of Fish and Game.

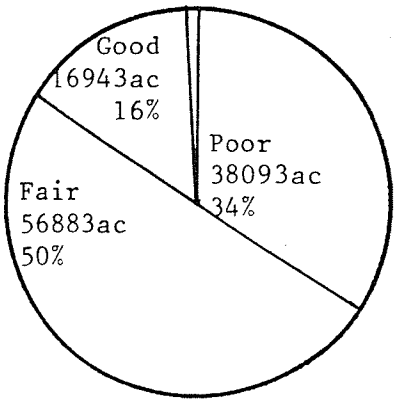
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Elk Fall/Winter

Existing Situation

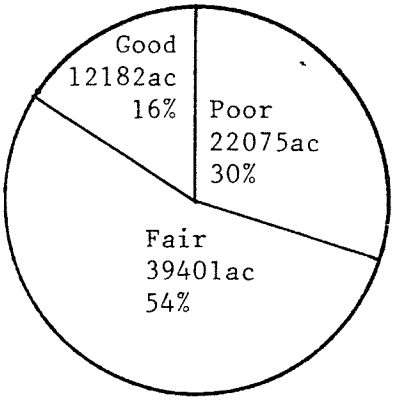


End of 20 Years



Elk Crucial Winter

Existing Situation



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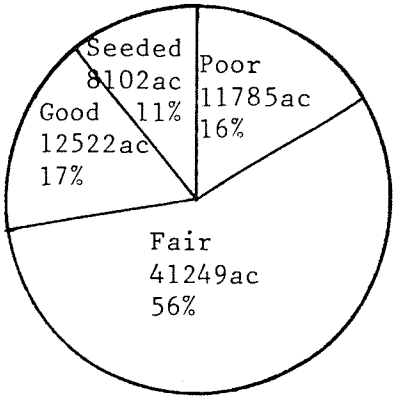


Mule Deer

Fall/winter and crucial winter deer ranges should show a slight improvement over current situation. This improvement would occur in the higher rainfall, northern ranges. This improvement would be due mainly to increased livestock management and use of grazing systems.

There are 2,400 acres of range projects proposed in the fall/winter ranges and approximately 20,000 acres of both range and wildlife seedings proposed in the crucial winter range. These seedings are designed to improve the forage base and increase the carrying capacity of the range. The 2,800 acres of aerial seedings proposed for the Snake River Breaks would improve the forage base on these crucial ranges.

There are approximately 665 acres of timber sales proposed in the fall/winter ranges and 1,092 acres on the crucial winter ranges. Impacts

should be minimized by following Resource Management Guidelines. Negative impacts on local populations could occur by decreasing the available crucial habitat. The roads would open more areas and increase hunting pressure on local populations.

The proposed transfer through sale or exchange of 6,690 acres in crucial winter ranges would have negative impacts on local populations. This would decrease the available habitat over the resource area by 5%.

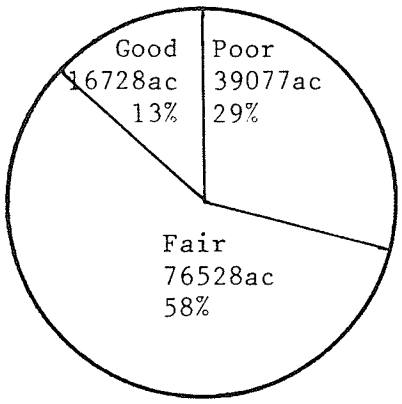
The 12,000 acre Boise Front ACEC would be managed as crucial mule deer winter range. Habitat improvement projects would help increase the carrying capacity of this crucial habitat.

Overall, due to fences, water developments, and pipelines for the livestock program, increased use of grazing systems, improved livestock management and increased carrying capacity of the ranges due to seedings, the habitat is predicted to be able to support at 25% increase over current populations. This would not meet the goals set for the habitat by the Idaho Department of Fish and Game.

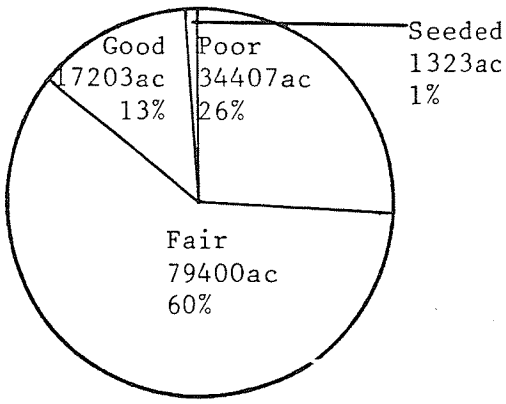
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Mule Deer Fall/winter

Existing Situation

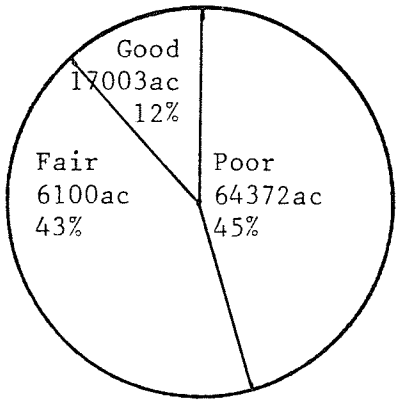


End of 20 Years

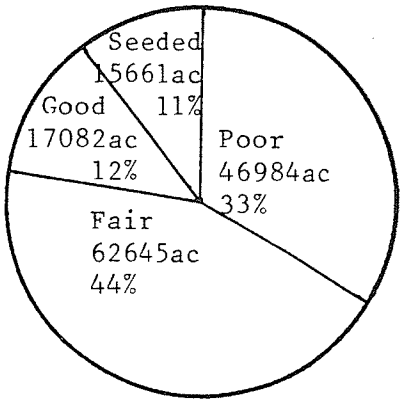


Mule Deer Crucial Winter

Existing Situation



End of 20 Years



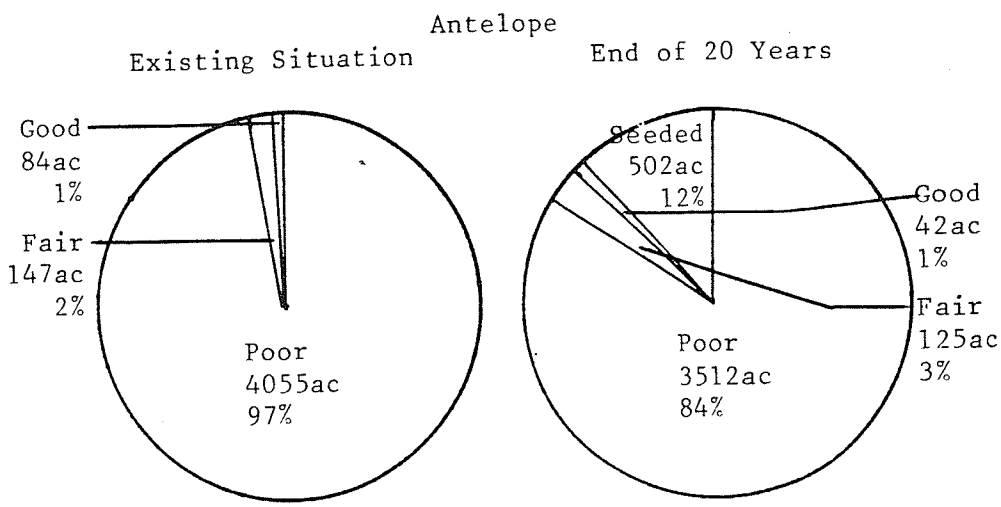
Environmental Consequences

Antelope

Crucial antelope winter ranges (4,400 acres) would not show any improvement in this alternative. Approximately 10% of this crucial habitat is proposed for sale or exchange. Negative impacts could occur due to this loss of habitat. Approximately 13% of the range would be seeded, which would improve the forage base of the local range. The remaining range would not be seeded due to reinfestation of medusahead wildrye. Seedings will emphasize shrub species to improve winter forage for the population.

Current population of the resource area is 50 animals. After improvements and livestock management including fences, water developments and pipelines, the habitat should support a population of 100 animals. This would not meet population goals set for the area by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Sage Grouse

The habitat under this alternative is predicted to improve slightly. This would be due to livestock management and the initiation of grazing systems.

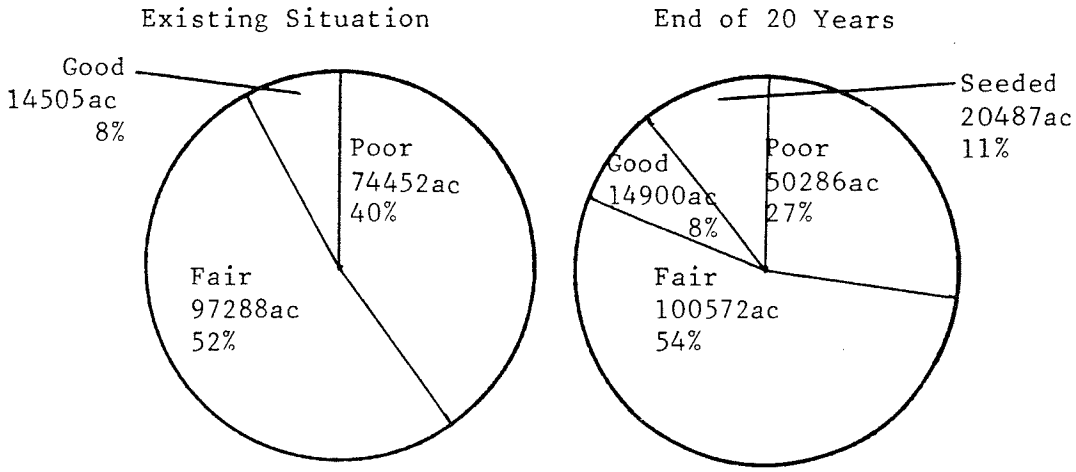
There are approximately 27,000 acres of range and wildlife seedings proposed. These seedings which would constitute 15% of the sage grouse habitat would improve nesting and brood-rearing habitat. Approximately 9,000 acres are in the crucial zone or 2 miles from a strutting ground. Disturbance of the area may have negative impacts to the breeding area.

There are 3,900 acres that are proposed to be offered for sale or exchange. Negative impacts could occur if these lands are within the 2 mile crucial zone of a strutting ground.

Seedings which do not include sagebrush would have little value to sage grouse. It would, however, relieve the pressure on local native ranges important to sage grouse.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Sage Grouse



Sensitive Animal Species

Columbian Sharp-tailed Grouse

Under this alternative, the habitat would show a slight improvement. This would be due to improvement in the range condition due to livestock management. These improvements would occur in the northern portions of the habitat in the higher precipitation zone.

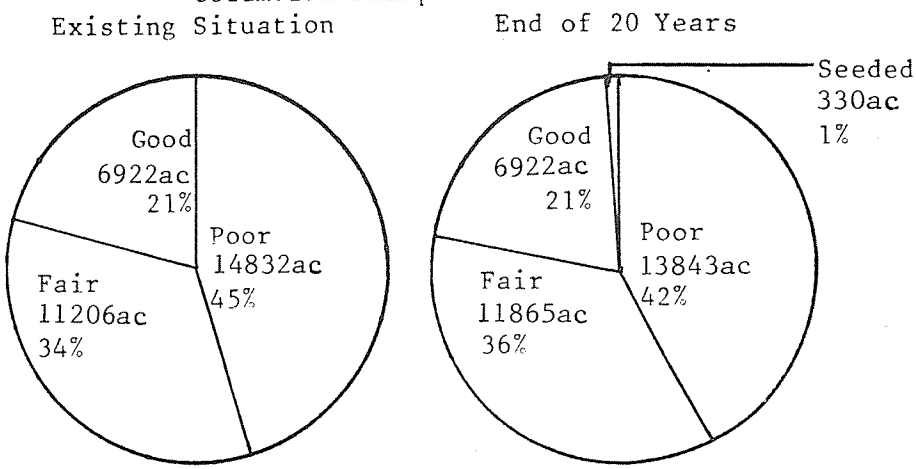
Approximately 330 acres of seedings are proposed for this habitat. Native seed mixtures would improve the nesting and brood-rearing cover of the area.

The proposed land transfer of 960 acres could have negative impacts if a local population is using the area or a dancing ground is located nearby.

Approximately 4,200 acres in the Sage Creek allotment would be designated and managed as an ACEC. The Sage Creek allotment would be inventoried for vegetative production and livestock use adjustments would be pursued and monitored to benefit sharp-tailed grouse. Livestock use adjustments would improve sharp-tailed grouse habitat and should stimulate population growth.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Columbian Sharp-tailed Grouse



Long-billed Curlew

The proposed seedings for both range and wildlife would have negative impacts on all curlew habitat. Most species of grasses grow too high for the area to be used as nesting habitat.

Approximately 3,750 acres of curlew habitat is proposed for sale or exchange. These areas would have to be reviewed on a case-by-case basis format to assess impacts to the habitat.

The 61,000 acre Black Canyon Curlew Area would be designated and managed as an ACEC. The proposed management of the area would protect the habitat for nesting curlews.

Birds of Prey

This alternative would generally improve habitat conditions for raptors in the Birds of Prey area through ORV restrictions.

Livestock

Under this alternative livestock forage levels would decrease by 6,216 AUMs due to land transfers. In the short term (5 years) with 6,000 acres seeded producing approximately 2,000 AUMs of forage, the resulting available livestock forage (with above mentioned losses) would be 61,872 AUMs. This would be a 7% decrease from the present five year average license use of 66,424 AUMs.

Over the long term (20 years) additional seedings of 17,000 acres would produce 5,700 AUMs. New water developments, fencing and increased livestock management on approximately 55,000 acres of native range would increase forage production an additional 2,869 AUMs.

Total forage production would reach 71,076 AUMs. This would be a 7% increase from the present five year average license use.

The largest single impact to the livestock program would be from land transfer out of federal ownership. In this alternative 38,548 allotted acres would be transferred by sale, exchange or desert land entry.

Special designation, historic and cultural areas of 915 acres would remove an additional 162 AUMs from current, available forage.

In both the short and long term analysis of range improvements and land treatment, AUMs lost to transfers and other special designation areas were considered removed prior to addition of new forage generated.

Impacts are allotment specific and resulting AUM levels are shown in Appendix F.

Trend information is not available at present. Monitoring studies will be used to adjust stocking levels on allotments. Data presented in Appendix E will be used as baseline information in prioritizing management and monitoring efforts to improve range condition where needed.

Annual grass ranges (medusahead/cheatgrass) would receive high priority land treatment efforts to restore perennial grasses.

Stock driveways would be eliminated on 22,237 acres, continued on 40,763 acres and added on 627 acres for a total of 41,390 acres available.

Wild Horses

Under this alternative the West Crane wild horse herd would be removed.

The Four-Mile wild horse herd would be maintained at 10-25 head. Livestock voluntary non-use of 424 AUMs for maintenance of range condition which has occurred since 1977 would continue.

LANDS AND REALTY RESOURCES

Lands

Land transfer would consist of 563 acres for sale, 33,409 acres for sale or exchange, 5,957 acres for exchange, and 560 acres for Desert Land Entry for a total of 40,489 acres.

Of the lands identified for sale, 80 acres would be a sanitary landfill for Ada County, 320 acres for a sanitary landfill site for Canyon County, and 160 acres already under R&PP lease to the Parma Rod and Gun Club would be patented. The remaining three acres are scattered occupancy and agricultural trespass parcels that have been surveyed and lotted. Transfer of land by sale would generate approximately $38,000 based on current appraisal for the 80 acres to be sold to Ada County, estimates of the value for the 320 acre parcel to Canyon County, the small parcels that total 3 acres, and the 160 acres for the Parma Rod and Gun Club.

Environmental Consequences

The lands proposed for transfer by sale or exchange are generally small isolated parcels that appear to meet the disposal criteria in Section 203(a)(1) of FLPMA. Their disposal would reduce problem management areas and/or consolidate land ownership patterns, thereby improving management and reducing management costs. The larger parcels would be examined for exchange possibilities before sale is considered, although any parcel would be available for exchange.

There are three exchange proposals pending in the resource area being considered by this plan. They are referred to as the Brownlee, Little and Henggeler exchanges. The Brownlee exchange is a State proposal to acquire 6,251 acres of public land for 6,171 acres of State land, however, it is proposed to retain 497 acres of the selected public land for timber production. This would result in a corresponding decrease in the number of acres to be acquired from the State. The exchange would consolidate State and public lands and would improve management efficiency for both governments.

The Little exchange is a private proposal to acquire 120 acres of public land for 160 acres of private land. The offered private land is identified for acquisition in the Boise Front MFP to facilitate watershed and grazing management. Action on this proposal has been initiated and will continue through development of this RMP.

The Henggeler proposal is to exchange 14 acres of private land for 83 acres of public land. The acquisition of the private land would provide access to the Snake River in an area with virtually no public access and would place the remainder of Crow Island in public ownership.

Land transfer for agricultural use (Desert Land Entry) would result in a few additional trespass cases, but because of the limited number of acres to be transferred under this category, it would not be a significant increase. The average administrative cost for a trespass case is $1,250, resulting in increased costs of approximately $5,000 on an estimated four trespass cases.

Rights-of-Ways

Overhead, surface and/or subsurface rights-of-way would be restricted on 6,886 acres of public land due to conflicts with candidate or sensitive plants, significant cultural or recreation sites, and on the portion of the Payette River recommended for Wild and Scenic River study - 8 miles of the South Fork Payette River. The areas precluded or restricted are generally small acreages and there would be few conflicts with major utility rights-of-way since rights-of-way could be rerouted slightly to avoid these areas. Hydroelectric development would be precluded on 8 miles of the South Fork Payette River.

Withdrawals

Of the lands presently withdrawn for livestock driveways (approximately 63,000 acres), 22,237 acres would be revoked from the withdrawals, 40,763 acres would continue, and 627 acres would be added.

There is only one C&MU classification in the resource area encompassing 37.31 acres. This parcel was acquired under a Section 8 (Taylor Grazing Act) exchange. When the order opening the lands to the administration of the public land laws was published, a C&MU classification was placed on it at the same time, precluding disposal. This parcel contains no unique resources and revoking the classification would put it in the same status of general retention as the other public lands adjacent to it.

Additional withdrawals may be forthcoming if Congress designates the Payette River as a Wild and Scenic River. The final acreage withdrawn may be more or less than that proposed in this plan.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

Cultural resource sites in critical need of special management (Grey's Creek, Indian Creek, Mill Creek, Cabin Creek, Mineral, Quartzburg, Centerville and Placerville) would continue to be protected by BLM standard operating procedures and would receive additional protection through nomination and acceptance to the National Register of Historic Places (NRHP). The effects of livestock trampling would be mitigated through the installation of protective fencing and the effects of erosion would be diminished by the removal of livestock from the immediate site area, and the improvement of riparian habitat.

Cultural Resource Management Plans (CRMP) prepared for these sites will detail additional inventory needs and monitoring schedules to determine the rate of deterioration, impacts of vandalism, etc.

Paleontologic Resources

The impacts from this alternative can not be fully analyzed since the paleontologic inventory for the resource area is not complete. The greatest possible impacts would be on the 41,415 acres proposed for transfer from federal ownership. Even with paleontologic clearances, unknown scientifically significant fossils could be lost or destroyed or closed off from scientific study.

RECREATION RESOURCES

Recreation

There would be 339,552 acres open to ORV use, 147,329 acres limited and 585 acres closed.

Impacts from managing the Boise Front as an ACEC would be the same as those discussed under Alternative A for the Boise Front SRMA.

An additional designation of 22,700 acres would seasonally limit ORV use to existing roads and trails in the Columbian sharp-tailed grouse habitat area and on 640 acres in the Birds of Prey Natural Area. The impacts of this restriction would not be significant due to the current and projected low use in this area.

A projected increase of 25% in big game numbers through improved habitat is expected to increase big game hunting opportunity by the same amount. Opportunities for non-consumptive uses would also increase as a result.

The effects of the Pickles Butte DLE would be the same as discussed in Alternative A. The Canyon County Sanitary Landfill Site (T1) would transfer 320 acres from the ORV play area. ORV use would most likely continue on the Canyon County landfill area (320 acres) but not on the DLE transfer.

Lands available for dispersed recreation would be reduced by the 41,404 acres identified for disposal.

Construction of 68 miles of timber harvest access roads (3.4 miles annually) would increase recreational access potential to a greater extent than Alternative A on roads which remain open after harvests are completed.

Eight miles and a 2,600 acre corridor of BLM land along the South Fork of the Payette River will be proposed for National Wild and Scenic Rivers study.

Visual

The positive effects of intensively managing the Boise Front as an ACEC would be the same as discussed in Alternative A.

Improved riparian habitat on 176 miles of rivers and streams would improve the visual resource in these locations.

Harvesting approximately 1.7 million board feet of timber and the resulting access roads may negatively impact the visual resource. Less obtrusive selective cutting would be the primary harvest method, although some clearcuts, not to exceed 40 acres each, may be proposed. All timber sales would be guided by the appropriate VRM class guidelines. Impacts from timber activities would be minimal.

Wildlife improvement projects such as fences, guzzlers and vegetation manipulation could negatively impact the visual resource. With the use of standard mitigation measures on these projects, no significant adverse impacts would be expected.

Project development in the range program could negatively impact the visual resource. Pipelines could be constructed using a ripper to bury the pipe, thus minimizing the adverse impacts. Other range developments such as fences and reservoirs should not significantly impact scenic quality because the standard operating procedure for construction would mitigate potential impacts. Land treatments that are designed with feathered edges, multiple species seed mixtures and other mitigating measures should not cause significant adverse impacts.

Transferring 41,404 acres of land from public ownership could result in impacts on the visual resource. Acres transferred from federal ownership by sale or exchange, would no longer be under BLM control and visual quality would depend upon the management implemented by the new owner. Example: agricultural development would transform the areas' scenic views from one of sagebrush/grass dominance to one dominated by cropland and farming. The

visual quality of transferred land that is maintained primarily for grazing purposes would not change significantly from present conditions.

MINERAL RESOURCES

Leasables

Oil and Gas

This alternative proposes a 2,600 acre no surface occupancy restriction for a section of the Payette River. The area involved is covered by existing power site and Bureau of Reclamation withdrawals and is not classified as prospectively valuable for oil and gas. This overlapping restriction is therefore considered to have no impact on the availability of lands for oil and gas exploration or development under this alternative.

The remaining no surface occupancy stipulations under this alternative total 1,241 acres. The lands involved are generally small and outside of the lands identified as prospectively valuable for oil and gas. Impacts would, therefore, be insignificant.

Time stipulations for the protection of wildlife are consistent throughout this plan and would be insignificant. See Alternative A for the analysis of their impacts.

Since the lands identified for transfer would have oil and gas reserved in areas classified as prospectively valuable for oil and gas, the impact of land transfers would be insignificant.

Based on the lack of any commercial oil or gas wells in Idaho, the 35 dry holes in the resource area, the low potential of the area, and the above analysis, the overall impacts of this alternative on the availability of oil or gas leasing and development would be insignificant.

Geothermal

This alternative proposes a 2,600 acre no surface occupancy restriction for a section of the Payette River. The area involved is covered by existing power site and Bureau of Reclamation withdrawals. It is classified as prospectively valuable for geothermal resources and has a hot spring producing 176° F water. As this proposed overlapping restriction does not add to the total acreage restricted, approximately 94% of the resource area would remain open for leasing under this alternative. The impacts would therefore not be significant.

The remaining no surface occupancy stipulations under this alternative total 1,241 acres. The lands involved are generally small parcels and represent a very small percentage of the total prospectively valuable area. Impacts would, therefore, be insignificant.

Time stipulations for the protection of wildlife are consistent throughout this plan and would not be significant. See Alternative A for the analysis of their impacts.

Environmental Consequences

Since the lands identified for transfer would have the geothermal estate reserved in areas classified as prospectively valuable, the impact of land transfers would be considered insignificant.

Although various lands within the resource area have been classified as prospectively valuable for geothermal resources, the only KGRA within the area has been declassified and there are no geothermal leases within the whole resource area.

Based on the lack of any commercial geothermal electric projects in Idaho, the lack of any known large reservoirs in the area, the declining interest in geothermal resources and the above analysis, the overall impacts of this alternative on the availability of geothermal leases and development would be considered insignificant.

Locatables

The resource area would have 94% of its lands open to mining activity. Those areas closed to mining are the existing withdrawals. A new withdrawal of 2,600 acres along the Payette River overlaps existing withdrawals. This overlapping withdrawal would not have any significant impact on the availability of lands for locatable mineral location and development. An 8 acre withdrawal to protect the Placerville historic site would not be a significant impact.

Although 40,489 acres of land are proposed for transfer from federal ownership, no lands having valid claims or mineral potential would be transferred from federal ownership unless they are patented under the mining laws, the mineral estate is paid for, or lands of equal overall values are obtained. The impact from land transfer on the availability of lands for mineral location and development is therefore considered insignificant.

An analysis of the location of and activity on the existing mining claims and areas of mineral interest compared to an analysis of the actions proposed under this alternative indicates that there would not be any significant impacts on the availability of locatable minerals.

Salables

Mineral material needs are not expected to increase or decrease as a result of proposed actions under this alternative. Some existing sites would, however, be depleted within the timespan of this plan and new sites would be needed.

The 12,000 acre Boise Front ACEC would be closed to the sale or free use of mineral materials under the alternative. Road construction and other mineral materials would not be available for use in right-of-way construction and maintenance, road construction and maintenance, mining construction and maintenance, or any other use within or out of the area. This would be a significant impact on the availability of mineral materials from federal lands, particularly if an emergency situation requiring the use of these materials arises.

FOREST RESOURCES

Timber

The total acres of commercial forest land would be reduced by 1,044 CFL set aside acres.

The impacts of losing this 1,044 acres of commercial forest land would be minimal. The annual allowable cut would increase to approximately 1.7 million board feet.

FIRE MANAGEMENT

Agricultural developments, or transfer acreages, about 8-10% of the total acreages, would gradually increase the number of fires and the cost of fire suppression. Fire suppression costs would increase to approximately $115,000 per year, or 5% of the total costs per year. All other levels would remain the same as with Alternative A.

ECONOMICS

Crop Agriculture

Impacts would be the same as for Alternative A.

Livestock

The 5-year livestock forage level would be 61,857 AUMs. This would support 5,155 animal units which would generate earnings of $2.5 million. This would be 10% of the total permittee earnings, 6% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be $6.7 million. This would be 0.2% of total RMP area 1983 earnings.

The direct earnings would generate 89 jobs. This would be 2.6% of the 1983 farm wage and salary employment. The total earnings would generate 308 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This initial stocking level represents a capital value of between $3.4 and $15.5 million.

The 20-year livestock forage level would be 71,076 AUMs. This would support 5,923 animal units which would generate earnings of $2.9 million. This would be 11% of total permittee earnings, 7% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be $7.6 million. This would be 0.3% of total RMP area 1983 earnings.

The direct earnings would generate 103 jobs. This would be 3% of the 1983 farm wage and salary employment. The total earnings would generate 354 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This 20-year stocking level represents a capital value of between $4.0 and $17.8 million.

Recreation

Impacts would be the same as for Alternative A.

Lumber and Wood Products

Approximately 1.7 million board feet of wood products would be harvested annually with this alternative. This would generate earnings of $387,000. This would be 0.2% of the RMP area durable manufacturing 1983 earnings. The total earnings (including the multiplier effect) would be $926,900. This would be 0.04% of the total RMP 1983 earnings.

The harvest level would lead to 18 jobs (Youngblood 1983). This would be 0.1% of the 1983 manufacturing wage and salary employment. Total employment (including the multiplier effect) would be 46. This would be 0.04% of the total 1983 RMP area wage and salary employment.

Management Costs

Range and wildlife improvements associated with this alternative would cost approximately $1.9 million.

Summary

Total crop agriculture earnings and employment would increase by $529,700 and 24 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of $6.7 million and 308 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of $7.6 million and employment of 354 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be $926,900 and 46 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be $1.9 million.

ALTERNATIVE C

RANGELAND RESOURCES

Soils

Broad based long-term erosion rates would show an average decrease of 0.4 tons/acre/year (20%) from current levels. The erosional processes described for land use actions in the Affected Environment and Alternative A would be the same for this alternative, but the area size and/or magnitude of the impact may vary considerably (Appendix B). Specific uses and actions would be responsible for significant short and/or long-term erosion on isolated areas. These would be ORV use, timber harvest, road building, range projects, and mineral exploration and/or development.

Impacts from ORV use would be similar to those described in Alternative A. The extent of impacts would be less (see Appendix B). Closed ORV areas have a high probability of gaining long-term benefits to watershed and site productivity on an additional 1,985 acres.

Commercial timber harvest is proposed on 50-200 acres annually with allowable annual cuts of approximately 0.5 million board feet. Selective cutting would generally be used with clearcutting as an option. To accomplish this harvest 1 mile/ year of roads, over a 20 year period, would be built. Resulting impacts would be similar to those described in Alternative A and Affected Environment. The extent of impacts would be less (see Appendix B).

Under this alternative no lands would be disposed of for agricultural development.

Impacts due to ROWs would be the same as Alternative A.

Mineral exploration and development would be open on 452,586 acres for locatables and 454,389 acres for leasables. Impacts would be the same as described in Alternative A.

Range condition improvement is projected for 25% of the RMP area. See Chapter 2 - Livestock, Vegetation, and Wildlife, Alternative C for details of improvements. Range condition improvements would benefit the soil resource as discussed in Alternative B.

Range improvement activities (burning, spraying and discing) would impact the area as described in Alternative B. Six miles of pipeline are proposed.

Livestock AUM decreases of 19% are proposed over a 20 year period. By incorporating grazing systems and with the addition of range improvement projects this decrease in AUMs would result in an average decrease in soil loss of about 0.2 tons/acre/year on grazed lands. Erosion would still be a problem around livestock concentration areas.

Fencing 13 miles and streambank planting of 15 miles of riparian habitat would affect soils as described in Alternative A.

Environmental Consequences

Designation of the Boise Front ACEC and the Sage Creek ACEC would provide special management for these areas (see appropriate ACEC). This management would enhance vegetative condition, increase watershed proficiency, and reduce soil loss.

Air Quality

There would be no long-term adverse affects to air quality under this alternative. A one to two day localized decrease in air quality would occur due to prescribed burning for rangeland improvements and slash burning after timber harvest.

Where spraying of herbicides is used to control brush and/or annual grasses a one to two hour reduction in air quality would result.

Water Quality

Parameters such as ammonia, total inorganic nitrogen, and fecal coliform that are influenced by livestock grazing would moderately improve due to the 14 stream miles of riparian exclosures and the 10 miles of improved stream habitat due to reduced stocking rates. Water quality would be maintained or very slightly improve on 18 miles of perennial streams and 124 miles of intermittent streams due to management in revised and new AMPs. High fecal coliform levels and sedimentation from streambank grazing activities would be eliminated from those stream reaches excluding livestock and reduced in those streams with revised and new AMPs.

A short-term increase in sedimentation would likely occur on a range of 3-11 miles of streams due to timber harvest activities. A slight increase in sedimentation would occur over the long term on the same 3-11 miles as above from the proposed 20 miles of road construction.

Range fires contribute to high sediment loads in streams due to the loss of upland and riparian vegetative cover. This impact would be minimized by full fire suppression and rehabilitation efforts.

Sedimentation due to ORV use would be negligible because 99% of the total area is classified as limited use.

Resource management guidelines for the maintenance and protection of riparian and aquatic habitats would have long term positive benefits on the quality of water on public lands by improving management of riparian areas.

Overall, water quality on public lands from this level of management would moderately improve.

Vegetation

The long-term vegetative condition would show an overall improvement on 20 to 25% of the RMP area. Increases would dominantly be within the existing class, but many areas (fair condition mostly) would increase in condition to the next higher class. On approximately 9% of the poor condition range this change would reflect a seeding. Approximate breakdown where improvements are projected would be: poor changed or improved - 16% (33,000 acres), fair

improved - 35% (73,500 acres), good improved - 38% (13,000 acres). See Appendix R for a comparison of vegetation condition changes by alternative. Trend data is not available.

This increase would mainly be due to the projected 19% reduction in livestock AUMs (over 20 years) and the incorporation of grazing systems along with rangeland improvement projects. Decreased livestock AUMs would promote more vigor and productivity increasing total vegetative cover.

Livestock and wildlife improvement projects would occur on 10% of the RMP area. These and the areas affected are listed in Chapter 2 - Livestock, Vegetation, and Wildlife. The success of rangeland seedings where poor condition annual range is converted is questionable at this point in time.

The gradual encroachment of annual grasses into poor and fair rangeland would continue (see Vegetation Alternatives A and B).

Limited and closed ORV designation for most of the RMP area would protect and enhance the vegetative condition of areas that without this designation may have been adversely affected.

The curlew habitat and Columbian sharp-tailed grouse habitat areas would be affected as discussed in Alternative A.

Candidate and Sensitive Plant Species

The designation and management of 5 research natural areas totaling 1,355 acres would provide protection and increased vigor for several candidate, sensitive, or uncommon plant populations. These areas may act as centers of dispersal for the plant species. Public awareness would also be enhanced for these areas.

Closing ORV use on 1,545 acres, limiting ORV use on 1,000 acres and excluding surface and subsurface rights-of-way on 2,545 acres should provide for the continued existence of candidate, sensitive, or uncommon plant species. Some species may increase in numbers due to the protection provided while other plant species would be stabilized. Some species may decrease in numbers outside of these protected areas because small scattered populations and undiscovered populations are not protected from grazing, ORV use, annual grass invasion or other hazards.

Some plant populations which have been damaged under current management practices might increase in number of individuals, vigor, and even new populations may be colonized because of the reduced grazing levels.

The exclusion of locatable mineral development on 1,355 acres would protect plant species within these areas. These restrictions would protect individual plants directly and indirectly by decreasing soil erosion and discouraging exotic weedy annuals, thereby decreasing the probability of wildfire. No surface occupancy restrictions would protect plants on 2,545 acres from leasable mineral exploration and development.

Riparian Habitat

Resource management guidelines for various programs should maintain overall existing riparian habitat quality and minimize impacts of actions in riparian areas.

Land transfer proposal would not impact the base of 122 miles of surveyed drainages. One mile of unsurveyed perennial habitat would be transferred from public ownership. Habitat quality would be maintained on 107 miles of the 122 miles surveyed while 12 miles would improve to the next higher condition class due to a combination of reduced stocking levels and aquatic habitat improvement projects. Loss of habitat value due to increased stocking levels would occur on 3 miles of stream riparian habitat.

Revision of 7 existing AMPs and the proposed 12 new AMPs would result in some improvement of riparian habitat on approximately 18 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 122 miles of surveyed and unsurveyed intermittent riparian habitats.

Proposed timber harvest level of approximately 0.5 MMBF and the associated 20 miles of road construction would have a minimum impact on riparian habitat along 2-8 miles of the potentially impacted 39 miles of perennial streams and 1-3 miles of the 13 miles of intermittent drainages within the total harvest acreages. Resource management guidelines would protect riparian vegetation by providing a no-cut buffer strip along drainages and prohibiting road construction within riparian areas (except for crossings where absolutely necessary).

ORV impacts on riparian vegetation would be very slight due to limited use classification along streams in high erosion hazard areas. Streamside habitats are used occasionally by ORVs and established woody riparian vegetation would not be impacted.

Full fire suppression and rehabilitation efforts would have a long term beneficial impact because loss of riparian vegetation due to wild fires would be minimized and gradually reduced.

Loss of riparian habitat attributed to a slight increase in mining activities would be minimal.

Aquatic/Fisheries Habitat

Due to land transfer proposals in this alternative one mile of perennial stream would be eliminated from the 81 miles of the surveyed aquatic/fisheries habitat base. Habitat quality would be maintained on 57 miles of the remaining 80 miles while 23 miles would improve to the next higher class in habitat quality due to a combination of reduced stocking levels and aquatic habitat improvement projects.

Revision of 7 existing AMPs and the proposed 12 new AMPs would result in the improvement of approximately 18 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside

woody vegetation which is an important component of streambank stability. This management strategy would also benefit approximately 124 miles of surveyed and unsurveyed intermittent streamside habitats.

Proposed timber harvest level of approximately 0.5 MMBF and the associated 20 miles of road construction would impact 2-8 miles of the 39 miles of perennial streams within the total harvest acreage. Also impacted would be 1-3 miles of intermittent drainages. Short term increased sedimentation levels associated with this level of timber harvest would be minimized by Resource Management Guidelines and the rehabilitation of major disturbed areas. A very slight increase in stream sedimentation over the long term would result from roads constructed in high erosion hazard areas and adjacent to perennial drainages. All roads would be stabilized and closures considered on a case-by-case basis to further minimize sediment loads.

Sediment loads associated with ORV use would be negligible as 99% of the total area would be classified as limited use. This would protect high erosion hazard areas adjacent to drainages.

Redband trout populations would increase over the long term on segments of 6 creeks due to livestock exclusion fencing. Habitat components important for salmonid spawning and rearing would likely improve as livestock grazing pressure on 13 miles of riparian habitat is eliminated. Habitat condition improvement on 10 stream miles due to decreased stocking rates would result in a slight increase in redband trout populations in those stream reaches over the long term. Livestock grazing strategies that are incorporated into AMPs to promote the vigor of woody streamside vegetation would help maintain existing good riparian habitat and would be expected to improve existing poor and fair condition riparian habitat. A corresponding increase in redband trout populations in perennial streams within these AMP areas would likely occur.

Impacts on redband trout populations over the long term due to timber harvest activities and ORV use would likely be very slight. Resource Management Guidelines would minimize soil disturbance and sedimentation in streams. Flushing streamflows would likely be adequate to prevent fine sediment accumulation in spawning gravels.

Warmwater and coldwater gamefish species confined to reservoir habitats would not be impacted by management actions in this alternative.

Wildlife

Elk

Under this alternative both elk fall/winter ranges and crucial winter ranges would show a 7% increase in the number of acres in good condition. This would be due to the 27% decrease in livestock AUMs. An increase in the use of grazing systems and livestock management would also contribute to improving the habitat condition.

Approximately 550 acres of fall/winter range would be seeded to grass and forbs. Range and wildlife seedings on 8,285 acres of crucial winter ranges, are proposed under this alternative. All these seedings would improve the

carrying capacity of the range. The 3,000 acres of aerial seeding proposed for the Snake River Breaks would also increase the shrub component on this crucial winter range.

There are approximately 280 acres of timber sales proposed in elk fall/winter ranges and 2,936 acres proposed on crucial winter ranges. The 20 miles of logging roads could put additional pressure on populations during hunting season. Resource Management Guideline adherence would keep impacts to a minimum.

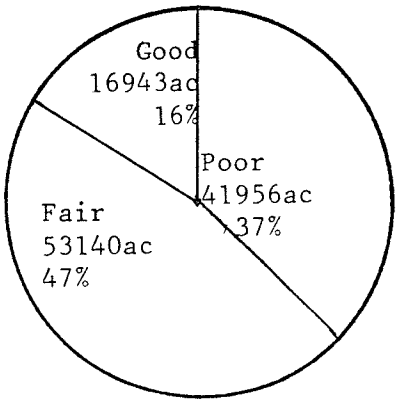
There are approximately 1,220 acres of crucial habitat proposed to be sold or exchanged. This would have negative impacts unless the land were exchanged for habitat of better or equal value.

Overall due to the 19% decrease in livestock AUMs in 20 years, fences, water developments and piplines associated with the livestock program, the increased range and wildlife seedings, 12 new AMPs, and increased livestock management, the elk habitat is expected to be able to support a 35% increase in populations over current numbers. This would exceed population goals set for the habitat by the Idaho Department of Fish and Game.

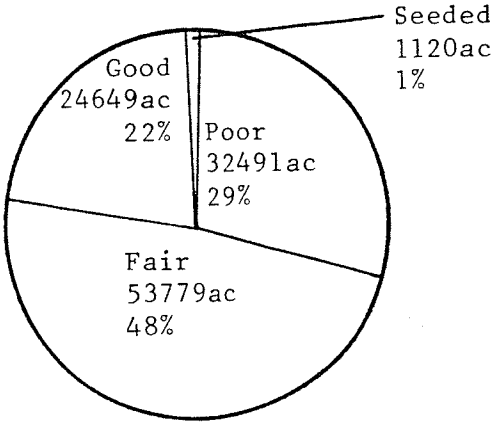
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Elk Fall/Winter

Existing Situation

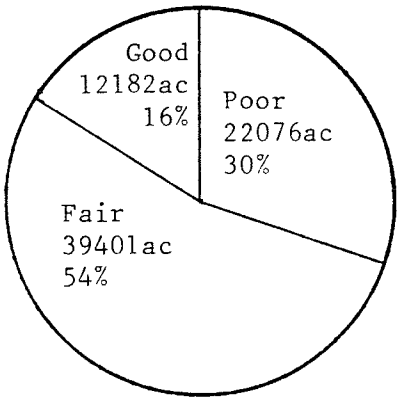


End of 20 Years

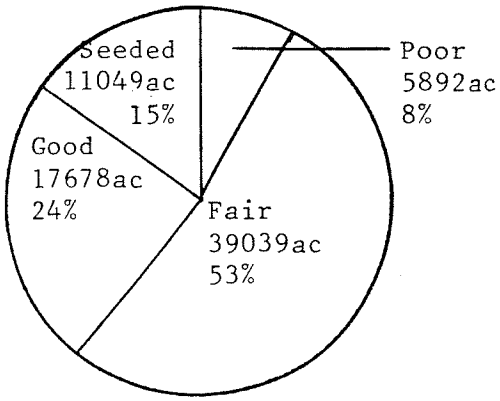


Elk Crucial Winter

Existing Situation



End of 20 Years



Mule Deer

The number of acres of mule deer fall/winter and crucial winter ranges in poor ecological condition would decrease by 7%. This would occur mainly because of the 27% decrease in livestock AUMs. The range program would also increase use of grazing systems and improve livestock management under this alternative.

There are 1,200 acres of range projects in fall/winter ranges and 16,880 acres of range and wildlife seeding projects in crucial winter ranges proposed under this alternative. These projects would increase the forage base and carrying capacity of the range. There are also 3,000 acres of deer and elk crucial habitat proposed to be aerial seeded along the Snake River Breaks.

The 134 acres of timber sales in the fall/winter ranges should have minimal impacts on the habitat. The 332 acres of timber sales in the crucial winter ranges and the 20 miles of proposed roads could produce more pressure on the population during the hunting season.

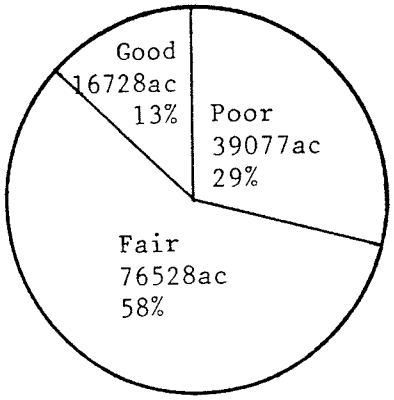
The 12,000 acre Boise Front ACEC would be managed for mule deer crucial winter range. Improvements to vegetation on the area would improve the carrying capacity of this crucial habitat.

The 19% decrease in livestock AUMs over 20 years, the fences, water developments, and pipelines for livestock, improved livestock management and wildlife seedings are expected to improve the carrying capacity of the habitat to support an overall 35% increase in the deer population of the resource area. This would exceed the population goals set for the habitat by the Idaho Department of Fish and Game.

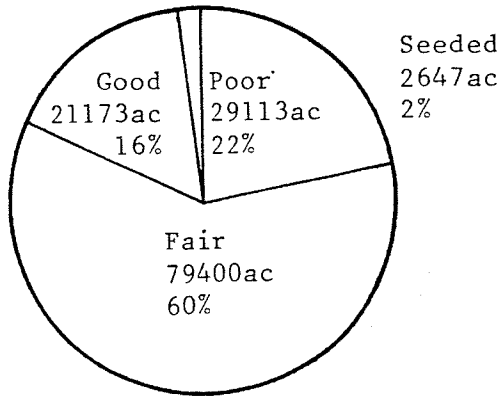
The acreages and percentages of existing habitat and 20-year projected habitat conditions are shown below.

Mule Deer Fall/Winter

Existing Situation

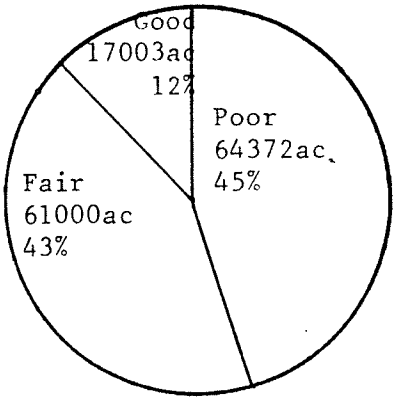


End of 20 Years

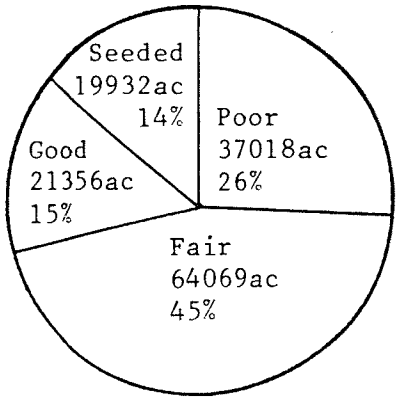


Mule Deer Crucial Winter

Existing Situation



End of 20 Years



Antelope

Crucial antelope winter ranges will show a slight improvement over current conditions. Approximately 12% of the range would be seeded to improve the carrying capacity of the habitat.

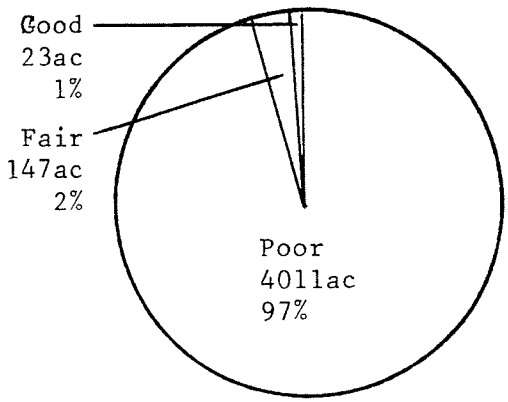
The 19% decrease in livestock AUMs, fences, water developments and pipelines for livestock, and improved livestock management and wildlife seedings would provide sufficient forage to support 200 animals. Seedings will emphasize the shrub component of the habitat.

This would exceed population goals set for the area by the Idaho Department of Fish and Game.

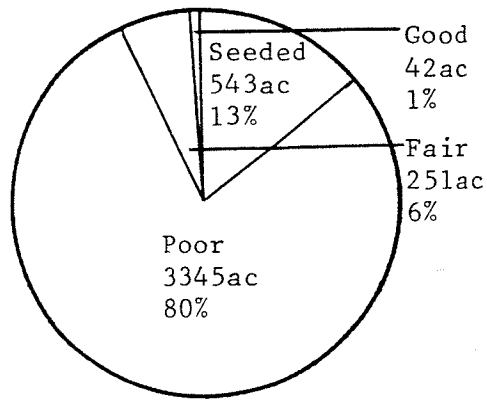
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Antelope

Existing Situation



End of 20 Years



Sage Grouse

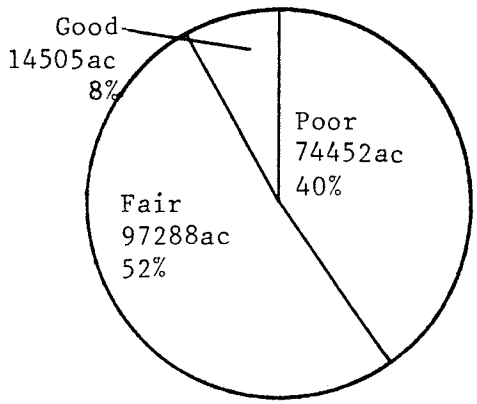
Overall, sage grouse habitat would show an improvement under this alternative. The 19,616 acres of range and wildlife seedings and the 19% reduction in available AUMs would improve the density of vegetation needed for nesting and brood-rearing habitat.

Seedings which do not include sagebrush would not increase the forage factor for sage grouse. It would, however, relieve the pressure on local native ranges.

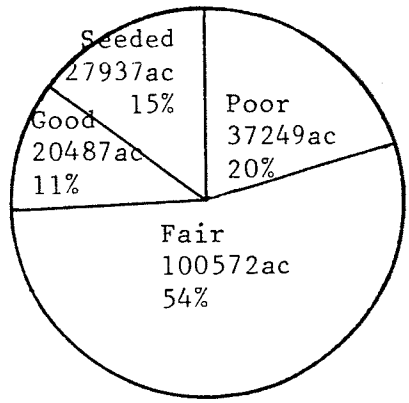
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Sage Grouse

Existing Situation



End of 20 Years



Sensitive Animal Species

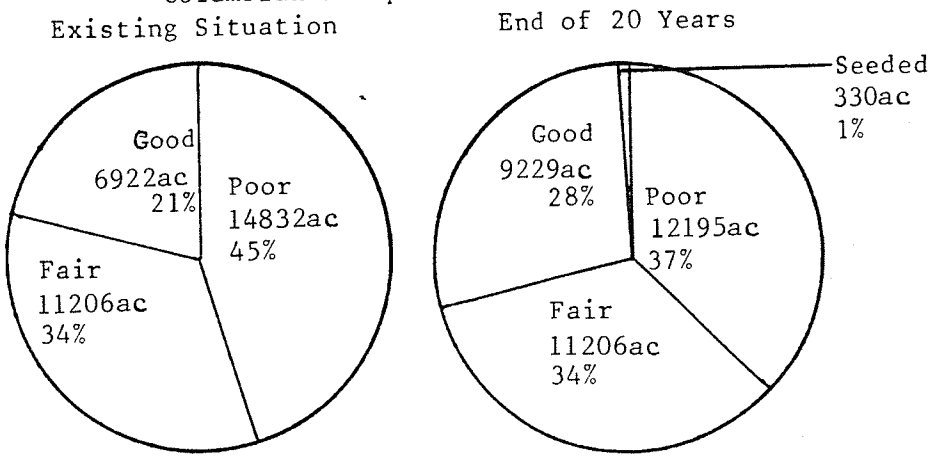
Columbian Sharp-tailed Grouse

Sharp-tailed grouse habitat would show a 7% improvement over current condition class. This would be due to the decrease in livestock AUMs and improved livestock management. The 330 acres of proposed seedings would also help improve nesting and brood-rearing cover.

Approximately 4,200 acres in the Sage Creek allotment would be designated and managed as an ACEC. The Sage Creek allotment would be inventoried for vegetative production and livestock use adjustments would be pursued and monitored to benefit sharp-tailed grouse. Livestock use adjustments would improve sharp-tailed habitat and should stimulate population growth.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Columbian Sharp-tailed Grouse



Long-billed Curlew

The 61,000 acre Black Canyon Curlew Area would be designated and managed as an area of environmental concern (ACEC). The proposed management would protect the habitat to maintain the current population of 1,000 nesting pairs.

Range and wildlife seeding proposed under this alternative in the remaining areas would have negative impacts on nesting curlews. Most species of grasses are too tall to be used as nesting habitat.

Birds of Prey

This alternative would generally improve habitat conditions for raptors in the Birds of Prey area through ORV restrictions.

Livestock

Under this alternative short and long term (5-year and 20-year) livestock forage levels would be reduced 27% for wildlife, watershed, and range condition improvement. This reduction would be a decrease of approximately 18,000 AUMs. With this planned reduction those native ranges that contain perennial/annual grass mixtures would show improvement, especially in density and vigor of perennials. Native shrubs would increase in size and occurrence.

Ranges containing predominantly annual grasses (medusahead/cheatgrass) may experience an increase in perennial grasses. In many areas however, the medusa "problem" would remain a problem.

Reducing the amount of forage utilized by livestock in the fall on many allotments (spring/fall ranges) would result in increased available forage for wintering deer and elk. Priority would be given to allotments in which major mule deer and elk winter ranges occur.

A loss of 9,200 acres of forest lands to exchange would further reduce livestock forage 277 AUMs.

Special designation/historic and cultural withdrawals of 1,015 acres would remove 183 AUMs, and transfers of 5,962 acres out of federal ownership would remove an additional 900 AUMs from current available livestock forage. With planned seedings of 3,000 acres generating approximately 1,000 AUMs, along with the above mentioned losses, AUM levels are projected in the short term (5 years) at 47,345 AUMs. This would be a 29% reduction from the five year average license use.

Over the long term (20 years) an additional 9,600 acres of seedings would produce an additional 3,000 AUMs. Increased livestock management practices on 64,000 acres of native range would increase forage production 3,287 AUMs. With these increases and the projected AUM losses, the overall AUM level over the long term is projected at 53,643 AUMs, which would be a 19% reduction from the five year average license use.

Under this alternative all 63,000 acres of stock driveways would be eliminated. Ranchers would be required to truck their livestock.

Wild Horses

Under this alternative both the West Crane Creek and Four Mile wild horse herds would be maintained.

Maximum numbers would be maintained in the West Crane Creek herd of 30 head, while the Four Mile herd would be maintained at 20 head.

LANDS AND REALTY RESOURCES

Lands

Land transfer would consist of 243 acres for sale, 5,775 acres for exchange, and 11,306 acres for special exchange only for a total of 17,324 acres.

Of the lands identified for sale, 80 acres would be a sanitary landfill for Ada County, and 160 acres already under R&PP lease to the Parma Rod and Gun Club would be patented. The remaining three acres are scattered occupancy and agricultural trespass parcels that have been surveyed and lotted. Transfer of land by sale would generate approximately $21,600 based on current appraisal for the 80 acres to be sold to Ada County, estimates of the value of the small parcels that total 3 acres, and the 160 acres for the Parma Rod and Gun Club.

There are three exchange proposals pending in the resource area being considered by this plan. They are referred to as the Brownlee, Little and Henggeler exchanges. The Brownlee exchange is a State proposal to acquire 6,251 acres of public land for 6,171 acres of State land, however, it is proposed to retain 680 acres of the selected public land for timber production. This would result in a corresponding decrease in the number of acres to be acquired from the State. The exchange would consolidate State and public lands and would improve management efficiency for both governments.

The lands proposed for transfer by sale or exchange are generally small isolated parcels that appear to meet the disposal criterial in Section 203(a)(1) of FLPMA. Their disposal would reduce problem management areas and/or consolidate land ownership patterns, thereby improving management and reducing management costs. The larger parcels would be examined for exchange possibilities before sale is considered, although any parcel would be available for exchange.

The Little exchange is a private proposal to acquire 120 acres of public land for 160 acres of private land. The offered private land is identified for acquisition in the Boise Front MFP to facilitate watershed and grazing management. Action on this proposal has been initiated and will continue through development of this RMP.

The Henggeler proposal is to exchange 14 acres of private land for 83 acres of public land. The acquisition of the private land would provide access to the Snake River in an area with virtually no public access and would place the remainder of Crow Island in public ownership.

The 11,306 acres identified for special exchange would be used for exchanges with the State to acquire nationally significant lands, such as State inholdings in wilderness areas, wild and scenic river corridors, crucial wildlife habitat, threatened and endangered species habitat, or other commercial forest lands of equal or better value (blocking of ownership pattern).

Rights-of-Ways

Overhead, surface and/or subsurface rights-of-way would be restricted on 10,326 acres of public land due to conflicts with candidate or sensitive plants, significant cultural or recreation sites, and on the portion of the Payette River recommended for Wild and Scenic River study - 6 miles of the North Fork and 8 miles of the South Fork Payette River. The areas precluded or restricted are generally small acreages and there would be few conflicts with major utility rights-of-way, with perhaps the exception of the proposed expanded Payette River wild and scenic river designation. Rights-of-way could be rerouted slightly to avoid the smaller areas.

Hydroelectric development would be precluded on Box Creek and on the 6 mile and 8 mile segments of the North and South Fork Payette River.

Withdrawals

All of the lands presently withdrawn for livestock driveways (approximately 63,000 acres) would be revoked from the withdrawals.

There is only one C&MU classification in the resource area encompassing 37.31 acres. This parcel was acquired under a Section 8 (Taylor Grazing Act) exchange. When the order opening the lands to the administration of the public land laws was published, a C&MU classification was placed on it at the same time, precluding disposal. This parcel contains no unique resources and revoking the classification would put it in the same status of general retention as the other public lands adjacent to it.

Additional withdrawals may be forthcoming if Congress designates the Payette River as a Wild and Scenic River. The final acreage withdrawn may be more or less than that proposed in this plan.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

Cultural resource sites in critical need of special management (Grey's Creek, Indian Creek, Mill Creek, Cabin Creek, Mineral, Quartzburg, Centerville and Placerville) would continue to be protected by BLM standard operating procedures and would receive additional protection through nomination and acceptance to the National Register of Historic Places (NRHP). The effects of livestock trampling would be mitigated through the installation of protective fencing and the effects of erosion would be diminished by the removal of livestock from the immediate site area, and the improvement of riparian habitat.

Cultural Resource Management Plans (CRMP) prepared for these sites will detail additional inventory needs and monitoring schedules to determine the rate of deterioration, impacts of vandalism, etc.

Paleontologic Resources

The impacts from this alternative can not be fully analyzed since the paleontologic inventory for the resource area is not complete. The greatest possible impacts would be on the 17,324 acres proposed for transfer from federal ownership. Even with paleontologic clearances, unknown scientifically significant fossils could be lost or destroyed or closed off from scientific study.

RECREATION RESOURCES

Recreation

There would be 3,276 acres open to ORV use, 481,620 acres limited and 2,570 acres closed. The additional closed acres include candidate and sensitive plant sites (1,545) and Box Canyon ONA (440). There would be little expected impacts on recreational ORV use.

Impacts from managing the Boise Front as an ACEC would be the same as those discussed under Alternative A for the Boise Front SRMA.

An additional designation of 22,700 acres would seasonally limit ORV use to existing roads and trails in the Columbian sharp-tailed grouse habitat area and on 640 acres in the Birds of Prey Natural Area. The impacts of this restriction would not be significant.

A projected increase of 35% in big game numbers through improved habitat is expected to increase big game hunting opportunity by the same amount. Opportunities for non-consumptive uses would also increase as a result.

The effects of the Pickles Butte DLE would be the same as discussed in Alternative A.

Lands available for dispersed recreation would be reduced by the 17,323 acres identified for disposal.

Construction of 20 miles of timber harvest access roads (1 mile annually) would increase recreational access potential to the same degree as Alternative A, but generally less than in Alternative B. Some of these roads would be closed after harvesting is completed.

Eight miles and a 2,600 acre corridor of BLM land along the South Fork of the Payette River and six miles and 1,900 BLM acres along the North Fork of the Payette River would be proposed for Wild and Scenic Rivers study.

Identification of special designation areas would cause a slight increase in hiking, sightseeing, and other casual visitor uses.

Visual

The positive effects of an intensively managed Boise Front ACEC would be the same as discussed in Alternative A.

Improved riparian habitat on 151 miles of rivers and streams would improve the visual resource in these locations.

Harvesting approximately 0.5 million board feet of timber and the resulting access roads may negatively impact the visual resource. Less obtrusive selective cutting would be the primary harvest method, although some clearcuts, not to exceed 40 acres each, may be proposed. All timber sales would be guided by the appropriate VRM class guidelines. Impacts from timber harvests would be minimal.

Wildlife improvement projects such as fences, guzzlers and vegetation manipulation could negatively impact the visual resource. With the use of standard mitigation measures on these projects, no significant adverse impacts would be expected.

Project development in the range program could negatively impact the visual resource. Fences, reservoirs, pipelines and vegetative manipulations are proposed, and have been discussed in Alternative A. Impacts would not be significant.

Transferring 17,323 acres of land from public ownership could result in impacts on the visual resource. See discussion in Alternative B.

MINERAL RESOURCES

Leasables

Oil and Gas

The proposed 4,500 acre withdrawals along the Payette River include 2,600 acres covered by existing power site and Bureau of Reclamation withdrawals and 1,900 additional acres currently open. None of these areas are classified as prospectively valuable for oil and gas. The impacts of the withdrawal would be insignificant. About 93% of the area would remain open for oil and gas leasing.

No surface occupancy stipulations under this alternative total 7,726 acres. The lands involved are generally small and are not identified as prospectively valuable for oil and gas. The 500 acre Pickles Butte Play Area and the 3,000 acre Little Gem Cycle Park area no surface occupancy restrictions may be a significant adverse impact on oil and gas exploration and development in the areas involved.

The effects of time stipulations on oil and gas exploration are consistent throughout this plan. Those effects are considered insignificant. See Alternative A for the analysis of their impacts.

Since the lands identified for transfer would have oil and gas reserved in areas classified as prospectively valuable for oil and gas, the impact of land transfers would be insignificant.

Based on the lack of any commercial oil or gas wells in Idaho, the 35 dry holes in the resource area, the low potential of the area, and the above

analysis, the overall impacts of this alternative on the availability of oil or gas leasing and development would be insignificant.

Geothermal

The proposed 4,500 acre withdrawals along the Payette River includes 2,600 acres covered by existing power site and Bureau of Reclamation withdrawals and an additional 1,900 acres currently open. This means that 93% of the area would remain open for geothermal leases. No other withdrawals are proposed. The impacts would be insignificant.

No surface occupancy stipulations under this alternative total 7,726 acres. The lands involved are generally small parcels and represent a very small percentage of the total prospectively valuable area. The impacts would be considered insignificant.

Time stipulations are the same as Alternative A and are considered insignificant.

Since the lands identified for transfer would have the geothermal estate reserved in areas classified as prospectively valuable, the impact of land transfers would be insignificant.

Based on the lack of any commercial geothermal electric projects in Idaho, the lack of any known large reservoirs in the area, the declining interest in geothermal resources and the above analysis, the overall impacts of this alternative on the availability of geothermal leases and development would be insignificant.

Locatables

A total of 17,324 acres of land are proposed to be transferred from federal ownership under this alternative. No lands having valid mining claims or mineral potential would be transferred from federal ownership unless they are patented under the mining laws, the mineral estate is paid for, or lands of equal overall values are obtained. The impact from land transfer on the availability of lands for mineral location and development would therefore be insignificant.

The resource area would have 93% of its lands open to mining activity. Those areas closed to mining include 31,177 acres of existing withdrawals, a 2,600 acre overlapping withdrawal and a new withdrawal of 1,900 acres along the Payette River, and various small protective withdrawals amounting to 1,803 acres total. Because the 2,600 acre Payette River withdrawal overlaps existing withdrawals, it would not have any significant impacts on the availability of lands for locatable mineral discovery and development. The new 1,900 acre Payette River withdrawal would not be a significant impact.

The largest of the other withdrawals are Rebecca Sandhill, Summer Creek, Goodrich Creek and Box Creek. None of these areas are within zones of current mineral interest and none of them have any record or history of mineral locations. The impacts from these withdrawals would, therefore, be insignificant.

An analysis of the location of and activity on the existing mining claims and areas of mineral interest compared to an analysis of the actions proposed under this alternative indicates that there would not be any significant impacts on the availability of locatable minerals.

Salables

The impacts of this alternative on mineral materials would be the same as that for Alternative A. Decisions on allowing or not allowing mineral material sales from any particular site would be made on a site specific basis.

FOREST RESOURCES

Timber

Under this alternative the total acres of commercial forest land would be reduced by 7,241 CFL set aside acres. The impact of this reduction in the number of high productive and high volume per acre commercial forest land would result in the lowering of the allowable cut to approximately 0.5 million board feet.

FIRE MANAGEMENT

Same as Alternative A.

ECONOMICS

Crop Agriculture

With this alternative there would be no new agricultural development.

Livestock

The 5-year livestock forage level would be 47,233 AUMs. This would support 3,936 animal units which would generate earnings of $1.9 million. This would be 7% of the total permittee earnings, 4% of the RMP area meat animal earnings, and 2% of total farm earnings. The total earnings (including the multiplier effect) would be $5.1 million. This would be 0.2% of total RMP area 1983 earnings.

The direct earnings would generate 68 jobs. This would be 2% of the 1983 farm wage and salary employment. The total earnings would generate 235 jobs. This would be 0.2% of the RMP area 1983 wage and salary employment.

This initial stocking level represents a capital value of between $2.6 and $11.8 million.

The 20-year livestock forage level would be 53,543 AUMs. This would support 4,462 animal units which would generate earnings of $2.2 million. This would be 9% of total permittee earnings, 5% of the RMP area meat animal earnings, and 2% of total farm earnings. The total earnings (including the multiplier effect) would be $5.8 million. This would be 0.2% of total RMP area 1983 earnings.

The direct earnings would generate 77 jobs. This would be 2.2% of the 1983 farm wage and salary employment. The total earnings would generate 266 jobs. This would be 0.2% of the RMP area 1983 wage and salary employment.

This 20-year stocking level represents a capital value of between $3.0 and $13.4 million.

Recreation

Impacts would be the same as for Alternative A.

Lumber and Wood Products

Approximately 0.5 million board feet of wood products would be harvested annually with this alternative. This would generate earnings of $107,500. This would be 0.04% of the RMP area durable manufacturing 1983 earnings. The total earnings (including the multiplier effect) would be $257,500. This would be 0.01% of the total RMP 1983 earnings.

The harvest level would lead to 5 jobs (Youngblood 1983). This would be 0.03% of the 1983 manufacturing wage and salary employment. Total employment (including the multiplier effect) would be 13. This would be 0.01% of the total 1983 RMP area wage and salary employment.

Management Costs

Range and wildlife improvements associated with this alternative would cost approximately $1.6 million.

Summary

The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of $5.1 million and 235 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of $5.8 million and employment of 266 jobs. This alternative would not lead to any change in the recreation-releated earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be $257,500 and 13 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be $1.6 million.

ALTERNATIVE D

RANGELAND RESOURCES

Soils

Broad based long-term erosion rates would show an average increase of 0.2 tons/acre/year (10%) over current levels. This increase is within the estimated average soil loss tolerance of 2 to 3 tons/acre/year. The erosional processes described for land use actions in the Affected Environment and Alternative A would be the same for this alternative, but the area size and/or magnitude of the impact may vary considerably (Appendix B). Specific uses and actions would be responsible for significant short and/or long-term erosion on isolated areas. These would be ORV use, timber harvest, road building, agricultural development, range projects, and mineral exploration and/or development.

Impacts from ORV use would be similar to those described in Alternative A. The extent of impacts would be less (see Appendix B). Closed ORV areas have a high probability of gaining long-term benefits to watershed and site productivity on an additional 1,990 acres.

Commercial timber harvest is proposed on 200-1,200 acres annually with allowable annual cuts of approximately 2.9 million board feet. Selective and clearcutting would be used. To accomplish this harvest 5.8 miles/year of roads, over a 20 year period, would be built. Resulting impacts would be similar to those described in Alternative A and Affected Environment. The extent of impacts would be greater (see Appendix B).

The transfer of public lands includes 560 acres for agricultural development. The impacts associated with farming would be the same as described in Alternative A.

Impacts due to ROWs would be the same as Alternative A.

Mineral exploration and development would be open on 454,486 acres for locatable and 456,289 acres for leasables. Impacts would be the same as described in Alternative A.

Range condition improvement is projected for 19% of the RMP area. See Chapter 2 - Livestock, Vegetation, and Wildlife, Alternative D for details of improvements. Range condition improvements would benefit the soil resources as discussed in Alternative B.

Range improvement activities (burning, spraying and discing) would impact the area as described in Alternative B. Thirty-six miles of pipelines are proposed.

Livestock AUM increases of 15% are proposed over a 20 year period. With the addition of grazing systems and the proposed range improvement projects this increase would result in a slight increase in erosion rates (up to 0.1 tons/ acre/year on grazed lands). Most studies have shown that runoff and erosion increase with grazing intensity (Lusby 1979a, Gifford and Hawkins

1978). Erosion would show the largest increases around livestock concentration areas and on steep hillsides.

Fencing 14 miles and streambank planting of 17 miles of riparian habitat would affect soils as described in Alternative A.

Designation of the Boise Front ACEC and the Sage Creek ACEC would provide special management for these areas (see appropriate ACEC). This management would enhance vegetative condition, increase watershed proficiency, and reduce soil loss.

Air Quality

Impacts to air quality would be the same as described under Alternative B.

Water Quality

Parameters such as ammonia, total inorganic nitrogen, and fecal coliform that are influenced by livestock grazing would increase slightly on four stream miles due to an increase in grazing. Water quality would be maintained or very slightly improve on 30 miles of perennial streams and 176 miles of intermittent streams due to management in revised and new AMPs.

A short-term increase in sedimentation would likely occur on a range of 8-49 miles of streams due to timber harvest activities. A slight increase in sedimentation would occur over the long term on the same 8-49 miles as above from the proposed 116 miles of road construction.

Range fires contribute to high sediment loads in streams due to the loss of upland and riparian vegetative cover. This impact would be minimized by full fire suppression and rehabilitation efforts.

Sedimentation due to ORV use would be negligible because 99% of the total area is classified as limited use.

Resource management guidelines for the maintenance and protection of riparian and aquatic habitats would have long term positive benefits on the quality of water on public lands by improving management of riparian areas.

Overall, water quality on public lands from this level of management would slightly decline.

Vegetation

The long-term vegetative condition would show an overall improvement on 14 to 19% of the RMP area. This increase would not always reflect a total change in condition class. In many areas the general condition would improve but not enough to change classes. On approximately 19% of the poor condition range this change would reflect a seeding. Approximate breakdown where improvements are projected would be: poor changed or improved - 25% (46,000 acres), fair improved - 21% (40,500 acres), good improved - 3% (1,000 acres). See Appendix R for a comparison of vegetation condition changes by alternative. Trend data is not available.

Increasing livestock AUMs by 15% over 20 years is proposed. By incorporating grazing systems along with range improvement projects this increase would not adversely affect the projected condition increase. The projected increases do however depend on the success of range improvement projects and how effectively grazing systems are utilized. These increases in condition would be most notable on the fair condition rangeland. A majority of the RMP area would show good response to management due to productive soils and having an average annual precipitation of greater than 13 inches. See Livestock Management Alternative D for details.

Rangeland and wildlife improvements would affect 12% of the RMP area. These and the acres affected are listed in Chapter 2 - Livestock, Vegetation, and Wildlife. The success of rangeland seedings where poor condition annual range is converted is questionable at this point in time.

The gradual encroachment of annual grasses into poor and fair rangeland would continue (see Vegetation Alternatives A and B).

Impacts associated with ORV use would be similar to those discussed in Alternative C.

The curlew habitat and Columbian sharp-tailed grouse habitat areas would be affected as discussed in Alternative A.

Candidate and Sensitive Plant Species

The designation and management of 5 research natural areas totaling 1,355 acres would provide protection and increased vigor for several candidate, sensitive, or uncommon plant populations. These areas may act as centers of dispersal for the plant species. Public awareness would also be enhanced for these areas.

Closing ORV use on 1,545 acres, limiting ORV use on 1,000 acres and excluding surface and subsurface rights-of-way on 2,545 acres should provide for the continued existence of candidate, sensitive, or uncommon plant species. Some species may increase in numbers due to the protection provided while other plant species would be stabilized. Some species may decrease in numbers outside of these protected areas because small scattered populations and undiscovered populations would not be protected from grazing, ORV use, annual grass invasion or other hazards.

The increased grazing pressure would destroy some plant populations. This increased grazing would further the invasion of exotic weedy annuals by the selective grazing of the more palatable perennial species. Exotic weedy annuals compete with native flora, negatively impacting native plant populations. Annuals increase the probability of wildfires which cause a perpetuation of annual grass ranges and poor ecological conditions. Some plant species could be eliminated or reduced in areas recurrently burned.

The exclusion of locatable mineral development on 1,355 acres would protect plant species within these areas. These restrictions would protect individual plants directly and indirectly by decreasing soil erosion and discouraging exotic weedy annuals, thereby decreasing the probability of

wildfire. No surface occupancy restrictions would protect plants on 2,545 acres from leasable mineral exploration and development.

Riparian Habitat

Resource management guidelines for various programs should maintain overall existing riparian habitat quality and minimize impacts of actions in riparian areas.

Land transfer proposal would not impact the base of 122 miles of surveyed drainages. Two miles of unsurveyed perennial habitat would be transferred from public ownership. Habitat quality would be maintained on 94 miles of the 122 miles surveyed while 11 miles would improve to the next higher condition class due to a combination of reduced stocking levels and aquatic habitat improvement projects. Loss of habitat value due to increased stocking levels would occur on 17 miles of stream riparian habitat.

Revision of 7 existing AMPs and the proposed 23 new AMPs would result in some improvement of riparian habitat on approximately 30 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 174 miles of surveyed and unsurveyed intermittent riparian habitats.

Proposed timber harvest level of approximately 2.9 MMBF and the associated 116 miles of road construction would have a minimum impact on riparian habitat along 6-37 miles of the potentially impacted 39 miles of perennial streams and 2-12 miles of the 13 miles of intermittent drainages within the total harvest acreages. Resource management guidelines would protect riparian vegetation by providing a no-cut buffer strip along drainages and prohibiting road construction within riparian areas (except for crossings where absolutely necessary).

ORV impacts on riparian vegetation would be very slight due to limited use classification along streams in high erosion hazard areas. Streamside habitats are used occasionally by ORVs and established woody riparian vegetation would not be impacted.

Full fire suppression and rehabilitation efforts would have a long term beneficial impact because loss of riparian vegetation due to wild fires would be minimized and gradually reduced.

Loss of riparian habitat attributed to a slight increase in mining activities would be minimal.

Aquatic/Fisheries Habitat

Land transfer in this proposal would eliminate 2 miles of aquatic/fisheries habitat from the 81 miles of the surveyed aquatic/fisheries habitat base. Habitat quality would be maintained on 55 miles of the remaining 79 miles and 10 miles would improve to the next higher condition class or greater due to aquatic habitat improvement projects. The remaining 14 miles would show a loss of habitat condition to the next lower condition class from impacts related to increased stocking rates.

The revision of 7 existing AMPs and the proposed 23 new AMPs would result in improved habitat quality on approximately 30 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management strategy would also benefit approximately 176 miles of surveyed and unsurveyed intermittent streamside habitats.

Proposed timber harvest levels of approximately 2.9 MMBF and the associated 116 miles of road construction would impact approximately 6-37 miles of the 39 miles of perennial streams within the total harvest acreage. Also impacted would be 2-12 miles of intermittent drainages. Short term increased sedimentation levels associated with this level of timber harvest would be minimized by Resource Management Guidelines and rehabilitation of major disturbed areas. A high increase in stream sedimentation over the long term would result from roads constructed in high erosion hazard areas and adjacent to perennial drainages. All roads would be reseeded and closures considered on a case-by-case basis to further minimize sediment loads.

Sedimentation, an impact on streams associated with ORV use, would be negligible with this alternative because 99% of the total area available would be classified as limited use. This use class would give protection to high erosion hazard areas adjacent to and within stream drainages.

Redband trout populations would increase over the long term on segments of 3 creeks due to livestock exclusion fencing. Habitat components important for salmonid spawning and rearing would likely improve as livestock grazing pressure on 10 miles of riparian habitat is eliminated. Decreased habitat condition on 14 stream miles due to increased stocking levels would cause a slight decrease in redband trout populations in those stream reaches over the long term. Livestock grazing strategies that are incorporated into AMPs to promote the vigor of woody streamside vegetation would help maintain existing good riparian habitat and would be expected to slightly improve existing poor and fair condition riparian habitat. A corresponding increase in redband trout populations in perennial streams within these AMP areas would likely occur.

Impacts on redband trout populations over the long term due to timber harvest activities would likely be high. Resource Management Guidelines would help minimize soil disturbance and sedimentation in streams. Flushing streamflows may not be adequate to prevent fine sediment accumulation in spawning gravels in some streams.

Warmwater and coldwater gamefish species confined to reservoir habitats would not be impacted by management actions in this alternative.

Wildlife

Elk

Elk fall/winter range would show a slight improvement. This would occur due to improved livestock management. Most improvement would be located in allotments in the northern portions of the resource area. These are areas that are in a high-poor condition and would improve to fair.

Approximately 1,100 acres of fall/winter range would be seeded to grass and forbs. These range projects would help increase the carrying capacity of the areas being seeded.

Approximately 3,977 acres of timber sales have been proposed in fall/winter range over the next 20 years. Impacts on the habitat would be minimal because of Resource Management Guidelines.

Crucial elk winter range is predicted to improve slightly over the next 20 years. This improvement would be due to increased use of grazing systems and livestock management.

Approximately 14,203 acres of timber sales are proposed in crucial elk winter range. Resource Management Guideline adherence would minimize the impacts. The 116 miles of proposed logging roads would open up more country and put more pressure on population.

There are approximately 10,400 acres of range and wildlife seeding proposed in this habitat. These seedings would be designed to protect the habitat and increase the carrying capacity of the area. Approximately 3,000 acres of crucial mule deer/elk habitat would be aerial seeded along the Snake River Breaks.

The 4,660 acres of proposed land actions in crucial areas would decrease habitat availability by 6%. If these lands are exchanged for lands of equal or better value, there would be no negative impacts.

The range program is proposing a 15% increase in livestock AUMs over present stocking rates in the next 20 years. At this stocking level, less forage would be available for wildlife use. In the shrub communities, this may become a significant factor.

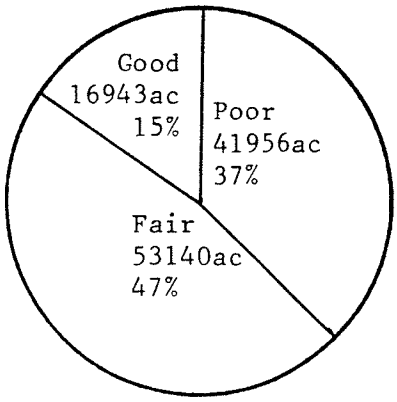
Overall, there would be increased range and wildlife seedings, fences, water developments and pipelines for livestock, increased use of grazing systems and 23 new AMPs. Due to these factors and the fact that currently only 35% of elk habitat is in poor condition the elk habitat should be able to support a 20% increase over current populations.

This would meet population goals set for the habitat by the Idaho Department of Fish and Game.

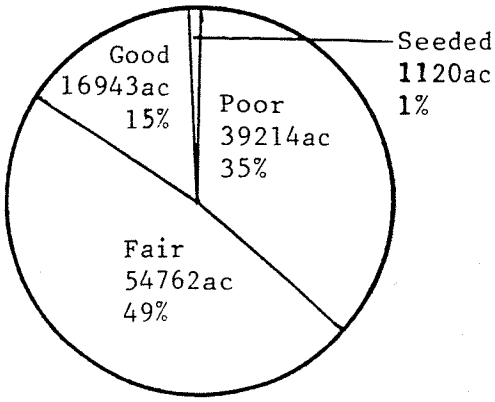
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Elk Fall/Winter

Existing Situation

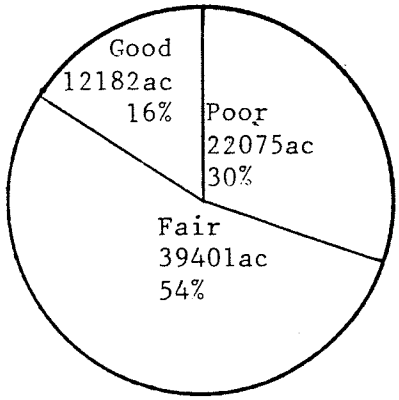


End of 20 Years

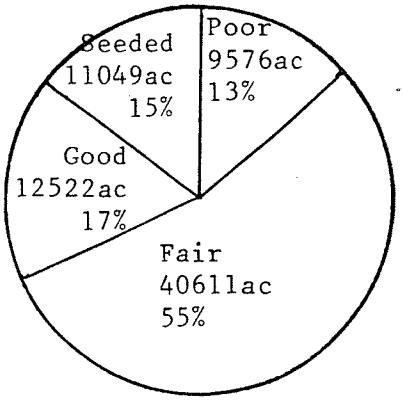


Elk Crucial Winter

Existing Situation



End of 20 Years



Mule Deer

Fall/winter ranges would show a slight increase from poor to fair. This increase would occur in the northern areas where higher rainfall occurs and would be due mainly to increased livestock management.

Crucial mule deer winter ranges are predicted to improve slightly over the next 20 years. This improvement would occur in the high-poor areas that would improve to fair condition. The improvement would occur from livestock management and use of grazing systems.

Approximately 2,400 acres of range projects are proposed in these ranges over the next 20 years. This would help increase the carrying capacity of the habitat.

Approximately 20,000 acres of both range and wildlife seedings are proposed in the next 20 years. These seedings would be designed to increase the carrying capacity of the range. Approximately 3,000 acres of crucial elk/mule deer winter range would also be aerial seeded along the Snake River Breaks.

The timber program has proposed approximately 1,136 acres of sales in deer fall/winter ranges. Minimal impacts are expected from these timber sales.

Approximately 1,894 acres of timber sales are proposed in crucial mule deer winter range. Impacts are expected to be minimal. The 116 miles of logging roads could put additional hunting pressure on populations.

Approximately 6,690 acres of crucial winter range is proposed for sale or exchange. This would decrease the available crucial habitat for the mule deer population by approximately 5%. If lands are exchanged for equal or better value, there would be no negative impacts.

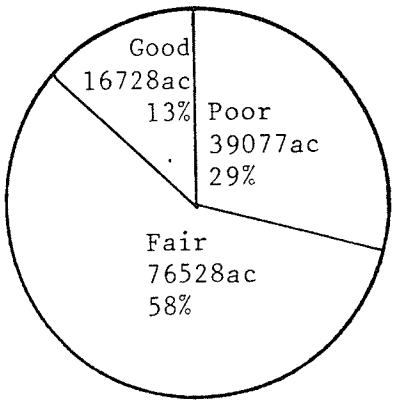
The 12,000 acre Boise Front ACEC would be managed as crucial mule deer winter range. Habitat improvement projects would help increase the carrying capacity of this crucial habitat.

Impacts from the proposed 15% livestock AUM increases, together with fences, water developments, and pipelines for livestock, are expected to provide less forage for mule deer populations. Overall, mule deer ranges in the resource area are expected to be able to support a 20% increase over the current population. This would not meet population goals set for the habitat by the Idaho Department of Fish and Game.

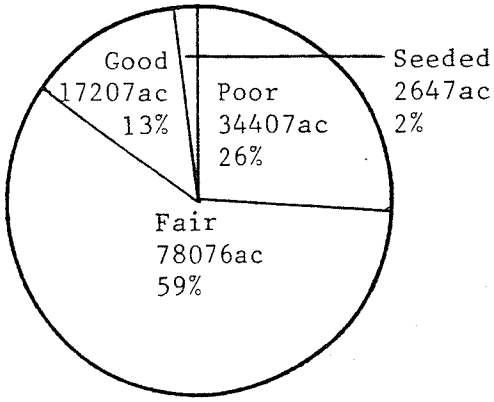
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Mule Deer Fall/Winter

Existing Situation

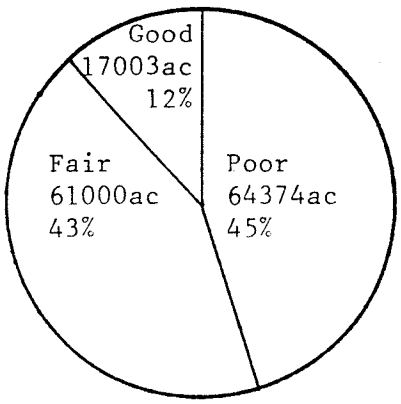


End of 20 Years

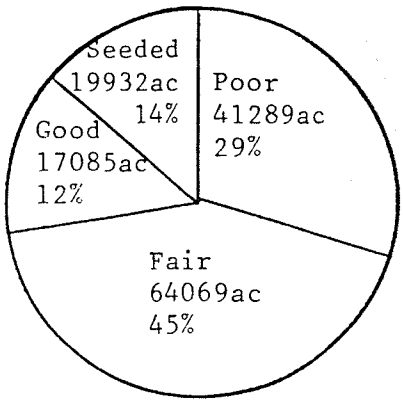


Mule Deer Crucial Winter

Existing Situation



End of 20 Years



Antelope

Crucial antelope winter ranges would not show any improvement under this alternative. Approximately 13% of the range would be seeded. This would increase the forage base for the population. The remaining range would not be seeded due to the infestation of medusahead wildrye.

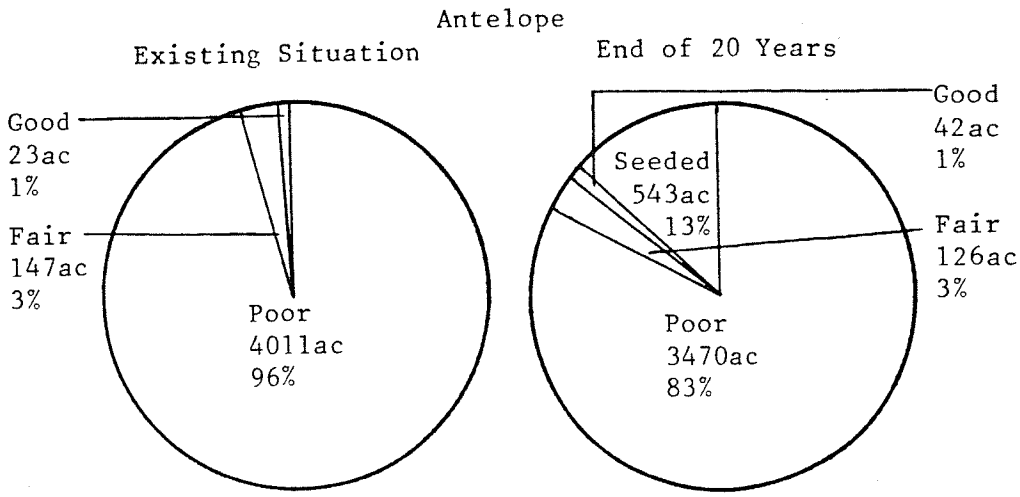
Approximately 10% of this crucial habitat is proposed to be sold or exchanged. This loss of habitat could have negative impacts to the welfare of the herd.

The current population is approximately 50 animals. Through improved livestock management, and the use of grazing systems, and fences, water developments and pipelines for livestock, the habitat is expected to be able to support a population of 100 animals.

Seedings will emphasize shrub species to improve the winter forage factor.

This would not meet the population goals set for the area by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Sage Grouse

Currently 60% of sage grouse habitat is in fair to good condition. Under this alternative, a slight improvement is predicted.

The seedings for both livestock and big game would improve nesting and brood-rearing habitat. These seedings would constitute approximately 15% of available sage grouse habitat. Approximately 9,000 acres occur in the crucial zone or 2 miles from a strutting ground. Disturbance of this area could have negative impacts during the breeding season.

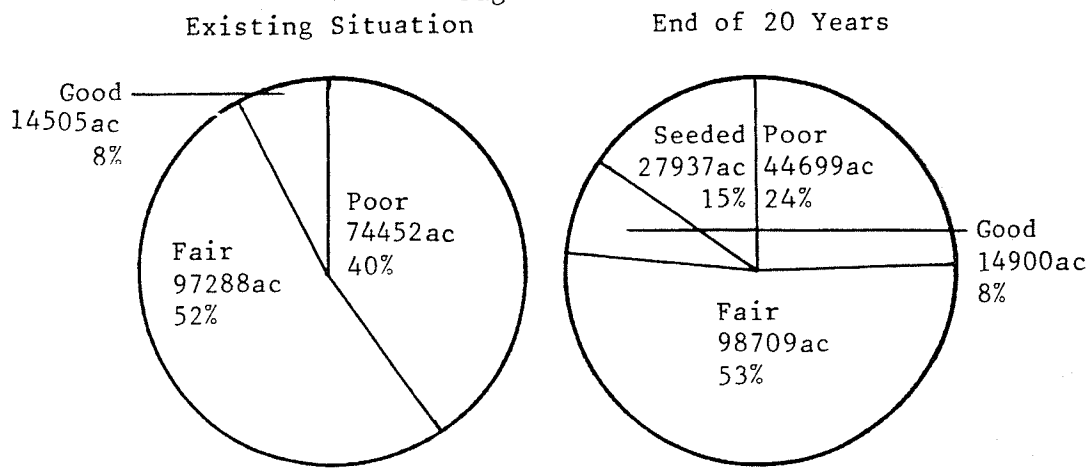
Seedings without sagebrush would not improve the forage factor for this species. They will, however, relieve the grazing pressure on native ranges used by sage grouse.

Approximately 3,900 acres of land located within a crucial zone is proposed for sale or exchange. If these lands are disposed of, negative impacts to nesting habitat could occur.

The proposed 15% increase in livestock AUMs should have minimal impacts to sage grouse habitat. Special management may be necessary in some areas during the mating season.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Sage Grouse



Sensitive Animal Species

Columbian Sharp-tailed Grouse

Currently 55% of sharp-tail habitat is in fair to good condition. Under this alternative habitat would show a slight improvement.

Approximately 330 acres of proposed wildlife seedings are expected to improve the nesting and brood-rearing habitat of the area.

Due to the small population, the proposed 15% increase in livestock AUMs should have minimal impacts on the habitat and population.

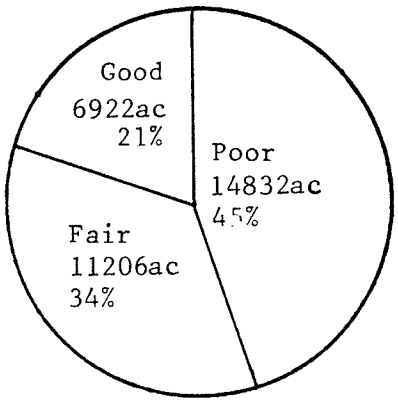
The proposed land transfer of 880 acres could have negative impacts if a local population is using the area or a dancing ground is located nearby.

Approximately 4,200 acres in the Sage Creek allotment would be designated and managed as an ACEC. The Sage Creek allotment would be inventoried for vegetative production and livestock use adjustments would be pursued and monitored to benefit sharp-tailed grouse. Livestock use adjustments would improve sharp-tailed grouse habitat and should stimulate population growth.

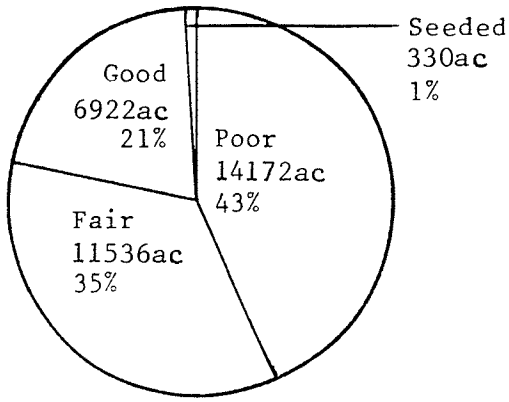
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Columbian Sharp-tailed Grouse

Existing Situation



End of 20 Years



Long-billed Curlew

Range and wildlife seedings proposed under this alternative that occur in areas used by curlew would have negative impacts on nesting habitat. Most species of grasses used in seedings are too high to be used by nesting females.

Approximately 3,750 acres of curlew habitat is proposed for sale or exchange. Negative impacts could occur if vegetative structure is changed and nesting habitat is decreased.

The 61,000 acre Black Canyon Curlew Area would be designated and managed as an area of critical environmental concern (ACEC). The proposed management of the area would protect the habitat to maintain the current population of 1,000 nesting pairs.

Birds of Prey

This alternative would generally improve habitat conditions for raptors in the Birds of Prey area through ORV restrictions.

Livestock

Under this alternative livestock forage levels would decrease by 5,407 AUMs due to land transferred out of federal ownership. In the short term (5 year protection) with 2,800 AUMs produced on 7,600 acres of seedings, the resulting available forage level of 63,942 AUMs would be a 4% decrease from the present five year average license use of 66,424 AUMs.

Over the long term (20 year protection) additional seedings of 23,000 acres would produce 8,700 AUMs. Installation of improvements (water

systems, fencing) along with increased livestock management practices on approximately 76,000 acres of native range would increase forage production an additional 3,900 AUMs.

Total forage production is expected to reach 76,613 AUMs over the long term. This would be a 15% increase from the present five year average license use.

The greatest impact to the livestock program as in Alternative B would be the transfer of land out of federal ownership. In this alternative 33,101 allotted acres are scheduled for sale, exchange or desert land entry. Special designation, historic and cultural areas of 915 acres account for an additional loss of 162 AUMs.

In both the short and long term analysis of range improvements and land treatment, AUMs lost to transfers and other special designation areas were considered removed prior to addition of new forage generated.

Impacts are allotment specific and resulting AUM levels are shown in Appendix F.

Trend information is not available at present. Monitoring studies will be used to adjust stocking levels on allotments. Data presented in Appendix E will be used as baseline information in prioritizing management and monitoring efforts to improve range condition where needed. Annual grass ranges (medusahead/cheatgrass) would receive high priority land treatment efforts to restore perennial grasses.

Stock driveways would be eliminated on 22,237 acres, continued on 40,763 acres, and added on 627 acres for a total of 41,390 acres available.

Wild Horses

Under this alternative the Crane Creek herd would be removed.

The Four-Mile herd would be maintained at 20 head. The livestock AUM reduction of 424 AUMs for maintenance of range condition which has been in effect since 1977 would continue.

LANDS AND REALTY RESOURCES

Lands

Land transfer would consist of 243 acres for sale, 28,750 acres for sale or exchange, 6,174 acres for exchange and 560 acres for Desert Land Entry for a total of 35,727 acres.

Of the lands identified for sale, 80 acres would be a sanitary landfill for Ada County, and 160 acres already under R&PP lease to the Parma Rod and Gun Club would be patented. The remaining three acres are scattered occupancy and agricultural trespass parcels that have been surveyed and lotted. Transfer of land by sale would generate approximately $21,600 based on a current appraisal for the 80 acres to be sold to Ada County, estimates

of the value of the small parcels that total 3 acres, and the 160 acres for the Parma Rod and Gun Club.

The lands proposed for transfer or sale or exchange are generally small isolated parcels that appear to meet the disposal criteria in Section 203(a)(1) of FLPMA. Their disposal would reduce problem management areas and/or consolidate land ownership patterns, thereby improving management and reducing management costs. The larger parcels would be examined for exchange possibilities before sale is considered, although any parcel would be available for exchange.

There are three exchange proposals pending in the resource area being considered in this plan. They are referred to as the Brownlee, Little, and Henggeler exchanges. The Brownlee exchange is a State proposal to acquire 6,251 acres of public land for 6,171 acres of State land, however, it is proposed to retain 280 acres of the selected public land for timber production. This would result in a corresponding decrease in the number of acres to be acquired from the State. The exchange would consolidate State and public lands and would improve management efficiency for both governments.

The Little exchange is a private proposal to acquire 120 acres of public land for 160 acres of private land. The offered private land is identified for acquisition in the Boise Front MFP to facilitate watershed and grazing management. Action on this proposal has been initiated and will continue through development of this RMP.

The Henggeler proposal is to exchange 14 acres of private land for 83 acres of public land. The acquisition of the private land would provide access to the Snake River in an area with virtually no public access and would place the remainder of Crow Island in public ownership.

Land transfer for agricultural use (Desert Land Entry) would result in only one estimated trespass case, because of the limited number of acres to be transferred under this category. The average administrative cost for a trespass case is $1,250.

Rights-of-Ways

Overhead, surface and/or subsurface rights-of-way would be restricted on 10,331 acres of public land due to conflicts with candidate or sensitive plants, significant cultural or recreation sites, and on the portion of the Payette River recommended for Wild and Scenic River study - 8 miles of the South Fork Payette River. The areas precluded or restricted are generally small acreages and there would be few conflicts with major utility rights-of-way since rights-of-way could be rerouted slightly to avoid the smaller areas.

Hydroelectric development would be precluded on 8 miles of the South Fork Payette River.

Withdrawals

Of the lands presently withdrawn for livestock driveways (approximately 63,000 acres), 22,237 acres would be revoked from withdrawals, 40,763 would continue, and 627 acres would be added.

There is only one C&MU classification in the resource area encompassing 37.31 acres. This parcel was acquired under a Section 8 (Taylor Grazing Act) exchange. When the order opening the lands to the administration of the public land laws was published, a C&MU classification was placed on it at the same time, precluding disposal. This parcel contains no unique resources and revoking the classification would put it in the same status of general retention as the other public lands adjacent to it.

Additional withdrawals may be forthcoming if Congress designates the Payette River as a Wild and Scenic River. The final acreage withdrawn may be more or less than that proposed in this plan.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

Cultural resource sites in critical need of special management (Grey's Creek, Indian Creek, Milk Creek, Cabin Creek, Mineral, Quartzburg, Centerville and Placerville) would continue to be protected by BLM standard operating procedures and would receive additional protection through nomination and acceptance to the National Register of Historic Places (NRHP). The effects of livestock trampling would be mitigated through the installation of protective fencing and the effects of erosion would be diminished by the removal of livestock from the immediate site area, and the improvement of riparian habitat.

Cultural Resource Management Plans (CRMP) prepared for these sites will detail additional inventory needs and monitoring schedules to determine the rate of deterioration, impacts of vandalism, etc.

Paleontologic Resources

The impacts from this alternative can not be fully analyzed since the paleontologic inventory for the resource area is not complete. The greatest possible impacts would be on the 35,727 acres proposed for transfer from federal ownership. Even with paleontologic clearances, unknown scientifically significant fossils could be lost, destroyed, or closed off from scientific study.

RECREATION RESOURCES

Recreation

There would be 3,276 acres open to ORV use, 481,615 acres limited and 2,575 acres closed. These figures represent no change from Alternative C except that a 5 acre campsite would be closed instead of limited. The limited use areas would decrease by 35,727 acres as lands are transferred from federal ownership. Impacts would be minimal on recreational ORV use.

Environmental Consequences

Impacts from managing the Boise Front as an ACEC would be the same as those discussed under Alternative A for the Boise Front SRMA.

A projected increase of 30% in big game numbers through improved habitat is expected to increase big game hunting opportunity by the same amount. Opportunities for non-consumptive uses would also increase as a result.

The effects of the Pickles Butte DLE would be the same as discussed in Alternative A.

Lands available for dispersed recreation would be reduced by the 35,727 acres identified for disposal.

Construction of 116 miles of timber harvest access roads (5.8 miles annually) will greatly increase recreational access potential in these areas. Some of these roads would be closed after harvesting is complete.

Eight miles and a 2,600 acre corridor of BLM land along the South Fork of the Payette River would be proposed for Wild and Scenic Rivers study.

Identification of special designation areas would cause a slight increase in hiking, sightseeing, and other casual visitor use.

Visual

The positive effects of an intensively managed Boise Front ACEC would be the same as discussed in Alternative A.

Improved riparian habitat on 170 miles of rivers and streams would improve the visual resource in these locations.

Harvesting approximately 2.9 million board feet of timber and the resulting access roads may negatively impact the visual resource. Less obtrusive selective cutting would be the primary harvest method, although some clearcuts, not to exceed 40 acres each, may be proposed. All timber sales would be guided by the appropriate VRM class guidelines. Impacts from timber harvest would be minimal.

Wildlife improvement projects such as fences, guzzlers and vegetation manipulation could negatively impact the visual resource. With the use of standard mitigation measures on these projects, no significant adverse impacts would be expected.

Project development in the range program could negatively impact the visual resource. Fences, reservoirs, pipelines and vegetative manipulations are proposed and have been discussed in Alternative A. Impacts would not be significant.

Transferring 35,727 acres of land from public ownership could result in impacts on the visual resource. See discussion in Alternative B.

MINERAL RESOURCES

Leasables

Oil and Gas

The effects of a 2,600 acre withdrawal along the Payette River under this alternative would not be significant since this area is already covered by existing power site and Bureau of Reclamation withdrawals and is not classified as prospectively valuable for oil and gas.

No surface occupancy stipulations under this alternative total 7,731 acres. The lands involved are generally small and are not identified as prospectively valuable for oil and gas. The 500 acre Pickles Butte Play Area and the 3,000 acre Little Gem Cycle Park area "no surface occupancy" restrictions may be a significant adverse impact on oil and gas exploration and development in the areas involved.

Since the lands identified for transfer would have oil and gas reserved in areas identified as prospectively valuable for oil and gas, the impact of land transfers would be insignificant.

Based on the lack of any commercial oil or gas wells in Idaho, the thirty-five dry holes in the resource area, the low potential of the area, and the above analysis, the overall impacts of this alternative on the availability of oil or gas leasing and development would be insignificant.

Geothermal

The 2,600 acre withdrawal along the Payette River would not be significant since the area is already covered by existing power site and Bureau of Reclamation withdrawals.

"No surface occupancy" stipulations under this alternative total 7,731 acres. The lands involved are generally small parcels and represent a very small percentage of the total prospectively valuable area. The impacts would be considered insignificant.

Time stipulations for the protection of wildlife are consistent throughout the plan and would be insignificant. See Alternative A for the analysis.

Since the lands identified for transfer would have the geothermal estate reserved in areas classified as prospectively valuable, the impact of land transfers would be insignificant.

Based on the lack of any commercial geothermal electric projects in Idaho, the lack of any known large reservoirs in the area, the declining interest in geothermal resources and the above analysis, the overall impacts of this alternative on the availability of geothermal leases and development would be insignificant.

Locatables

The resource area would have 93% of its lands open to mining activity. Those areas closed to mining include 31,177 acres of existing withdrawals, an overlapping withdrawal of 2,600 acres along the Payette River, and various small protective withdrawals amounting to 1,803 acres total. The 2,600 acre overlapping withdrawal would not be a significant impact. None of the 1,803 acres are within zones of current mineral interest and none have any record or history of mineral locations. Therefore, the impacts for these withdrawals would also not be significant.

A total of 35,727 acres of land are proposed for transfer from federal ownership under this alternative. No lands having valid mining claims or mineral potential would be transferred from federal ownership unless they are patented under the mining laws, the mineral estate is purchased at fair market value, or lands of equal overall values are obtained. The impact from land transfer on the availability of lands for mineral location and development would, therefore, be considered insignificant.

An analysis of the location of and activity on the existing mining claims and areas of mineral interest compared to an analysis of the actions proposed under this alternative indicates that there would not be any significant impacts on the availability of locatable minerals.

Salables

The impacts of this alternative on mineral materials would be the same as that for Alternative A. Decisions on allowing or not allowing mineral material sales from any particular site would be made on a site specific basis.

FOREST RESOURCES

Timber

Under the high investment alternative the total acres of commercial forest land would be reduced by 1,339 CFL set aside acres. However the impacts of losing this 1,339 acres of commercial forest land would be minimal and with the intensive management of the available CFL the cut would increase to approximately 2.9 million board feet.

FIRE MANAGEMENT

Fire occurrence and suppression costs adjacent to farming developments would remain at Alternative B levels. All other levels would remain the same as with Alternative A.

ECONOMICS

Crop Agriculture

Impacts would be the same as for Alternative A.

Livestock

The 5-year livestock forage level would be 63,966 AUMs. This would support 5,331 animal units which would generate earnings of $2.6 million. This would be 10% of the total permittee earnings, 6% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be $6.9 million. This would be 0.3% of total RMP area 1983 earnings.

The direct earnings would generate 92 jobs. This would be 2.7% of the 1983 farm wage and salary employment. The total earnings would generate 318 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This initial stocking level represents a capital value of between $3.6 and $16.0 million.

The 20-year livestock forage level would be 76,613 AUMs. This would support 6,384 animal units which would generate earnings of $3.1 million. This would be 12% of total permittee earnings, 7% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be $8.2 million. This would be 0.4% of total RMP area 1983 earnings.

The direct earnings would generate 111 jobs. This would be 3.2% of the 1983 farm wage and salary employment. The total earnings would generate 382 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This 20-year stocking level represents a capital value of between $4.3 and $19.2 million.

Recreation

Impacts would be the same as for Alternative A.

Lumber and Wood Products

Approximately 2.9 million board feet of wood products would be harvested annually with this alternative. This would generate earnings of $645,000. This would be 0.2% of the RMP area durable manufacturing 1983 earnings. The total earnings (including the multiplier effect) would be $1.5 million. This would be 0.07% of the total RMP 1983 earnings.

The harvest level would lead to 30 jobs (Youngblood 1983). This would be 0.2% of the 1983 manufacturing wage and salary employment. Total employment (including the multiplier effect) would be 77. This would be 0.06% of the total 1983 RMP area wage and salary employment.

Management Costs

Range and wildlife improvements associated with this alternative would cost approximately $2.5 million.

Summary

Total crop agricultural earnings and employment would increase by $529,700 and 24 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of $6.9 million and 318 jobs. These are both less than one-half of one percent of the RMP area earnings and employment. The 20-year stocking level would lead to total earnings of $8.2 million and employment of 382 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood product earnings and employment would be $1.5 million and 77 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be $2.5 million.

ALTERNATIVE E (PREFERRED ALTERNATIVE)

RANGELAND RESOURCES

Soils

Broad based long-term erosion rates would show an average increase of 0.05 tons/acre/year (2%) over current levels. This increase is within the estimated average soil loss tolerance of 2 to 3 tons/acre/year. The erosional processes described for land use actions in the Affected Environment and Alternative A would be the same for this alternative, but the area size and/or magnitude of the impact may vary considerably (Appendix B). Specific uses and actions would be responsible for significant short and/or long-term erosion on isolated areas. These would be ORV use, timber harvest, road building, agricultural development, range projects, and mineral exploration and/or development.

Impacts from ORV use would be similar to those described in Alternative A. The extent of impacts would be less (see Appendix B). Closed ORV areas have a high probability of gaining long-term benefits to watershed and site productivity on an additional 1,548 acres.

Commercial timber harvest is proposed on 150-700 acres annually with allowable annual cuts of approximately 1.7 million board feet. Selective cutting would generally be used with clear cutting as an option. To accomplish this harvest 3.4 miles/year of roads, over a 20 year period, would be built. Resulting impacts would be similar to those described in Alternative A and Affected Environment. The extent of impacts would be greater (see Appendix B).

The transfer of public lands include 560 acres for agricultural development. The impacts associated with farming would be the same as described in Alternative A.

Impacts due to ROWs would be the same as Alternative A.

Mineral exploration and development would be open on 454,486 acres for locatables and 456,289 acres for leasables. Impacts would be the same as described in Alternative A.

Range condition improvement is projected for 27% of the RMP area. See Chapter 2 - Livestock, Vegetation, and Wildlife, Alternative E for details of improvements. Where range condition is improved through enhancement of vegetation density and/or composition, erosion rates would be reduced. Rates would decrease from 0.1 to as much as 1 ton/acre/year. The amount would depend on the degree of vegetative improvement, the success, and the following management of the area. Where annual range is converted to seedings the susceptibility to wildfires would be greatly reduced.

Where burning, spraying, discing or any combination of the three are used, with or without seeding, a short-term (one to two year) increase in soil loss would result. This would be due to loss of vegetative cover and surface disturbance. But as vegetation becomes reestablished and density

and/or composition improved, long-term erosional decreases would be expected. Twelve miles of pipelines are proposed.

Livestock AUM increases of 6% are proposed over a 20 year period. By incorporating grazing systems and with the proposed range improvement projects this increase would result in a very slight increase in erosion rates (up to 0.05 tons/acre/year) on grazed lands. Erosion would show the largest increases around livestock concentration areas and on steep hillsides.

Fencing 10 miles and streambank planting of 7 miles of riparian habitat would affect soils as described in Alternative A.

Designation of the Boise Front ACEC and the Sage Creek ACEC would provide special management for these areas (see appropriate ACEC). This management would enhance vegetative condition, increase watershed proficiency, and reduce soil loss.

Air Quality

Impacts on air quality would be the same as described under Alternative B.

Water Quality

Parameters such as ammonia, total inorganic nitrogen, and fecal coliform that are influenced by livestock grazing would slightly improve due to the proposed 11 stream miles of riparian exclosures. Water quality would be maintained or very slightly improved on 18 miles of perennial streams and 124 miles of intermittent streams due to management in revised and new AMPs. High fecal coliform levels and sedimentation from streambank grazing activities would be eliminated from those stream reaches excluding livestock and reduced in those streams within revised and new AMPs.

A short-term increase in sedimentation would likely occur on a range of 7-29 miles of streams due to timber harvest activities. A slight increase in sedimentation would occur over the long term on the same 7-29 miles as above from the proposed 68 miles of road construction.

Range fires contribute to high sediment loads in streams due to the loss of upland and riparian vegetative cover. This impact would be minimized by full fire suppression and rehabilitation efforts.

ORV use in the limited use areas would occur on 47% of the area. This would result in a very slight increase in sediment in streams in these areas. Open ORV use would occur on 53% of the area and would occur on those areas of basaltic parent materials. A slight increase in sediments would occur in streams within the open ORV use classification areas.

Resource management guidelines for the maintenance and protection of riparian and aquatic habitats would have long term positive benefits on the quality of water on public lands by improving management of riparian areas.

Overall, water quality on public lands from this level of management would slightly improve.

Vegetation

The long-term vegetative condition would show an overall improvement on 22 to 27% of the RMP area. This increase would not always reflect a total change in condition class (ie., fair to good). In many areas the general condition would improve but not enough to change classes. On approximately 16% of the poor condition range this change would reflect a seeding. Approximate breakdown where improvements are projected would be: poor changed or improved - 28% (56,000 acres), fair improved - 32% (66,230 acres), good improved - 11% (3,680 acres). See Appendix R for a comparison of vegetation condition changes by alternative. Trend data is not available.

The encroachment of annual grasses (medusahead wildrye and cheatgrass) into fair and poor condition rangeland would continue. This would be most prominent on the sedimentary and lower elevation basalt soils. These areas tend to be very susceptible to invasion once disturbed (wildfires or heavy use by livestock). Full fire suppression and rehabilitation efforts would gradually reduce the total number of acres burned annually.

Increasing livestock AUMs by 6% over 20 years is proposed. By incorporating grazing systems along with range improvement projects this increase would not adversely affect the projected condition increase. The projected increases do however depend on the success of range improvement projects and how effectively grazing systems are utilized. Those increases in condition would be most notable on the fair condition rangeland. A majority of the RMP area would show good response to management due to productive soils and having an average annual precipitation of greater than 13 inches.

Rangeland and wildlife improvements would affect 10% of the RMP area. These improvements and the acres affected are listed in Chapter 2 - Livestock, Vegetation, and Wildlife. The success of rangeland seedings where poor condition annual range is converted is questionable at this point in time.

Impacts associated with ORV use would be the same as described in Alternative A.

The curlew habitat area and Columbian sharp-tailed grouse habitat area would be affected as discussed in Alternative A.

Candidate and Sensitive Plant Species

The designation and management of 5 research natural areas totaling 1,355 acres would provide protection and increased vigor for several candidate, sensitive, or uncommon plant populations. These areas may act as centers of dispersal for the plant species. Public awareness would also be increased in these areas.

Closing ORV use on 1,545 acres, limiting ORV use on 1,000 acres and excluding surface and subsurface rights-of-way on 2,545 acres should provide for the continued existence of candidate, sensitive, or uncommon plant species. Some species may increase in number due to the protection provided while other plant species would be stabilized but would not have an opportunity to increase. Some species may decrease in numbers outside of these areas because small scattered populations and undiscovered populations

would not be protected from grazing, ORV use, annual grass invasion or other hazards.

The increased grazing pressure would destroy some plant populations. This increased grazing would further the invasion of exotic weedy annuals by the selective grazing of the more palatable perennial species. Exotic weedy annuals compete with native flora, negatively impacting native plant populations. Annuals increase the probability of wild fires which cause a perpetuation of annual grass ranges and poor ecological conditions. Some plant species could be eliminated or reduced in areas recurrently burned.

Due to the lack of restrictions on locatable mineral development, some individual plants or small populations could be destroyed. Procedural compliance with the Endangered Species Act would keep these impacts below the level of significant to the species as whole. No surface occupancy restrictions would protect plants on 2,545 acres from leasable mineral exploration and development.

Riparian Habitat

Resource management guidelines for various programs should maintain overall existing riparian habitat quality and minimize impacts of actions within riparian areas.

Land transfer proposals would not impact the base of 122 miles of surveyed drainages. One mile of unsurveyed perennial habitat would be transferred from public ownership. Habitat quality would be maintained on 102 miles of the 122 miles surveyed while 16 miles would improve to the next higher condition class due to a combination of reduced stocking levels and aquatic habitat improvement projects. Reduced habitat value due to increased stocking levels would occur on 4 miles of stream riparian habitat.

Revision of 7 existing AMPs and the proposed 12 new AMPs would result in some improvement of riparian habitat on approximately 18 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 124 miles of surveyed and unsurveyed intermittent riparian habitats.

Proposed timber harvest level of approximately 1.7 MMBF and the associated 68 miles of road construction would have a minimum impact on riparian habitat along 5-22 miles of the potentially impacted 39 miles of perennial streams and 2-7 miles of the 13 miles of intermittent drainages within the total harvest acreages. Resource management guidelines would protect riparian vegetation by providing a no-cut buffer strip along drainages and prohibiting road construction within riparian areas (except for crossings where absolutely necessary).

ORV use in the limited use areas would occur on 47% of the area and would have a slight impact on riparian vegetation within those areas. Drainages are often used as travel corridors by wildlife and humans. With no use restrictions on 53% of the area, riparian areas within these open ORV use areas would likely be moderately impacted resulting in long term disturbances

to vegetation and soils and short term disturbance to associated riparian wildlife.

Full fire suppression and rehabilitation efforts would have a long term beneficial impact because loss of riparian vegetation due to wildfires would be minimized and gradually reduced.

Loss of riparian habitat attributed to a slight increase in mining activities would be minimal.

Aquatic/Fisheries Habitat

Land transfer proposals in this alternative would eliminate one mile of perennial stream from the 81 miles of the surveyed aquatic/fisheries habitat base. Habitat quality would be maintained on 66 miles of the remaining 80 miles while 14 miles would improve to the next higher condition class or greater due to aquatic habitat improvement projects.

Revision of 7 existing AMPs and the proposed 12 new AMPs would result in the improvement of approximately 18 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 124 miles of surveyed and unsurveyed intermittent streamside habitats.

Proposed timber harvest level of approximately 1.7 MMBF and the associated 68 miles of road construction would impact 5-22 miles of the 39 miles of perennial streams within the total harvest acreage. Also impacted would be 2-7 miles of intermittent drainages. Short term increased sedimentation levels associated with this level of timber harvest would be minimized by Resource Management Guidelines and the rehabilitation of major disturbed areas. A slight increase in stream sedimentation over the long term would result from road construction in high erosion hazard areas and adjacent to perennial drainages. All roads would be stabilized and closures considered on a site specific basis to further minimize sediment loads.

Sediment load associated with ORV use would slightly increase within the open ORV use areas and result in a long term impact on low gradient streams unable to attain flushing flows. A slight increase in sediment would occur in streams within limited and closed ORV use areas.

Redband trout populations would increase over the long term on segments of 4 creeks due to livestock exclusion fencing. Habitat components important for salmonid spawning and rearing would likely improve as livestock grazing pressure on 11 miles of riparian habitat is eliminated. Livestock grazing strategies that are incorporated into AMPs to promote the vigor of woody streamside vegetation would help maintain existing good riparian habitat and would be expected to slightly improve existing poor and fair condition riparian habitat. A corresponding slight increase in redband trout populations in perennial streams within these AMP areas would likely occur.

Impacts on redband trout populations over the long term due to timber harvest activities and ORV use would likely be slight. Resource Management Guidelines would minimize soil disturbance and sedimentation in streams.

Flushing streamflows would likely be adequate to prevent fine sediment accumulation in spawning gravels.

Warmwater and coldwater gamefish species confined to reservoir habitats would not be impacted by management actions in this alternative.

Wildlife

Elk

Both fall/winter and crucial winter ranges would show a slight improvement in this alternative. The improvement would be in northern regions in the higher precipitation zones.

All seedings proposed in Alternative D are also proposed in this alternative.

Approximately 68 miles of roads (3.4 miles annually for 20 years) are proposed in deer and elk habitat to facilitate timber harvest. Approximately 8,200 acres over the life of the plan are proposed for timber harvest in crucial elk winter ranges. Negative impacts to the elk populations would occur due to increased hunter access along the logging roads and decreased crucial winter range.

There are 4,660 acres of crucial habitat proposed for exchange with the state. Impacts would be minimal because the exchange would be for land of equal or greater value for wildlife.

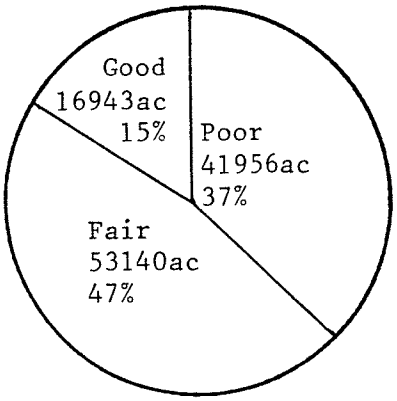
Overall there would be increased range and wildlife seedings. These seedings, would be multi-purpose and the grass, forb and shrub mixture will consider the needs of both wildlife and livestock. Currently, 65% of the habitat is in fair to good condition. The cumulative improvements of range and wildlife seedings, fences, water developments and pipelines for livestock, increased use of grazing systems and more AUMs provided for elk would support the proposed 22% increase in the population.

This would exceed population goals set for the habitat by the Idaho Department of Fish and Game.

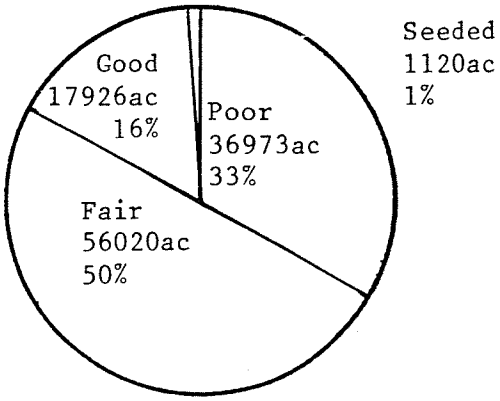
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Elk Fall/Winter

Existing Situation

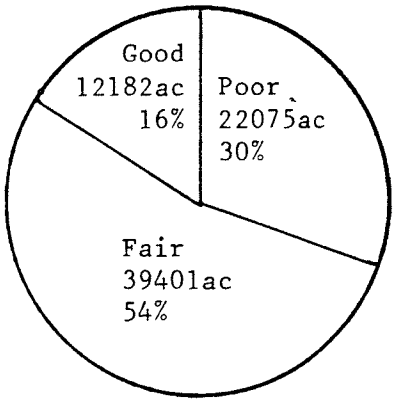


End of 20 Years

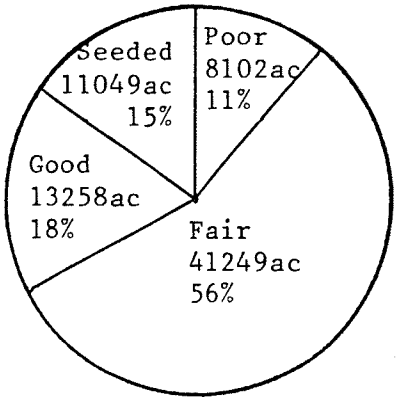


Elk Crucial Winter

Existing Situation



End of 20 Years



Mule Deer

Fall/winter and crucial winter deer ranges should show a slight improvement over the current situation. These improvements would most likely occur in the higher precipitation zones.

All seedings proposed in Alternative D are also proposed in this alternative.

Over the life of the plan, timber harvest is proposed on approximately 1,100 acres in crucial mule deer winter range and 700 acres in fall/winter range areas. Negative impacts on the local mule deer populations would occur from reducing overall habitat and increased hunting pressure due to access along logging roads. Severe impacts should be minimized by following Resource Management Guidelines.

Environmental Consequences

There are 6,690 acres of crucial winter habitat proposed for exchange with the state. Impacts would be minimal because the exchange would be for lands of equal or higher value for wildlife.

The 12,000 acre Boise Front ACEC would be managed as crucial mule deer winter range. The Snake River Breaks, on the western border of the resource area, is another very important crucial deer and elk winter range. Intensive livestock management will have to be considered on this area (from Grouse Creek north to Indian Creek) to provide enough forage for wintering herds.

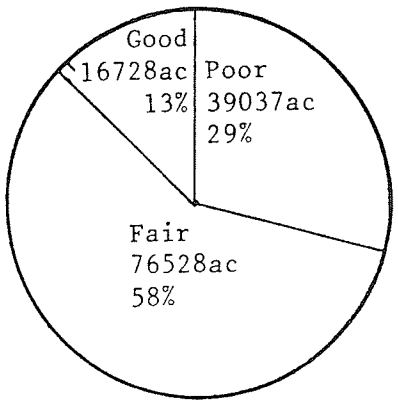
Currently, 55% of the crucial winter range is in fair to good condition. In the fall/winter range, 70% is in the fair to good class. Considering the current condition, fences, water developments, and pipelines for livestock, proposed seedings and availability of AUMs for wildlife, the habitat would be able to support the proposed 33% increase in the population.

This would exceed population goals set for the habitat by the Idaho Department of Fish and Game.

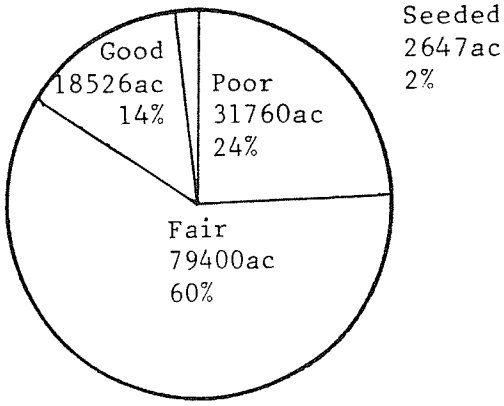
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Mule Deer Fall/Winter

Existing Situation

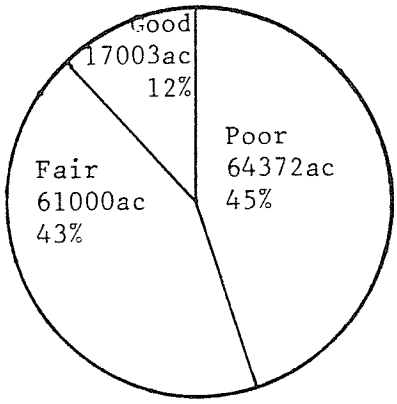


End of 20 Years

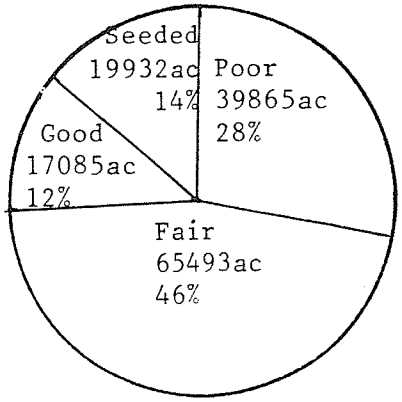


Mule Deer Crucial Winter

Existing Situation



End of 20 Years



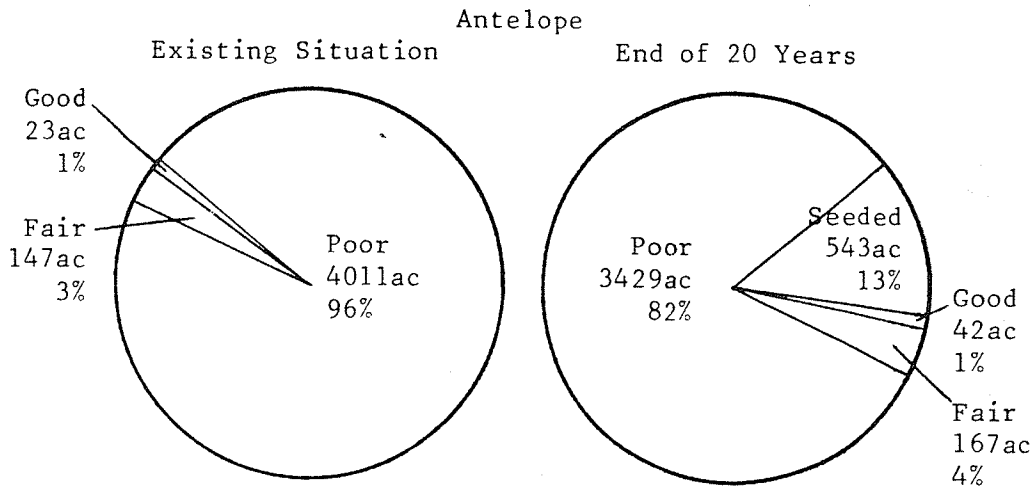
Antelope

Crucial antelope winter ranges would show little improvement under this alternative. The ranges, however, are dominated by medusahead wildrye. Eradication techniques for medusahead ranges have not been fully developed and are not economical.

The current population of the resource area is 50 animals. After improvements 13% of the range would be seeded, and with the increased use of grazing systems in the area, fences, water developments and pipelines for livestock, the habitat should support a population of 175 animals.

This would exceed the population goals set for the area by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Sage Grouse

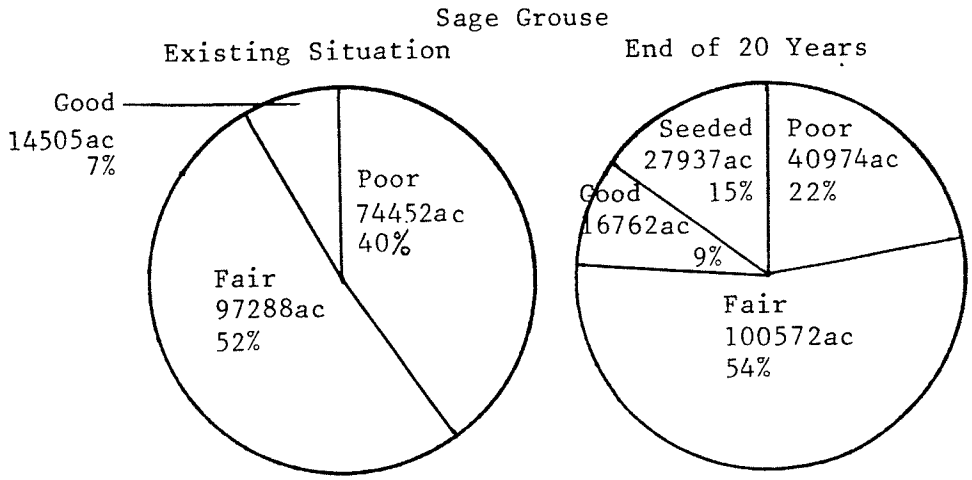
Currently, 60% of the sage grouse habitat is in fair to good condition. A slight improvement in the habitat would occur due to livestock management.

All seedings proposed in Alternative D are also proposed in this alternative. The seedings which would constitute 15% of the habitat would improve nesting and brood-rearing habitat.

Approximately 1,040 acres of habitat are proposed for sale or exchange. Each parcel would be evaluated as to its importance to the local sage grouse population. All habitat crucial to the sage grouse population will be retained in federal ownership.

Environmental Consequences

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Sensitive Animal Species

Columbian Sharp-tailed Grouse

The slight improvement in this habitat would occur in the northern regions of the resource area. Currently, 45% of the habitat is in poor condition. This is due mainly because of medusahead wildrye invasion. Due to reduced grazing pressure these areas would improve.

Approximately 330 acres of seedings are proposed in this habitat. The areas would have to be evaluated to assure that no seeding would destroy a dancing ground. The seedings should improve nesting and brood-rearing cover.

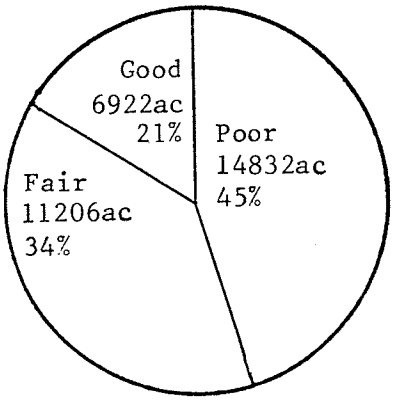
The proposed land transfer of 360 acres could have negative impacts if a local population is using the area or a dancing ground is located nearby.

Approximately 4,200 acres in the Sage Creek allotment would be designated and managed as an ACEC. The Sage Creek allotment would be inventoried for vegetative production and livestock use adjustments would be pursued and monitored to benefit sharp-tailed grouse. Livestock use adjustments would improve sharp-tailed habitat and should stimulate population growth.

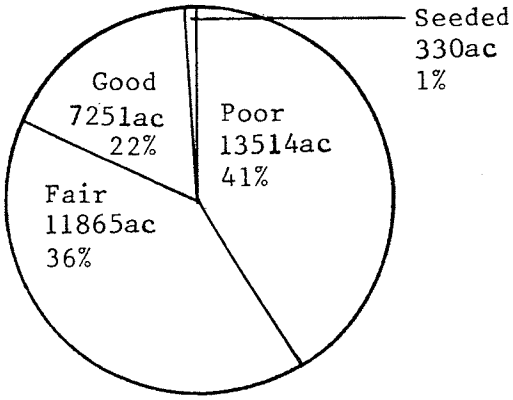
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Columbian Sharp-tailed Grouse

Existing Situation



End of 20 Years



Long-billed Curlew

All proposed seedings in this alternative would have negative impacts on breeding curlews. The physical structure of most grass species is too high and dense to be used as nesting habitat.

Approximately 760 acres of curlew habitat is proposed for sale or exchange. These areas would be reviewed to evaluate any impacts on local curlew populations. Crucial habitat will be retained in federal ownership.

The proposed Long-billed Curlew ACEC would contain approximately 61,000 acres of public land. These lands would continue to be managed to provide nesting and breeding habitat for 1,000 pairs of breeding curlews.

Birds of Prey

This alternative would generally improve habitat conditions for raptors in the Birds of Prey area through ORV restrictions.

Livestock

Under this alternative initial forage levels would start at 66,257 AUMs which is a small decrease from the present five year average license use of 66,424 AUMs. This decrease is due to existing land transfers and desert land entry applications currently being processed.

Over the long term (20 year projection) losses of 14,382 acres to land transfers out of federal ownership account for a reduction of 2,531 AUMs. An additional 162 AUMs would be lost to special designation, historic, and cultural withdrawals of 915 acres.

Further reductions to provide forage for big game winter and summer range account for an additional loss of 2,729 AUMs over the long term. In total, 5,422 AUMs would be lost under this alternative.

In the short term (5 years) with approximately 1,700 AUMs produced on 5,000 acres of seedings, the resulting available forage level would reach approximately 68,000 AUMs. This would be a 2% increase from the present five year average license use.

Over the long term seedings of 18,279 acres are expected to produce 6,097 AUMs. Installation of improvements (water systems, fencing) along with increased livestock management practices on approximately 66,800 acres of native range are expected to increase forage production an additional 3,433 AUMs. Total forage production is expected to reach 70,536 AUMs over the long term. This represents a 6% increase over the present five year average license use.

In the long term analysis of range improvements and land treatment, AUMs lost to transfers, special designation areas, and wildlife forage were considered removed prior to addition of new forage generated.

Impacts are allotment specific and resulting AUM levels are shown in Appendix F.

Trend information is not available at present. Monitoring studies will be used to adjust stocking levels on allotments. Twelve new allotment management plans will be established along with revising existing plans (where necessary) to increase livestock management and improve range conditions. On other allotments data presented in Appendix E will be used as baseline information in prioritizing management and monitoring efforts to improve range condition. Annual grass ranges (medusahead/cheatgrass) will receive high priority land treatment and/or livestock management efforts to restore perennial grasses.

Stock driveways would be eliminated on 22,237 acres, continued on 40,763 acres, and added on 627 acres for a total of 41,390 acres available.

Wild Horses

The West Crane wild horse herd would be removed from the West Crane Allotment.

The Four-Mile wild horse herd would be maintained at 20 head. The livestock AUM reduction of 424 AUMs for maintenance of range condition which has been in effect since 1977 would continue.

LANDS AND REALTY RESOURCES

Lands

Land transfer would consist of 563 acres for sale, 10,107 acres for sale or exchange, 6,374 acres for exchange, and 560 acres for Desert Land Entry for a total of 17,604 acres.

Of the lands identified for sale, 80 acres would be a sanitary landfill for Ada County, 320 acres for a sanitary landfill site for Canyon County, and 160 acres already under R&PP lease to the Parma Rod and Gun Club would be patented. The remaining three acres are scattered occupancy and agricultural trespass parcels that have been surveyed and lotted. Transfer of land by sale would generate approximately $38,000 based on a current appraisal for the 80 acres to be sold to Ada County, estimates of the value for the 320 acre parcel to Canyon County, the small parcels that total 3 acres, and the 160 acres for the Parma Rod and Gun Club.

The lands proposed for transfer by sale or exchange are generally small isolated parcels that appear to meet the disposal criteria in Section 203(a)(1) of FLPMA. Their disposal would reduce problem management areas and/or consolidate land ownership patterns, thereby improving management and reducing management costs. The larger parcels would be examined for exchange possibilities before sale is considered, although any parcel would be available for exchange.

There are three exchange proposals pending in the resource area being considered by this plan. They are referred to as the Brownlee, Little and Henggeler exchanges. The Brownlee exchange is a State proposal to acquire 6,251 acres of public land for 6,171 acres of State land. The exchange would consolidate State and public lands and would improve management efficiency for both governments.

The Little exchange is a private proposal to acquire 120 acres of public land for 160 acres of private land. The offered private land is identified for acquisition in the Boise Front MFP to facilitate watershed and grazing management. Action on this proposal has been initiated and will continue through development of this RMP.

The Henggeler proposal is to exchange 14 acres of private land for 83 acres of public land. The 80 acre parcel selected is in the curlew area and will be retained. Another parcel may be selected from the proposed sale or exchange lands or from lands proposed for disposal under DLE that are relinquished or rejected. The acquisition of the private land would provide access to the Snake River in an area with virtually no public access and would place the remainder of Crow Island in public ownership.

Land transfer for agricultural use (Desert Land Entry) would result in a few additional trespass cases, but because of the limited number of acres to be transferred under this category, it would not be a significant increase. The average administrative cost for a trespass case is $1,250, resulting in increased costs of approximately $2,500 on an estimated two trespass cases.

Rights-of-Ways

Overhead, surface and/or subsurface rights-of-way would be restricted on 6,696 acres of public land due to conflicts with candidate or sensitive plants, significant cultural or recreation sites. The areas precluded or restricted are generally small acreages and there would be few conflicts with major utility rights-of-way since rights-of-way could be rerouted slightly to avoid these areas. Hydroelectric development would be precluded on 8 miles of the South Fork Payette River.

Withdrawals

Of the lands presently withdrawn for livestock driveways (approximately 63,000 acres), 22,237 acres would be revoked from the withdrawals, 40,763 would continue, and 627 acres would be added.

There is only one C&MU classification in the resource area encompassing 37.31 acres. This parcel was acquired under a Section 8 (Taylor Grazing Act) exchange. When the order opening the lands to the administration of the public land laws was published, a C&MU classification was placed on it at the same time, precluding disposal. This parcel contains no unique resources and revoking the classification would put it in the same status of general retention as the other public lands adjacent to it.

Additional withdrawals may be forthcoming if Congress designates the Payette River as a Wild and Scenic River. The final acreage withdrawn may be more or less than that proposed in this plan.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

Cultural resource sites in critical need of special management (Grey's Creek, Indian Creek, Milk Creek, Cabin Creek, Mineral, Quartzburg, Centerville and Placerville) would continue to be protected by BLM standard operating procedures and would receive additional protection through nomination and acceptance to the National Register of Historic Places (NRHP). The effects of livestock trampling would be mitigated through the installation of protective fencing and the effects of erosion would be diminished by the removal of livestock from the immediate site area, and the improvement of riparian habitat.

Cultural Resource Management Plans (CRMP) prepared for these sites will detail additional inventory needs and monitoring schedules to determine the rate of deterioration, impacts of vandalism, etc.

Paleontologic Resources

The impacts from this alternative can not be fully analyzed since the paleontologic inventory for the resource area is not complete. The greatest possible impacts would be on the 17,524 acres proposed for transfer from federal ownership. Even with paleontologic clearances, unknown scientifically significant fossils could be lost or destroyed or closed off from scientific study.

RECREATION RESOURCES

Recreation

Based on the State Comprehensive Outdoor Recreation Plan (1983) data, the overall demand for recreation opportunities in the Cascade Resource Area is expected to increase 54-78% by the year 2000. This would result in demand increasing from the current 622,000 activity occasions to approximately 1,034,000 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 recreational activities would vary somewhat between alternatives, but overall demand throughout the Cascade Resource Area would be unaffected by any of the alternatives.

There would be 244,118 acres open to unrestricted ORV use (except competitive races) 241,215 acres limited and 2,133 acres closed to ORV use. Most of the limited use areas fall into the "high erosion hazard" (HEH) category of soils and topography. The limited areas include the following acreages: Boise Front SRMA (11,995), Oxbow-Brownlee (39,779), Payette River Corridor (18,984), Black Canyon Planning Unit (65,000), Birds of Prey Natural Area (640), sharp-tailed grouse ACEC (4,200), identified cultural sites (2,020), developed recreation sites (12), and candidate and sensitive plant sites (1,000). The remaining limited acres fall into the "high erosion hazard" (HEH) category.

The closed areas include the following acreages: research natural areas and/or candidate and sensitive plant sites (1,545), developed recreation sites (36), Silica Sands area (40), and the Clay Peak Motorcycle Park buffer zone (512).

ORV use in the Boise Front SRMA is currently limited to designated roads and trails. Giving this area ACEC status would not effect this designation. Rehabilitation of the approximately 10 miles of currently closed roads and trails on the Boise Front might be expected to decrease unauthorized ORV use by as much as 15-20% (BLM lands only), with proportionate improvements in the visual and aesthetic qualities and watershed integrity.

Impacts on ORV recreation by limiting use in the Oxbow-Brownlee and Payette River Corridor SRMAs, cultural sites, recreation sites, the sharp-tailed grouse ACEC and most T&E sites are expected to be minimal as very little use off roads and trails in these areas is occurring now or is expected to occur in the near future (snowmobiles excepted). However, the transfer (T1) of 320 acres in the Pickles Butte ORV play area would reduce the play area to 180 acres of public lands. ORV use would most likely continue on the transferred lands until the County started landfill activity. As the landfill areas become reclaimed, ORV activity would most likely be displaced.

Limitations on 65,000 acres of public land in the Black Canyon Planning Unit are currently in effect with apparently minimal impact on recreational ORV use.

Limiting 900 acres in the Little Gem Cycle Park can be accomplished by rerouting existing trails so that ORV use will not be impacted.

An annual seasonal closure of approximately four miles of roads and trails for Boise Front winter deer habitat is currently in effect with apparently minimal impact to recreational ORV use.

Impacts on ORV recreation by closing 2,133 acres of developed recreation sites, T&E sites, research natural areas and a buffer zone are expected to

be minimal as very little or no ORV use is occurring in these areas now or expected to occur in the near future.

A projected increase in big game numbers (deer-33%, elk-22%) through improved habitat is expected to increase big game hunting opportunity by the same amount. Opportunities for nonconsumptive uses would also increase.

Construction of 68 miles of timber harvest access roads (3.4 miles annually for 20 years) would increase recreational access into these areas on those roads that would remain open for timber management purposes.

Lands available for dispersed recreation would be reduced by the 17,524 acres identified for disposal.

Eight miles and a 2,600 acre corridor of BLM land along the South Fork of the Payette River would be proposed for Wild and Scenic Rivers study.

The Box Creek WSA (440 acres) will be managed under wilderness IMP guidelines pending Congressional action. Under IMP, ORV use in the area will be designated as "limited to existing roads and trails." As there are no existing roads and trails in the area, and minor recreational use occurring within the area, the effects of this action would be negligible. If Congress does not designate the WSA as wilderness, no other special designation of the area will be considered.

Visual

More intensive management of the Boise Front SRMA (12,000 acres) could result in positive effects in the visual resource of the area by as much as 10-15%.

Improved riparian habitat on 155 miles of rivers and streams would improve the visual resource in these locations.

Harvesting approximately 1.7 MMBF of timber, and resulting access roads, may negatively impact the visual resource. Less obtrusive selective cutting will be the primary harvest method, although some clearcuts (not to exceed 40 acres each) may be proposed. All timber sales will be examined for visual impacts on a case-by-case basis.

Increased wildlife improvement projects could negatively impact the visual resource. Thirty miles of new fences are planned, as well as approximately 15,600 acres of shrub planting. With the use of standard mitigation measures on these projects, no significant adverse impacts are expected.

Project development in the range program could negatively impact the visual resource. Pipelines will be constructed using a ripper to bury the pipe, thus minimizing the adverse impacts. Other range developments should not adversely impact visual quality because the standard operating procedures for construction are expected to effectively mitigate potential impacts. Land treatments that are designed with feathered edges, multiple species seed mixtures and other mitigation measures should not cause significant adverse impacts.

Transferring 17,524 acres of land from public ownership could result in impacts to the visual resource. Acres transferred from federal ownership by sale or exchange, would no longer be under BLM control and visual quality would depend upon the management implemented by the new owner. Example: agricultural development would transform the areas' scenic views from one of sagebrush/grass dominance to one dominated by cropland and farming. The visual quality of transferred land that is maintained primarily for grazing purposes would not change significantly from present conditions.

MINERAL RESOURCES

Leasables

Oil and Gas

Approximately 100,000 acres of BLM land within this resource area have been classified as prospectively valuable for oil and gas. Considering a 12 month availability 1,200,000 acre/months of access exist. About 19,000 acres would continue to be affected by crucial deer winter range stipulations (closed 12/1 to 4/30) and 5,000 acres would continue to be closed from 2/15 to 6/30 to protect bird nesting and breeding areas. This would be a total protective closure of 117,500 acre months or approximately 10% of the available access. Since weather and soil conditions normally do not allow off-road activities before 4/15 each year the impact from the stipulations would not be significant.

The "no surface occupancy" stipulations under this alternative total 3,549 acres. The lands involved are generally small and outside of the lands identified as prospectively valuable for oil and gas. The impacts on the availability of lands for oil or gas leasing and development is therefore insignificant.

Since the lands identified for transfer would have oil and gas reserved in areas classified as prospectively valuable for oil and gas, the impact of land transfers would be insignificant.

Based on the lack of any commercial oil or gas wells in Idaho, the 35 dry holes in the resource area, the low potential of the area, and the above analysis, the overall impacts of oil or gas leasing and development would be insignificant.

Geothermal

Approximately 94% of the resource area would remain open for leasing under this alternative. The areas closed to geothermal leasing would be the existing 31,177 acres of withdrawn lands. Impacts from time stipulations would not be significant because the periods of closure generally match the period that has poor weather and soil conditions which limit access.

The "no surface occupancy" stipulations under this alternative total 3,549 acres. The lands involved are generally small parcels and represent a very small percentage of the total prospectively valuable area.

Environmental Consequences

Although various lands within the resource area have been classified as prospectively valuable for geothermal resources, the only KGRA within the area has been declassified and there are no geothermal leases within the whole resource area.

Based on the lack of any commercial geothermal electric projects in Idaho, the lack of any known large reservoirs in the area, the declining interest in geothermal resources and the above analysis, the overall impacts on the availability of geothermal leases and development would be insignificant.

Locatables

The resource area would have 94% of its lands open to mining activity. Those areas closed to mining would be the existing withdrawals of 31,177 acres plus an additional 8 acres for cultural site protection.

A total of 17,604 acres of land are proposed for transfer from federal ownership under this alternative. No lands having valid mining claims or mineral potential would be transferred from federal ownership unless they are patented under the mining laws, the mineral estate is purchased at fair market value, or lands of equal overall values are obtained. The impact from land transfer on the availability of lands for mineral location and development would, therefore, be considered insignificant.

An analysis of the location of and activity on the existing mining claims and areas of mineral interest compared to an analysis of the actions proposed under this alternative indicates that there would not be any significant impacts on the availability of locatable minerals.

Salables

Mineral Materials

Mineral material needs within the resource area have not been very high except in the Weiser area. No increase in need or decrease in overall availability would result from the actions under this alternative. Some existing pits will, however, be depleted within the timespan of this plan.

The impacts from this alternative on mineral material resources would be insignificant.

FOREST RESOURCES

Timber

The total acres of commercial forest land would be reduced by 23 CFL set aside acres to 26,663 acres.

The impacts of losing this 23 acres of commercial forest land acres would be minimal. The annual allowable cut would be approximately 1.7 million board feet.

FIRE MANAGEMENT

The fire occurrence in the Cascade Resource Area is approximately 40 fires per year with a size of about 221 acres per fire per year. Agricultural development, or transfer acreages, about 3-4% of the total acreages, would gradually increase the number of fires and the cost of fire suppression. Fire management costs would increase approximately 3% to $112,000 per year in this alternative.

This would be a gradual reduction in the annual acreage of wildfires burned, because of the effects of fuel breaks, and because of rehabilitation and greenstripping effects, including reseeding of fire resistance species, which would retard or reduce the larger fires. Refer to Resource Management Guidelines for Fire.

ECONOMICS

Crop Agriculture

With this alternative there would be 560 acres of agricultural development. The total annual crop sales would be $542,600.

This level of annual sales would generate direct earnings of $207,800. This would represent 0.2% of the RMP area farm earnings. The total earnings that would be generated, including interindustry interactions and household spending (the multiplier effect) would be $529,700. This would be 0.02% of the total RMP area 1983 earnings.

The direct earnings would lead to a gain in farm employment of 7 jobs. This would be 0.2% of the 1983 farm wage and salary employment. The total earnings gain would lead to an increase of 24 jobs. This would be 0.02% of the RMP area 1983 wage and salary employment.

Livestock

The initial livestock forage level would be 66,307 AUMs. This would support 5,526 animal units which would generate earnings of $2.7 million. This would be 11% of the total permittee earnings, 6% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be $7.2 million. This would be 0.3% of total RMP area 1983 earnings.

The direct earnings would generate 96 jobs. This would be 2.8% of the 1983 farm wage and salary employment. The total earnings would generate 333 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This initial stocking level represents a capital value of between $3.7 and $16.6 million.

The 20-year livestock forage level would be 70,538 AUMs. This would support 5,878 animal units which would generate earnings of $2.9 million. This would be 11% of total permittee earnings, 7% of the RMP area meat

animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be $7.7 million. This would be 0.3% of total RMP area 1983 earnings.

The direct earnings would generate 104 jobs. This would be 3% of the 1983 farm wage and salary employment. The total earnings would generate 357 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This 20-year stocking level represents a capital value of between $3.9 and $17.6 million.

Recreation

Impacts would be the same as for Alternative A.

Lumber and Wood Products

Approximately 1.7 million board feet of wood products would be harvested annually with this alternative. This would generate earnings of $387,000. This would be 0.2% of the RMP area durable manufacturing 1983 earnings. The total earnings (including the multiplier effect) would be $926,900. This would be 0.04% of the total RMP 1983 earnings.

The harvest level would lead to 18 jobs (Youngblood 1983). This would be 0.1% of the 1983 manufacturing wage and salary employment. Total employment (including the multiplier effect) would be 46. This would be 0.04% of the total 1983 RMP area wage and salary employment.

Management Costs

Range and wildlife improvements associated with this alternative would cost approximately $1.8 million.

Summary

Total crop agriculture earnings and employment would increase by $529,700 and 24 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of $7.2 million and 333 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of $7.7 million and employment of 357 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be $926,900 and 46 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be $1.8 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 difference 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 Chapter 2.

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 lost.

The Preferred Alternative (Alternative E) would result in the following irreversible or irretrievable commitments of resources:

An irretrievable loss of soil would occur on 560 acres of lands put into agricultural production.

Wildlife habitat could be modified on up to 17,604 acres of transferred lands converted to other uses. Species most affected include elk, mule deer, sage grouse, and long-billed curlew. These areas would be committed for the foreseeable future.

Approximately 2,531 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 Cascade Resource Management Plan/Environmental Impact Statement (RMP/EIS) was prepared by an interdisciplinary team with expertise in range management, wildlife, recreation, lands, economics, soils, forestry, watershed, cultural resources, minerals, and fire management. The list of preparers is at the end of this chapter.

The planning process began in November 1983 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 Cascade RMP/EIS.

Issue Identification and Inventory Stage

November 25, 1983	Notice of Intent to prepare Resource Management Plan (RMP) published in Federal Register.
January 26, 1984	RMP mailout sent to 435 agencies, organizations, groups, and individuals announcing the beginning of the planning process and soliciting the identification of issues and planning criteria. Approximately 93 people responded by prioritizing and identifying issues.
February 6-29, 1984	Held meetings in Cambridge, Emmett, Payette, Weiser, Boise and Caldwell for issue identification.
March 12-23, 1984	District Office Staff meetings - analyzed results of issue and criteria identification process from mailouts and six public meetings.
September 17, 1984	RMP mailout and news release issued to announce results of public input.
November 26, 1985	State Director briefing on Alternatives.
November 30, 1985	State Office Coordination meeting on update policy for RMP.

LIST OF PREPARERS

Name	Responsibility	Education	Experience
Delores Blom	Lands	Business Major - Boise State University	10 yr; Realty Specialist-BLM
George Farrow	Recreation, Visual	B.S. Resource Management - Oregon State University Post Graduate - Idaho State University	2 yr, Timber Management-USFS 5 yr, Fire Management-BLM 8 yr, Outdoor Recreation Planner-BLM
Stan Frazier	Economics	B.S. Agricultural Economics - Oregon State University	12 yr, Economist-BLM
Richard Geier	Project Leader/Cascade Area Manager	B.S. Forestry - University of Maine	1 yr, Forester-BIA 8 yr, Forester-BLM 16 yr, Outdoor Recreation Planner-BLM 4 yr, Area Manager-BLM
Ed Gheen	Livestock, Wild Horses	B.S. Wildlife Management - University of Idaho	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. 4 yr, Fisheries/Wildlife Biologist-BLM 2 yr, Range Conservationist-BLM
Galen Green	Fire Management	B.S. Range & Forest Mgm't. - Colorado State University	9 yr, Forester-BLM 4 yr, Fire Ecologist-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 5 yr, Planning Coordinator-BLM
Jim Jones	Forestry	B.S. Forest Management - Washington State University	17 yr, Forester-BLM
Sam Mattise	Wildlife	B.S. Wildlife Biology - Panhandle State University M.S. Wildlife Biology - South Dakota State University	9 yr, Wildlife Biologist-BLM
Fred Minckler	Team Leader	B.S. Fishery Management, B.S. Wildlife Management - Utah State University	1 yr, Recreation/Forestry Technician-BLM 1 yr, Soil Conservation Technician-SCS 4 yr, Fisheries Biologist-NMFS 2 yr, Fisheries Biologist-BLM 7 yr, Environmental Coordinator-BLM
Pat Olmstead	Water Quality, Aquatic Habitat, Riparian Habitat	B.S. Fishery Biology - Michigan State University	5 yr, Aquatic Habitat Biologist-BLM 5 yr, Fisheries Biologist-BLM
Roger Rosentreter	Threatened and Endangered Plants	B.A. Botany - University of Montana M.A. Biology - Clark Univ. Ph.D. Botanty - University of Montana	6 yr, Seasonal Range Technician-BLM 2 yr, Botanist-BLM
Bill Rush	ADP, Remote Sensing, Geographic Information Systems	B.S. Wildland Recreation Management - University of Idaho	4 yr, Forestry Technician-USFS 3 yr, Forester-BLM 5 yr, Natural Resource Specialist-BLM
Paul Seronko	Soils, Air, Vegetation	B.S. Soil Science - University of Wisconsin	2 yr, Soil Specialist-Wyoming State 7 yr, Soil Scientist-BLM
Teresa Thomason	Word Processing	Oregon State University, Kauai Community College, Boise State University	8 yr, Editorial Assistant-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 6 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 5 yr, Resource Area Archaeologist-BLM

Mailing List

The Draft RMP/EIS was 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 Richard Stallings

State:
- Governor John Evans
- Senator James Risch
- Senator Walt Yarborough
- Representative Gerry Montgomery
- Representative Lyman Winchester

Local:
- Affected Cities and Counties

Federal Agencies

Department of Agriculture:
- U.S. Forest Service
- U.S. Soil Conservation Service

Department of Defense:
- U.S. Air Force
- Idaho National Guard

Department of Energy:
- Bonneville Power Administration
- Federal Energy Regulatory Commission

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 Public Utilities Commission
Idaho State Historic Preservation Office
Idaho Outfitters and Guides Board
Office of the Governor

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 Museum of Natural History
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 Whitewater Association
Idaho Wildlife Federation
Idaho Woolgrowers Association
Institute for High Desert Studies
League of Women Voters
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
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
Cascade Raft Company
TEXACO
Affected grazing permittees
Other businesses and industries
Colleges and universities
Desert Land Entry applicants
Other individuals

PUBLIC REVIEW AND COMMENT

During the period August 21, 1986 through November 28, 1986, the Cascade Draft Resource Management Plan and Environmental Impact Statement (DRMP/EIS) was made available to the public for review and comment. The document was sent to nearly 1,000 individuals, organizations and agencies. The Boise District received 42 letters commenting on the proposals in the Draft RMP/EIS. Public hearings were not held.

Of the 42 comment letters received, 13 were from government agencies/institutions, 10 from Idaho individuals, 7 from industry, 7 from recreation/conservation/environmental interest organizations, 2 from Cascade Resource Area livestock permittees, and 1 each from an elected official and an out of state individual.

There was no overwhelming support for any one particular alternative. Twenty-four (24) letters made no mention of which alternative they supported although they gave specific comments and reasons for various aspects of the preferred alternative or for developing a new alternative. Eight (8) letters favored Alternative C, 5 letters favored Alternative E and 1 letter favored Alternative D.

The areas receiving the most attention were the actions relating to ORV management, fire management, timber harvest, rangeland management, Payette River recommendations and the adequacy of the DRMP/EIS regarding NEPA regulations.

The concerns about ORV management on public lands were reflected in a number of letters. The concerns related mainly to the protection of various resources (sensitive and candidate plants and watershed) and closure of additional public lands.

The large amount of public lands in the Cascade Resource Area affected by fire during 1986 resulted in a number of comments relating to fire impacts and actions that BLM should take. Proposals ranged from recommending the burned areas for ACEC designation to a complete revision of the planning document. Several commentors were concerned with the rehabilitation of lands impacted by fire and that reseeding include mixtures of native forbs and grasses.

The volume of timber harvest proposed generated several comments. Commentors suggested that the volume was too low in light of the production capability and the need to sustain the economic and social base of the communities within the resource area.

The amount of the resource area's rangelands in poor ecological condition was also addressed. In particular, the land treatment proposals and a concern that the rangelands are not expected to improve very much. Doubt was expressed about BLM's commitment to monitoring and to improving the public lands.

Support for having the Payette River included in the National Wild and Scenic River system was expressed by a number of commentors. Several comments suggested that the RMP was the vehicle to make a decision rather than a recommendation. Several other comments suggested the addition of the North Fork of the Payette River to the BLM recommendation.

The final area receiving specific comments related to the adequacy of the document itself. These comments suggested the BLM had some procedural discrepancies, that the planning criteria were inadequate, and that anticipated budgets and proposals (monitoring) were unrealistic.

The above summary of public comments contain the major thrust of the public concerns regarding the planning document proposals. The specific comments were analyzed by the interdisciplinary team. Changes made as a result of public comment are incorporated in the proposed plan (Alternative E) and the final EIS. Responses to specific substantive comments are contained in the following section.

List of Comments Received on the Draft RMP/EIS

Log #	Name	Location	Representing
1	George Baggley	Boise, ID	Self
2	Mark Davis	Boise, ID	Self
3	Ronald L. Stockhoff	Klamath Falls, OR	Oregon Council of Rock & Mineral Clubs
4*	Thomas J. Green	Boise, ID	Idaho State Historical Society, State Historic Preservation Officer
5*	D'Arcy P. Bannister	Spokane, WA	USDI, Bureau of Mines
6	Kenneth Thomasson	Seattle, WA	USDOT, Federal Aviation Administration
7*	Andrew G. Anderson	Boise, ID	Idaho Petroleum Council
8	William A. Akersten	Pocatello, ID	Idaho State University, Idaho Museum of Natural History
9	Ken Robison	Boise, ID	State Representative, District 19
10*	John P. Wolflin	Boise, ID	USDI, Fish & Wildlife Service
11*	Richard L. Winters	Seattle, WA	USDI, National Park Service
12*	Charles A. Wellner	Moscow, ID	Idaho Natural Areas Coordinating Committee
13	Paul Poorman	Meridian, ID	Self
14	John R. Swanson	Minneapolis, MN	Self
15	John P. Butt	Ogden, UT	USDA, Forest Service
16*	Douglass A. North	Seattle, WA	Friends of Whitewater
17*	Alice Frell Benitez	Denver, CO	Rocky Mountain Oil & Gas Association
18	Frederick R. Ward & Janet D. Ward	Boise, ID	Self
19	Dave Van De Graaff	Boise, ID	Self

List of Comments Received on the Draft RMP/EIS (continued)

Log #	Name	Location	Representing
20*	Edwin W. Stockly	Boise, ID	Idaho Natural Resources Legal Foundation
21*	John P. Kwader	McCall, ID	Boise Cascade
22*	John Bender	Horseshoe Bend, ID	Boise Cascade
23*	Erik Fisher	Boise, ID	Self
24*	Russell W. Heughins	Meridian, ID	Idaho Wildlife Federation
25	Weldon Branch	Midvale, ID	Branch Key Hole Ranch
26	Grant Simonds	Boise, ID	Idaho Outfitters & Guides Association
27*	E. Dean Tisdale	Boise, ID	State of Idaho, Dept. of Transportation
28*	Neil W. Allen	Denver, Co	AMOCO Production Company
29*	James F. Devine	Reston, VA	USDI, Geological Survey
30*	Donald R. Stockton	Boise, ID	State of Idaho, Dept. of Lands
31	Robert T. Coats	New Meadows, ID	Evergreen Forest Products
32*	James S. Riley	Couer d'Alene, ID	Intermountain Forest Industry Association
33*	Edwina Allen	Boise, ID	Self
34*	Kay Hummel	Boise, ID	Self
35*	Jeffrey C. Fereday	Boise, ID	Self
36	Lynn House	Cascade, ID	Boise Cascade
37*	Stacy Gebhards	Boise, ID	State of Idaho, Dept. of Fish & Game
38*	Robert S. Burd	Seattle, WA	Environmental Protection Agency
39*	Stanley N. Hobson	Boise, ID	USDA, Soil Conservation Service
40*	Brad Little	Emmett, ID	Little Land & Livestock Company
41*	Bob Moseley	Moscow, ID	The Nature Conservancy
42*	Sheldon Bluestein	Boise, ID	Committee for Idaho's High Desert

*Letters containing substantive comments that are responded to in this document.

RESPONSE TO COMMENTS RECEIVED

Response 4.1 - We agree that the statement you refer to on page 56 of the draft document that "All significant cultural sites (as determined by the SHPO and National Advisory Council on Historic Preservation) will be retained in federal ownership" is overly restrictive. It was also inaccurate since it did not express our intentions. It has been revised and included in the final statement in this section. The preceeding statement regarding abandonment of projects affecting significant cultural sites has also been revised.

Response 4.2 - Regarding your concern for Class III inventories on BLM lands along the upper end of Brownlee Reservoir, Crane Creek, and the Boise Basin, present budgets preclude conducting large scale, intensive cultural resource inventories solely for the purpose of determining site condition and/or National Register eligibility. Such inventories are not precluded by this land use plan and will be considered in the future. We will respond to reports of vandalism and would appreciate any information you may have or obtain concerning these activities.

Response 5.1 - We agree that the recommended data display of various levels of mineral favorability and a corresponding analysis of access limitations would be useful. However, since an intensive inventory of locatable or salable minerals has not been completed, we do not have the information needed to develop this type of analysis.

Response 7.1 - The environmental analysis referred to is a review of existing information done to determine what general and specific stipulations will be applied to a lease. This process is normally completed under the Categorical Exclusion provisions of the National Environmental Policy Act (NEPA) and in accordance with 43 CFR 3109 and 43 CFR 3204. Information contained in the District Oil and Gas and Geothermal Environmental Assessments and in this land use plan will be the primary information sources used to determine the applicable stipulations. This Bureau-wide process has proven to be efficient in terms of time and money and effective in protecting public resources.

Response 7.2 - Our information indicates that there are no locations within the Cascade Resource Area which contain significant potential for energy or mineral resources. Map 3-9 has been revised (Maps 3-9 through 3-12) to better illustrate the available information on energy and mineral resources. Map 9 has been prepared to indicate areas where special stipulations will be applied to leases. Since the number of leases pending or currently being held continually changes and are relatively few and is of limited value in this land use planning process, they have not been included in this document.

Response 7.3 - See Response 7.1. We will consider all information available to us at the appropriate time during the process concerning the exploration and development of energy and mineral resources.

Response 7.4 - Map 3-9 has been revised (Maps 3-9 through 3-12) to better illustrate the available information on energy and mineral

resources. Map 9 has been prepared to indicate areas where special stipulations would apply. Since the entire area classified as prospectively valuable is considered to have low potential for energy and mineral resources and the alternatives differ only slightly concerning energy and mineral development, we feel that a matrix is not essential in this land use planning process and has not been included. Areas currently withdrawn are identified in Appendix S.

Response 10.1 - The text has been revised to identify the Idaho ground squirrel and long-billed curlew as candidate species. The Idaho ground squirrel was mentioned and the long-billed curlew was addressed throughout the document but were identified as sensitive species.

Response 10.2 - The text has been revised to reflect this information. Spelling errors have also been corrected. *Carex aboriginum* is not known to occur on BLM lands but was historically located on private lands.

Response 10.3 - The level of mercury verified is the result of past mining/processing activity done on patented land for which BLM has no control or authority. It is anticipated that mining activity will continue on the patented lands in the future. Although there is no current mining activity (exploration or development) on adjacent BLM land, some activity could occur in the future. The BLM cannot address the impacts of possible activities until a claim has been filed and a preliminary mining plan has been filed. At that time, the BLM would address potential impacts. The responsibility for monitoring downstream impacts or conducting studies rest with those state and federal agencies charged with those roles.

Response 11.1 - We do not feel that our Cascade (RMP) land use planning process sufficiently fulfills the study requirements for recommendations to Congress that either the North Fork or the South Fork of the Payette River be designated as a component of the Wild and Scenic Rivers System. Our guidance for completing land use plans that involve rivers on the nation-wide inventory is to either recommend further study for possible congressional designation or to make no recommendation for further study.

Administration and management of the Payette River and adjacent lands is a complex issue because of the various alternatives and interests (State of Idaho, Bureau of Reclamation, Federal Energy Regulatory Commission, U.S. Forest Service, and BLM). For this reason we believe that the river should receive further formal study by the appropriate State and Federal agencies and the preparation of a joint legislative study/EIS.

If Congress authorizes a study of any segment of the Payette River, the study recommendations will be forwarded to Congress for their action.

We will continue to manage public lands along both the North Fork and South Fork of the Payette River as though they were components of the Wild and Scenic Rivers System pending further congressional action.

Response 12.1 - We have reevaluated the Paraphyllum Rock area as an RNA and agree that it does not meet the criteria. Since it does not meet the criteria, and protection of the sensitive species is a result of the management actions (use limitations) rather than the designation, we have

dropped the RNA designation for this area in all alternatives. We do, however, feel that special management is appropriate for this area to protect the sensitive species found here and have retained the use limitations in all alternatives, including the preferred alternative, as identified in the draft plan/EIS.

Response 12.2 - The proposed Buckwheat Flats RNA has been expanded from 60 to 200 acres to include the referenced Sage Creek area as an RNA. The expanded area now contains a better example of the *Eriogonum thymoides* plant community.

Response 12.3 - The proposed Summer Creek RNA has been expanded from 200 to 240 acres in response to this suggestion.

Response 12.4 - The text has been revised to more accurately and clearly identify our objectives and rationale for managing these areas and the occurrence of plant species.

Response 16.1 - See Response 11.1.

Response 17.1 - See Response 7.1.

Response 17.2 - See Response 7.2.

Response 17.3 - See Response 7.3.

Response 17.4 - See Response 7.4.

Response 20.1 - The Environmental Protection Agency and our internal review of the document did not identify any deficiency relating to the cumulative impacts of proposed actions. Our analysis includes actions anticipated in the reasonably foreseeable future for the life of the plan. We feel that our document does conform to the CEQ regulations for implementing the procedural provisions of NEPA.

Response 20.2 - The text has been revised to indicate that the correct number of miles for the water pipelines proposed for livestock management is 15. This total of 15 miles does not include the short sections of laterals which would be extended away from the mainlines. The exact location of these laterals will be addressed in site specific analysis.

Water would be taken from springs or wells and piped to areas currently void of water sources but that are used to some degree by livestock. Water developments would be designed to benefit both livestock and wildlife. The primary purpose for the water developments is to improve livestock distribution and reduce overutilization of range resources around existing water sources. The water developments are necessary to implement the rest rotation grazing systems in the affected allotments. Wildlife would also benefit by having additional water sources which would help expand the use of available habitat. The areas proposed for water developments would not necessarily be reseeded. The majority of the proposed pipelines are located in the area east of Crane Creek Reservoir. Refer to Map 7 for locations of proposed pipelines and land treatments. The cumulative impacts of the proposed livestock management program on wildlife, including water

developments and seedings, have been analyzed and the conclusions have been identified in Chapter 4 for the affected wildlife species. The text has been revised to clarify that water developments and other projects have been included in the analyses.

Response 20.3 - The impacts of land transfers are discussed in Chapter 4 under each affected resource topic including soils, riparian habitat, aquatic/fisheries habitat, wildlife, livestock, recreation, minerals, and economics.

Response 20.4 - Management actions for the control of noxious weeds would remain the same for all alternatives and are discussed in the Resource Management Guidelines section of the document. The burning, discing and spraying referred to are actions that would be taken in conjunction with land treatments to benefit livestock. Burning and discing are also identified as actions that would be taken in conjunction with land treatments to benefit wildlife. The effects of these actions have been analyzed and are incorporated in the various affected resource sections in Chapter 4.

Response 20.5 - The planning criteria used during the various stages of the RMP planning process were developed with public input. The initial request soliciting public input on issues and outlining the public participation process (Notice of Intent to prepare an RMP/EIS) was published in the Federal Register on November 25, 1983. On January 26, 1984 mailouts were sent to over 400 entities announcing the six public meetings which were to be held in communities within the Cascade Resource Area during February, 1984 and requesting public input on issues and criteria. Following these public meetings and review of public comments received on issues and criteria, the final package of issues, management concerns, guidance, and criteria was prepared and sent to over 900 entities on our Cascade mailing list on September 17, 1984. This more detailed information, including criteria, is available for review at the District Office. We believe that we have complied with our planning regulations found at 43 CFR Part 1600.

Response 20.6 - We did consider future budget levels in developing both the proposed management actions and the proposed monitoring program. National and state level BLM reviews suggest that the anticipated budget levels needed to accomplish both the proposed management actions and proposed monitoring program are realistic.

Response 20.7 - The document discusses the impact that the wildfires had on the various resources in Chapter 3. It also identifies temporary special management actions that have been taken as a result of the fire. We feel that the objectives and proposed long-term land use decisions are still appropriate and anticipate only minor adjustments in site specific management actions needed to achieve short-term objectives.

Response 20.8 - The referenced area was analyzed in February 1987 by an interdisciplinary team of resource specialists, whose resources were affected by the 1986 wildfires, to determine if the area met the criteria required for ACEC designation. The conclusion of that analysis is that the area does not meet either of the two required criteria of relevance and

importance. Rehabilitation efforts have been initiated to stabilize the watershed resource and help speed the recovery of wildlife habitat. This area will receive special management attention during the life of the plan.

Response 21.1 - The annual harvest level of approximately 1 million board feet should not be used to equate any kind of an annual growth rate. This level of cut was based primarily on the administrative capacity to offer timber sales.

We agree that some of our lands, mainly those lands located in the McCall planning unit, are probably growing at a rate of 150 board feet/acre/year. However, most of our land in the Crane Creek planning unit is producing below that level.

According to our 1975 Forest Inventory, the Resource Area can support an annual allowable cut of approximately 1.7 million board feet without intensive management and approximately 2.9 million board feet with intensive management. We have revised our preferred alternative (Proposed Plan) to include an annual average harvest of 1.7 million board feet.

Response 22.1 - See Response 21.1.

Response 23.1 - In 1986, as required in the RMP/EIS process, all lands within the Cascade Resource Area were included in the Recreation Opportunity Spectrum (ROS) system analysis. The ROS analysis considers the following criteria:

1. Physical Setting - remoteness, size, and evidence of human use;

2. Social Setting - level and type of contact between individuals or groups which can be expected;

3. Managerial Setting - level and type of management services and facilities provided to support recreation, and the restrictions placed on peoples actions by the administering agency.

Based on the above criteria, the two areas you identified in your comment letter were placed into the category of "Roaded Natural."

In response to your comments, the ROS categories for the two areas that you identified were reevaluated. Our findings maintain that the Dodson Pass area is best classified as a "Roaded Natural" area. However, we do agree that due to overlap of the category criteria in the ROS system, a designation of "Semi-Primitive, Motorized" could be applied to the area between Crane Creek Reservoir and the Weiser River. In light of an expressed public need to maintain a natural area primarily for hiking, we propose redesignating the area in the vicinity of Crane Creek Reservoir, totaling 13,240 acres, from the ORV category of "Open" to the category of "Limited to Designated Roads and Trails" and have included it in our Proposed Plan (Preferred Alternative E).

The paucity of existing roads and trails in this area combined with steep, rocky terrain would be the primary limiting factors for increased

vehicular use. The majority of the ORV use that would likely occur in this area is that which is associated with livestock management conducted by permittees, which would be authorized as part of their grazing license, and ORV use for access by hunters during the hunting season. With the anticipated level of use from these activities, we feel that, in general, a semi-primitive experience would be available throughout most of the year in this area.

Response 24.1 - See Response 20.5.

Response 24.2 - See Response 20.7. Most of the areas that were burned by the 1986 wildfires were not identified for major projects or increases in AUMs for livestock. The major projects proposed were for wildlife habitat improvement. These projects are still proposed. The fire rehabilitation efforts include reseeding burned areas with shrub, grass, and forb mixtures that will help restore the crucial mule deer winter habitat that was burned. The fire rehabilitation efforts over the next five years to help restore that winter range for wildlife is in addition to the proposed land treatments identified in the proposed plan. All of these management actions will occur during the life of the plan. Wildlife use in the area will be related both to the success of the reseeding efforts and management of the wildlife population goals established and updated by the Idaho Department of Fish and Game.

Response 24.3 - See Response 20.1.

Response 24.4 - See Response 20.2.

Response 24.5 - See Response 20.3.

Response 24.6 - See Response 20.6.

Response 27.1 - The proposed plan does not include a proposal for the future transportation route referenced since the location of that route was not specifically identified during discussions between our Boise District staff and the Idaho Transportation Department (ITD) staff. We have been aware of your long range proposal for a route between Emmett and Mesa and will continue to work with you as more specific plans are developed. The BLM planning process allows for amendments to approved land use plans as new information becomes available or as new proposals are made which do not conform to the approved land use plan. A proposal to locate a transportation route in an identified avoidance area would be processed in accordance with these land use plan amendment procedures. The amendment process would require either an environmental assessment or an environmental impact statement depending on the severity of expected impacts the proposal would have on resource values or land use decisions.

Response 27.2 - Avoidance areas are areas where important and sensitive resource values have been identified. Additional areas may also be identified that contain important plant species or cultural or paleontological resource values. These areas would likely be small and would be identified through either inventories or site specific project clearances. The identified avoidance areas specifically preclude

rights-of-way for overhead, surface, or subsurface proposals. Map 6 identifies all of the avoidance areas for these three categories. All of the identified avoidance areas on Map 6 would preclude surface rights-of-way.

Response 27.3 - The avoidance areas contain important and sensitive resources that were identified during the planning process as needing protection from rights-of-way development. The identified avoidance areas are generally small and we feel that flexibility exists to locate rights-of-way around these areas. If there are no feasible alternatives for a right-of-way other than through an avoidance area, provisions exist for changing the plan through the plan amendment process.

Response 27.4 - Avoidance areas are now defined in the Glossary. Map 6 shows the identified avoidance areas which includes 14 developed recreation sites and 13 sensitive plant sites. A more detail map of these areas is available at the Boise District Office.

Response 27.5 - Our regulations pertaining to rights-of-way are found at 43 CFR Part 2800. Subpart 2806 addresses corridor designation. Although provisions exist to designate corridors in land use plans we have chosen to identify areas to be avoided rather than identify specific areas for transportation and utility locations. This option was chosen since it is a more realistic approach for the Cascade Resource Area because of the fragmented land ownership pattern and numerous existing rights-of-way. This approach provides more flexibility for locating rights-of-way since the majority of the BLM lands are available and the avoidance areas are quite small.

Response 28.1 - See Response 7.1.

Response 29.1 - When a tract of land is identified for sale, it has been determined to meet the disposal criteria of Section 203 of FLPMA. The future uses of the land are not analyzed because there is no means by which all of the potential uses could be identified. In this particular case, the counties have identified these parcels of land for possible use as sanitary landfills. However, we do not make an analysis of the geology and hydrology of an area to be sold. The counties must obtain approval from the State Department of Health and Welfare before they can open a sanitary landfill. The State makes the analyses mentioned and approves or rejects the site as suitable for a sanitary landfill. We believe that the counties will have the necessary analyses and permits before they request us to make these sales. If they do not, and the state fails to approve their sites, those lands would have to be used for other purposes by the counties.

Response 30.1 - The lands that we have identified for possible transfer from federal ownership went through several screenings using various criteria (FLPMA, R&PP, DLE and CA, and retention criteria for other resource values - wildlife, recreation, etc.). The lands identified under Alternative B is the maximum amount of land that would be considered for transfer for the current Resource Management Planning process. Any public land not identified in Alternative B (as shown on Map 2-1 B) is outside the scope of this RMP and EIS and therefore would require a plan amendment with full public involvement. The proposed land transfer identified in the

Proposed Plan (draft Preferred Alternative E as modified) meets the criteria of the 1986 State/BLM Exchange Strategy Agreement. We were not aware of the land transfer proposal referenced in your comment letter during the preparation of this land use plan. We feel that it would be more efficient to address this proposal in our land use plan amendment process.

Before the identified public lands could be transferred from federal ownership, a lands report would be prepared along with a site specific environmental assessment. In this process, clearances for cultural and paleontological resources would be completed as well as reviews for wildlife and Threatened, Endangered and Sensitive species values, etc. Lands that pass through these screens would be available for sale or exchange.

Response 32.1 - Alternative D would manage 25,347 acres of suitable commercial forest land (CFL) and would provide an annual harvest level of approximately 2.9 million board feet through the use of full intensive management practices.

Our draft Alternative E would have managed 1,316 more acres of suitable CFL for a total of 26,663 acres of suitable CFL. The approximately 1 million board foot annual harvest level was based primarily on the administrative capacity to offer timber sales. Our preferred alternative (Proposed Plan) now includes an annual average harvest of 1.7 million board feet.

Response 33.1 - See Response 23.1. The Cascade Proposed Plan (Preferred Alternative E) includes a float boat put-in/take-out site to be developed on public lands on the Weiser River in Township 11 North, Range 4 West.

We feel that to accommodate the existing and anticipated public needs the recreational facilities on Paddock Reservoir need to be improved and have included a camping facility to be developed in the Proposed Plan (Preferred Alternative E).

The level of historical recreational use around Crane Creek Reservoir has not been great enough to warrant the development of recreation facilities there. However, if use continues to increase as the trend over the past several years indicates, we will consider developing recreation facilities on Crane Creek Reservoir through the land use plan amendment process. The Washington County Waterways Board has installed boat ramps on the east and west ends of Crane Creek Reservoir on private lands. Additional facilities such as toilets and parking may be needed to accommodate use generated by these boat ramps and should meet the public need.

Response 34.1 - During the fall of 1986, the BLM established the Squaw Butte Shrub Restoration Committee (10 member group of agency, livestock, conservation, sportsman, research and citizen representatives) to help BLM develop a long-range restoration program. The recommendations of the group are being implemented and the long-range aspects of their recommendations have been integrated into the proposed RMP/FEIS.

Response 34.2 - The RMP is meant to be a general long range planning document to guide the BLMs various programs. Detail plans, such as

rehabilitation and activity plans, are considered the second level plans where specifics such as seed mixtures, etc. are developed. The fire rehabilitation plan, which included recommendations made by the Squaw Butte Shrub Restoration Committee does contain references to seed mixtures, application rates, and locations for reseeding.

Response 35.1 - Refer to Appendix R for a display by alternative of the vegetation condition changes and amount of nonnative seedings proposed.

With the methods available we cannot give an accurate estimate of how much land would be moved from one condition class to another. Most predicted improvements would be within a class (i.e., from fair to high fair). Some land in the upper end of its condition class would move to the next higher class (i.e., high fair to good).

We feel that the RMP does answer the issue questions and actions addressed in the DRMP pp. 4-5. We feel that the effects described in Chapter 4 provide sufficient information when compared with the various maps showing where the vegetation exists (Map 3-1), what the current condition is (Map 3-2), what the proposed land treatments (Map 7) by allotment are. Appendix F illustrates the AUM changes that will result after the projects/ land treatments are completed. Appendix E shows the current condition by acres.

Response 35.2 - Alternative C proposes a 19% decrease in AUMs. The economic effects of this alternative are discussed in Chapter 4. The range improvement projects are funded from grazing fee receipts that are returned to the states/districts. These monies are used for rangeland improvement projects for livestock and wildlife. These projects are not funded from general account monies.

Response 35.3 - The approximate location of the proposed riparian/aquatic improvement projects are shown on Map 8 and would only occur on public lands. The specific locations are identified in Appendix H. The condition of the riparian/aquatic areas are described in Appendices I and J. See also Maps 3-6 and 3-7.

Response 35.4 - See Response 11.1.

Response 35.5 - A fire rehabilitation plan has been prepared for areas burned in the Squaw Butte area during 1986. The Squaw Butte Shrub Restoration Committee has helped develop our rehabilitation program. The Proposed Plan/Final EIS describes the fire effects on the various resources and what measures have been taken in Chapter 3. Future fire actions and rehabilitation will adhere to the resource management guidelines identified for fire management. Environmental Assessments (EAs) will be prepared for all rehabilitation projects. Interested publics will have an opportunity to provide input into those EAs.

Response 37.1 - The safeguards will be the incorporation of rest rotation grazing systems in AMPs. We will incorporate rest rotation in lower elevation areas also, but the emphasis is to start in higher elevations because of the good perennial base currently existing.

Response 37.2 - Interseeding and reseeding projects to benefit wildlife will use shrub species that are adapted to the elevation and soil type of the area. We will also seed as many native grass species as are available. We will attempt to plan seedings far enough in advance to assure that adequate seed is available.

Response 37.3 - Depending on seed availability, the emphasis will be to plant forbs on important brood ranges.

Response 37.4 - Approximately one mile of Dukes Creek and one mile of Little Pine Creek are the creeks identified for transfer. These creeks are unsurveyed for riparian values, but were surveyed for fisheries values and appear in the table in Appendix J. Neither is identified for transfer in Alternative A and the correction is made on page 4-5. Where Dukes Creek is identified for transfer it would be exchanged with the State of Idaho. Where Little Pine Creek is identified for transfer it would either be through sale or exchange. Little Pine Creek is on an isolated parcel surrounded by private land with no access presenting a difficult management situation. The proposed exchange is part of an exchange proposed by a State agency and meets the criteria of FLPMA. The proposal was analyzed under the various alternatives and the decision to make it available for transfer was incorporated in the Proposed Plan (Preferred Alternative E) because the transfer would have minimal effects on the environment and would satisfy the intent of Section 206(a) of FLPMA.

Also see Response 30.1.

Response 37.5 - Map 3 identifies the approximate location of those lands proposed for transfer from federal ownership. Detailed large scale maps are available for review at the Boise District Office. The legal description of the proposed transfer lands are now included in Appendix V.

Response 37.6 - The text has been revised to incorporate this information.

Response 37.7 - The text has been revised to clarify this sentence (... maximum opportunity for survival of local wildlife populations.).

Response 37.8 - The sage grouse habitat will be improved through livestock management, use of grazing systems, and implementing AMPs. Grass and forb species will be selected based on key wildlife species, present vegetation and ecological site potential. Shrub interseeding will be selected based on key wildlife species and ecological site potential (soils and elevation).

Response 37.9 - There are currently no commercial varieties of crested wheatgrass available that have growth characteristics that are compatible with long-billed curlew. They will be considered as they become available.

Response 37.10 - The Idaho ground squirrel is identified in Chapter 3 as candidate species. The needs of the Idaho ground squirrel will be addressed when site specific proposal may affect their habitat.

Response 37.11 - This information has been noted and the text has been revised accordingly.

Response 37.12 - The issue questions are answered throughout the document in various sections. The proportions are shown in AUMs in each alternative under livestock and wildlife objectives. The other questions are answered in similar format and in the management guidelines sections of the plan. Activity plans and Environmental Assessments will be the mechanisms used to provide specific details on methods used for land treatments. The effects of the proposed actions and their success in addressing the issue questions are covered in Chapter 4 in the Vegetation, Soils, and Wildlife sections. This planning format was developed to conform with the Idaho RMP Guide Book and is used by all Idaho BLM districts preparing RMPs.

Response 37.13 - The indication from the Idaho State BLM office and the Washington Office is that monitoring will be funded. The 1987 Annual Work Plan Directives specifically emphasized monitoring as a priority. The Boise District has established and filled a Monitoring Coordinator position.

No alternative plans have been developed should monitoring funds be discontinued. Those alternative plans/actions would be developed at that time if needed.

Response 37.14 - See Response 20.8.

Response 37.15 - The criteria used to select public lands available for transfer from federal ownership are found in Sections 203, 206, and 212 of the Federal Land Policy and Management Act of 1976. The application of this criteria provided lands identified for transfer under Alternative B. Selected forested lands, isolated lands on streams and in crucial wildlife areas were removed from T2 designation (sale or exchange). Lands with specific exchange proposals were retained. All lands identified for transfer in the Proposed Plan would still need additional review (also see Response 30.1).

The location of the recommended transfer lands for each alternative are shown on Maps 3, 2-1, and 2-2. The legal descriptions are found in Appendix V. Larger scaled maps are available for review at the Boise District Office.

Response 38.1 - Refer to the Soils section in Chapter 3 for existing erosion criteria. This section addresses area-wide average estimated soil loss and the range in acceptable soil loss tolerances on rangeland. Site specific erosion may be many times this average but the size of the affected areas are small in comparison to the total acreage.

The instream sediment component of stream habitat rates as poor (not acceptable) when fine sediments ($\geq$2 millimeters) cover the stream substrate on more than 25% of the stream channel. This condition was observed on eight of the 21 sites evaluated. The primary source of this sediment is believed to originate from upstream land management practices on non-BLM lands. The Water Quality section in Chapter 3 has been revised to reflect this information.

Response 38.2 - The text has been revised for Alternative C to indicate that preservation of natural systems and nonconsumptive resources uses would be favored by management actions.

Response 38.3 - The management objective for an Outstanding Natural Area is to manage for the maximum recreation use possible without damage to the natural features that qualify the area as outstanding. Management guidance would follow the direction in 43 CFR 8352 and our Bureau Manual 1623.3. This management objective would not be applied to the lands adjacent to the 440 acre Box Creek area since those adjacent lands are administered by the U.S. Forest Service and the State of Idaho Department of Lands. The management guidelines that would apply under an Outstanding Natural Area designation for this area would be: 1) no timber harvest, 2) closed to off-road vehicle use, 3) withdrawn from mineral entry, 4) no surface occupancy for leasable minerals, and 5) no actions that would impair its natural values such as water diversions from the existing stream would be permitted. The Box Creek area is not proposed for Outstanding Natural Area designation in the preferred alternative (Alternative E).

Response 38.4 - The 12 miles of riparian habitat and 23 miles of aquatic habitat improvements in Alternative C are achieved through direct manipulation of habitat components. The EIS Summary on page v describes 140 and 142 miles of riparian and aquatic habitat improvements through increased emphasis on riparian habitat management in the new and revised AMPs. These 140 and 142 miles are additional miles of benefits derived from specific riparian/aquatic habitat objectives in these new and revised AMPs.

Response 38.5 - The difference between miles of habitat benefits between Alternative C and Alternatives B and D through new and revised AMPs result from both Alternatives B and D having more proposed AMPs, and therefore more miles of streams directly benefiting from specific riparian/aquatic habitat objectives.

Response 38.6 - For the purposes of this EIS the "benefits" to riparian/aquatic habitat are defined as measured increases in the woody shrub species resulting in greater biomass or diversity that positively affect the riparian/aquatic habitat components used in the qualitative evaluations. These benefits need not raise habitat condition ratings to the next higher condition class to be considered benefits.

Response 38.7 - The few miles predicted to experience a decrease in habitat condition quality have low potential, are remotely located, and will be considered for improvements on a case-by-case basis if monitoring indicates an unacceptable loss in habitat value.

Response 38.8 - The identification of site specific measures is beyond the scope of this RMP/EIS. An activity plan for the Boise Front area will discuss and identify these measures, the types of structures used, and where they are to be installed. Initial site assessment is to begin in the summer of 1987.

Response 38.9 - The proposed actions under the various alternatives (prescribed and slash burning) would cause some short-term (commonly less

than 24 hours) air quality deterioration. However, national and state ambient air quality standards would still be met.

Prescribed and slash burning would be conducted in such a way (size limitations, climatic conditions, time of year, and in coordination with other agency programs) that air quality impacts would not exceed the Prevention of Significant Deterioration (PSD) increments for class II areas.

Response 38.10 - The survey method used to evaluate riparian habitat within the Cascade Resource Area was adopted from that developed in 1976 at the BLM Dillon Resource Area, Dillon, Montana. This method is quite extensive and was found to apply to almost all foothills habitats in southwestern Montana. We believe that it is also suited to perennial and ephemeral flow streams in the Cascade Resource Area which support deciduous woody species along the banks. This survey does not apply to closed canopy conifer sites and may be of doubtful value in stands dominated by mature aspen where canopy density impairs reproduction.

The survey area consists of the stream bank within a uniform woody species habitat type. The surveyor walks along the bank area within the identified stream reach, and, at the predetermined step interval, selects and evaluates the highly palatable woody plant nearest the step interval. This process is repeated until a minimum of 100 sample plants are evaluated in the stream reach being surveyed. Palatable species in this survey include willow, aspen, dogwood, maple, alder, birch, and cottonwood. Once a plant is selected it is evaluated according to form class, size class, and coverage class. The stream reach is evaluated for the amount of stream bank erosion. A habitat rating is then determined for the surveyed stream reach by combining the observed values for the stream bank erosion and vegetation parameters. A complete survey methodology can be obtained from the Boise District. See Appendix T for classification criteria.

Response 38.11 - The text has been revised to include the existing habitat conditions within the Payette River watershed.

Response 38.12 - Erosion as the result of ORV activity is site specific. Although the severity of erosion may be great, usually the area of impact is small (exceptions are the Boise Front and designated open cycle parks). Most areas classified as limited in the various alternatives are situated away from the mainstream of usual ORV activity and are not expected to be impacted to any great extent.

The statement in Alternative C (and other alternatives) concerning impacts of ORVs and timber harvesting compared to Alternative A has been changed to more accurately reflect the extent of these impacts. Appendix B identifies the number of acres by alternative that would potentially be affected by ORV activities.

Response 38.13 - Impacts on riparian habitat, aquatic/fisheries habitat, and water quality due to timber harvest activities are discussed under these topic headings by alternative in Chapter 4. The types of impacts would be similar among the different alternatives but would differ in the number of stream miles affected.

Response 38.14 - Future AMPs and management agreements will incorporate rest rotation grazing systems for livestock management, pasture fencing and fencing of streams and important riparian areas, water developments, use adjustments, vegetation manipulation and seedings - as appropriate. New and revised AMPs will be prepared as agreements are reached with permittees and as funding and staffing permit. Changes or adjustments in grazing management such as rest rotation and fencing will be a high priority since many permittees are favorable to the idea or are requesting it. New and revised AMPs will be prepared and implemented over the next 10-15 years.

Response 38.15 - Overall management objectives would be to try and avoid road construction on high erosion hazard lands. If it becomes necessary to cross these lands then additional measures would be incorporated. These measures would be identified in an activity plan and could include such measures as ditch construction with culvert installations. References such as the State of Idaho - Best Management Practices for Road Construction will be used as technical guides.

Response 38.16 - The Stream Survey Form and the Stream Habitat Inventory Form have been included in Appendix U. These forms were used to evaluate the aquatic habitat of streams. The habitat rating was conducted during the summer of 1985 by ocular determination only and by biologists experienced in on-the-ground stream habitat feature measurements on southwest Idaho streams. Staffing levels and time were extremely limited for this survey. However, we feel that the information is accurate and meets the needs of this land use planning effort.

Response 38.17 - This appendix has been revised to reflect the correct information.

Response 38.18 - The table in Appendix H identifies aquatic habitat improvement projects and conditions which corresponds with Map 8 and Map 3-7. Appendix I identifies riparian habitat conditions and corresponds with Map 3-6. The information in Appendix H and I and on Maps 8, 3-6 and 3-7 is correct.

Streams were chosen for improvements on the basis of several factors. The more important factors were existence of a perennial water source, public visibility, potential for improvement, ease of access, and manageability.

Response 38.19 - Appendix P has been revised to incorporate more detailed information regarding water quality and riparian monitoring. Current guidance on all programs including riparian area management and monitoring has been incorporated in this final document. Additional and more detailed guidance and state-of-the-art technology will be incorporated in activity plan efforts.

Response 38.20 - Your agency will have an opportunity to review our draft monitoring plans as they are developed. You will receive a copy of the Record of Decision when it is released to the public.

Response 38.21 - Monitoring plans will be developed with the implementation of those decisions that require monitoring. They will normally be developed at the activity level planning stage.

Response 38.22 - Monitoring programs will be coordinated among the various programs whenever practicable.

Response 38.23 - Funding for implementation of the RMP decisions rests with the annual priorities established by the national BLM office and the Congress. Over the past two years, monitoring has been a high priority and in all current budgetary/program assessments it appears to be a priority for the next few years. In the Boise District monitoring is considered a top priority.

Response 38.24 - The Resource Management Guidelines, Public Land Management section has been revised to reflect this comment.

Response 38.25 - In areas designated as limited ORV use, ORV use would be restricted either seasonally or to existing or designated roads and trails. Indiscriminate off-road (cross-country) use would be prohibited. The use of ORVs on the designated or existing roads and trails would not have adverse impacts on the sensitive or significant resources. The Boise District will use a combination of public information brochures, public announcements, and meetings, to educate the public concerning areas with limited (and closed) restrictions. In addition, selected areas may be signed to indicate the ORV use restriction. Law enforcement capabilities are also available if needed. The limited use area referenced in your comment pertains to land management intensity and not ORV use. ORV use may be designated as open in some limited use areas.

Response 38.26 - The text has been revised to clarify the intent to improve all riparian habitats that occur in areas where AMPs are being prepared.

Response 38.27 - The management guidelines for the Boise Front include use limitations and management emphasis which should provide adequate protection for the resource values identified. In addition, at the end of 20 years, livestock use on nearly 6,000 acres would be reduced 23% from the 5-year average license use. Livestock use on approximately 5,000 acres would be allowed to increase 5%. No additional soil disturbing activities requiring use limitations to protect resource values have been identified.

Response 38.28 - The text has been revised to include fish and wildlife habitat and water quality as important wetland functions to be considered by future management actions. Specific measures to protect, preserve, or restore wetland functions will be addressed during development of activity plans and project specific proposals.

Response 38.29 - The text has been revised to clarify this guideline. The high priority habitats will be identified in activity plans with the aid of this land use plan.

Response 39.1 - The fenced areas along streams will not be available for livestock grazing. Water gaps will be incorporated into the fences to provide adequate water availability for livestock in pastures and allotments. Management on adjacent lands is expected to remain the same in most cases. Maintenance and costs will be addressed in site specific analyses. Time

controlled grazing and water developments will also be addressed in site specific analyses (AMP-EA). Time controlled grazing (rest rotation), an alternative to fencing, requires enough pastures to allow this system to work.

Response 39.2 - Two of the existing AMPs are also CRMPs. Not all AMPs lend themselves to CRMP formats since other entities (U.S. Forest Service, State agencies) may not be involved or a coordinated plan may not be necessary. Any CRMPs considered in the future will be coordinated with your agency.

Response 39.3 - Long-billed curlew winter in coastal areas and nest and brood inland. Historically, pairs would nest in the valleys but due to increased agriculture, their habitat decreased. Historically, this area was covered with sagebrush and bitterbrush stands. Year after year, wildfires would burn a part of this area. These fires and overutilization of the range have reduced the shrub component. The invasion of annual grasses has allowed this area to develop into a major nesting area. Overall, the long-billed curlew population in the United States has decreased substantially and there is evidence that they are still declining in parts of their range. The proposed ACEC area supports the largest nesting population in western United States.

Response 39.4 - See Response 38.10.

Response 40.1 - Ecological site condition change is the change in kind, amount, and proportion of the vegetative community.

Response 40.2 - A proposed cooperative agreement in 1976 stated "Motorcycle use will not be allowed to occur on lands adjacent to the Park boundaries." The cooperating parties in this agreement were to be Idaho Department of Parks and Recreation, Gem County, Little Gem Motorcycle Park Council, Mr. David Little, and BLM. That agreement was never made final or signed by any of the cooperators. We have no record of any other agreement entered into by Little Cattle Company and BLM in this matter. Following completion and approval of the Cascade Resource Management Plan, site specific activity plans will be developed. During the preparation of an ORV plan for the Little Gem Cycle Park we will consider the need for restrictions on lands adjacent to the park. Any restrictions would be based on established objectives for the park and adjacent areas. These objectives will be developed with input from the entities that participated in the original agreement effort and other interested parties.

Response 40.3 - The 3,000 acres of BLM lands within the boundaries of the area called Little Gem Cycle Park contains two areas (Sand Hollow - 500 acres and Pearl - 400 acres) that contain sensitive plant species. These two areas contain over 90% of the known populations of wild onion (*Allium aaseae*), a candidate plant species of federal and state concern. These are the areas of special designation referenced in your comment letter.

Response 40.4 - We feel that excluding salt and water from the ridgelines would reduce concentrated livestock use in these areas and would better protect the category 2 candidate plant species found there. The 6 miles of fence is the total among the Rebecca Sandhill, Peraphyllum Rock, and Buckwheat Flats special management areas.

Response 40.5 - The text has been revised to incorporate this information and more clearly reflect the existing situation.

Response 40.6 - Any type of vegetative cover (grass, forbs, or shrubs) helps to protect soil from the impact of rain drops, the overland flow of water, and wind. Shrubs also act as snow catch areas allowing slow release of this stored moisture. The referenced section of the document contains the resource management guidelines that are applicable for managing the soil resource. The use of shrubs in conjunction with wildlife management is discussed in the Wildlife Resources section of the Resource Management Guidelines.

Response 40.7 - The term "60/40 ratio of forage area to cover area" means that 60% of a given area contains plant species used for foraging (forage area) and 40% contains plant species used for thermal protection and hiding (cover area).

Response 41.1 - See Response 12.1.

Response 41.2 - See Response 12.2.

Response 41.3 - See Response 12.3.

Response 41.4 - This site of 80 acres has been included in all alternatives, including the preferred alternative, and contains the sensitive plant species *Ceaenothus prostratus*.

Response 41.5 - We have been consulting with the U.S. Fish and Wildlife Service on this matter and will continue to do so in the future. Further studies and inventories concerning this species are planned. We would appreciate any assistance that The Nature Conservancy could provide.

Response 41.6 - See Response 12.4.

Response 41.7 - The text has been revised to reflect the correct information.

Response 41.8 - *Allium aaseae* has been collected and still occurs along the Hulls Gulch trail. Refer to the College of Idaho (Carol Prentice's collection) for documentation.

Response 41.9 - The text has been revised to reflect the correct information.

Response 41.10 - See Response 12.4.

Response 41.11 - The text has been revised to reflect the correct information.

Response 41.12 - See Response 12.4.

Response 41.13 - The maps have been revised to reflect the correct information.

Response 42.1 - See Response 11.1.

Response 42.2 - See Response 33.1.

Response 42.3 - BLM currently administers lands bordering Crane Creek Reservoir. These lands provide public access from the south side of the reservoir. The Boise District has, in years past, approached private land owners around Paddock Reservoir to try to obtain access to the reservoirs. To date, the land owners have not been receptive with the exception of the current developments which are maintained by the Idaho Department of Fish and Game. The BLM lands that exist around the reservoir are either non waterfront or to steep to be developed for recreation facilities. The Boise District is interested in obtaining access on the east or north side of the reservoir for the development of recreation facilities. The plan does not identify specific land parcels but does identify the need to seek acquisition.

Response 42.4 - See Response 23.1. The two areas you identified, one area south of Dodson Pass and the other area between Crane Creek Reservoir and the Weiser River, were inventoried for Wilderness Study Area characteristics in 1978. The recommendation following that inventory was that both units be carried forward from the Initial Inventory to the Intensive Inventory. The units were subsequently eliminated from further consideration for wilderness study in light of the following factors: poor configuration, presence of roads and/or ways, range developments, impaired naturalness, and topographic and vegetative screening which does not provide opportunities for solitude and recreation that are considered outstanding.

COPIES OF COMMENTS RECEIVED

All letters received were considered in the preparation of this proposed RMP/Final EIS. Although all public input will be considered when management decisions for the Cascade Area are made, only substantive comments that presented new data, questioned the adequacy of the impact analysis or raised questions or issues bearing directly upon the Draft RMP/EIS have been responded to in this document. All letters received are reprinted on the following pages. The letters are numbered chronologically in the order in which they were received during the public comment period. Each substantive comment contained in the letters is also numbered. The BLM response to each specific substantive comment is located in the previous section (pages 5-9 through 5-26) and is numbered to correspond with the appropriate comment found in the letter.

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17 Mesa Vista Drive
Boise, Idaho 83705
August 26, 1986

Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, ID 83705

Dear Mr. Geier:

Thanks for sending me a copy of the "Cascade Resource Management Plan". This document represents a great deal of time, effort and thoughtfulness. It is a bit more "Governmentese" than I would like to see but in the main tracks the various resources problem rather well.

I do believe AVR's should be more restricted in where they can go and what they can do. They are very destructive as you know.

I feel ranchers grazing on public land should pay a higher grazing fee. I believe also you are acutely optimistic on range rehabitation. Unless stock numbers are reduced I cannot see much chance of you accomplishing very much in range improvement.

Your general policy does not stress strongly enough the basic purpose and objective of Public Land Management, i.e., to "preserve and improve public lands" over and above any other objectives.

I hope in the future some way can be found to reduce the size and repetitive characteristics of these reports. They are just too long and complicated for most people to read, much less comment on.

Thank you and I should like to see the final when it comes out.

Sincerely,

George Baggley

George Baggley

2

Comment
1) I commend you for your ACEC designations.
2) Appendix E notes:

~~Action~~
Average license use is @66,000 and Preference is @79,000 aums.

Range Condition shows over 40% in poor condition.

The Proposal to increase aums by 6% seems overly optimistic. Reducing preference to below current licensed use seems more likely to produce improvement in range condition, where ~~acceptable~~

Mark Davis
1305 N 5th
Boise, Id.
83702

3) Visual ranking of headwaters of The Little Weiser River seems low.

26 September 1986

Cascade Resource Management

Re; EIS Letter
Dtd: Aug 21, 86

3

Mr. Richard A. Geier
Cascade Area Manager
Boise

Please note the change of address for the Oregon Council of Rock and Mineral Clubs Inc.....

Ronald L Stockhoff, President
Oregon Council of Rock & Mineral Clubs Inc.
1624 Manzanita
Klamath Falls, OR 97601

Mr. Harold Dunn, has retired from our organization as of June 1986. As we are currently under reorganization, and are short four officers until the coming elections in June 1987, I will cover the input for the Information Officer. Please be advised of the new Public Lands Advisory Committee (PLAC) formed by our Regional affiliation - Northwest Federation of Mineralogical Societies, which we are working with. They have the States of Montana, Washington, Oregon, Alaska, Idaho and the northern portion of Utah to administer. We would entertain that they be included in your mailing list;

Dick Rantz, Chairman
NFMS Public Lands Advisory Committee
184 Sudden Valley
Bellingham, WA 98226

In your planning decisions - Non Issue/Management Concern Programs - Minerals, are of a concern in a non-commercial attitude. The hobby mining and access, to those considered non-commercial/lease minerals Ie; Jasper, Agate, Geodes, Crystals, Rhyolite, Feldspars, Fossils, Petrified Wood Etc.. are a very important consideration.

The Oregon Council, is in the opinion that these rocks and minerals should be identified and controled through existing regulations., Ie; Public Laws 167 and 94-579, U.S. Code 30, Sections 23,28,35,36 and 1744., as well as 43 CFR, sections 3621,3622 and 3800. The tenants found in 3622 should be applied to all hobby minerals, unless the operators are commercial, and then they should show proof of market, and leasing. By placing limitations on removal of rocks and minerals, it would stop hobby / recreational miners from wholesale manipulation of species.

The Oregon,Prineville, DEIS approaches these hooby/recreational miners as a lease/contract option. We would like to see Club Claims and individual hobby claims remain as non fee public use, with limits on removal of material. The Oregon Council, previously had its first input on this issue at the Ochoco National Forest - Crooked River National Grasslands EIS. It was a start and does not approach in as much detail as paragraph 2. But, if our hobby is to survive and leave some for the generations to follow - we must practice restraint and conservation.

Rockhounding brings tourism and recreational dollars into small communities, providing services to support the hobbyists in their pursuit. The concern of

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many of our older citizens,is that lands closed to vehicular access, will denia them the pleasure of the National Forest and Public Lands. They are people because of diminished capabilities, from disease and age that cannot participate without use of motorized conveyance. Our feelings on this is a permit access for use of orv/atv transport of these persons, with limit of only use by them in a party. Assurances of material transport only - for the permit users., For use by certified disabled persons, this access should be free - for others it should be on a nominal payment basis., None - the - less it would give our disabled population recreational access to our Public Land.

The Council has also discussed the fact that payed users, have more say in the Public Land Issues, than what the non-paying public has had. It is felt that a reasonable fee system is not out of order. We also realize that surface management and resources are in the hands of the Forest Service and that the Bureau of Land Management has juridiction of the surface/sub-surface mineral management. The regulations found in 36 CFR and 43 CFR are sometimes conflicting and act in cross purposes. This makes it very hard for the hobby/recreational miners to stay knowledgeable of the rules. We would like to see one or the other agencies handle this issue - the resulting reduction of duplication would save some money in its management.

We support your preferred alternative Plan E, with the addition of hobby/recreational rock and mineral criteria. Wholesale/commercial miners should have to acquire leases and comply with salable mineral regulations.

Respectfully
Ronald L Stockhoff
Ronald L Stockhoff, President
OC of R&MC Inc.

IDAHO STATE HISTORICAL SOCIETY
610 NORTH JULIA DAVIS DRIVE BOISE, 83702

4

September 30, 1986

Mr. Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Geier:

We recently reviewed the draft Cascade Resource Mangement Plan/ Environmental Impact Statement. Our concern is with the protection of archaeological and historic properties in the area. Our comments are as follows:

4.1 1. The document indicates that 17,524 acres will be transferred from federal ownership. Federal regulations require (36 CFR800) inventory and evaluation of archaeological and historic properties before transfer. Properties that are determined eligible for the National Register of Historic Places can be transferred out of federal ownership when proper protection measures are designed. Your statement on Page 56 indicating that the BLM will retain all eligible sites restricts your management options and probably should be modified.

2. We agree the eight sites proposed for nomination are eligible for the National Register and should be nominated.

4.2 3. The following areas in the Cascade Resource Area need Intensive Class III Inventories: all BLM lands along the upper end of Brownlee Reservoir; Crane Creek; all BLM lands in the Boise Basin.

All of these areas contain significant archaeological sites and all are being intensively collected or vandalized, if the reports and rumors are correct. Surveys in these areas should be done as soon as possible so we can determine which sites are significant and devise ways to protect them.

Thank you for the opportunity to comment.

Sincerely,

Thomas J. Green

THOMAS J. GREEN
Deputy State Historic
Preservation Officer

TJG:rm

5

2

This format will provide needed detail and a more relevant method of comparison for alternatives with regard to mineral resources.

Thank you for the opportunity to comment on this document.

D'Arcy P. Banister

D'Arcy P. Banister

2 Enclosures

United States Department of the Interior
BUREAU OF MINES
WESTERN FIELD OPERATIONS CENTER
EAST 360 3RD AVENUE
SPOKANE, WASHINGTON 99202

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October 2, 1986

Memorandum

To: Richard A. Geier, Cascade Area Manager--Boise District Office, Bureau of Land Management, Boise, Idaho

From: Supervisor--Minerals Involvement Section, Branch of Engineering Studies

Subject: Review of Draft Cascade Resource Management Plan and Environmental Impact Statement

A review of the subject document reveals a good analysis regarding the impact of preferred alternative management practices on mineral resources. All of the alternatives were analyzed with regard to their potential impact on the mineral resource base of the study area. Also, a good overview of the mineral base was given on pages 3-26 to 3-28. However, as not all Federal land has equal potential for mineral discovery, the statistics on page 31, 2-13, 2-15, and 2-61 are relatively meaningless. What is needed is an analysis of the various levels of mineral favorability with corresponding analysis of access limitations. It is necessary to develop the acreage charts to show total acres of each potential available and the percentage of each which will be affected under each alternative.

5.1

Example:

Potential Category*	Acreage	Alternative 1 % acres affected (by access category**)				Alternatives 2, 3, 4, etc.
		A	B	C	D	
I						
II						
III						
IV						
V						
Total of forest						

* Same as page J-10, appendices, Wallowa-Whitman National Forest DEIS (enclosed).
** Same as Beaverhead National Forest, Montana, Revised DEIS (enclosed).

U.S. Department of Transportation
Federal Aviation Administration

6

Northwest Mountain Region
Colorado, Idaho, Montana, Oregon, Utah, Washington, Wyoming

17900 Pacific Highway South
C-68966
Seattle, Washington 98168

OCT 10 1986

Mr. Richard A. Geier, Cascade Area Manager
Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Geier:

We have reviewed your draft Cascade Resource Management Plan and Environmental Impact Statement and do not foresee any impact on aviation or its activities.

Thank you for the opportunity to comment on your proposal.

Sincerely,

Kenneth Thomasson

Kenneth Thomasson
Policy and Planning Officer

50 Years of Air Traffic Control Excellence – A Standard for the World –

IDAHO PETROLEUM COUNCIL
Rocky Mountain Oil and Gas Association

ANDREW G. ANDERSON
EXECUTIVE DIRECTOR

Suites 614-616-618 Empire Building
205 N. 10th St.
Boise, Idaho 83702
Telephone 208-343-0456

MAIL ADDRESS
P.O. Box 547
Boise 83701

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October 14, 1986

Mr. Richard A. Geier
Area Manager
Cascade Resource Area
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Geier:

On behalf of the Idaho Petroleum Council, I would like to make the following points in commenting on the Cascade Resource Management Plan:

* We support the BLM's Preferred Alternative which would leave 94 percent of the Resource Area open to oil and gas leasing. It is important that access for energy and mineral activities be maintained with a minimum of constraints. However, there are some major flaws contained in the planning documents regarding the attention mineral resources have been afforded during the planning process.

7.1 * On Page 57 of the Plan, you state that energy and mineral leasing is a discretionary action and that approval of an application for a lease is subject to an environmental analysis to determine whether any special stipulations are required to protect sensitive resources. You seem to be implying that separate environmental analyses will be prepared on individual leases as they are applied for by industry. It is our understanding that this approach is not in compliance with Bureau policy in Washington. Director Burford has testified on several occasions before Congress, on oil and gas leasing legislation, that this approach would be costly, time-consuming and impractical. The land management planning process should contain sufficient direction in order to make all leasing decisions within the Resource Area.

7.2 We believe that the minerals section of the plan should provide explicit direction as to how energy and mineral resources will be managed during the life of the plan. The Cascade RMP fails to provide specific information as to the location of significant potential existing in the RA for energy and mineral resources. Nor is there a map which provides information as to where you anticipate attaching special stipulations to leases. You should also provide information regarding the number of leases currently held in the RA as well as a discussion of any pending leases. This type of information is essential for companies when they are

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trying to determine how their present or future operations may be affected by the proposed plan. Such information also provides the general public with an idea as to where these activities may take place and under what conditions.

* Even if more specific information is contained in the regional Oil and Gas Environmental Assessment, the planning documents should include, at minimum, the basic information required to evaluate how the plan impacts industry operations. We, therefore, encourage you to more fully integrate the Oil and Gas EA into the proposed planning documents.

7.3 * We are concerned that the Cascade RMP may not provide adequate direction for the management of energy and mineral resources. For instance, we are concerned that there may be delays in the future when lease applications are filed because additional environmental documentation may be needed before an application is approved. It is possible that situations may arise where there is a conflict between surface and subsurface resources. You have stated that there are approximately 100,000 acres which have potential for oil and gas reserves. We are unsure as to whether you will consider the fact that in some cases energy and mineral resources may warrant priority consideration over surface resources in some situations.

7.4 * In conclusion, we recommend you revise your final EIS to comply with the draft planning guidance for fluid minerals. For example, portions of the RA would be categorized as having low, moderate, or high potential for oil and gas. A matrix would then be prepared which would indicate how many acres are subject to withdrawals, no surface occupancy stipulations, seasonal or other special stipulations, and standard stipulations. These areas would then be identified on a map and included in the plan. These guidelines should be identified in the plan with an explanation that they will be utilized when conflict resolutions are made.

Thank you for this opportunity to present our ideas on the Cascade Resource Management Plan.

Sincerely,

Andrew G. Anderson
ANDREW G. ANDERSON
Executive Director

AGA:jbt

8

IDAHO MUSEUM OF NATURAL HISTORY
Idaho State University
Campus Box 8096
Pocatello, Idaho 83209-0009

Telephone (208) 236-3168

November 10, 1986

Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, ID 83705

Dear Mr. Geier:

The following comments and recommendations apply to the paleontologic resources sections of the "Cascade Draft Resource Management Plan and Draft Environmental Statement". They are based on the fact that the paleontologic resources of the area are essentially unknown.

1. Unfortunately, it is common practice throughout the United States for individuals and companies to not report, to destroy, and/or to bury paleontologic (and cultural) resources encountered during excavation activities. The primary reasons for this stem from fears that reporting of such resources will lead to work disruptions, excessive costs, and personnel layoffs. Such fears have been occasionally justified in the past, primarily with cultural resource finds. With this in mind, I recommend that all use permits which involve disturbance to soils, sediments, or rocks should include provisions which will encourage permittees to report paleontologic resources and which include major penalties (revocation of permit?) for knowingly destroying, reburying, or not reporting the discovery of such resources. For projects contracted out by the BLM, delays resulting from the reporting and evaluation of paleontologic materials could be treated as change orders so that they would not result in financial loss to the contractor or his employees.

2. For purposes of resource management, the primary points to be considered are that the paleontologic resources of the Cascade area are poorly known: that lack of documentation of paleontologic resources within any area cannot, in itself, be construed as evidence for a lack of such resources; that paleontologic resources are often undetectable in ground surveys; and that the only way to be certain of the presence or absence of scientifically significant paleontologic resources within any given area is intensive and expensive study. However, unlike cultural resources, the occurrance of paleontologic resources is constrained by mappable bodies of sediment or rock and the overall paleontologic potential of any given area can often be reasonably estimated from existing geologic maps and reference to pertinent literature. Thus, I recommend a management plan which I developed for private project EIR work in California.

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The first step is to develop a set of designations which describe the estimated probability that given rock units contain significant paleontologic resources. For example, granitic terrane would be designated as having no probability of containing fossils (but areas of sediment within granitic terrane would have a higher probability). Units such as the richly fossiliferous Hagerman beds would be ranked as almost certainly containing fossils, even in areas which have not yet been explored for fossils. These designations would then be applied to available geologic maps of the area and could be modified and refined as additional information becomes available. A separate designation would apply to areas of unknown geology.

Permit conditions and mitigation requirements would be tied to the probability designations. For example, permits for work in all areas having a map designation of no probability of encountering significant paleontologic resources would have only the minimum condition described in #1 above (reporting of encountered specimens). Permits applying to ground disturbance in areas with higher probabilities of encountering significant paleontologic resources would require additional measures. Permits for the most sensitive units may require preliminary field survey and monitoring by a qualified paleontologist.

In my opinion this approach will provide the maximum protection for fossils while minimizing costs to governmental agencies and to permittees. If you wish to explore this approach further, I will be pleased to provide assistance.

Sincerely,

William A. Akersten
William A. Akersten
Curator, Vertebrate Paleontology

WAA/ss

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Nov. 12, 1986

DICK GEIER, BLM
3948 DEVELOPMENT AVE
BOISE, ID 83705

I support ALTERNATIVE C OF THE CASCADE MANAGEMENT PLAN. I would like to see much more emphasis on wildlife habitat IN BLM's management.

MANY riparian areas in the district are in bad shape because of excessive grazing pressure. I URGE YOU, AS PART OF THE MANAGEMENT IN THIS DISTRICT, TO INVENTORY RIPARIAN AREAS AND record their current condition. THIS INFORMATION WOULD PROVIDE A BASE TO MEASURE FUTURE PROGRESS, OR LACK OF IT, IN REHABILITATION OF RIPARIAN AREAS.

Rep. KEN ROBISON
DISTRICT 19
1119 W. 12th
BOISE ID 83702

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10.2 We have also identified two species, Camassia cusickii and Primula cusickiana, as category 3C plants and of some Federal concern even though they are no longer being considered for listing as threatened or endangered species. Should further research or changes in land use indicate significant decline in either of these taxa, they may be reevaluated for possible inclusion in category 1 or 2.

There are three other points that we wish to draw to your attention. First, we concur with the observation that reduced grazing enhances the growth and development of native plant species. Abuse of land by overgrazing results in the invasion of exotic species. This is usually followed by expenditures for noxious weed control, which could have been prevented if reasonable grazing practices had been used from the beginning.

Second, the BLM should recalculate the wildlife habitat allocation in the subject document and assess the numbers of acres of deer habitat that were destroyed by the fires this past summer. We understand that as much as 50 percent of the winter deer habitat may have been destroyed. An addition to the wildlife habitat allocation in consideration of habitat lost to fire is recommended.

10.3 Third, studies by the Walla Walla District of Corps of Engineers, the Idaho Department of Water Resources, and the College of Idaho under contract from the owner of Almaden Mine, have verified an elevated level of mercury in the Bear Creek watershed, a tributary to the Weiser River. Tailings from the Almaden mercury mine erode into Bear Creek. The mine area and Bear Creek watershed are administered by the BLM. We are concerned that migratory birds nesting in the wetland and riparian areas downstream from the tailings may be exposed to mercury poisoning. No studies have been done on possible mercury contamination of migratory birds using the watershed. The management plan and EIS should address this issue and propose mercury monitoring studies of migratory birds using the area.

John P. Wolflin

cc: FWS, ES/BEC, Washington, D.C.

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
BOISE FIELD OFFICE
4696 Overland Road, Room 576
Boise, Idaho 83705

November 14, 1986

TO: Richard A. Geier, Cascade Area Manager, Bureau of Land Management, Boise District, Boise, Idaho

FROM: John Wolflin, Field Supervisor, FWS, Boise Field Office, Boise, Idaho

SUBJECT: Draft Cascade Resource Management Plan/Environmental Impact Statement

We have reviewed the draft Cascade Resource Management Plan (Plan) and have limited our comments to federally listed candidate and endangered species.

General Comments

The document adequately addresses habitat requirements and maintenance for two federally listed species, the bald eagle and peregrine falcon. However, the document identifies only two candidate species, the Swainson's hawk and ferruginous hawk. Two other vertebrate species should be included in the document
10.1 as candidate species, the Idaho ground squirrel and long-billed curlew (Federal Register, December 30, 1982, p. 58458).

Specific Comments

The plan provides excellent guidelines and habitat for managing the long-billed curlew. However, we could not find managements recommendations for the Idaho ground squirrel. We recommend that you contact Dr. Eric Yensen, College of Idaho, Caldwell, Idaho, for this information. As to comments and corrections on plant species, we reviewed the table found on page 3-8 of the draft Environmental Impact Statement. We recommend that the following table replace the one on page 3-8.

Allium aaseae	Category 1
Astragalus mulfordiae	Category 2
Haplopappus radiatus	Category 2
Carex aboriginum	Category 2
Camassia cusickii	Category 3C
Primula cusickiana	Category 3C

10.2

We also found that Primula cusickii was identified in the report. We have no record of this species and assume it is Primula cusickiana.

Carex aboriginum is included in the report. It belongs as a Federal candidate species to category 2*. The 2* suggests the possible extinction of the taxa.

United States Department of the Interior

NATIONAL PARK SERVICE
Pacific Northwest Region
83 South King Street, Suite 212
Seattle, Washington 98104

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IN REPLY REFER TO:
L7619(PNR-RE)
DES 86/35

NOV 14 1986

Memorandum

To: Cascade Area Manager, Bureau of Land Management, Boise, Idaho

From: Associate Regional Director, Recreation Resources and Professional Services, Pacific Northwest Region

Subject: Review of Draft Resource Management Plan (RMP) and Draft Environmental Impact Statement (EIS)

Thank you for the opportunity to review and comment on the draft RMP and EIS. Our review has surfaced one concern regarding your recommendation that the South Fork Payette River be nominated for study as a recreational component of the Wild and Scenic Rivers System. It appears that the necessary studies have been completed to recommend to Congress that the river be designated as a
11.1 component of the Wild and Scenic Rivers System. Your studies indicate that the river is both eligible and suitable and should be classified as recreational. We agree and believe that the requirements of the "Final Revised Guidelines for Eligibility, Classification and Management of River Areas," as published in the Federal Register, Vol. 47, No. 173, Tuesday, September 7, 1982), have been satisfied. Therefore, congressional designation should be recommended and no additional studies are necessary.

These comments are provided in accord with this Service's responsibility as custodian of the Nationwide River Inventory, which was prepared under authority of the Wild and Scenic Rivers Act. The South Fork Payette is included in the Inventory.

If you have any questions or wish to discuss this matter further, please contact Ron Hyra at FTS 399-5366.

Richard L. Winters

12

439 Styner Avenue
Moscow, Idaho 83843
November 14, 1986

Mr. Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Geier:

It was a pleasure to review the Draft Resource Management Plan and Draft Environmental Impact Statement for the Cascade Resource Area. The report documents a tremendous amount of information and its synthesis and analysis. It is a great step forward in management of Public Lands of the Resource Area.

My particular interest is research natural areas. I have confined the following remarks to coverage and treatment of these areas.

We were pleased to see the inclusion of six proposed research natural areas in the Draft Plan and EIS. Moseley's and my letter to you of September 10, 1985 proposed designation of four of these areas and another, Summer Creek, was discussed in my letter to you of January 2, 1986. We strongly support designation of five of the six proposed RNA's. We do not support designation of Peraphyllum Rock as a research natural area, and we suggest that location and boundaries of two others, Summer Creek and Buckwheat Flat, could be improved. In addition, we suggest that rare plants should not be used as justification for Buckwheat Flats, Lost Basin Grassland, and Goodrich Creek. To our knowledge these areas do not contain rare plants. Following are comments concerning individual proposed RNA's.

Peraphyllum Rock

12.1 We do not believe that this area meets RNA criteria. Please see the 1977 publication, "A Directory of Research Natural Areas on Federal Lands of the United States of America", by the Federal Committee on Ecological Reserves. Pages 5-8 and 266-275 of that publication provide a good review of purposes, standards, and policy guidelines for research natural areas. Paraphyllum Rocks is a small area, badly disturbed by grazing, and with a ground cover of Medusahead. Though it possibly contains squaw apple (we didn't find any squaw apple on a quick visit on September 18, 1986), we do not believe that this qualifies it for RNA designation.

Buckwheat Flats

12.2 The area shown on Map 4 was suggested by Roger Rosentretter prior to an examination of the general area by Robert Moseley and me on August 20, 1985. Using maps and notes supplied by Rosentretter, we located the Sage Creek area proposed as a RNA in our letter to you of September 10, 1985. We believe

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12.2 that the Sage Creek area is a better candidate RNA for the following reasons: (1) It contains greater diversity. Not only does the Sage Creek area contain undisturbed stands of *Eriogonum thymoides* but it also has slopes of bluebunch wheatgrass and areas of sagebrush and bitterbrush. (2) It probably is less subject to disturbance by livestock and man. Although the surrounding country is heavily grazed, the area we proposed receives little livestock use because of the steep slopes where the bluebunch wheatgrass occurs and a very rocky surface on the ridge where buckwheat is found. It is away from the highway and probably less subject to ORV and other human uses. (3) Although the proposed Sage Creek area is small (about 90 acres), it is larger than Buckwheat Flats and a bit closer to meeting RNA criteria.

Summer Creek

12.3 We suggest that you also reconsider the location and boundaries of this area. My letter of January 2, 1986 based on Blaine Mooers recommendations, suggested an area that would include not only the two rare plants of Summer Creek but also vegetation types dominated by stiff sagebrush, mountain mahogany, bitterbrush, bluebunch wheatgrass, and lomatium. We believe that plant diversity would be greater and that protection from livestock use would be easier.

Rare Plants in Proposed RNA's

12.4 We do not believe that occurrence of rare plants should be used as justification for the proposed Lost Basin Grassland, Goodrich Creek, or Buckwheat Flats (pages 12, 25, 2-9, 2-17, 2-26, 2-35, 2-44, 3-9, 4-5, 4-22, 4-41, 4-59, 4.79). To our knowledge none of these three areas contain rare plants. They do contain plant associations needed in a research natural area system to serve research and educational purposes and as baseline reference areas to determine effects of management practices in similar vegetation types.

We are pleased with your restrictions of activities in RNA's, and with the fire policy with respect to these areas. Exclusion of grazing, ORV use, timber cutting, powerline ROW's is necessary so that these areas will be representative of undisturbed conditions.

There are other plant communities and situations in the Cascade Resource Area that should be included in research natural areas. Needed are areas if Xericensis sagebrush, and mountain shrublands on the southeast slopes of the Hitt Mountains. We hope that we can cooperate with your people to find suitable areas that include these and other situations.

I appreciate the opportunity to review and comment on the Draft Plan and EIS.

Sincerely

Charles A. Wellner

Charles A. Wellner, Chairman
Idaho Natural Areas Coordinating Committee

13

5230 N Black Cat Rd.
Meridian, ID 83642
November 17, 1986

Dick Geier
BLM
3948 Development Dr.
Boise, ID 83705

Dear Dick,

I attended ICL's special meeting last night about the Cascade Resource management area plans. I don't think I know enough about the plan to really offer an opinion, but I trust that your group is doing all it can to walk the tightrope between careful non-consumptive use and total closure. I only have a few thoughts.

1) It seems like these lands are being primarily maintained for livestock grazing. Do the ranchers pay fees for their grazing permits? Shouldn't they fund the monitoring programs which the management plans are based on?

2) I see a major global issue surfacing here in the elimination of native grasses. It seems like we have upset the delicate balance in the area with years of overgrazing. Now we have more frequent, larger range fires. Unless something is done to restore the balance, we'll be paying the price with charred acres, loss of wildlife habitat, firefighting bills and eventual destruction of the entire high desert grassland ecology. I hope these plans address the sins of the past and how they can be remedied.

Thank you for the opportunity to express my views.

Sincerely,

Paul Poorman

Paul Poorman

P.S. DO YOU HAVE INFORMATION ON VOLUNTEER BLM PROGRAMS?

14

JOHN R. SWANSON
P. O. Box 6554
Minneapolis, Minn. 55406

November 12, 1986.

Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

Dear Sirs;

Please accept my comments concerning Draft Resource Management Plan and Draft Environmental Impact Statement [illegible] Cascade Resource Area.

I am acquainted with this area of Idaho, and continue to firmly believe that this Cascade Resource Area contains outstanding Wilderness with wildlife, fish, botanic, cultural and scenic resources of certain national significance [illegible] fully beneficial to man, and all life, on our endangered planet.

I then recommend that the Preferred Alternative [illegible] the management of this Cascade Resource Area be opposed, which Draft Plan will [illegible] of such Resource Area.

And to accept the establishment of this Cascade Resource Area as a permanent Natural Preserve.

With each Unit as administered by the Bureau of Land Management established as a permanent Natural Preserve.

As the purpose of the Bureau of Land Management, United States Department of the Interior, is to preserve all of the Wilderness, wildlife, fish, botanic and all biological resources, cultural and scenic resources as located in the areas that are administered by the Bureau of Land Management.

With each such Natural Preserve to protect ecosystems, preserve watersheds, save and enhance wildlife, fish and botanic habitats, areas, protect and promote all biological resources and their natural diversity, preserve rivers and streams, creeks, restore and recover all such damaged areas to their natural environmental conditions, and to preserve, protect, strengthen and expand wilderness.

As wilderness is the foundation of all land and water resources.

With the purpose of all land and water resources planning and management to preserve, protect, strengthen and expand wilderness.

I then urge that the following area and acres indicated in this Cascade Resource Area, which are administered by the Bureau of Land Management be dedicated as wilderness and included in our National Wilderness Preservation System:

Bay creek 487.

Plus, an additional 173,000 acres.

So as to secure a total of some 173,500 acres of Wilderness to be located in this Cascade Resource Area as administered by the Bureau of Land Management and to be included in our National Wilderness Preservation System, at this time.

Plus, areas to be included in the proposed Snake River Birds of Prey Wilderness.

To include rivers and streams, creeks in our National Wild and Scenic Rivers System, such as the South Fork of the Payette River.

To classify this area as a National Critical Habitat Area, so as to save all life including the Columbian Sharp-tailed Grouse, Long-billed Curlew, Bobcat, River Otter, Osprey, Burrowing Owl, Mountain Quail, Idaho Ground Squirrel, Bald Eagle, Peregrine Falcon, Ferruginous Hawk, [illegible] Hawk and Mountain Lion.

To save all remaining Old Growth Forests, and to include same in a National Old Growth Forests Wildlife Sanctuary System.

With no surface and sub-surface activities, developments to occur in this Cascade Resource Area, so as to save this area to fully serve man and all life.

Including a ban on all developments in all proposed and potential Wilderness with no release of any Roadless areas.

To acquire all [illegible] holdings in all Public Lands.

With no disposal of any Public Lands.

To secure this Cascade Resource Area as a [illegible] permanent National Wilderness Wildlife Biological Preserve.

And to select the following Alternative in this Cascade Resource Area's permanent management Plan:

Alternative Preservation Wilderness Wildlife Biological Science Resources.

For wilderness saves our natural lands and waters.

We save America!

Sincerely,

John R. Swanson

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United States Department of Agriculture — Forest Service — Intermountain Region — 324 25th Street, Ogden, UT 84401

Reply to: 1950

Date: [illegible]

Mr. J. David Brunner
District Manager
Boise District
Bureau of Land Management
3948 Development Avenue
Boise, ID 83705

Dear Mr. Brunner:

We have reviewed the Cascade Resource Management Plan for coordination concerns relative to management of the Boise National Forest.

Particular attention was given to proposed direction for lands immediately adjacent to National Forest lands. We found the direction to be consistent with what will be proposed in the Forest Land Management Plan. This includes the Bureau of Land Management's proposal for studying the South Fork Payette River from Garden Valley to Banks for Wild and Scenic River designation. Also, provisions for managing ORV travel are consistent with adjacent Forest direction.

We appreciate the opportunity to review the plan, and we look forward to working with the Bureau as we implement plans on the adjacent areas.

for Roberta E. Beverly
JOHN P. BUTT
Director, Planning and Budget

FS-6200-11b (7/81)

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Friends of Whitewater

Washington · Oregon · Idaho · Montana

Richard Geier
Cascade Area Manager
BLM Boise District
3948 Development Ave.
Boise, ID 83705

November 17, 1986

Dear Mr. Geier

16.1 The Cascade Area Resource Management Plan is to be commended for its recommendation of Wild & Scenic consideration for the Payette river and its South Fork. The draft plan and EIS err, however, in recommending further study for these river segments instead of recommending them to the President and Congress for designation. The Resource Management Planning process is the study on the eligibility and suitability of these rivers for Wild & Scenic designation.

I have attached correspondence in which the Regional Forester of Region Six of the Forest Service agrees that the Forest Planning process constitutes the Wild & Scenic study of rivers and the Forest Service will make recommendations for designation, rather than further study. Unless the BLM's planning process is somehow less capable or thorough than the Forest Service's, it should similarly be making recommendations for designation rather than further study.

Very Truly Yours,

Douglass A. North

Douglass A. North

PO Box 88 Seattle, Washington 98111-088

17

1860 Lincoln Street, Suite 404 • Denver, Colorado 80295
303/860-0099

November 19, 1986

Mr. Richard A. Geier
Area Manager
Cascade Resource Area
Bureau of Land Management
3948 Development Avenue
Boise, ID 83705

Dear Mr. Geier:

On behalf of the Rocky Mountain Oil and Gas Association (RMOGA) I am writing to offer our comments on the Draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for the Cascade Resource Area (RA). RMOGA is a trade association representing hundreds of members who account for more than 90% of the oil and gas exploration, production, and transportation activities in the Rocky Mountain West.

RMOGA supports the BLM's Preferred Alternative which proposes to make 94% of the Cascade RA available for oil and gas leasing. It is important that access for energy and mineral activities be maintained with minimum constraints, even in periods of low activity. We believe, however, that the treatment of minerals in the planning documents has some flaws which require correction or modification.

17.1 For example, on Page 57 of the RMP, the BLM states that energy and mineral leasing is a discretionary action and that approval of an application for a lease is subject to an environmental analysis to determine whether any special stipulations are required to protect sensitive resources. We believe this type of analysis should be included in the RMP; otherwise there would be no need to discuss minerals in the planning process. However, the BLM seems to be implying that separate environmental analyses will be prepared on individual leases as

-1-

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November 19, 1986

Mr. Richard A. Geier
Area Manager
Cascade Resource Area
Bureau of Land Management

page two

17.1 they are applied for by industry. This approach is not in compliance with Bureau policy in Washington. Director Burford has testified on several occasions before Congress on oil and gas leasing legislation and has directly addressed this issue. It is our understanding that, according to Director Burford, the land management planning process should provide sufficient direction in order to make all leasing decisions within the Resource Area. We fully support this position.

17.2 We believe that the minerals section of the plan should provide explicit direction as to how energy and mineral resources will be managed during the life of the plan. The Cascade RMP fails to provide specific information as to the location of significant potential for energy and mineral resources. Nor is there a map which provides information as to where the BLM anticipates attaching special stipulations to leases. The BLM also failed to provide information regarding the number of leases currently held in the RA, as well as a discussion of any pending leases. This type of information is essential to companies in their efforts to determine how their present or future operations may be affected by the proposed plan. Such information also provides the general public with an idea as to where mineral activities may take place and under what conditions.

The BLM has indicated that an Oil and Gas Environmental Assessment (EA) on leasing was previously prepared which includes the Cascade Resource Area. Even if more specific information is contained in this EA, the planning documents should include the basic information and guidelines the BLM utilized in making planning decisions. We therefore encourage the BLM to more fully integrate the oil and gas leasing EA into the proposed planning documents if that document was the basis for the decisions contained in the proposed plan.

17.3 We are concerned that the Cascade RMP does not provide adequate direction for the management of energy and mineral resources. For instance, we are concerned that there may be future delays when lease applications are filed because additional environmental documentation may be needed before an application can be approved. It is possible that conflict situations may arise between surface and subsurface resources that the RMP has failed to address. Therefore, we recommend that the BLM revise the mineral portion of the plan to include a more indepth analysis of the possible trade-offs involved between surface and subsurface resources. This analysis is important area-wide, but is of particular importance for the 100,000 acres identified by the BLM as having significant potential for oil and gas. During preparation of such an analysis, the BLM must recognize that in some situations energy and mineral resources may warrant priority consideration over surface resources. We believe these objectives can be met by utilizing the draft RMP Guidance for Fluid Minerals currently under BLM consideration.

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November 19, 1986

Mr. Richard A. Geier
Area Manager
Cascade Resource Area
Bureau of Land Management

page three

In conclusion, while we endorse the leasing availability recommendations contained in Alternative E, we recommend that the BLM revise its final EIS to comply with the BLM's draft planning guidance for fluid minerals. These guidelines require specific disclosure of how minerals are considered and related decisions made. For example, the RA would be categorized as having low, moderate or high potential for oil and gas. A matrix would then be prepared which
17.4 would indicate how many acres are subject to withdrawals, no surface occupancy stipulations, seasonal or other special stipulations, and standard stipulations. These areas would then be identified on a map and included in the plan. This type of information aids public review efforts because rationale for decisions is more easily identified.

We appreciate this opportunity to provide you with our views. If you have any questions regarding our comments, please contact me.

Sincerely,

Alice Frell Benitez
Public Lands Director

AFB:cw

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The recreation plan accommodates ORV users in play area and cycle parks. Hikers get little, which is unfortunate for there is a real need for hiking trails near the population center of the state. The Hull's Gulch trail is well developed and gets a lot of use. We hike it 3-5 times a year. More trails should be developed, especially on the Boise Front, Squaw Butte, and dodson Pass. Perhaps the BLM could take the lead and co-ordinate with the Forest Service and Idaho Fish and Game to establish a trails Committee to promote hiking trails on the Boise Front.

Box Creek should be managed as an outstanding natural area as proposed in Alternative C.

The unsatifactory camping situation at Paddock Reservoir needs some solution. The BLM should take the lead in this, perhaps even trading some land to acquire the camping area which could then be developed for camping.

Thank you for the opportunity to express our views.

Sincerely,

Frederick R. Ward

Frederick R. Ward

Janet D. Ward

Janet D. Ward

18

1910 Manitou
Boise, Idaho 83706
November 25, 1986

Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise district Office
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Geier,

We appreciate the conservative and realistic approach reflected in the draft Cascade Resource Management Plan. This land use plan seems to be truely based on environmental considerations.

The plan doesn't include extensive and expensive range manipulations. This is a sound approach considering the Federal deficit, available funding, and environmental constraints of slope and soils. Yet most of the area is in poor ecological condition (Map 3-2 in the appendix) reflecting a long history of abuse. Therefore the proposal making grazing increases dependent on monitoring studies indicating range improvement is absolutely necessary.

The plan needs to be amended to indicate the extent of the damage to range and wildlife habitat done by the wide-spread wildfires in the summer of 1986. The proposals of the Range Restoration and Rehabilitation Committee need to be included. At the meeting Nov. 12, you indicated affected allotments would have several seasons of non-use and that AUM's on other allotments would not be increased to compensate for these losses. This should also be included.

The 1986 fire damage to 80% of the mule deer winter range is tragic. The 20 year wildlife projections obviously need to be adjusted. The reseeding efforts with a mixture of grasses, forbs, and shrubs is a fine approach--far better than the prevalent seeding with a crested-wheatgrass monoculture.

Especially admirable is the plan's recognition of wildlife needs. We were pleased to read of the habitat management for sage grouse (page 51) for this species is entirely dependent on sage. There is a fine proposal for 6 research natural areas to protect Federal category II and sensitive plants. The 3 Areas of Critical Environmental Concern are essential for protection of the Columbian sharp-tailed grouse, the long billed curlew, and the watershed on the Boise Front. Recognition of the Boise Front as a critical watershed is long overdue. The BLM seems committed to these proposals: we were encouraged to read that the Honggeler land exchange (page 4-89) for 80 acres in long-billed curlew habitat was rejected.

However, we recommend more concern for the red-banded trout. The plan includes fencing on segments of 4 streams (page 4-81). We prefer the proposal in Alternative C (page 4-43) which includes fencing on 6 streams.

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Dave Van De Graaff
4310 N. Maple Grove Rd.
Boise, Idaho 83704
November 26, 1986

Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Having reviewed the "Draft Resource Plan and Draft Environmental Impact Statement" for the Cascade Management Area, I would like to submit the following comments as input into the planning process.

1 - The plan as presented has minimal analysis of the impact BLM timber has on the economy of local communities. Several mills are affected by timber availability. In the Southwest Idaho area all mills are dependent upon a "wood-basket" for raw materials. This common source of timber includes the Forest Service, State of Idaho, Private, and BLM.

In the past, BLM timber has not been a major souce of raw material. However, the impact of BLM offerings will be more critical to the timber industry as time goes on. The reasons for this is as follows:

A - Timber availability from the Forest Service is declining. Indications are that the Payette National Forest will hold their harvest level to about historic levels. Initial contact with the Boise National Forest Plan indicates a reduction in cut from 92.6 MMBF to about 74 MMBF

B - State of Idaho timber is projected to remain about constant.

C - During the period from 1979 to 1985, the timber industry in Southern Idaho moved heavily to private timber for raw material. This was done to survive depressed lumber prices. Much of the private timber was already owned at low stumpage. This trend is now over. Increased harvest on private lands has depleted much of this source for the next decade. Fortunately, lumber demand has increased, making government wood more attractive.

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2

For the above reasons there is a serious shortage of timber for the near term. This will increase demand. If the needed raw material for current facilities in this area is to be provided, all sources of mature material must be made available. It is desirable to maintain current operating levels to:

A - Provide employment in local communities. This is especially important in view of the lack of other employment opportunity in towns such as Horseshoe Bend, Cascade, New Meadows, Council, and Emmett.

B - Utilize growth of a natural resource providing funds to local, state, and the Federal government. This is critical at a time of budget constraint at all levels.

The BLM plan has looked at five alternative levels of timber management. The Preferred Alternative (E) recommends 1 MMBF of timber to be offered annually. In view of the above discussion, I feel that the harvest level should be set between the 1.7 MMBF in alternative B, and the 2.9 MMBF in alternative D.

2 - I am very pleased that the BLM intends to continue selective logging. This system removes over-mature, high risk trees decreasing loss from mortality while providing raw material of a size which industry can use. In addition, selective logging provides cover for game animals.

3 - At this time you have not addressed the wilderness issue. I oppose the inclusion of any lands into wilderness which can provide livestock forage, timber, or minerals. Idaho has all the single use lands it can stand. I would recommend multiple use on every acre available.

Thank you for the opportunity to provide my personal input into your planning process.

Sincerely,

Dave Van De Graeff

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Comments of Idaho Natural Resources Legal Foundation on the Cascade Draft Resource Management Plan and Draft Environmental Impact Statement.

20.1 1. The plan does not conform to the CEQ Regulations under NEPA. 40 C.F.R. § 1508.7 defines "cumulative impact" as

> the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. § 1508.25(a)(2) requires "(2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts ... be discussed in the same impact statement."

20.2 An example of the failure to live up to the standards of these regulations, and thus NEPA, is the discussion (or more accurately, the complete lack of discussion) of the cumulative effects of pipelines. The DEIS, on page 2-43, and the proposed plan, on page 24, both say 15 miles of pipelines will be put in during the planning period. The DEIS, on page 4-77, says 12 miles of pipelines are proposed. That completes the discussions of pipelines.

For the purposes of these comments, it is assumed that the pipelines are going to be installed to take water from

IDAHO NATURAL RESOURCES LEGAL FOUNDATION, INC.
"To Restore, Preserve and Protect"
P.O. Box 1946 Boise, Idaho 83701 (208) 343-8978

William R. Meiners, Chairman
Terry-Ann Spitzer, Vice-Chairman
Russ Heughins, Secretary-Treasurer
Richard McCloskey
Martin Martelle
D. Michael Barton
David Meyers
Chet Bowers
Glen Foster
Edwin W. Stockly, Lawyer and Chief Executive Officer

20

November 25, 1986

Richard A. Geier, Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Ave.
Boise, ID 83705

Re: Cascade Draft RMP and DEIS

Dear Sir:

Here is Idaho Natural Resources Legal Foundation's comments on the Cascade Draft Resource Management Plan and Draft Environmental Impact Statement. The Legal Foundation appreciates the opportunity to submit these comments for your consideration.

Very truly yours,

Edwin W. Stockly

EWS/ng
Enclosure

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20.2 one spot, such as a river, stream or well, and apply it to an area which now is used only by wildlife. When water is applied, the area will be reseeded and cattle will be turned out on it. If the pipelines in fact are intended to be transportation for oil, natural gas or slurry, this discussion will need revision.

The effect of the these actions on the wildlife must be considered. We are not dealing in terms of numbers here, we are dealing in terms of areas used by wildlife (one of the approved multiple uses) that is going to be turned into cattle grazing area. Can the wildlife compete with the cattle? Will the range be planted with seeds that produce a crop the wildlife presently using the area will be able to use? Will the wildlife habitat be preserved or destroyed in the transformation? What sort of an area are we talking about? Are the 12 or 15 miles the mainstems or do they include all laterals? The Legal Foundation recognizes that the proposed plan and the DEIS are not the appropriate places for site specific analyses. They are, however, the required place (40 C.F.R. § 1501.2) to discuss the environmental impacts of the proposed actions.

20.3 Pipelines are just one example. Land transfers, for instance, are another example. Other range improvements such as are mentioned in the plan, are another example. The

20.4 plan speaks of "burning, discing and spraying" (e.g. page

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20.4 24). The danger of noxious weed infestations from land disturbing activities are not discussed. The Legal Foundation assumes that any spraying to control noxious weeds or other pests will be in accordance with an approved weed or pest control plan. It is doubtful that any such plan would permit indiscriminate spraying. So the indiscriminate work will be the burning and the discing. The effects of such work on wildlife, water quality, and other natural resources should be discussed.

20.5 2. The planning criteria on page 8 of the RMP are totally inadequate. These are not the planning criteria called for by 43 C.F.R. § 1610.4-2, which call for criteria "to guide development of the resource management plan". The criteria on page 8 couldn't guide anything. The BLM Regulations require public input into the planning criteria. The regulations require the planning criteria be developed before the development of the plan and the DEIS. If the regulations have any meaning, they require the Cascade Resource Area to start anew, develop adequate planning criteria, with good public input, and then -- based on the criteria decided upon -- develop the proposed plan and DEIS anew. The Legal Foundation considers the development of adequate planning criteria, with appropriate public input, to be essential to the development of an adequate plan. The

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Legal Foundation intends to make sure that the BLM Regulations, 43 C.F.R., part 1600, are complied with.

20.6 3. The Legal Foundation questions whether the plan contemplates realistic budget levels. On page 46 an extensive monitoring program is called for. Does the Bureau have the money now for such monitoring? Is it now being performed? Does the Bureau contemplate such funds?

20.7 4. The plan should be revised so that it accurately reflects the conditions following the 1968 fires. At a public meeting the Director of the Resource Area indicated that it is not intended to revise the plan. This is a mistake. Significant elements of the Area's resources have been changed to such an extent that the plan no longer represents reality.

20.8 5. The entire burned wildlife habitat north of Emmett should be an ACEC. 43 U.S.C. § 1702(a), and 43 U.S.C. § 1712(c)(3) are clearly applicable to this situation. An extensive wildlife population and habitat is at extreme risk. This is what the concept of the area of critical environmental concern was developed for. It should be used. Failure to do so would appear to be a failure to comply with the law and regulations.

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P.O. Box 339
McCall, Idaho
83638

November 25, 1986

Mr. Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Ave.
Boise, Idaho 83705

Dear Mr. Geier:

After reviewing your Cascade Resource Management Plan for 487,466 acres of BLM administered public lands in the Cascade Resource Area, I wish to make several comments concerning the plan.

1. More importance should be on Multi Use Management, with emphasis on those uses that complement each other. An example would be using logging to enhance big game winter range and improve wildlife habitat.

21.1 2. Your preferred alternative indicates 26,663 acres of timber management acres with an annual harvest of only one million board foot of timber. The one million board foot harvest equates to an annual growth of only 37½ board foot per acre per year. Even under average growing conditions one can expect 150 board foot/acre/year on the 26,663 acres of timberland resulting in an annual harvest of approximately four million board foot. As a professional Forester working out of the Cascade, Idaho area, I am familiar with some of your timberlands. Many of these timbered acres contain an abundance of high risk timber which should be harvested.

3. Federal grazing fees should be raised to reflect a fair market value, at least $3.25/animal unit month. All area of public lands that are grazed by domestic livestock should be grazed under some type of grazing management plan, preferably a three pasture rest rotation system.

4. The so called wild horses should be greatly reduced or better yet eliminated. The wild horses are not wild but descendants of domestic horses. They are damaging to the range, have no natural enemies, and your present control

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methods are quite expensive. The horses compete for habitat that should be occupied by deer, elk, big horn sheep, antelope, etc.

I appreciate the opportunity to comment on the Cascade Resource Management Plan.

Sincerely,

John P. Kwader

22

Timber and Wood Products Group

Boise Cascade

Southern Idaho Region
P.O. Box 156
Horseshoe Bend, Idaho 83629
208/793-2241

November 26, 1986

Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Ave.
Boise, Idaho 83705

Dear Mr. Geier;

Boise Cascade has reviewed the "Draft Resource Management Plan and Draft Environmental Impact Statement" for the Cascade Resource Management District and the following comments are our input into the planning process.

The timber sales level on the BLM, Cascade District, should be set at between 3 MMBF and 5 MMBF annually. This level is sustainable and is necessary to maintain current employment levels in small, dependent communities.

The reasons are as follows:

I. Concerning forest mangement alternatives and potential.

22.1 A - The document considers five alternatives, managing a range of acres and intensities. Harvest levels range from .5 MMBF to 2.9 MMBF annually on lands between 20,026 acres and 26,686 acres. Our experience with timber types in the same area shows timber growth to be between 150/250 bd.ft./acre per year, on unmanaged stands, and 200/500 bd.ft./acres under intensive management. Assuming the worst case, 150 bd.ft./acre per year on 20,026 acres, the sustained yield harvest should be 3.0 MMBF.

200 bd.ft./acre per year average should be easily attainable. Assuming the 26,663 acres in the preferred alternative, this would allow a sustained yield of 5.3 MMBF annually. Considering growth potential of timbered acres, a harvest of 1 MMBF per year is considered too low.

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B - You mention in the plan that selective harvest systems are preferred. Boise Cascade agrees with this philosophy for the following reasons;

1 - Selective harvest normally takes out larger, high risk trees. This reduces losses due to mortality, increases growth by leaving smaller, more thrifty trees, and is more economical for the purchasers. Larger trees cost less to harvest, reduces milling expense, and yield higher value products.

2 - Silvicultural systems which leave a continuous stand of timber depend on natural regeneration, saving the expense of planting.

3 - Selective cutting provides cover for game animals.

II. Concerning industries needs.

A - On page 16 of the "Draft Plan", it is stated that "the proposed annual harvest of 1 MMBF has been determined on the basis of demand for saw timber and the administrative capability to offer timber sales". This indicates a lack of demand for timber in the Southwest Idaho area. This is not the case. We view the timber supply as follows;

1 - Operators in the Southwest Idaho area (from Mountain Home on the Southeast to New Meadows on the Northwest) draw timber from a common raw material base. This limited source is made up of the Boise National Forest, the Payette National Forest, the BLM, the State of Idaho, and private landowners. The area of commercial timber land is fixed, distance prohibits operators from "reaching out" and expanding the operating base.

2 - The Payette National Forest has been operating on an allowable harvest of 74 MMBF. The Draft Plan for this forest indicates future harvest of 78 MMBF, including salvage.

3 - The Boise National Forest has been operating at a 92.6 MMBF allowable harvest level. Indications are that this level will be reduced to about 75 MMBF under the new plan.

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4 - The State of Idaho sells 20 MMBF annually. This volume is expected to remain constant.

5 - Harvest of private lands was increased during the period from 1980 to 1985, primarily due to the less expensive stumpage from this source during a period of depressed lumber prices. Harvest levels from private sources will be reduced in the future.

The net result of the above listed facts is a reduction in available timber of 13 to 25 MMBF annually to operators in Southwest Idaho.

B - Timber manufacturers in the Southwest Idaho area are not currently operating at full capacity. To be efficient, a sawmill should operate on at least a two shift basis. Several facilities in this area are presently operating only one shift, primarily due to lack of raw materials.

C - To operate efficiently, a standing timber inventory equalling 2½ to 3 years of production is needed. This allows time for road construction, contracting, etc. At Boise Cascade, the level of timber under contract has been going down steadily since 1975. There is no "backlog" of timber to make up for future sale shortages.

D - Reduction in production is not a straight line relationship with reduction in timber supply. When adequate timber is not available, a full shift is removed from a large mill, or a small mill goes out of business.

III. Concerning effects on employment.

A - The timber shortage which industry is facing will result in either a small mill going down, or a large mill reducing at least one shift. This equates to the loss of approximately 65 direct jobs.

B - Job loss would occur in a small, dependant community, such as Horseshoe Bend, Council, or New Meadows. These areas have little or no employment opportunity for displaced workers.

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IV. Effects of community stability.

A - Mill facilities in Southwest Idaho are located in small communities. A reduction in timber availability would reduce $1,475,000 in direct payroll in the town where a shutdown occurs. This, coupled with a reduction in taxes at all levels, would have serious adverse affects.

Thank you for considering our concerns and comments.

Sincerely,

BOISE CASCADE CORPORATION

John Bender

John Bender
Idaho Region Manager

23

Nov. 22, 1986

Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Sir:

I attended the Cascade RMP Workshop on Nov. 12 and read through a copy of the plan , focusing primarily on the preferred alternative and Alternative C.

1. My opininon would favor Alternative C. This opininon is bolstered by the uncertaincies surrounding adequate monitoring (because of insufficient funding) in the preferred alternative.

2. If sufficient funds and the mechanisms of monitoring are attainable, the the preferred alternative appears to be an acceptable second choice.

3. The fire restoration efforts are encouraging, and I have little to add in comment on them.

4. I do want to go on record as being very strongly in support of the South Fork Payette Recreational River recommendation; of the proposed ACEC's; and of the RNA's.

5. What I would like to concentrate on in more detail are the following two issues:

(a) The importance of good riparian management -- for wildlife, fish and people ; overgrazed stream banks are disastrous for plants and animals -- probably one of the most obvious reasons many people think that there should be decreases in AUM's. At least major tributaries like Crane Creek deserve careful management. Along these lines, setting minimum flow criteria for streams like Crane Creek is also something that should be included in the final RMP.

(b) The issue of regulation of ORV's. I entirely support the closure of RNA's to ORV's and the limitations of ORV use in the ACEC's and other selected areas. However, I have extensively hiked in the Boise Front and frequently encounter trail bikes in areas that are supposed to be closed; last Spring I even met a trail bike on the Hulls Gulch Trail. It is clearly true that a significant number of ORV operators neglect the simplest rules of erosion control -- the thrill of tracking the untracked is ultimately highly destructive to steep

23 page 2

erosive slopes. Thus it is not just a matter of a conflict of uses -- although it is that, and a hiker- trail bike encounter interferes much more with the enjoyment of the hiker than it does the biker -- it is also a matter of a conflict of one use with the ecological integrity of the land used. It is analogous in a way to bird-hunting vs bird-watching; the former is more consumptive than the latter. Clearly ORV's are here to stay -- but just like with hunting, it needs to be regulated. Thus I would like to propose that the final RMP include some provision for monitoring of ORV use, particularly in the areas that are sensitive to erosion and in the areas where use is to be limited to trails only; and that the RMP include some criteria for when an area would become one of limited instead of unrestricted use or be closed altogether -- these criteria being ones that are before destruction to the extent seen in the Boise Front.

23.1 I would like to further propose that a few selected smallish areas be set aside as entirely closed to ORV's to provide havens for wildlife and for hikers free of conflict with ORV's. The two proposals put forth by Sheldon Bluestein seem to be appropriate; the 7500 acres between Crane Creek and the Weiser River and the 8000 acres south of Dodson Pass. The total acres are not excessively large here; it can not be held to be discriminating to ORV'ers to designate an area outside an RNA as open to non-motorized recreation only, when the total number of unrestricted acres and available trails is so overwhelmingly large. It would seem to me that such an area is fully compatible with the principle of multiple use in that multiple use is a concept applied to a region -- like the Cascade area -- such that specific areas can have restricted uses.

A last thought along these lines would be to wonder if the Cascade Management Area could coordinate with the Boise National Forest to extend the Hulls Gulch trail further in to the forest above its current ending.

6. Lastly, I would like to indicate that I would be willing to spend a Saturday come Spring working in the Boise Front or another area that needs it helping replace signs and fences that have been knocked down or have fallen into disrepair. Alternatively, if there was some trail work that was taking place I would be willing to help out there too.

Sincerely yours,

Erik Fisher
1824 Edgecliff Terrace
Boise, Idaho 83702

24

700 E. Fairview Ave. Sp 68
Meridian, ID 83642
November 28, 1986

J. David Brunner
Boise District Manager
Bureau of Land Management
3948 Development Ave.
Boise, ID 83705

Dear Mr. Brunner:

24.1 The Idaho Wildlife Federation(IWF) appreciates the opportunity to comment on the Cascade Resource Management Plan and Environmental Impact Statement(Draft). Our organization views this land use plan an especially important one because of the destructive fires in the Resource Area. Protection and rehabilitation will dominate the management direction during the life of the land use plan, especially throughout the first five years of the plan. Because of these conditions the IWF recommends the Squaw Butte/Willow Ridge complex be designated an Area of Critical Environmental Concern(ACEC). The critical mule deer winter range, upland wildlife and riparian zones will require special management attention throughout the life of the plan.

24.2 The IWF recommends changing the RMP to reflect the altered range and wildlife conditions in the resource area. While we appreciate the confidence of your staff to carry out the management objectives of the proposed plan despite the obstacles, we believe the damage modified conditions that require a reassessment of the management prescriptions proposed under all the alternatives. Without such reconsideration and adjustment the public is handicapped in evaluating the plan.

24.3 Significant inadequacies occur throughout the plan because it does not conform to the CEQ Regulations under NEPA. Federal Regulation, 40CFR 1508.7, defines "cumulative impact" as

> the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably forseeable future actions regardless of what agency(federal or non-federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40CFR 1508.2r(a)(2) requires "(2) cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts . . . be discussed in the same impact statement."

Affiliated with the National Wildlife Federation

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Cascade Draft RMP/EIS
November 28, 1986
Page 2

24.4 An example of the inadequacies is the discussion(or lack of discussion) of the cumulative effects of the fifteen (15) miles of stock watering pipeline(pg 24). Through experience we discovered pipelines usually result in the development of laterals and extensions. Because the plan extends through a twenty year period we feel it is reasonable to anticipate such actions during the life of the plan. The effect of pipelines on wildlife must be considered. We feel it is not a case of numbers but one of areas used by wildlife. While the proposed plan and DEIS are not the appropriate places for site specific analyses, they are however, the required place(40CFR 1501.2) to discuss the environmental impacts of the proposed actions.

24.5 Another example of where the proposed plan is deficient is the discussion of the land transfer, particularly the BLM/State of Idaho exchange. In the DEIS the potential environmental consequences are not discussed. The failure to explain the results of the proposed exchange is one more example of the inadequacies permeating the Draft RMP/DEIS.

The Federation approves of the establishment of an ACEC for Columbian sharp tail grouse and for the longbilled curlew.

24.6 Funding emerges as a major questionable ingredient of the plan. Much of the success of the plan hinges on carrying out the prescriptions stated in the RMP, but in Appendix P the familar phrase "depending on the availability of funding and manpower" imposes a limitation on the ability of the Bureau to meet their commitments. The likelihood of reduced funding and manpower in the remainder of this decade and into the next decade is a likely constraint. However, the sequence to the environment if the Bureau is unable to implement an aggressive and effective monitoring plan is not discussed. We view this oversight as a serious flaw in the plan because monitoring constitutes a major step in determining management decisions.

The Idaho Wildlife Federation believes the Cascade Resource Management Plan and Environmental Impact Statement (Draft) seriously flawed, and we recommend that a rewrite is necessary to bring it in complaince with the requirements of NEPA and the federal regulations. Any rewrite must include the conditions and situations created by the past summer's fires.

Cordially,

Russell W. Heughins

Russell W. Heughins, Chairman
Natural Resources Committee

25

11/26/86

Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Sir:

Concerning the Cascade Resource Plan/Environmental Impact Statement, I back the Preferred Alternative E with some reservations. Removing the West Crane horse herd I believe is a very good idea as we are going into a more intensive management program on water development + grass seeding. also, I think we are the only allotment to have been cut in Cascade Resource Area - 24% I believe. As for the Four Mile herd if it is retained, I would like to see them gathered more often so it is held closer to the proposed 20. I believe range would be better served if they were removed also.

ON wildlife, I oppose a 22% increase in the Elk herd. Most areas that I know of already have too many & are causing a problem for private land owners. The increase in deer may not be as bad, but there seemed to be quite a few around

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before the special harvest because of burned areas. I doubt that the increase in antelope would be any problem.

The off road vehicles could get to be a problem as their use increases. I have noticed this in my area.

ON riparian habitat, I would not like to see much fencing if any. It could be real problem maintaining such fences.

ON curlew habitat, I believe the range would be better served if seeded to some type of grass rather than go all to medusahead.

Sincerely,
Weldon Branch

26

HUNTING FISHING SCENIC

Idaho Outfitters' & Guides' Association, Inc.

P.O. BOX 95 BOISE, IDAHO 83701 (208) 342-1438

November 26, 1986

BUREAU OF LAND MANAGEMENT.
3948 Development Avenue
Boise, ID 83705

Gentlemen,

The Idaho Outfitters and Guides Association supports Alternative C of the Cascade RMP.

In the area of recreation we support:

1) full 4500 acre recreational river management along six miles of the North Fork, and eight miles along the Main Payette

2) the exchange or purchase of land for a Middle Weiser River canoe/float launch site and take out site

3) development of a recreation parking area for a take out site for river recreationists on the Cabarton stretch of the Payette

4) wild and scenic status for the South Fork of the Payette

5) withdraw 500 foot corridor along Hull's Gulch Nature Trail from overhead, surface, or subsurface rights of way, from mineral location and leasing, and from <u>any</u> domestic grazing

We support ACEC's for the long-billed curlew and the Columbian sharp-tailed grouse.

Additionally, we are concerned that the plan adequately addresses the need for range rehabilitation north of Emmett in the burn area. Winter range for wildlife is critical for the herds.

Sincerely,

Grant Simonds

Grant Simonds
Executive Director

GS/SS

27

STATE OF IDAHO

JOHN V. EVANS
GOVERNOR
IDAHO TRANSPORTATION BOARD
JOHN M. OHMAN — CHAIRMAN
LLOYD F. BARRON — VICE CHAIRMAN
MARION DAVIDSON — MEMBER
E. DEAN TISDALE
DIRECTOR

TRANSPORTATION DEPARTMENT

PO BOX 7129 BOISE, IDAHO 83707

November 26, 1986

Mr. J. David Brunner
BLM District Manager
3948 Development Ave.
Boise, ID 83705

Dear Mr. Brunner,

The Idaho Transportation Department has two major concerns with the "Cascade Draft Resource Management Plan and Environmental Impact Statement." The concerns are related, and could severely limit our ability in the future to accomplish transportation objectives, including a major state goal of improving North/South travel.

27.1 The first concern is that the Resource Management Plan (RMP) does not acknowledge our future plans or needs for improving state and federal transportation routes within your resource area. For example, several Idaho Transportation Department studies have addressed the need to extend State Highway 16 between Emmett and Mesa through the Indian Valley area. Our department and consultants have coordinated with your agency on this project. The RMP, without reference, appears to eliminate this project from consideration. We have two alternative corridors, both of which apparently involve RMP identified "Avoidance Areas." The RMP states on page 43, under "Land Use Authorizations," that rights-of-way will be considered <u>except</u> where specifically identified in the RMP for avoidance. The second, and related, concern regards clarity of definition for the term "Avoidance Area." RMP map 6 supposedly identifies right-of-way avoidance areas, but differs considerably from those avoidance areas identified on page 64 under "Land Transfer and Utility Rows."

27.2

Our recommendation regarding the Draft RMP is that:

27.3 ° The Land use authorization section (page 43) be reworded to reflect that right-of-way will be considered in all cases; except those identified as sensitive areas should be avoided to the extent possible when practical and feasible alternatives exist to satisfy a demonstrated need.

CONTINUED

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STATE OF IDAHO - TRANSPORTATION DEPARTMENT

J. DAVID BRUNNER
NOVEMBER 26, 1986
PAGE 2

27.4 ° Avoidance areas be defined in the definition section, and areas within this definition, identified (General Boundaries) on a specific map. In any case, the conflict of definition between Map 6 and page 64 should be clarified.

27.5 ° That you identify the potential for a major transportation corridor in your RMP as set out in your BLM Organic Act Directive (OAD) 79-20 and its subsequent changes.

Your consideration and inclusion of our concerns and recommendations in your final RMP and EIS would be appreciated.

Sincerely,

E. Dean Tisdale

E. DEAN TISDALE
Director

EDT:CMR:sk

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Richard A. Geier
November 24, 1986
Page 2

demonstrated by statistical sample that out of 73,626 noncompetitive and competitive leases issued for the states of Utah, Wyoming, New Mexico and Colorado, only 5,984 or 8.14 percent were actually drilled. This statistic demonstrates the impractical nature of attempting to complete environmental analysis before issuing leases since most leases will never be drilled thus wasting valuable agency time and efforts.

Another area of concern deals with Table 1 (page 49) listing the no occupancy time periods for wildlife habitat. While we recognize the need for some restrictions, a similar need exists for providing exceptions to no occupancy when the situation presents itself. Many times individual species may not be occupying critical range. If an operator desires to conduct operations in a given area, flexibility should be allowed to waive the restriction when justification can be given. We recommend that the restrictions presented on Table 1 contain a reference that modification to these restrictions for any period may be approved in writing by the authorized officer such as a Resource Area Manager.

In conclusion, we recommend that BLM revise its position relative to environmental documentation at the leasing stage and allow for flexibility in managing wildlife areas.

Thank you for considering our comments.

Neil W. Allen

DRB/mgb

LTR718

28

AMOCO

Amoco Production Company
Denver Region
1670 Broadway
P.O. Box 800
Denver, Colorado 80201
303 830-4040

Neil W. Allen
Regional Environmental
Safety and Unitization Manager

November 24, 1986

Richard A. Geier, Area Manager
Cascade Resource Area
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

File: NWA-575-031

Cascade Draft Resource Management Plan
and Draft Environmental Impact Statement

Amoco Production Company is a wholly owned subsidiary of Amoco Corporation, and is incorporated for the purpose of exploring for and developing oil and gas resources. The company is involved in the exploration of the federal mineral land base, and, as a result has great interest in the BLM planning process associated with public lands.

We support the preferred alternative which would leave 94 percent of the resource area open to oil and gas leasing. It is important that access for energy and mineral activities be maintained with a minimum amount of constraints. However, there are some problems in the planning documents regarding the analysis mineral resources has received during the planning process.

28.1 One example of a concern can be found on Page 57 of the plan. Here the document states that energy and mineral leasing is a discretionary action and that approval of an application for a lease is subject to an environmental analysis to determine whether any special stipulations are required to protect other resources. Does this mean that separate environmental analysis will be prepared on individual leases before they are issued? The Washington D.C. office of the BLM has on numerous occasions indicated that this process is very time consuming and costly. In a 1982 General Accounting Office report entitled "Are Leaseholders Adequately Exploring for Oil and Gas on Federal Lands?"

29

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VA. 22092

In Reply Refer To:
WGS-Mail Stop 423

24

Memorandum

To: Cascade Area Manager, Bureau of Land Management, Boise, Idaho

From: Assistant Director for Engineering Geology

Subject: Review of draft Cascade Resource Management/environmental statement for the Cascade Resource Area, Idaho

We have reviewed the statement as requested in your letter of August 21 included with the statement.

29.1 Page 4-88 of the draft statement indicates that 400 acres of Cascade Resource Area lands are to be sold for use as sanitary landfills: 80 acres in Ada County, 320 acres in Canyon County. This portion of the plan should be evaluated in more detail. Examination of map 2 and of maps of ground-water occurrence (e.g., Kinnison, P.T., 1955, A survey of the ground water of the State of Idaho: Idaho Bureau of Mines and Geology Pamphlet No. 103) suggest that the lands to be sold may be in ground-water recharge areas. The draft statement should indicate the location of the lands, discuss the geology and hydrology of the areas involved, assess the potential for impacts on ground water, and discuss mitigation possibilities.

Clarence F. Skinner

for James F. Devine

Copy to: District Chief, WRD, Boise, Idaho

30

November 25, 1986

Dick Geier
Bureau of Land Management
Cascade Resource Area
3948 Development Ave.
Boise, ID 83705

Dear Dick:

Reference our telephone conversation regarding the State-BLM land exchange program and your draft resource management plan.

30.1 You mentioned the Cascade District would not be able to do anything on land exchange until the resource management plan was approved. To avoid this delay in our land exchange program and to comply with the recently executed State/BLM Exchange Strategy Agreement, we suggest the State and BLM try to reach agreement on exchange for the Cascade District - which could then be incorporated into the Cascade Resource Management Plan.

I have attached a map showing the BLM lands the State is interested in acquiring and those lands the State is willing to dispose. It is a proposal - there may be State lands not identified the BLM may wish to acquire or lands shown in which you are not interested in exchanging. We did not list each subdivision and acreage. The total exchange acreage as shown on the map amounts to about 50,000 acres of each ownership.

The State/BLM exchange strategy agreement suggests that field offices develop exchange proposals and submit to headquarters no later than January 31. In order to meet this date, we suggest you review our proposal and lets' meet some time in December and see if we can jointly develop a proposal to be submitted by this January date.

Land exchange between our agencies has a past history of moving rather slowly. I see no reason we cannot work together to improve the process and get our exchange program completed in a relatively short time frame.

30

The Cascade District overlaps two State Supervisory Areas. For the most part, any questions on this proposal north of Township 10 North should be addressed to Bill Petzak, Area Supervisor, McCall, 634-7125. South of this Township line, questions should be addressed to me, 334-3488.

Dick, should you have any questions or if we can be of any assistance, feel free to contact Bill Petzak or myself.

Sincerely,

Don R. Stockton
DONALD R. STOCKTON
Area Supervisor

DRS/slp

cc Bill Petzak
Jay Biladeau, C.BL

31

November 26, 1986

Mr. Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District
3948 Development Ave.
Boise, Idaho 83705

Dear Mr. Geier:

I am writing in regard to your proposed preferred alternative E which proposes a allowable cut of 1mm bd. foot.

We feel that the proposal is too low and would urge you to set a allowable sale volume of at least 2.9 mm bd. foot which is option D.

We feel that you have the acres of timber and growth to allow for the level of harvest which is needed to help support industries needs in this region. This level would not be a detriment to the other uses on BLM lands. Thank you.

Yours truly,

Robert Coats
Robert T. Coats
Forester

RTC/pm

32

INTERMOUNTAIN FOREST INDUSTRY ASSOCIATION

November 26, 1986

Mr. Richard A. Geier
Cascade Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Geier:

I appreciate the opportunity to review the draft Cascade Resource Management Plan and Environmental Impact Statement, and offer the following comments for your consideration.

In general, I found the plan's presentation of the resource management opportunities on the Cascade Resource Area to be concise, clear, and comprehensive. You are commended for an excellent job in this regard.

Since the members of the Intermountain Forest Industry Association are primarily engaged in the forest products industry, I will direct our comments to your management proposals for the timber resource. To put our remarks in perspective, I note that our association has been actively involved in development of Forest Service land management plans for the National Forests in southwestern Idaho. As an integral part of this effort, we have compiled timber supply and demand data for the southwestern Idaho market area. A summary of our analysis is enclosed for your consideration.

The southwestern Idaho timber market is characterized by several sources of timber supply, generally referenced as 1) Forest Service, 2) Private industrial, 3) Private non-industrial, and 4) Other public. Demand centers are the sawmills located in the numerous small communities of Boise, Gem, Adams and Valley counties. A critical examination of the timber supply and demand interactions in this market area indicates an alarming timber supply shortage. This situation is particularly exacerbated by the proposed management plans for the Boise and Payette National Forests.

Thus, we are most concerned that the proposed plan for the BLM's Cascade Resource Area does not provide for more active management of the available timber resource. Notably, the proposed plan does authorize timber management on 26,663 acres of the 31,895 acre commercial forest base. However, the rate of

703 Lakeside Avenue • Coeur d'Alene, Idaho 83814 • (208) 667-4641

32

32.1 harvest and intensity of management appears to be severely limited. The High Investment Management Alternative (Alternative D) authorizes timber management on fewer acres, but provides nearly three times the annual harvest as the proposed plan. Presumably, the acres assigned to timber management under Alternative D are the same acres assigned to timber management in the preferred Alternative D. Thus, we are puzzled by why the preferred alternative limits the Agency's flexibility to manage the timber resource on these lands in the same manner envisioned under Alternative D.

I am sure you are aware that the Secretary of Agriculture has recently asked the Forest Service to complete a timber supply and demand analysis for Idaho, including an assessment of the social and economic impact of proposed Forest Service plans on local dependent industries and communities. We believe that this study will substantiate the conclusions we have drawn from the Association's study of this situation as referenced above. Since the Forest Service study is expected to be released shortly, we would hope that the BLM will also consider the study results in the development of their plans and the selection of the final management proposal. Specifically, we suggest that the BLM plan for the Cascade Resource Area be modified to allow the opportunity to increase timber management levels on the 26,663 acres assigned to timber management. Although the timber resource inventory on the Cascade Resource Unit is admittedly quite small when compared to other inventories in the market area, we believe that it will be necessary to take full advantage of all management opportunities to avoid a major supply/demand imbalance in southwestern Idaho.

We sincerely appreciate this opportunity to comment and will be happy to meet with you as you consider preparing a final plan for the Cascade Resource Area, if it would be helpful to clarify our comments.

Sincerely,

James S. Riley
Executive Vice President

33

CASCADE RESOURCE MANAGEMENT PLAN COMMENTS

1408 Joyce Street
Boise, Idaho 83706
November 28, 1985

Dick Geier
3948 Development Way
Boise, Idaho 83705

Because of its concern for the protection and enhancement of the natural environment, I endorse Alternative C. It is especially important that Alternative C's increases in improved riparian and fisheries habitat be carried out. Also, we need to seek minimum stream flows. Areas of Critical Environmental Concern must be established for the long-billed curlew and for the Columbian sharp-tailed grouse. I support all six research natural areas. These areas should be closed to grazing, ORV activity, and and mineral entry.

The BLM is to be applauded for recommending reductions in grazing the Crane Creek-Weiser River roadless area for Allotments 304 and 361. We must not let the fires of last summer be used as an excuse to increase grazing on BLM lands.

33.1 Unlike many of the BLM lands in Idaho, the Cascade District is readily accessable to much of our state's population. Recreation is therefore especially important for this area. I support the full 4500 acre Recreational River management along six miles of the North Fork and for eight miles of the Payette River. There is a need for a canoe launch site for the Middle Weiser River in the Midvale area. I urge you to acquire land for this purpose through trade or purchase. Likewise, Crane and Paddock reservoirs need to have land acquired and developed as campsites. We need "semi-primitive non-moterized" recreation in our high desert environment. The 7500-acre area between Crane Creek Reservoir and Weiser River should be designated as a Special Recreation Management Area, closed to motor vehicles, and have adequate deeded public access.

Finally, the Hull's Gulch Nature Trail, with its extensive public use, should serve as a shining example of good BLM recreational land management practices. A 500 foot corridor along it should be withdrawn from surface or subsurface right of ways, from mineral exploration or leasing, and from any domestic livestock grazing. For many people, this is the only close look at our desert lands; we want them to see the land at its unspoiled best.

Thank you for this opportunity to comment.

Sincerely,

Edwina Allen

Edwina Allen

34

November 27, 1986

1914 North 20th
Boise, Idaho 83702

Mr. Larry Woodard
Associate State Director
Burea of Land Management
Boise District
3948 Development Avenue
Boise, Idaho 83705

Re: Cascade Draft Resource Management Plan & DEIS

Dear Mr. Woodward:

Please enter these comments into the record on the BLM's proposed Cascade Draft Resource Management Plan and Draft Environmental Impact Statement (hereafter the "Plan") for the Boise District.

Preferred Alternative

I support Alternative C as a preferred alternative, principally because it will reduce grazing allotments and best protect important soil and watershed resources on the Cascade Resource Area. I do not agree with your rationale that Alternative E can increase grazing use 6% and still "meet the rangeland resource management objectives of maintaining or improving the soil, esthetic, wildlife, vegetation and warershed resources" (Plan, p.9).

While it is true that livestock production is part of the local economy, it is not the only component and the interests of these resource users are given unfair advantage in the Plan. I do not support continued gross public subsidy for vocal miniority users and the simultaneous destruction of rangeland and watershed resources. Your Alterntive E depends on livestock management and range improvements that in turn depend on federal funding year after year. Given the current trends in federal funding, there is no assurance you can or will carry out the improvements or that all of them will have the intended beneficial effects on range resources. The predicted increase in forage to support 6% more AUMs simply is not guaranteed. The range already is in terrible shape--the Plan itself shows only 35,123 acres as in either excellent or good condition while 406,644 acres are classified in fair or poor condition. Therefore the wisest course of management with our current funding climate is reduced grazing on the Cascade Resource Area.

Recreation

My particular concerns are with the recreational and rangeland resource mismanagement currently occuring on the Boise Front. I definitely support a 12,000 acre special management area on the Boise Front and urge improved management, including no transitory grazing, in the Hull's Gulch Nature Trail.

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Countless times I have seen ORV and motorcycle damage on and near Hull's Gulch. The disregard for a special area you have put much effort into is disgraceful; we must redouble efforts to continue this well-used recreational resource and teach the public about its specialness. This would include withdrawing it from mineral leasing and overhead and subsurface right of ways. The rest of the Boise Front needs similar attention to ORV and trail bike abuse. Runoff problems due to man-caused recreational erosion are increasing annually. Likewise, wildlife and plant abuse is abundant on the Boise Front and the BLM needs to take stronger action to channel the ORV users to appropriate and limited areas while restoring the rest of the front's soil waterholding capacity. Non-motorized recreation on the Boise Front is increasing and requires fuller support in the Plan.

Another area of special recreational concern are the Cascade Resource Area's river resources. You should establish a full 4500 acrea Payette River Management Unit on the main and north forks of the Payette River. I would also like to see land exchange activities carried out for the Middle Weiser River to support increased boating use in the Midvale area. There is also a prime opportunity to build camp sites at Crane and Paddock Reservoirs. The plan should aggressively acquire lands, not just study the idea, to carry out such needed recreational improvements.

Riparian and Natural Areas

Minimum stream flows should be obtained by the BLM for Crane Creek below the resevoir. Alternative C's management objectives for fisheries and riparian habitat should be followed in the final Plan. I support your ACECs for the Columbian Sharp-Tailed Grouse Habitat Area, the Black Canyon Long-Billed Curlew Habitat Area and the Boise Front. In all three of these areas, severe restrictions on grazing and motorized activities must be implemented along with preventing future right of way grants to ensure the long term habitat in these special resource areas. The six Research Natural Areas need additional protection as well by eliminating grazing, ORV use and mineral entry on these units.

Fire Rehabilitation

34.1 I realize that the Plan was largely drafted before the 1986 fires destroyed rangeland and winter deer habitat in Willow Creek and Squaw Butte. Nonetheless, the final Plan should include sound range and habitat recovery steps and follow them with adequate monitoring for the next 20 years. Grazing definitely should be deferred for no less than two years on the burned range and reseeding should include a natural mix of forbes, sagebrush and fire resistant plants, not just crested wheatgrass. THe soil needs immediate stabilization to prevent erosion and water quality problems. Upland game habitat and the winter mule deer habitat requires special attention and vigilance to bring the animal levels back just to the pre burn levels, let alone attain the increases the Plan had originally projected. Incorporating

34.2 sound rehabilitation measures of the Emergency Fire Rehab Plan into the final Cascade RMP should be mandatory and should include explicit maps of what types

34

34.2 of seed will be planted and exactly where the seeding will occur.

Wilderness Area

I support final wilderness recommendation for Box Creek area studied in the Plan. Please be sure that this area is not omitted and that management practices in the coming months or years do not preclude or interfere with the raodless status of Box Creek. The remarks of Mr. Burford during his recent Boise visit about future BLM wilderness in Idaho were shocking and to say the least, inappropriate for the head of the agency which has the FLPMA congressional mandate to study rather than prejudicially speak out against wilderness.

I appreciate the opportunity to comment on the Cascade Plan and encourage significant changes in the Final Plan to adequately manage the public's resources in this portion of the Boise District.

Sincerely yours,

Kay Hummel

Kay Hummel

cc: Honorable Cecil D. Andrus
Congessman Larry Craig
Senator James McClure

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livestock grazing program. The final plan and EIS should describe the monitoring program in detail.

In addition, it appears that it would be more cost effective to approach range improvement through the technique of reducing AUMs rather than spending money on as yet undefined rehabilitation and monitoring efforts. The draft plan and the DEIS both should be redrafted to describe an alternative that
35.2 proposes significant reductions in AUMs and compares the costs and benefits of doing so with those expected from monitoring and conducting rangeland improvement projects at public expense.

Riparian areas. The draft plan and DEIS give far too little consideration to the specifics of riparian habitat
35.3 protection and improvement. The DEIS does not adequately explain which riparian areas are to be improved or how this is to be done. Nor is there an adequate explanation of the present locations of abused riparian areas. The EIS process demands that the public be given better information. Stream bank grazing activities should be eliminated.

Reseeding. The draft plan and the DEIS both fail to describe adequately the agency's reseeding plans in the Resource Area. However, it appears that most reseeding will be carried out for the benefit of livestock. You should specify more clearly the goals of your reseeding program. In my view, reseeding should be aimed primarily at restoring and improving wildlife habitat and restoring damaged watersheds while reducing the encroachment of annual grasses. Reseeding chiefly for cattle grazing, which appears to be your goal, likely does not fulfill your mandate to promote multiple use.

Off-road vehicles. The draft plan's proposal to allow ORV use in some of the research natural areas should be changed. ORV use is not acceptable in such areas unless specifically addressed and justified. Likewise, the draft plan and DEIS should describe each habitat containing rare, endangered or sensitive plants. It appears that the draft plan proposes to allow ORV use in some of these areas. If so, such use should be eliminated here as well. At the very least, the plan and EIS should describe whether such use is to be allowed, where it is to be allowed, and why.

Perhaps most fundamentally, the draft plan and DEIS should describe and justify an overall ORV program for the Resource Area which addresses the problems of erosion, damage to wildlife habitat, sensitive plant communities and recreation. In areas such as the Boise Front, ORV use should be significantly restricted or eliminated entirely. The DEIS should display an alternative prohibiting or near-total ORV use, except on

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November 28, 1986

Mr. Larry L. Woodard
Associate State Director
Bureau of Land Management
Boise District
3948 Development Avenue
Boise, ID 83705

RE: Draft RMP and DEIS for the
Cascade Resource Area

Dear Mr. Woodard:

I have the following comments on the draft Cascade Resource Management Plan and the Draft Environmental Impact Statement:

Livestock grazing. The DEIS fails to display adequately the effects of the proposed increase in livestock grazing. The few sentences devoted to a description of these effects on pages 4-78 and 4-79 do not contain the information necessary for the public to make an informed judgment about what exactly is
35.1 proposed in the livestock grazing program and what the affects of the program will be. The information on these subjects should be expanded to show, in specific terms, how much seeding will be involved in the program, how much land will be moved from one vegetative condition class to another, what type of "improvements" are projected and what their effects will be. Also, you should more clearly describe the present overall range condition and compare that with the expected overall condition that will result from your proposed program. Your goals for the range do not appear to comport with the requirements of federal law respecting the maintenance and improvement of the condition of the public rangelands.

Neither the draft RMP nor the DEIS contains an adequate description of the monitoring techniques that you may be considering. Maintaining a vigorous and realistic monitoring program, and the flexibility to change grazing practices when the monitoring uncovers problems, is critical to the entire

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established roads, on the Boise Front and other areas which have been particularly abused or which are especially vulnerable.

The Boise Front. Neither the plan nor the DEIS adequately addresses the Boise Front, an area which has suffered some of the most glaring land abuses in the entire Resource Area. Large portions of the public lands on the Boise Front continue to decline in quality and contribute to increased erosion and the public costs that go along with it, including sedimentation of streams, loss of wildlife habitat and the spread of annual grasses. The Resource Management Plan should include a more extensive program to revegetate and protect the Boise Front. Of particular importance is the need to restore year-round flows in those streams from the Boise Front which have been rendered intermittent by poor land management practices. While I applaud the efforts the BLM has undertaken in the Hull's Gulch area, these efforts should be extended. The agency should make a greater effort to educate the public about the Hull's Gulch restoration project and the importance of keeping ORVs out of the area.

Wild and scenic rivers. The draft plan and DEIS give no justification for merely recommending certain rivers for further
35.4 study to determine whether they should be recommended as wild, scenic or recreational rivers. The draft plan is the study. The South Fork of the Payette River should be proposed to Congress for scenic or recreational status.

Wildlife habitat. The draft plan proposes that wildlife habitat will experience only a negligible improvement over the planning cycle. This approach does not appear to comport with your statutory duty to manage the public lands for multiple use or to improve the productivity of the public lands in the Resource Area for wildlife and related purposes. The draft plan and DEIS demonstrate an imbalance in favor of livestock grazing and against wildlife. The plan should be redrafted to place wildlife and other multiple uses on at least an equal footing with livestock grazing.

Fire rehabilitation. The draft plan and DEIS should be redrafted -- or a supplemental DEIS should be issued -- on the
35.5 BLM's fire rehabilitation plan for the Squaw Butte region which burned last summer. The fires have significantly affected both the RMP's grazing and wildlife programs. The public should have an opportunity to comment on how the BLM intends to restore these areas, how you plan to keep livestock off reseeded areas for a proper period of time, what type of seed will be used in any follow-up seeding next year, and so forth.

Mr. Larry L. Woodard
November 28, 1986
Page 4

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Research Natural Areas. I applaud your proposed designation of research natural areas in the Resource Area. However, as pointed out above, they should be given more protection from ORV use and other activities that could destroy their value for such designation.

Very truly yours,

Jeff Fereday

Jeffrey C. Fereday

JCF:tg

IDAHO FISH & GAME

37

Region 3
109 W. 44th St.
Boise, Idaho 83714
Telephone (208) 334-3725

November 28, 1986

Mr. Richard A. Geier
Cascade Area Manager, BLM
Boise District Office
3948 Development Avenue
Boise, ID 83705

Re: Draft Cascade Resource Management Plan/EIS

Dear Mr. Geier:

Idaho Department of Fish and Game personnel have reviewed the Cascade Draft Resource Management Plan and Draft Environmental Impact Statement. We offer the following recommendations, comments and questions for your consideration.

Comments are separated into two categories, general and specific. Similar concerns and questions from various parts of the documents are consolidated to aid you in developing your responses.

Specific Comments

37.1 1. Page 9 - 3rd and 5th Paragraphs - If there is "Limited Potential" to improve range conditions due to the reasons listed in Paragraph 3 and the intention is to shift intensive management to higher precipitation zones (Paragraph 5), what safeguards are planned to maintain condition class in these restricted areas of good range condition?

37.2 2. Page 47 - 4th Paragraph - What plant species are proposed to be seeded for wildlife? Are sources available for the "shrub, forb and grass seed mixture that are normally found in that type of ecological zone/type"?

37.3 3. Page 51 - Sage Grouse - What plant species are planned for seedings designed to improve sage grouse brooding ranges?

EQUAL OPPORTUNITY EMPLOYER

36

Timber and Wood Products Group
Boise Cascade

Forestry and Logging
P.O. Box 652
Cascade, Idaho 83611
208/382-4888

November 26, 1986

Mr. Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Ave.
Boise, Idaho 83705

Dear Richard:

I prefer Alternative 'D' (High Investment), as the best management approach on BLM Lands in the Cascade Resource Area. A higher level of timber management activity enhances many of the other multiple uses besides providing a return to the treasury.

The main reason I support a higher harvest level on BLM Lands is because of a major reduction in the USFS Cascade Ranger Dist. allowable cut to 8.0MMBF per year. The Cascade Ranger District historically has produced 15-20 MMBF per year and because of the withdrawl from the South Fork Salmon River timber activities, the void in volume has left the Cascade mill in a precarious position. Timber volume coming from BLM Lands in this area would be a welcome augmentation to what we are presently getting.

Many of the BLM Lands are adjacent to Boise Cascade lands which are already being managed intensively for timber production as well as the other multiple use activities.

Thank you for the opportunity to input.

Sincerely,

Lynn House

Lynn House
Dist. Logging Mgr.

LH/bc

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Mr. Richard Geier
November 28, 1986
Page 2

37.4 5. Pages 4-5, 4-23, 4-42, 4-60 and 4-80 - It is not possible to determine from the maps or information supplied, where the 1-2 miles of "unsurveyed perennial habitat" are located or why this valuable public land is proposed for transfer to private ownership.

37.5 6. Page 4-97 - Paragraph 5 - The Department would like to see a listing of which 17,524 acres of wildlife habitat would be modified to the extent that they are listed under Irreversible and Irretrievable Commitments of Resources.

7. Part 2 - Pages ii, iv, vi, vii and ix - The Department sees no reason why the entire 14 mile reach of the Payette River listed in Alternative C cannot be recommended for Wild and Scenic Recreation River Study in all of the proposed alternatives.

37.6 8. Page 33 - 1st Paragraph - Hungarian partridge is no longer the accepted name for this species -- Gray partridge is preferred.

37.7 9. Page 65 - 2nd Paragraph - It is unclear what "maximum opportunity for survival to occur" means.

10. Part 2 - Pages iii, iv, vi, vii and ix - It does not appear reasonable to expect recreation-related earnings and employment to be the same under all alternatives.

37.8 11. Page 2-45 - Wildlife Resource Objectives - An explanation of how 185,650 acres of sage grouse brooding and nesting habitat will be improved is needed. What plant species will be seeded to improve the 23,912 acres of wildlife habitat as planned?

12. Page 4-81 - Paragraph 4 - Wildlife concerns (hunter access, elk calving, etc.) should also be considered as reasons for post-logging road closures.

37.9 13. Page 4-87 - Paragraph 1 - We suggest that commercial varieties of crested wheat grass, etc. which have growth characteristics that are not detrimental to long-billed curlew be used in all seedings in the Black Canyon SRMA.

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Mr. Richard Geier
November 28, 1986
Page 3

37.10 14. We found no mention of the Idaho Ground Squirrel in these documents. We suggest that the final report by Eric Yensen on the Taxonomy, Distribution, and Population Status of the Idaho Ground Squirrel as prepared for the Nongame Species Program, Idaho Department of Fish and Game, 30 January 1985 be used to manage this species. Given its status as a Species of Special Concern, its needs should be addressed.

37.11 15. Page 3-12 - Aquatic Environment - Paragraph 3 - White sturgeon do exist in the free-flowing reaches of the Snake River above Brownlee Reservoir. This habitat is of unknown quality, but sturgeon are known to be present.

37.12 16. Page 3 - Several Issue Questions such as 1, 2, 5, 6, 7 and 9 do not appear to be answered or are not sufficiently answered in the plan. The RMP action contemplated section apparently is your approach to answering these questions. Can a realistic plan be developed at this stage without this information? This section is confusing as to what has been and what will be done.

General

37.13 1. The implementation of the grazing portion of the RMP and meeting the goals of the wildlife, fisheries and riparian plans are all dependent on monitoring. Based on your experience with past funding problems for monitoring, is it reasonable to expect that sufficient funding will be available for monitoring, and if not are alternative management plans developed that do not rely on monitoring?

2. How will the fires that burned during August of 1986 affect the plan? How will the necessary changes in the plan be made available for public review? Will management emphasis be changed from unburned to burned areas? Will wildlife and livestock monitoring be shifted to the burned areas? Will you be able to meet the wildlife habitat improvement goals and still rehabilitate the burned areas?

The recent fires open innumerable questions as to the Cascade Resource Management Plan and we suggest that the Final Environmental Impact Statement and Management Plan cover the changes in depth. 37.14 The wildlife habitat losses were of such magnitude and importance that we strongly recommend that the Squaw Butte area be listed as an Area of Critical Environmental Concern.

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Mr. Richard Geier
November 28, 1986
Page 4

37.15 3. We are extremely concerned with the proposal to exchange or sell 17,524 acres of land. Especially since 4,660 acres are listed as crucial elk habitat and 6,690 acres are listed as crucial mule deer winter range and an unknown number of acres supply habitat for other game and nongame species. What were the criteria for selecting these acres? Where are they located?

The Department views isolated BLM lands near Pickles Butte, Map Rock Road, Walters Perry and elsewhere as important wildlife habitat because of the upland game winter habitat they provide. Their value as winter habitat for upland birds is much greater than their size would indicate.

Page 4-82 Wildlife-Elk and 4-83 Wildlife-Mule Deer - In both sections the statement is made that the exchange will be for lands of "equal or greater wildlife value". Since the locations of State and private lands to be exchanged are not delineated there is no basis for that statement. In addition, the management direction of the BLM and the State of Idaho Department of Lands is vastly different. While BLM lands are required to be managed under multiple use criteria, the direction for State lands is to manage its lands for the greatest return to the school fund. We suspect that the State lands being considered for exchange are State school sections currently within BLM lands and are being managed under multiple use criteria. We believe such an exchange of crucial wildlife habitat will be detrimental to wildlife populations and to the Department meeting its goals for wildlife management.

If this document is to be used as a "decision document" to decide the fate of the lands as listed on Map E Alternative E (Preferred), then we suggest that the RMP and EIS are deficient in listing the environmental effects of such exchanges or sales.

The Department is opposed to the transfer of crucial or critical wildlife habitats from public ownership.

Thank you for the opportunity to comment.

Sincerely,

Stacy Gebhards
Regional Supervisor
Region 3/Boise

SG:WB:1

38

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

NOV 25 1986

REPLY TO ATTN OF: M/S 443

Mr. Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Geier:

The Environmental Protection Agency (EPA) has reviewed the draft Cascade Resource Management Plan/Environmental Impact Statement (RMP/EIS) prepared by your office. The RMP/EIS evaluates five alternatives for management of 487,466 acres of BLM-administered lands in the Cascade Resource Area of west-central Idaho. Our review was conducted in accordance with the National Environmental Policy Act, and our responsibilities under Section 309 of the Clean Air Act.

We have rated the draft RMP/EIS as EO-2 (Environmental Objections-Insufficient Information). An explanation of the EPA rating system for draft EISs is enclosed for your reference. This rating and a summary of our comments will be published in the Federal Register.

Our primary concern is the potential for impacts to occur to water quality and beneficial uses under the BLM-preferred Alternative E. A variety of water quality problems exist in portions of the Cascade Resource Area. In particular, significant sedimentation of instream habitat has occurred as a result of livestock grazing, forest practices, and ORV use. The draft EIS predicts a 2 percent further increase in the rate of erosion Area-wide under Alternative E. Although this may seem to be a small percentage, the draft EIS notes that over one-third of the streams recently surveyed (8 of 21) exhibited "excessive" sedimentation. Further increases will exacerbate cumulative effects in this area of highly intermingled ownership, and do not appear to be justifiable.

After careful consideration, we recommend redesignation of Alternative C as preferred in the Final EIS. Nonpoint source pollution, with subsequent degradation of water quality and beneficial uses, is the primary concern leading to this recommendation. Alternative C is the only alternative that would result in an overall reduction in erosion and instream sedimentation rates while also reducing other types of water quality problems.

In addition, we are interested that the monitoring plans to be developed will be clearly capable of detecting adverse impacts before they become significant. We have recently been discussing monitoring needs with the BLM Idaho State Office in this regard. Consistent with these discussions, we would appreciate the opportunity to review the draft monitoring plans as they are developed.

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Our nonpoint source and monitoring concerns are discussed more specifically in the enclosed detailed comments. Other comments are also provided with the intent of assisting you in finalizing the RMP/EIS.

Thank you for the opportunity to review the draft RMP/EIS. Once you have had the chance to consider these comments, we will be contacting your staff to offer our assistance during the finalization process. In the meantime, if there are any questions, please contact Mr. Brian Ross of our EIS and Energy Review Section at (206) 442-8516 (FTS 399-8516).

Sincerely,

Robert S. Burd
Director, Water Division

Enclosures

cc: BLM (Idaho and Oregon/Washington State Directors)
USFS (R-4, Payette NF, Boise NF)
USFWS
NMFS
IDHW
IDFG
TWS
SC
IELC

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U.S. Environmental Protection Agency Detailed Comments:
Cascade Area Draft Resource Management Plan
Environmental Impact Statement, Idaho

These detailed comments are divided into two parts. Comments specific to the draft EIS appear first, followed by RMP comments beginning on page 8.

Detailed Comments on the
Draft Environmental Impact Statement

EIS, page 2-4 (Objectives/Actions Common to all Alternatives). The objectives listed for Watershed and for Riparian and Aquatic are appropriate. The general actions seem to be appropriate as well, with the exception that limiting ORV activity to existing designated roads and trails might at best prevent existing erosion problems from worsening. The draft EIS does not establish that existing erosion and instream sedimentation is acceptable. To the contrary, improvements appear to be necessary. **38.1**

EIS, page 2-25 (Alternative C). Under this alternative, "(m)anagement would comply with the more stringent environmental protection standards." What standards does this refer to, specifically? The Resource Management Guidelines described beginning on page 38 of the draft RMP are said to be those which are applicable regardless of which alternative is selected. The more stringent standards should also appear in the documents. **38.2**

What management guidelines would apply to the Box Creek area under Outstanding Natural Area designation? What uses would be compatible and incompatible? What is the major objective of Outstanding Natural Area management? **38.3**

EIS, page 2-28 (Riparian and Aquatic Resources). Under Alternative C, present management would continue on 107 stream miles of riparian habitat and 57 miles of aquatic habitat, while 12 and 23 miles of these habitats, respectively, would receive direct improvement. This direction appears to be inconsistent with the EIS Summary (page v) which describes benefits to 140 and 142 miles of riparian and aquatic habitat (through AMP revisions) under this Alternative. Also, we are confused about the basis for determining the miles of improvements or other benefits. Why would AMP revisions and reduced grazing under Alternative C not be capable of benefitting more miles of habitat than **38.4** **38.5**

2 38

38.5 Alternatives B and D, which each have more grazing? This is especially confusing given the predicted 20 percent Area-wide decrease in erosion rates under Alternative C. **38.6** How is "benefit" defined for the draft EIS?. Finally, for the few miles predicted to experience decreases in riparian habitat value under any alternative (3 miles under Alternative C), why are no further measures proposed for mitigation? (E.g., fencing would appear to be economically feasible.) **38.7**

EIS, page 2-53 (Areas of Critical Environmental Concern). The EIS does a good job of describing the resource values, causes for concern, and purpose relative to proposed ACECs. Regarding the Boise Front, the management guidelines described do not specify whether the proposed measures would result in a significant decrease in ORV-related erosion, or simply in maintenance of current erosion. It seems that continuing significant ORV use is expected. Element No. 6 under Management Emphasis (installation of water control structures) may therefore be the key to reducing impacts from continuing erosion. The final document should therefore describe the measures BLM will employ to determine when structures are needed. **38.8**

Also, given clear statements on pages 3-3 and 3-5 that ORV use is resulting in "very evident" and "serious" erosion problems, the final documents should describe the measures BLM will use to enforce ORV limitations (i.e., regarding use on only designated roads and trails). The likely effectiveness of enforcement should be evaluated, and possible changes in ORV management (if enforcement is not highly effective) should be described.

EIS, page 3-5 (Air Quality). This section should describe existing air quality conditions in the area. It should also note that while some air quality deterioration can occur, standards and increments must still be met. Chapter 4 should then evaluate whether proposed burning in conjunction with activities on adjacent properties (including lands managed by the U.S. Forest Service) would contribute to significant air quality degradation. For suspended particulates, the allowable increase over baseline in Class II areas is 37 micrograms per cubic meter (twenty-four hour maximum). This degree of increase could not occur if baseline for the Cascade Resource Area is such that the 24 hour ambient standard of 150 micrograms per cubic meter would be exceeded. The attached Exhibit provides a suggested outline for evaluating potential air quality impacts. Our staff can provide assistance in carrying out such an analysis if this would be useful to you. **38.9**

3 38

EIS, pages 3-5,6 We agree with the statement that soil disturbing activities can be designed so that long term impacts can be reduced to environmentally acceptable levels. The key to achieving this is a clear definition of what "acceptable levels" are. For erosion, not only loss of productivity, but also instream values and impacts must be considered. Fish "species of special concern" occur throughout the Area. These are beneficial uses which should receive more than "usual" levels of management emphasis on protection of their habitat.

Of the streams surveyed (by ocular measurements), a large percentage have already experienced excessive sedimentation. Even if these streams have the ability (gradient and flow characteristics) to flush themselves of sediment, continuing impacts will result from continued erosion. Also, impacts due to sedimentation will be long term in the lower gradient areas that cannot regularly flush sediments, including the North Fork Payette and Weiser Rivers. Even where erosion from BLM land is not the primary cause of these impacts (due to intermingled ownership), already-serious cumulative effects can be worsened. To the extent that additional erosion from BLM land is avoidable, it should not occur.

We were pleased to see that a management scheme which would significantly reduce erosion (Alternative C) was among the alternatives that could be implemented. We were further pleased to note that the local economies potentially affected by this management scheme represent less than one-half of one percent of the income and employment in this relatively populous area of the state. Clearly, the costs of adequately protecting water quality and beneficial uses in the Area are not excessive.

EIS, page 3-11 Please describe the "woody riparian survey method" - in particular the criteria for classification of conditions as poor, fair, good, excellent, or unsuitable. **38.10**

EIS, page 3-12 (Aquatic/Fisheries Habitat). This section generally does a good job of outlining the resources in the Area, and some of the places where habitat degradation has occurred. It would be useful to expand the discussion somewhat to include the habitat requirements of the noted "species of special concern." This would serve to better highlight both the potential types of impacts that may occur and the sorts of mitigation that may be most effective.

4 38

38.11 What habitat conditions exist on BLM lands within the Payette River Watershed?

EIS, page 4-1 It is stated that soils impacts would occur on both "limited" and "open" classifications of ORV use areas. However, page 4-40 states that in "limited" classification areas, only negligible sedimentation would result. Given numerous references throughout the EIS to significant erosion problems due to ORV use, we expect the former statement to be more correct. In any case, the apparently inconsistent statement on page 4-40 leads us to question whether erosion would be reduced as significantly as predicted under Alternative C. Our concern here is further heightened by the statement on page 4-39 that ORV use under Alternative C would result in the same impacts as under Alternative A (where 75% of the Area would be classified as "open" to ORVs). Please more fully describe the effective reductions in erosion expected to occur under "limited" use as compared to "open" use, and the method (including assumptions) used in estimating this. This will help us to better determine whether impact predictions and the Resource Management Guidelines, (even for Alternative C) adequately reflect uncertainties inherent in the analyses. **38.12**

EIS, page 4-39 The above comment also applies to impacts due to timber harvesting activities. We would expect reduced road construction and timber harvesting under Alternative C to result in reduced riparian area, fish habitat, and water quality impacts. Instead, this page states that impacts would be the same as described in Alternative A. **38.13**

EIS, page 4-40 Predictions of overall riparian and aquatic impacts are based in large part on management practices that will be specified in new and revised AMPs. The final EIS should outline the types of measures that are likely to be specified in future AMPs so that we can determine whether the EIS appropriately evaluates impacts. Also, when would AMP revisions or preparation of new AMPs be initiated? We would appreciate the opportunity to review the draft AMPs and CRMPs for the Area. **38.14**

EIS, page 4-43 Would special (more stringent) SOPs be utilized during road construction on high erosion hazard lands (under all alternatives)? If so, please describe them. **38.15**

EIS, page Gl-9 (Glossary). The use of the Stream Habitat Condition Rating should be more fully described, either here or in the text. Specifically, what is the quality and **38.16**

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38.16 comprehensiveness of the database on stream habitats over the Area? Are there only ocular estimates available for the six factors evaluated? How are the cutoffs between the ratings classifications defined?

EIS, page B-1

38.17 (Appendix B). The acreages for the various ORV use classifications under Alternative A appear to be incorrect. Elsewhere in the documents, the following acreages (and percentages of the Area) are given:

Open:	257,623	(53 percent)
Limited:	227,895	(47 percent)

EIS, page H-1

38.18 (Appendix H). This table appears to be inconsistent with Map 3-6 in terms of the ratings of existing habitat condition. On Map 3-6, the following ratings appear:

Harris Creek	"Good"
Shafer Creek	"Good"
Big Willow Creek	"Good"
Little Weiser River	"Good"
Manns Creek	"Fair"
Dennett Creek	"Fair" to "Good"
Rock Creek	"Fair" to "Good"

(Also, specific areas of North Fork Payette River, Deer Creek, Little Pine Creek, and Grouse Creek that would experience improvement projects under some alternatives are not obvious on Map 3-6).

Which rating is correct for these areas? Also, how were areas chosen for improvement? (Some additional areas noted on Map 3-6 as being in "poor" condition are not proposed for improvement. Several other areas are also shown on Map 3-6 as being in worse condition than the areas proposed for improvements in this appendix.)

EIS, page P-1 to 3

38.19 (Appendix P: Monitoring and Evaluation Plan). An adequate monitoring program is the key to our ability to determine that undue degradation will not occur, and that adverse impacts will not persist, under any of the alternatives. We have recently been discussing monitoring program needs with BLM Idaho State Office personnel. From these meetings, we understand that additional guidance on water quality and riparian monitoring will soon be available from the State Office to the Districts. (We are reviewing a draft of the guidance now.) Also, a variety of BLM national level draft guidance relating to riparian area management and monitoring is currently under review

38

38.20 and should be available in the near future. To the extent that these materials are available by the time the final RMP/EIS is prepared, they should be reflected.

We would appreciate the opportunity to review the draft monitoring plans as they are developed. We would also appreciate receiving a copy of the Record of Decision for the RMP ("Plan Decision Document").

Regarding the general monitoring program outline in Appendix P, its intent is appropriate. We have a few specific comments meant to help ensure that the intent is realized.

38.21 When will monitoring plans for the individual programs be developed? Obviously, monitoring should begin concurrent with RMP implementation. For example, it should not entirely wait for new AMPs to be developed.

38.22 The monitoring plans for the various programs should be coordinated where appropriate. For example, Range program monitoring should include collection of information necessary for the Fisheries and Watershed programs. [This would include information on water quality, bank stability, riparian condition (including stream shading), instream habitat condition (including sedimentation), etc.].

All monitoring plans should include a description of appropriate measures that could be taken if monitoring determines that objectives are not being met. Of course, clear statements of the objectives are necessary in order to design the monitoring to adequately address the objectives. These should include specific "triggers" for further management action (i.e., definitions of significance).

The description of Minimum Data Elements to be Monitored is too general for us to determine whether minimum monitoring standards will be sufficient in the Cascade Area. Given the extreme erosion potential on the majority of the Area's lands, and existing erosion-related water quality problems, we anticipate that more intensive monitoring will be necessary even for Alternative C.

38.23 Related to this, we are concerned with the statement that more intensive monitoring, if needed, would occur if funding is available. We believe that sufficient funds for monitoring (and mitigation) must be a firm commitment of any alternative. Such funds are part of the cost of

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38.23 doing business and should appear as a non-optional part of Management Costs (for instance, in the Comparative Summary on page 2-61 of the EIS). This is a primary basis for our uneasiness over preparation of specific monitoring programs after Plan implementation. Significant adverse impacts may go undetected if the monitoring funds, allocated before needs are determined, are later found to be insufficient. Certainly, identified needs that are truly "special" may require additional funds. However, routine needs in highly erosive areas, such as the Cascade Area for example, need to be recognized and funded up front.

EIS, Maps

We noted some inconsistencies regarding the text and Map 3-6. Beyond this, we found that the maps included pertinent information and were of excellent quality. Public understanding would be enhanced if all other agencies that prepare land management plans produced this quality of maps.

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Detailed Comments on the
Draft Resource Management Plan

As noted earlier, EPA supports redesignation of Alternative C for implementation on the Cascade Area. This would require substantially revising the draft RMP. Our comments on this document, which is based on Alternative E, are thus less extensive than on the draft EIS.

RMP, page 12

38.24 Under Soil and Water Quality, it is stated that "Standard operating procedures would be followed to ensure management proposals are in compliance with soil and water quality standards." The final documents should reflect the fact that while SOPs are a major tool for minimizing water quality impacts, their application does not automatically equate with standards compliance. Protection of beneficial uses is their goal. Beneficial uses themselves must therefore be regularly monitored so that the need for revisions to SOPs can be identified.

RMP, page 21

38.25 For "limited" use ORV areas, the general policy is "to fully protect and enhance sensitive and significant resources." It is unclear in the draft RMP and EIS the degree to which ORV use in "limited" areas will reduce impacts and be consistent with this guidance. Please refer to our comments on the EIS, pages 2-4, 2-53, and 4-1.

RMP, page 27

38.26 (Riparian and Aquatic Resources). Under Actions, the guideline to "adopt special measures to improve riparian and aquatic areas in all AMPs containing these areas" (emphasis added) is unclear. Does this refer to all riparian and aquatic habitats existing in all allotments having an AMP, or does it refer only to the 16 miles of riparian and 14 miles of aquatic habitats slated for improvement under "Objectives?"

RMP, pages 33, 34

38.27 Management guidelines for the Boise Front ACEC do not include stipulations on other soil disturbing activities such as livestock grazing. Why are no special restrictions/practices considered necessary for such uses in this fragile area?

RMP, page 45

38.28 It is stated that measures would be taken to protect the natural water storage and groundwater recharge functions of wetlands. This section should specifically include measures to preserve, protect or restore, other important functions of wetlands including for fish and wildlife habitat, water quality, nutrient cycling, etc. Wetlands,

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like riparian areas, are critical resources which have experienced severe cumulative degradation. Wetland protection is one of EPA's top priorities nationally. We have developed a Mitigation Policy relating to wetlands in Region 10. This policy is enclosed for your reference.

RMP, page 53

This statement appears, "In those areas where fish/riparian values are identified as high priority, all other management practices will be designed to accomodate those priority needs." We agree with the sentiment of this statement. However, definitions of "high priority" and "accomodate" need to be provided. (For example, we believe sensitive beneficial uses such as habitat for designated fish "species of special concern" should qualify as high priority.) Also, how will the identification occur (e.g., in activity plans)?

38.29

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Richard A. Geier
December 1, 1986
Page 2

39.4 **Page 3-11 Riparian Habitat.** Generally when condition is rated, one bases it against potential! While you stated that this did not occur on the woody riparian survey, by using the terms poor, fair, etc., one is led to believe that this has occurred. If it was just ungulate use inventoried, perhaps terms such as heavy use, moderate use, light use, etc., would be more appropriate. Also we are not certain what woody riparian survey method was used. Could you identify or did we just miss it in the Plan?

Sincerely,

Mike Somerville Acting
STANLEY N. HOBSON
State Conservationist

39

United States Department of Agriculture
Soil Conservation Service

Room 345, 304 North 8th Street
Boise, Idaho 83702

December 1, 1986

Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Geier:

Thank you for the opportunity to review and comment on the Draft Resource Management Plan and Draft Environmental Impact Statement for the Cascade Resource Area. Following are our comments:

Page 10, 3rd paragraph: ...perhaps you should not reduce grazing on the poor condition rangeland but pursue exercising more time control over the grazing, i.e. graze the annual ranges at periods to favor establishment and improvement of vigor on the perennial species, if that is your objective.

39.1 **Page 11, Riparian/Aquatic Resources:** Will the fenced areas along the stream be removed from livestock grazing? How does this affect management of adjacent land? If livestock are fenced out, has the maintenance liabilities/responsibilities, time and cost been evaluated? Could time-controlled grazing, water development, etc., reduce the need for fencing and the resultant high maintenance cost which goes along with the fencing of streams?

39.2 **Page 24, Actions - Activity Plans.** Mention is made of 7 AMPs/CRMPs to be reviewed and updated, and 12 AMPs will be prepared. Is there a possibility for some/all of the 12 plans to use the CRMP as the AMP and perhaps avoid duplication of effort?

39.3 **Page 36-37.** Statement is made that the 61,000 acres as an ACEC have generally been modified over the years, changing it from its potential natural vegetation to one of exotic species. Also, the statement is made that the long-billed curlew population and distribution is or has declined. Where was these birds' habitat prior to manipulation of the vegetation? Have we perhaps, through management, caused the decline because the birds are now coming to an area not truly a habitat favorable to the distribution and population of the species? Perhaps we are maintaining a habitat for the species which, if a full life cycle of the bird was fully evaluated, the habitat in Idaho should not be maintained? Have you fully evaluated this?

The Soil Conservation Service is an agency of the Department of Agriculture

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Little Land & Livestock Co.
Box 205
Emmett, Idaho 83617

December 1, 1986

Mr. Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Dick,

I have a variety of concerns and questions about the draft RMP. I will address the concerns by refering to the page number and the subject area.

Page 9: Stock Driveways: I would like to know which driveways will be closed.

Grazing Levels: 6% increase proposed. Little Cattle Company has expended substantial resources in improving range land and if not rewarded with licensed carrying capacity the incentive to improve the range is eliminated.

Land Treatment: Our restoration system has shown a marked improvement in range trend (ie: annuals to native perennials) this trend is evident on most of our allotment. What is "ecological site change"? 40.1

Page 11: I feel that curlew habitat maintenance should be accomplished through an economic analysis. (ie: if $1.00 spent outside curlew management area yields more habitat than $1.50 inside the curlew management area then that should be the direction.)

Page 12: I would like a map of areas identified for sale and/or trade.

40.2 Page 14: Little Cattle Company designated a specfic area for ORV activity. Little Gem Cycle Park, part of our agreement with the ORV and BLM people was that the rest of our allotment would be closed to ORV activity. According to the RMP that is not the case. Why?

40.3 What are the "area's of special designation" in the Little Gem Cycle Park and why?

Page 21: I have no problem with protecting curlew habitat, but I doubt that the area is of "critical" concern. Critical meaning that action is absolutely necessary. Obviously curlews are not rare and endangered.

Also the banning of utility ROW seems like a very large impact for minimal habitat disruption.

Page 25: The statement of "reducing livestock preferences in allotments in poor and fair condition" does not bode well for the management practices of the BLM. Good range management is predicated on range TREND and not range condition. I wonder if a good manager removes livestock from poor range in an upward trend or does he remove livestock from good range in a downward trend?

Page 2

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40.4 Page 26: Why can't we put salt and water on the ridgelines in Sand Hollow? A practice encourged by the BLM for years. Where are the 6 miles of fence to be located? Why no utility ROW's allowed?

40.5 Page 37: The description of the curlew area have several inaccuracies.
1. perennial have been reduced, not eliminated.
2. horse enthusiasts don't use area heavily.
3. upland bird hunters seldom use area.

It almost impossible to put in stock water pipelines any time other than spring due to the hardness of the ground. To put in a mile of water line in the spring disrupts only a minor amount of soil and usually takes only 1 day.

If we are forced to put in the pipeline in the fall a back hoe rather than a trencher is necessary and much more soil disruption, time and cost is involved.

40.6 Page 44: Under "soils", do shrubs help stabalize soils or are shrubs for wildlife rather than soil?

Page 48: To allow an entire year for Fish & Game comment before land disposal and vegetative manipulation can be implemented, is a cumbersome restriction which severely limits a range managers ability to effectively manage the land.

Page 49: I would like a map of all areas listed on page 49 which restrict construction. It virtually eliminates many of the multiple use's of a large part of the Cascade Resource Area.

40.7 Page 50: What is a 60/40 ration of forage area to ground cover?

Page 51: What areas have had wintering populations of sage grouse in the past 10 years.

Page 52: Define: de-watering, riparian area and riparian zone.
If stock driveways are eliminated from riparian areas it will stop economical grazing of livestock therefore implementing single use rather than multiple use.

Page 53: Define practical application of:
--providing water for livestock away from reservoirs (and who pays for).
--utilizing manual for management and protection of western stream eco-system.

Page 55: What is the necessity for 2 years of rest after a fire?
--How can BLM delegate 8100 funds for wildlife and watershed projects.

Page 60: "Economic Considerations".
Cost effectiveness should be determined by "generally accepted economic principles" and not by any method deemed appropriate.

Page 3

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I am concerned that weed control and livestock management be subject to benefit/cost analysis yet wildlife recreation and fire management not be subjected to the same analysis.

Dick, I would be very appreciative if your staff would keep me informed as changes in the RMP evolve, since my livelyhood is dependent on future management of the Cascade Resource Area.

Sincerely,

Brad Little

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The Nature Conservancy

November 4, 1986

Mr. Richard A. Geier
Cascade Area Manager
Bureau of Land Management
Boise District Office
3940 Development Avenue
Boise, Idaho 83705

Dear Mr. Geier:

Thank you for the opportunity to review the Draft Resource Management Plan and EIS for the Cascade Resource Area. The Nature Conservancy's goal is the preservation of a full array of biotic diversity and it is toward this that the following comments are directed. More specifically, I am commenting on how the plan addresses two major areas: rare plant taxa and Research Natural Areas.

Research Natural Areas - A Memorandum of Understanding between The Nature Conservancy and your State Office was finalized in April, 1986. The MOU enumerates common interests and provides for cooperation between our two organizations in several areas including protection of biologically significant areas via ACEC and/or RNA designations. In addition, the Conservancy cooperated with the Idaho Natural Areas Coordinating Committee and BLM in recommending five of the six RNA's proposed in the RMP.

The Nature Conservancy supports the designation of five of the RNA's proposed in the plan (the exception, Peraphyllum Rock, is discussed below). Proposed protection measures for these valuable areas also appears adequate. These small areas will go a long way toward completion of a statewide RNA system that will include much of Idaho's biotic diversity. There are, however, problems with three of the proposed areas:

41.1 1. Peraphyllum Rock RNA This area does not meet RNA criteria agreed upon by the Federal Committee on Ecological Reserves. Please refer to the Committee's 1977 report A Directory of Research Natural Areas on Federal Lands of the United States of America for RNA purposes and management guidelines. Peraphyllum Rock, while possibly containing a rare plant, is not representative of an ecosystem with minimal human influence, having had a long history of domestic livestock grazing.

National Office: 1800 North Kent Street, Arlington, Virginia 22209

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Cascade RMP Comments
Page 2

41.2 2. Buckwheat Flat RNA Boundaries for Buckwheat Flat in Map 4 do not coincide with those proposed by us in 1985. Please refer to the letter from C.A.Wellner and myself, dated September 10, 1985, for our proposed boundaries. While containing good stands of Eriogonum types, your area is small and relatively indefensible, being close to much activity centered around Midvale Summit, including a rock crusher, gravel pit, rifle range, etc. The area we propose includes good examples of both Eriogonum types plus a steep canyon side with remnant bunchgrass communities in good condition. This area would also make a more defensible unit and, although cattle graze the periphery, it is away from much of the human disturbance and would be easier to manage.

41.3 3. Summer Creek Boundaries of the proposed Summer Creek RNA also need to be reassessed in light of the criteria set forth in the 1977 Directory. Please refer to a letter from C.A. Wellner, dated November 10, 1985, concerning boundaries and further attributes of the Summer Creek/Sheep Peak area.

Additionally, there are other communities found on the Cascade Resource Area that are currently missing from any proposed or established RNA. Foremost among them is an area that contains Artemisia tridentata ssp. vaseyana form "wericensis" habitat types. This form of mountain big sagebrush is endemic to the Cascade Resource Area and may prove valuable in rehabilitating the large areas burned by wildfire last summer.

Rare Plant Taxa - For this information I rely on the Idaho Natural Heritage Program. The Heritage Program is a comprehensive biological inventory undertaken in a cooperative way between The Nature Conservancy and Idaho Department of Fish and Game. The resulting data base serves as a clearinghouse for information on rare species and ecosystems in the state of Idaho that is continuously being updated and refined, making it ideally suited for Resource Area planning.

Treatment of rare plants in the RMP and EIS is good. The strong protection measures for rare plants and the incorporation of management needs for candidate and sensitive plants in all activity plans is commendable. Incorporation of the following suggestions, however, would greatly enhance the rare plant portion of the RMP and EIS.

41.4 1. The isolated tract of BLM land near Council that contains Idaho's only known population of Ceanothus prostratus should be included on the list of rare plant sites requiring special attention. A monitoring program should also be established to study the effects of livestock grazing on the Ceanothus.

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Cascade RMP Comments
Page 3

41.5 2. A plant that is a concern of many botanists in Idaho, is Allium aaseae. The BLM needs to fully address how they intend to manage those areas on which A. aaseae is known to occur in order to prevent this species from being listed as Threatened by the USFWS due to the documented and continuing impacts of mining, ORV's, housing development, mass-transplant experiments, etc. Mass-transplant cultivation of A. aaseae is an unproven conservation measure for rare onions and may jeopardize the survival of large numbers of plants. Additionally, this action may be outside the intent of The Endangered Species Act, that is, it is a recovery action taking place prior to official listing and Recovery Plan development. Furthermore, the transplant gardens would be considered experimental populations and would not fulfill the BLM's obligation toward recovery if Aase's onion is listed as Threatened. Consultation with USFWS on these experiments is imperative.

A more prudent and effective course of action for the conservation of this rare plant would be to conduct intensive surveys of BLM tracts within the onion's known range in conjunction with the Heritage Program. Steve Caicco of the Heritage Program has spent two years on a thorough search of adjacent private, state, and municipal lands. Following this survey, and in cooperation with the USFWS, Heritage Program, and The Nature Conservancy, a conservation plan should be drawn up for the species that would entail rigorous protection of the best Allium aaseae populations as preserves. When the survival of this plant appears secure in these preserves and Federal listing unnecessary, experiments involving the movement of entire populations to prevent loss from mining would be a worthwhile endeavor.

Following are specific comments on the EIS amd RMP:

EIS-Description of Alternatives

41.6 All five alternatives have as an objective under Vegetative Resources to "protect and manage 12 specific sites containing candidate and sensitive plants" (except in Alternative D, page 2-35, where only 11 are considered). The list includes six RNA's, three of which, Goodrich Creek, Buckwheat Flats, and Lost Basin Grassland, contain no known populations of BLM listed plants.

EIS-Affected Environment (pages 3-8 to 3-10)

41.7 A. Allium aaseae is incorrectly identified as a Category 2 candidate on page 3-8, paragraph one and list at bottom of page. It is a Category 1 candidate.

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Cascade RMP Comments
Page 4

41.7 B. In the third paragraph, page 3-8, Carex aboriginum is listed as a sensitive species. It is a Category 2 candidate.

C. On page 3-9, the following four areas are incorrectly identified as having known populations of candidate and sensitive species:

41.8 1) Hulls Gulch Nature Trail - According to Heritage Program survey information for Allium aaseae on the Boise Front, the lower limit of the proposed Hulls Gulch Nature Trail is higher than any known occurrence of the species. If the onion occurs along the trail, it needs to be documented.

41.9 2) Lost Basin Grassland RNA - contains no known populations of plants listed on page 3-8. It does, however, contain Allium tolmei var. platyphyllum, a plant considered sensitive by the Rare and Endangered Plants Technical Committee ("Redbook Committee") and tracked by the Heritage Program data base.

3) Goodrich Creek RNA - likewise, contains no known populations of BLM listed plants.

4) Buckwheat Flat RNA - also does not contain any listed plants, but does contain a population of Allium tolmei var. platyphyllum.

41.10 It appears that certain RNA's are being erroneously justified as rare plant sites. They are equally valuable without rare plants and are justified for a myriad of other reasons. See the 1977 federal report on RNA's cited above.

D. Spelling errors:

41.11 1) Page 3-8, paragraph three, the spelling of the specific epithet of Mimulus ringens is incorrect.

2) Page 3-10, heading for last paragraph, Peraphyllum is spelled incorrectly.

3) Page 3-8, list of common names, both Mulford and Cusick are propper names and should begin with upper case letters.

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Cascade RMP Comments
Page 5

41.11 4) Three times on page 3-8 and once on page 3-10, Astragalus mulfordiae is spelled incorrectly. Over the past couple of years, there has been widespread confusion as to the correct spelling of "mulfordiae." M.E. Jones published the name without the "i" in 1913, prior to formalization of the International Code of Botanical Nomenclature. According to the code, this is an orthographic error that can be (and was) changed in later treatments of the taxon. All commemorative specific epithets used as nouns include an "i". If it is used to commemorate a female, as in Astragalus mulfordiae, "ae" is added.

EIS-Environmental Consequences

As mentioned above, each alternative includes the designation of certain RNA's to protect candidate and sensitive species that do not contain any.

RMP-Rationale for Preferred Alternative

Page 12 - It is good to see that allowances are made for new knowledge of rare plant distributions and that the BLM will protect new populations that are identified through site evaluations and other inventories. This indicates a long-term commitment to rare plant conservation that is rarely seen in land management plans.

You again incorrectly mention the designation of six RNA's to protect known candidate and BLM sensitive species.

41.12 RMP-Preferred Alternative

Page 25 - The 12 sites do not all contain candidate and sensitive species.

RMP-Support Requirements

Page 63 - We strongly agree with the need for the highest level of wildfire supression on RNA's to protect these significant resources.

41.13 RMP-Map 4

Summer Creek is not identified as a RNA.

RMP-Map 5

Goodrich Creek and Buckwheat Flat RNA's are not closed to ORV use, as recommended on page 26.

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Cascade RMP Comments
Page 6

41.13 RMP-Map 7

The proposed vegetative treatment in allotment 179 lies within the proposed Rebecca Sand Hill RNA. This would be inconsistent with RNA designation.

If you have any questions concerning these comments please feel free to contact me. Thanks again for the opportunity to comment on the Draft RMP and EIS and I look forward to working with the Cascade Resource Area in the future.

Sincerely,

Bob Moseley

Bob Moseley
Idaho Public Lands Coordinator

CC: Roger Rosentreter, ISO
Craig Groves, Idaho Natural Heritage Program
Guy Bonnivier, Idaho Field Office, TNC
C.A. Wellner, Idaho Natural Areas Coordinating Committee
Robert Parenti, Boise Field Office, USFWS

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COMMITTEE FOR IDAHO'S
HIGH DESERT
P.O. BOX 463 BOISE, IDAHO 83701

Dick Geier
Cascade Resource Area Manager
BLM Boise District

Dear Dick,

Thanks for the opportunity to comment on your Cascade R.M.P. We really have a chance to do good things in this area and make it a multiple use showcase.

We strongly endorse Alternative C, which emphasizes the "protection and enhancement of the natural environment", with some modifications. Given the poor baseline data you have available on the Resource Area's vegetation, and the continuing lack of funds for effective monitoring, this alternative offers a usable, conservative management strategy.

Many of our proposed modifications concern recreation. We recognize that some of these concerns were not fully expressed in the issues identification stage of the planning process. You stated at our meeting that none of our newly voiced concerns could have any impact on the R.M.P., and that you would disregard them as stated. Given the flaws in the Plan, this left us very disheartened.

We will therefore attempt to shape them into the relevant issues as presented in the Draft R.M.P.--Payette River Corridor Management Issue, Land Tenure Adjustment Issue, and your Rangeland Resource Management Issue; as well as your Access Management Concern, your Off-Road Vehicles Management Concern, your Fire Management Management Concern, and your Special Designations Management Concern. Further, we request your willingness to consider new issues/concerns/policy requirements as stated on page 6 of the draft (Identification of Future Issues).

We support full 4500 acre Recreational River management along 6 miles of North Fork, and 8 miles of main Payette River. These are world-class kayaking and floating rivers, with heavy public use. They deserve and need protection and management. We
42.1 urge that you review your statutory and regulatory position, and pursue full recommendations, not must urge further study for these rivers.

We urge that you broaden your limited issue of Payette River management to consider the Middle Weiser River's recreational potential, which your plan seems to ignore. Use land tenure adjustment here as a creative management tool to purchase or acquire through exchange canoe/float launch sites, especially in Midvale area. This also applies to your Access management concern--the public needs access to these lands.

42.2 The Crane Creek and Paddock Reservoir areas desperately need developed recreation sites. This brings together three issues and concerns in the plan, and one major problem we see with the
42.3 R.M.P. as written. You ignored the problems at these sites

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because your failed to consider the potential for using an aggressive land transfer or purchase program (Land Tenure Adjustments Issue) to acquire title to lands at the reservoirs
42.3 suitable for campgrounds. Building campgrounds, and banning camping outside the campsites, is a good way to reduce wildfire hazards (Fire Management Concern). Also, the public is in danger of being denied access (Access Concern) to these reservoirs because of the private land surrounding them.

The major problem we see with the plan is its incredible bias in favor of ORV's (Off-Road Vehicle Management Concern) and against any other form of recreation. The current SCORP calls for numerous campsites to be built in these counties. Why can't the Cascade Resource Area help? The public expresses an increasing interest in hiking in the desert, in an environment resembling Recreational Opportunity Spectrum's Primitive and Semi-Primitive Non-Motorized categories. Why can't the Cascade Resource Area help? Too much attention is paid to motorcycles, and not enough to developed and undeveloped recreation needs. This desperately needs to be changed in the final plan.

With these concerns in mind, we support placing a larger portion of the Resource Area into the closed to Off-Road Vehicles category (page 6). Our proposed closed areas definitely merit Special Recreation Management Areas status. We recommend: 1) a 7500-acre area between Crane Creek Reservoir and the Weiser River, an area which needs deeded public access; and 2) an 8000-acre area south of Dodson Pass (Sheep and Hog Creek drainages),
42.4 which needs access from Dodson Pass. Please regard these comments as relative to your Special Designations management concern, as well as your ORV concern. We regard these areas as meeting all FLPMA definitions as Wilderness Study Areas. We're not sure why BLM never inventoried them as such, but we see such potential in them to justify placing them in our Idaho BLM Wilderness Proposal.

The Hulls Gulch Nature Trail, one of BLM's premiere nature trails, needs additional protection. This could be accomplished by withdrawing a full 500 foot corridor along Hull's Gulch Nature Trail from overhead, surface or subsurface right of ways, from mineral location and leasing, and from any domestic grazing, even transitory. Please consider these comments under your Special Designations management concern.

One of the RMP's best features is its provision for Natural Areas. We support Areas of Critical Environmental Concern (ACEC's) for long-billed curlew, and Columbian sharp-tailed grouse. We also support the six Research Natural Areas, and request additional protection through withdrawal from mineral entry, elimination of grazing, and closure to ORVs.

We feel more could be done for riparian areas in the Resource Area. We support Alternative C's increases in improved riparian and fisheries habitat. We additionally support improvement in Crane Creek below Crane Creek Reservoir to Good or excellent condition, and request that the BLM seek minimum stream flows

On grazing, we support Alternative C's reductions in grazing in the Crane Creek-Weiser River roadless area for Allotments 304 and 361; given present conditions in these allotments, there

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seems good cause for reductions. We oppose increased grazing pressure on BLM lands to make up for fire losses on BLM and private lands.

Last, we wish to make one point perfectly clear. We support high populations of wildlife--game and non-game. Whatever course fire rehabilitation takes, we urge you to decide the tough decisions in favor of deer, elk, antelope, upland birds, and non-game species. This nation has a surplus of beef and a shortage of wildlife.

Thanks again for the opportunity to comment. I hope you are willing to take our suggestions and put them to use to improve this plan.

Sheldon Bluestein
Sheldon Bluestein
Secretary

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GLOSSARY

ACRONYMS

ACEC - Area of Critical Environmental Concern
AMP - Allotment Management Plans
AUM - Animal Unit Month
BLM - Bureau of Land Management
CFL - Commercial Forest Land
CRA - Cascade Resource Area
CRMP - Coordinated Resource Management Plan
CRMP - Cultural Resource Management Plan
DEIS - Draft Environmental Impact Statement
DLE - Desert Land Entry
EA - Environmental Assessment
ERMA - Extensive Recreation Management Area
FLPMA - Federal Land Policy and Management Act of 1976
GEM - Geology, Energy, and Minerals
IMP - Interim Management Plan
KGRA - Known Geothermal Resource Area
MIC - Maintain, Improve, Custodial
MFP - Management Framework Plan
MMBF - million board feet
MUA - Multiple Use Area
NEPA - National Environmental Policy Act of 1969
ONA - Outstanding Natural Area
ORV - Off Road Vehicle
RA - Resource Area
RAMP - Recreation Area Management Plan
RMP - Resource Management Plan
RNA - Research Natural Area
ROS - Recreation Opportunity Spectrum
ROWs - Rights-of-Ways
RPP - Recreation and Public Purpose Act
SCORP - State Comprehensive Outdoor Recreation Plan
SHPO - State Historic Preservation Officer
SOP - Standard Operating Procedures
SRMA - Special Recreation Management Area
TMP - Timber Management Plan
TPCC - Timber Production Capability Classification
USFS - United States Forest Service
VRM - Visual Resource Management
WHMP - Wild Horse 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. A standard unit of recreation use consisting of one individual participating in one recreation activity during any reasonable portion, or all, of any 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.

AVOIDANCE AREA. Areas containing sensitive resource values which preclude overhead, surface, or subsurface rights-of-way.

BEA. Bureau of Economic Analysis, U.S. Department of Commerce.

BU. Bushel, a unit of dry measure.

CANDIDATE SPECIES. Species with insufficient biological information on hand to support listing by the U.S. Fish and Wildlife Service as either threatened or endangered.

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.

CLASS III CULTURAL RESOURCE INVENTORY. A complete inspection of all areas of potential impact from project implementation.

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.

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. Synonomous 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.

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.

CRUCIAL HABITAT. Habitat which is absolutely basic to maintaining viable populations of fish, wildlife, or plants during certain seasons of the year or specific reproduction periods.

CULTURAL RESOURCE CLEARANCE. A statement by a competent professional historian 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.

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) have high prospects for extraction of geothermal steam or associated geothermal resources.

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.

MANAGEMENT FRAMEWORK PLAN (MFP). A planning decision document prepared before the effective date of the regulations implementing the land use planning provisions of the FLPMA, which establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, and objectives to be achieved for each class of land-use or protection. Until replaced by RMP's, MFP's, including those completed in the transition period, are used as a basis for management action as provided for in 43 CFR 1610.8.

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 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 in 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. 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 ORV use). 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 plant 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.

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.

RECREATION DAY. Any part of a day spent participating in a given activity.

RECREATION OPPORTUNITY SPECTRUM (ROS). A conceptual framework designed for inventory, planning and management of public lands from a recreation perspective.

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.

RESEARCH NATURAL AREA (RNA). A naturally occurring physical or biological unit where natural conditions are maintained insofar as possible. Further, the natural features are preserved for research and education purposes. The features to be preserved may be important or unique ecosystems, habitats, organisms, and may be terrestrial, fresh water or marine.

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.

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 poor 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.

TIMBER PRODUCTION CAPABILITY CLASSIFICATION (TPCC). The process of separating land within the forest zone into major classes indicating relative suitability to produce timber on a sustained yield basis.

TREND (Range) - The direction of change in ecological condition.

UNIVERSAL SOIL LOSS EQUATION (USLE). An erosion model designed to compute average soil losses from sheet and rill erosion under specified conditions.

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.

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APPENDICES

APPENDIX A

SOIL EROSION HAZARD BY ALLOTMENT

Allotment #	Allotment Name	Public Land Acres	Acres with High or Very High Hazard	Percent of Allotment
0001	Pearl Individual	40	0	0
0002	Pickle Butte	80	0	0
0003	Jerusalem	11,699	11,465	98
0004	Bissell Creek	6,004	4,575	76
0005	Big Willow Creek	28,093	20,227	72
0006	Sheep Creek Com.	12,493	6,650	53
0007	Tommy Carr	4,927	3,320	67
0008	Field	445	174	39
0009	Butte Ranch	2,609	1,487	57
0010	Chacartegui	2,120	185	9
0011	Round Valley	18	0	0
0012	Armacost Individual	530	406	77
0013	Wildhorse	4,679	4,575	98
0014	Lower Allotment	360	360	100
0015	Goodrich Individual	200	0	0
0016	Goodrich Com.	5,261	4,511	86
0017	County Line	80	0	0
0018	Ball Individual	80	80	100
0019	Sheep Gulch	969	548	56
0020	Barker Individual	500	380	76
0021	Basin Individual	1,248	259	21
0022	Beal Individual	80	0	0
0023	Bean Individual	131	0	0
0024	Beggs Individual	121	70	58
0025	Bettis FFR	786	786	100
0027	Bezates Individual	360	280	78
0028	Stillwell Individual	200	200	100
0029	Biggers Individual	320	0	0
0030	West Side	1,741	1,206	69
0031	Biggers	77	0	0
0032	Randall	2,140	2,140	100
0033	Camp Creek	203	203	100
0034	Bilbao Individual	60	60	100
0035	Black Canyon Individual	850	605	71
0036	Bivens Individual	471	290	61
0037	Brownlee	1,455	1,395	96
0038	Blessinger Individual	200	200	100
0039	Bott Individual	537	430	80
0040	Boyd Individual	320	320	100
0041	Granger Butte	2,910	438	15
0042	West Crane Individual	480	0	0
0043	Indian Valley	4,103	1,904	46

Allotment #	Allotment Name	Public Land Acres	Acres with High or Very High Hazard	Percent of Allotment
0043	Indian Valley Com.	2,208	840	38
0044	Riley Butte	765	234	30
0045	Branch Individual	1,004	1,004	100
0046	T. Braun Individual	465	240	52
0047	Braun and Bacon Valley	520	0	0
0048	H & R Braun	120	0	0
0050	Rudger	280	0	0
0051	Brent Individual	110	110	100
0052	M. Brent Individual	240	240	100
0053	Burkhardt Individual	280	280	100
0054	Burt Individual	40	0	0
0055	Burton Individual	439	0	0
0056	Busch Individual	1,701	958	56
0057	Butler and Perkins	360	218	60
0058	Sweet	80	80	100
0059	Minnie	4,707	2,606	55
0060	West Crane	8,459	1,008	12
0061	R. Cada Individual	255	0	0
0062	Lower Crane	2,034	1,049	51
0062	Lower Crane Com.	1,931	247	13
0063	GT. Cada Individual	1,076	450	42
0064	Canaday Individual	237	237	100
0065	McMahan Ranch	40	40	100
0066	Carr Individual	190	176	93
0067	Mitchell Individual	40	0	0
0068	Chandler Individual	360	360	100
0069	Chestesen	810	675	83
0070	Clarkson Individual	120	120	100
0071	McFadden	620	0	0
0072	Clelland	200	200	100
0073	Coates FFR	80	80	100
0074	Cove Creek	2,455	775	31
0075	Coates A & R Individual	240	240	100
0076	Fruitvale	1,000	1,000	100
0077	Craig Individual	280	0	0
0078	Frisbee	40	0	0
0079	Fruitvale Glenn	40	40	100
0080	J. Craig Individual	690	0	0
0081	West Individual Allotment	837	405	48
0082	Cambridge	520	157	30
0083	Cruickshank Individual	815	360	44
0084	Dahnke	320	320	100
0085	Cove Springs	40	0	0
0086	Darnell Individual	80	80	100
0087	Webb Creek FFR	290	10	3
0088	Round Valley FFR	80	0	0
0089	Squaw Butte	2,686	1,563	58

Allotment #	Allotment Name	Public Land Acres	Acres with High or Very High Hazard	Percent of Allotment
0090	Gambril Individual	120	120	100
0092	East Garden Valley	2,352	2,352	100
0093	Dickerson Individual	40	40	100
0094	Dishner Individual	40	0	0
0095	Horse Flat	4,147	3,242	78
0096	Dotson	120	40	33
0097	Dunham Individual	40	0	0
0098	Eakin Individual	118	0	0
0099	Emery Individual	1,742	1,742	100
0100	Brownlee	1,932	1,776	92
0101	Sage Creek	1,664	500	30
0102	New Bold	200	30	15
0103	Farrens	40	0	0
0104	Big Willow FFR	809	663	82
0105	Fisk Individual	160	160	100
0106	Indian Creek	501	449	89
0107	Indian Creek Com.	204	104	51
0108	Ford	80	80	100
0109	Long Gulch	2,210	1,548	67
0110	Frasier Individual	343	343	100
0111	Uhlam	160	108	67
0112	Gallant Individual	320	60	19
0113	Justus FFR	320	192	60
0114	Gatfield Individual	199	190	95
0115	Packer John	2,907	2,907	100
0116	Patterson & Goodwin	3,516	3,516	100
0120	Gossard Individual	423	423	100
0121	Gould Individual	160	0	0
0122	Leep Individual	656	656	100
0123	Greenwood Individual	160	92	57
0124	Gutherie Individual	40	0	0
0125	Dechambean Individual	461	461	100
0126	Hadley Individual	200	200	100
0127	Hagans Individual A	40	40	100
0128	Hagans Individual B	120	120	100
0129	Hale Individual	120	0	0
0130	Gross	221	221	100
0131	D. Harrington Individual	760	750	99
0132	Home Ranch	187	187	100
0133	Lake Ranch	980	545	55
0134	J. Harrington Individual	200	200	100
0135	Dad Harrington	200	113	56
0136	Kenny Ridge	40	40	100
0137	Hayshed	40	0	0
0138	L & J Harrington	240	240	100
0139	Lower Field	1,562	1,562	100
0140	Upper Field	474	326	69

Allotment #	Allotment Name	Public Land Acres	Acres with High or Very High Hazard	Percent of Allotment
0141	Helmick Individual	237	100	42
0142	Wolf Creek	1,630	970	59
0143	Herrick FFR	40	0	0
0144	Higgins Individual	160	0	0
0145	Scott Creek	3,220	3,055	95
0146	Hoffman Individual	200	0	0
0147	Holbrook Individual	257	30	12
0148	Indian Mtn. Com.	732	234	32
0149	Holmes Individual	80	0	0
0150	Hopper Creek	382	0	0
0151	Deer Creek	80	0	0
0152	Hornet Creek	681	163	24
0153	Horning Individual	40	0	0
0154	North	642	55	8
0155	South	980	152	15
0156	Upper Ranch	240	240	100
0157	Hubbard Individual	40	0	0
0158	Jackson Creek	1,514	1,049	69
0159	Isom	1,000	440	44
0160	Jacobs Individual	40	0	0
0161	Goodrich Individual	240	240	100
0162	Johannsen Individual	360	173	48
0163	Kaufman Individual	68	0	0
0164	Keithley Individual	1,507	388	26
0165	J. Keithley	920	423	46
0166	Kennedy Individual	68	0	0
0167	Kilborn Individual	160	160	100
0168	Klingback Individual	80	50	62
0169	Langer Individual	200	0	0
0170	Little Jackson	2,650	2,650	100
0171	A. Legg Individual	40	0	0
0172	P. Legg Individual	40	40	100
0173	Line Individual	40	0	0
0175	Black Canyon Fenced	80	0	0
0176	Black Canyon	4,540	2,050	45
0177	Big Flat	722	300	41
0178	Paddy Flat	840	840	100
0179	Lyle Individual	683	525	77
0180	M. C. & M. Individual	105	46	44
0181	Black Canyon Ranch	1,333	1,140	85
0182	Soldier Creek Ranch	44	0	0
0183	Cabarton Ranch	85	0	0
0184	Siller Ranch	208	175	84
0185	Maddox Individual	50	18	36
0186	Mainvil Individual	95	55	58
0187	Marvin Individual	735	185	25
0188	West Side (South)	1,055	564	53

Allotment #	Allotment Name	Public Land Acres	Acres with High or Very High Hazard	Percent of Allotment
0189	McCool Individual	1,320	627	47
0191	Linson Creek	5,629	4,756	84
0193	McGinnis Individual	23	0	0
0194	McMullen	7,121	7,120	100
0195	Syme-Moser River	422	422	100
0196	McPherson Individual	240	240	100
0197	Meinikheim Individual	195	195	100
0198	Meyer Individual	120	40	33
0199	Hays	80	0	0
0200	Advent Gulch	119	0	0
0201	Mitchell Individual	180	0	0
0202	Lund	370	370	100
0203	Sage Creek	2,246	1,662	74
0204	Dennet & Stover	859	448	52
0205	Crane Creek	1,312	655	50
0206	D. Moritz Individual	361	45	12
0207	Henley Basin	3,196	2,956	92
0208	Sage Creek	4,028	3,177	79
0209	Burroughs	2,457	351	14
0210	Montour Individual	217	57	26
0211	Nissula Individual	243	233	96
0212	Nissula Individual	240	240	100
0213	Osborn Individual	321	321	100
0214	Palmer Individual	430	0	0
0215	Parks Individual	558	478	86
0216	Patton	560	372	66
0217	Peebles	319	187	58
0218	Perkins Individual	120	0	0
0219	Peterson Individual	555	555	100
0220	Potter Individual	158	72	45
0221	Pound Individual	2,184	1,137	52
0222	Pratt Individual	152	130	85
0223	Putnam Individual	720	461	64
0224	Ranny Individual	523	170	32
0225	Indian Head Mtn.	1,468	1,468	100
0227	Ryals Individual	80	80	100
0228	Sagebrush Hill	880	880	100
0229	Stait	329	0	0
0230	Tarter	790	230	29
0231	Schlehuber Individual	563	146	26
0232	Schmeller Individual	1,240	100	8
0233	Hopper Creek	2,650	583	22
0234	Mrs. Seid Individual	775	29	4
0235	Pine	2,029	27	1
0236	Middle Fork	480	480	100
0237	Black Canyon (Shaw)	10,438	6,311	60
0238	Simplot Cattle Co.	320	0	0

Allotment #	Allotment Name	Public Land Acres	Acres with High or Very High Hazard	Percent of Allotment
0239	Simplot Industries	40	40	100
0240	Clipper Flat	1,239	593	48
0241	Sister Individual	40	40	100
0242	Roy Slyter	160	160	100
0243	Rocky Ridge	725	725	100
0244	Smith Individual Allotment	100	100	100
0246	Smith Black Canyon	580	485	84
0247	Wilson Individual	159	159	100
0248	Hashagen Individual	560	520	93
0249	Sturgill Creek	6,421	6,421	100
0250	Squaw Creek	120	0	0
0252	Willow Creek	200	0	0
0253	Butte Field	708	642	91
0254	Sand Hollow	5,160	4,562	88
0255	Sutten Individual	40	0	0
0256	Sutten Ranches Individual	80	0	0
0257	Thomason Individual	40	0	0
0258	Thompson	280	83	29
0259	Towell	120	0	0
0260	Crane Creek Individual	643	0	0
0261	Twin Sisters	3,067	1,267	41
0262	Vogel & Ogle Individual	160	0	0
0263	Waite Individual	120	0	0
0264	Walker Individual	160	160	100
0265	Watson Individual	30	30	100
0266	Montour Individual	316	197	62
0267	Alder Creek Individual	991	991	100
0268	Weiser Sheep Company	1,439	744	52
0269	Wells Individual	120	0	0
0270	Whiteman Individual	200	200	100
0271	Williams-Fairchild	1,006	60	6
0272	Williamson	160	50	31
0273	Perkins Creek	340	340	100
0274	Winegar Individual	120	120	100
0275	Woodland Individual	770	770	100
0276	Lindsay Individual	200	200	100
0278	Spring Valley	7,687	6,995	91
0279	Black Canyon	3,380	2,364	70
0280	Lick Creek	10,097	8,986	89
0284	Spring Creek	7,811	2,600	33
0286	Deardorff Individual	120	0	0
0287	Stippich Pasture	319	0	0
0288	Double Diamond	80	80	100
0289	Porter Creek	80	0	0
0290	North Hornet	230	230	100
0291	Hornet Creek	120	40	33
0292	D. Moritz Individual	120	120	100

Allotment #	Allotment Name	Public Land Acres	Acres with High or Very High Hazard	Percent of Allotment
0293	North Fork FFR	440	0	0
0294	U-Bar-M FFR	571	571	100
0295	Little Willow	3,193	2,960	93
0297	Wet Gulch	40	40	100
0298	X5	897	302	34
0299	Cox FFR	120	120	100
0300	WRR Individual	40	0	0
0301	Holland Gulch	4,114	1,643	40
0302	Weiser Cove	380	380	100
0303	Skow FFR	40	40	0
0304	Center Allotment	4,030	1,124	28
0306	Big Creek	560	320	57
0307	Dry Lake	1,360	400	29
0308	Sky Ranch Individual	111	0	0
0309	Boise Front	5,837	5,837	100
0310	Black Canyon	16,770	9,223	55
0311	No Unit	5,208	5,208	100
0312	Bannister Basin	2,073	2,013	97
0313	Fenwick Place	80	80	100
0314	Bingman	40	40	100
0315	Terteling	40	40	100
0350	Lucky Peak	164	164	100
0352	Stephens Individual	399	53	13
0355	Robert Royston Individual	475	475	100
0356	Roberts Individual	40	40	100
0361	Crane Creek Allotment	9,804	4,154	42
0362	Foothills	7,798	5,532	71
0363	Drake Individual	270	270	100
0364	Wiskey Rapids Allotment	316	316	100
0365	Old Craig Allotment	320	0	0
0366	Staley Allotment	201	60	30
0367	Minnie Snyder FFR	175	175	100
0368	Rock Creek FFR	3,677	3,603	98
0369	McChard Butte	6,693	6,653	99
0370	Upper	15,474	8,820	63
0371	Callender Individual	296	260	88
0372	Warm Springs	233	90	38
0373	Williams Individual	338	338	100
0374	1000 Acre Field	100	100	100
0375	Gibson Allotment	120	0	0
0376	Fry Individual	92	0	0
0377	Dennet Creek FFR	770	770	100
0378	Lower Raft Creek	2,120	2,120	100
0379	Upper Raft Creek FFR	245	245	100
0380	Mineral	951	951	100
0381	Cow Camp	243	243	100
0382	Beef Trap	985	985	100

Allotment #	Allotment Name	Public Land Acres	Acres with High or Very High Hazard	Percent of Allotment
0383	Forsgren Individual	40	0	0
0384	Jenkins Creek	2,109	2,029	96
0385	Putnam Custodial	40	40	100
0386	White Butte Allotment	466	0	0
0387	Individual	80	40	50
0388	Pedro & Upper Wolf	205	120	58
0389	Long Hollow Field	1,628	1,331	82
0390	Fenced Federal Range	726	540	74
0391	Little Emmett Allotment	24,323	6,809	28
0392	Fenced Federal Range	180	38	21
0393	Indian Jake	17,224	8,004	46
0396	Bivens Purchase	200	160	80
1278	Quartzburg	2,179	2,179	100
0388	Fenced Federal Range	120	60	50
	TOTAL	*464,920	295,972	64

* Note that these are totals for alloted acres only and therefore do not equal total acres for the RMP area.

APPENDIX B

ACTIONS AFFECTING SOILS*

Action	Alt. A	Alt. B	Alt. C	Alt. D	Alt. E
Rangeland Improvements:					
Livestock - Seed, burn, disc or spray over 20 yrs (acres)	0	23,400	13,000	31,000	24,279
Pipelines (miles)	6	12	6	36	15
Wildlife - Burn, disc and seed over 20 yrs (acres)	0	7,672	6,802	8,295	8,295
Livestock Use 20 yrs (AUMs)	66,014	71,076	53,543	76,613	70,538
Timber Harvest 20 yrs:					
Roads Built (miles)	40	68	20	116	68
Annual Cut (MMBF)	1.0	1.7	0.5	2.9	1.7
ORV Use (acres):					
Open	362,892	339,552	3,276	3,276	244,118
Limited	123,989	147,329	481,620	481,615	241,215
Closed	585	585	2,570	2,575	2,133
Mineral Exploration and Development:					
Leasable open (acres)	456,289	456,289	454,389	456,289	456,289
Locatable open (acres)	456,289	456,281	452,586	454,486	456,281
Agricultural Transfer (acres)	560	560	0	560	560

* The impacts caused by land use actions are discussed in the narratives of the alternatives. This table indicates the area affected by the action.

APPENDIX C

MAPPING RANGELAND VEGETATION USING LANDSAT MSS DIGITAL DATA FOR RESOURCE MANAGEMENT PLANNING

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ABSTRACT

The objective of this project was to produce usable map products showing present rangeland vegetative communities based on Landsat MSS digital analysis and appropriate ancillary data. These products have provided the Bureau of Land Management, Cascade Resource Area (CRA) staff with a base inventory for the CRA Resource Management Plan and Environmental Impact Statement (RMP/EIS). They have also provided the Soil Conservation Service (SCS) with an inventory of private rangeland within BLM grazing allotments. Of particular interest was the ability of Landsat spectral data to distinguish non-native homogeneous stands of medusahead grass (*Elymus caputmedusae*) and cheatgrass brome (*Bromus tectorum*) from native plant communities. This project represents a cooperative interagency effort to generate uniform vegetation cover data at least possible cost.

INTRODUCTION

The Bureau of Land Management (BLM) resource inventory process is structured in a manner that meets legislative and policy requirements. It provides decisionmakers with the information necessary to make sound land-use and resource management decisions. Inventory data provides the factual basis for development of Resource Management Plans (RMP's). The Federal Land Policy and Management Act of 1976 states that inventories be maintained, on a continuing basis, of all public lands. These inventories are to be kept current to reflect changes in conditions and to identify new and emerging resource values (FLPMA 1976).

Traditional inventories in the Boise District BLM were conducted by a Resource Inventory Team (RIT). This team consisted of up to twelve resource specialists and was responsible for all inventory work associated with RMP's. The team concept was an effective but costly method of accomplishing

the task. Costs for vegetation inventories alone averaged $.15/acre.* Faced with decreasing budgets and personnel, the Resource Inventory Team disbanded in 1982. Alternative methods to accomplish resource inventories were needed.

A rangeland inventory need existed for the BLM's Cascade Resource Area (CRA) in preparation for their Resource Management Plan. Limited rangeland inventory data existed for the CRA in 1982. A very scattered land ownership pattern and limited access contributed to this lack of current inventory. Some lands in the resource area had never even been visited by BLM personnel.

The use of remote sensing techniques was chosen by the CRA manager as an alternative method for gathering vegetation inventory data. The use of Landsat MSS digital data was available as a tool to accomplish this task. Of particular concern to the CRA manager was the continued proliferation of non-native homogeneous stands of medusahead grass (Elymus caputmedusae) and cheatgrass brome (Bromus tectorum). These two annual grass species encompass the majority of poor condition rangeland in the CRA. The ability of Landsat MSS digital data to distinguish these non-native homogeneous stands from native plant communities was imperative in this inventory effort.

USER REQUIREMENTS

The production of present rangeland vegetation maps based on Landsat MSS digital data was the basic requirement to meet the vegetation inventory needs for the CRA Resource Management Plan. In addition, the USDA Soil Conservation Service (SCS) was interested in using data gathered on private rangelands within BLM allotments for developing conservation plans. The information was planned for use in future SCS-BLM coordinated rangeland planning efforts.

Specialized image processing equipment was needed to process Landsat MSS data. The BLM's Branch of Technology Applications Assistance, at the Denver Service Center, was capable of processing the necessary data. However, due to an existing work schedule and limited personnel, this facility was unable to provide these services in the required timeframe. An alternate remote sensing facility was needed. With the limited funding available for this project, it was necessary that an alternate facility meet the following criteria:

1. Low cost. The contracted facility should benefit from the results and be willing to absorb certain processing costs associated with the project, a true cost share effort.

2. Close proximity. Due to restricted travel funds available for this project, the contracted facility must be close to both the project area and the Boise District Office.

3. Personnel interaction. Past experience has shown that the close interaction of contracted remote sensing facilities and BLM resource personnel is essential for the most effective use of the data.

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*Average costs from 1977-1981 as reported by Boise District Resource Inventory Team Leader.

4. Computer compatibility. The alternate facility must have a computer hardware/software package capable of interacting with the BLM's Interactive Digital Image Manipulation System (IDIMS) at Denver. This was required for hard copy output.

5. Interagency cooperation. The project was designed to be a cooperative effort and learning experience for all participants. The alternate facility must provide necessary training to BLM personnel to assist in data processing, therefore reducing costs.

IMAGE ANALYSIS FACILITY

The only facility meeting these requirements was the State of Idaho, Department of Water Resources, Idaho Image Analysis Facility (IIAF). It is a complete image processing facility, established by executive order, to service Landsat MSS user needs in the State of Idaho.

The IIAF is located in Boise, Idaho, close to the BLM Boise District Office and the project area. Travel costs were eliminated enabling BLM personnel to participate in data processing on a routine basis. This participation provided a better understanding of the complexity of the project and a more effective use of the output products.

The IIAF supports a suitable hardware/software computer package (VICAR/IBIS) which is compatible with BLM's IDIMS at the Denver Service Center. Computer compatible tapes were produced for hardcopy output. BLM personnel were able to work directly with IIAF personnel for data output. The IIAF was willing to provide all necessary training in the use of the (VICAR/IBIS) image analysis software and the interactive digital image display device. The primary emphasis of the IIAF is technology applications through development and application of operational remote sensing management and assessment programs.

The required data generation would normally cost about $.06/acre to process. The IIAF provided the required data to the BLM for about $.02/acre. The $.04/acre difference was absorbed by the IIAF to enhance its data processing capabilities for future project work. This facility is non-profit by directive.

DESCRIPTION OF THE PROJECT AREA

The CRA supports a diverse environment for a variety of vegetation types. A combination of man's actions, fire history, climate, elevation, aspect, and soil types account for this diversity.

The resource area stretches approximately 120 miles from north to south and 70 miles from east to west. The temperature/moisture regimes associated with this large area account for a variety of vegetation zones. The vegetation zones represented in the CRA include the following:

1. Sage/Grass Zone
2. Wheatgrass/Bluegrass Zone
3. Ponderosa Pine Zone
4. Douglas-Fir Zone
5. Spruce/Fir Zone

Because of the size and diversity of the CRA, it was decided that a sample area would be selected for processing in order to evaluate its usefulness over the entire area. This sample area, or Phase I, encompassed 508,000 acres. Native vegetation is primarily big sagebrush/perennial grass. Average annual precipitation is about 12 inches. About 75% of the soils are formed in residuum, alluvium, and colluvium from tertiary flow basalt and about 25% are formed in residuum, alluvium and colluvium from Pliocene stream and lake deposits. Elevations range from about 2400 feet to 6100 feet.

Of the 508,000 acres, about 350,000 acres are BLM administered public lands. The remaining 158,000 acres are private and state lands.

The limitations on fiscal year budgeting necessitated breaking the project into three distinct phases. Phase 2 and Phase 3, consisting of an additional 500,000 acres of public and private rangeland, were added to the project area after the successful completion of Phase I. The area of each phase was no larger than could easily be field checked in one field season. The Phase 3 classification was budgeted entirely by the SCS.

PROCEDURES

This project represents the operational use of Landsat MSS digital data. The classification techniques and inventory methodology developed as a result of the BLM-NASA Cooperative ASVT projects in Alaska, Arizona, and Idaho were used.

Environmental Stratification

Using geologic maps (1:250,000), the project area was stratified to separate soils derived from igneous and sedimentary parent materials. Agricultural lands were manually interpreted on National High Altitude Aerial Photography (NHAP) and transferred onto 1:100,000 scale maps using a Zoom Transfer Scope (ZTS). The strata were digitized and rasterized into image masks and were used to remove riparian confusion in the classification. Classification output for each geologic strata were treated separately, and the agricultural stratum was embedded into the final classification.

Administrative Stratification

BLM personnel compiled grazing allotment information onto the 1:100,000 scale Surface Management Map Series. Grazing allotment boundaries and BLM administered lands were digitized and converted to raster format. Image masks of grazing allotments by ownerships were created and used in an overlay process with the classified Landsat data. Tabular reports of landcover acreage for BLM and non-BLM lands by grazing allotment were then generated.

Classification of Landsat Data

A guided clustering methodology was employed to generate training statistics. BLM and SCS personnel familiar with the CRA selected training sites using NHAP and a 1:250,000 scale Landsat FCC (path:45 row:29 date:July 17 1980 Id #:82201317514XO). The Landsat MSS data for each training area (50x50 pixels) was clustered and classified into 10-12 spectral classes.

The spectral classes were color coded, displayed, and photographed on a cathode ray tube (CRT). Display photographs and NHAP photography were registered using the ZTS. The delineated photos were taken into the field and each spectral class was labeled and ground checked for:

1. Physiography
2. Elevation
3. Slope %
4. Parent Material
5. Stratum
6. Aspect
7. Species Composition %
8. Range Site
9. Range Condition
10. Surface Stones %
11. Bare Soil %
12. Rock Outcrop %

A master statistics file was compiled from the individual training area statistics files. Spectral plots (band 5 vs. 7) for each training area were overlaid on a light table and the measurement space filled with as many distinct (Swain-Fu distance) spectral classes as possible. In this way a master statistics file containing 57 spectral classes representing 15 vegetation cover types was assembled (number of spectral classes and cover types varied for each phase). The project area was classified using a maximum likelihood decision rule.

The classified data were then resampled and registered to a 57 meter UTM grid. The agricultural stratum was embedded into the classified data and the spectral classes combined into the final output classes.

Continuity Evaluation

Due to time and funding limitations, a statistically designed accuracy assessment of the spectral data could not be conducted. An alternative action to assess the accuracy of the data was developed in the form of a continuity evaluation. This proved most useful in determining the reliability of individual spectral classes within each stratum and for developing land cover descriptions.

Random 40 acre sites were selected for individual spectral classes in each stratum. Each spectral class was evaluated at least twice within each stratum. The sites were transferred to 1:24,000 USGS quads for field verification.

A special "field" form was developed to record information at each site. Land surface feature data recorded included present vegetation, surface soil conditions, rock outcrop or stoniness, slope, aspect, and the probable presence of shadow. Care was taken to ensure that each spectral class was precisely located on the ground prior to documentation.

This data was used to evaluate the composition of each spectral class. As was expected, some spectral classes were very uniform in terms of land cover composition while others showed a wide range in composition. This data was also used to develop land cover descriptions for each spectral class. The actual composition of each description was based on the field data. A range-in-characteristics was developed indicating what could be expected in terms of vegetation and land surface composition within each spectral class.

The documentation of the variability within each spectral class served as the accuracy assessment for the project. Those classes having a wide diversity in land cover feature data were judged to be less accurate than those having a narrower diversity. Those land cover units having a wide diversity in composition were isolated for further analysis.

Output Products

Computer compatible tapes (CCT's) produced through IIAF were sent to the BLM's Denver Service Center. Through the BLM's Interactive Digital Image Manipulation System (IDIMS), hardcopy color maps were produced for the entire project area. In this form, the interpreted data was conveniently input to a geo-based information system. The data was smoothed and output at 1:100,000 scale to correspond to BLM planning base maps. These computer generated maps were used to compile the final rangeland vegetation and condition maps for the CRA Resource Management Plan.

The output products generated in the project include the following:

1. Tabular reports listing authorized grazing allotments showing acreage of vegetation cover types within BLM and non-BLM lands. This simplicity in cover type area determination is an additional cost advantage over manual map interpretation.

2. Color-coded maps (Applicon) of the CRA at 1:100,000 scale showing vegetation cover types.

3. Symbol mylar map overlays (Versatec) for the 7.5 minute topographic maps of the project area at 1:24,000 scale depicting vegetation cover types.

SUMMARY

Map products showing present rangeland vegetation based on Landsat MSS digital analysis have provided the CRA with a base inventory for resource management planning. These computer generated maps were used to compile the final rangeland vegetation and condition maps for the CRA Resource Management Plan and Environmental Impact Statement.

Landsat MSS data was able to easily distinguish and quantify non-native homogeneous stands of medusahead grass (Elymus caputmedusae) and cheatgrass brome (Bromus tectorum) from other native plant communities. This study has established baseline information for monitoring the changes in the distribution of these two species.

Interagency cooperation reduced traditional inventory costs of about $.15/acre to about $.06/acre. Through the use of a local remote sensing facility, IIAF, uniform vegetation cover data was generated at least cost. This facility, non-profit by law, absorbed some processing costs associated with the project. With a close proximity to the Boise District Office and project area, travel costs were virtually eliminated. The facility provided training to BLM and SCS personnel to assist in data processing which allowed close interaction of remote sensing specialists and professional resource specialists. This interaction is essential for the most effective use of the output products. Computer compatibility between IIAF and the BLM's

Denver Service Center allowed the transfer of CCT's for the production of hardcopy color (Applicon) and mylar symbol (Versatec) maps.

A continuity evaluation was used to assess the accuracy of the image classification. This proved most useful in determining the reliability of the data and for developing land cover class descriptions.

The documentation of the variability within each spectral class served as the accuracy assessment for the project. The successful results of the continuity evaluation required close involvement between the remote sensing analyst, the image data, the field specialists, and the users of the data. The quality of the image classification can only be as good as the quality of the training data and accuracy evaluation used to perform the classification.

The entire project represents a cooperative effort by three agencies to generate uniform vegetation cover data at the least possible cost. The sharing of digital data bases and cooperative efforts are necessary cost saving mechanisms which should be addressed in future Bureau of Land Management remote sensing projects.

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APPENDIX D

RANGE CONDITION METHODOLOGY

The inventory of present vegetation in the Cascade Resource Area was begun in 1983. The inventory was based on Landsat Digital Analysis, remote sensing techniques and an intensive field verification effort.

The various vegetation cover types inventoried were combined into the following types:

1. mixed grass
2. sagebrush/mixed grass
3. mountain brush/perennial grass
4. perennial grass/deciduous brush/or riparian
5. conifer/forest brush/perennial grass
6. conifer closed canopy
7. mixed annual grass
8. dense medusahead grass
9. riparian grassland
10. sparse sagebrush/medusahead grass
11. sagebrush/perennial grass

These 11 types were used to produce a present vegetation map for the entire resource area.

Resource specialists used soil types and species composition of the individual vegetation cover types to determine a condition class range within each type.

Range specialists familiar with the Cascade Resource Area used the best available information from range surveys, Landsat, ground checks, and riparian studies to derive a condition class percent by allotment.

Because time and funding restraints precluded the tabulation and assessment of slope and topography effects on total available forage an assumption has been made that the 5-year average demand is the same as the estimated current available forage production. Monitoring and utilization studies will be used to verify the current carrying capacity and/or to establish the need for a change in active demand.

APPENDIX E

RANGE CONDITION

Allotment Number	Allotment Name	Public Land Acres	Estimated Current Production (Pounds)	Pref. Active (AUM's)	Pref. Total (AUM's)	Average License Use (AUM's)	Condition Excel	Good	Fair	Poor	Burn	Seed	Season of Use	Class of Livestock C = Cattle S = Sheep H = Horse	Wild Horses	M Category	I Category	C Category	Erosion Hazard Acres High or Very High
1	Pearl Ind.	40.00	42,139	10	10	10				40			4/1-4/30	C				1	0
2	Pickles Butte	1,360.00	1,286,560	142	142	58				1,360			3/1-3/10	S			1		400
3	Jerusalem	11,659.23	6,156,941	1,428	1,428	957		2,909	6,401	2,328			6/1-10/15	C			1		11,465
4	Bissell Creek	6,004.43	4,372,840	1,134	1,134	1,134			2	6,002			1/1-6/30	C			1		4,575
5	Big Willow Cr.	29,093.61	18,780,160	4,700	4,700	3,758		3,433	15,380	8,936			5/1-7/15	C	10		1		20,227
6	Sheep Cr. Comm.	12,492.89	11,072,464	2,103	2,103	1,016		1,550	9,760	1,182			4/15-10/31	C			1		6,650
7	Tommy Carr	4,927.46	4,404,190	781	781	567		196	4,465	266			7/16-10/31	C			1		3,320
8	Succor Hansen Field	445.00	394,416	65	65	65			6	439			4/1-8/31	C				1	174
9	Butte Ranch	2,608.75	1,664,280	20	20	20		33	1,437	1,104			9/1-12/31	C			1		1,487
10	Chacartegui	2,120.00	894,920	175	175	175		13	1,247	740			8/1-12/31	C			1		185
11	Round Valley	17.73	9,486	57	57	9			18				7/1-9/30	C				1	0
12	Araacost Ind.	529.96	475,304	50	50	50		125	340	35			4/1-4/30 11/1-11/30	C		1			406
13	Wildhorse	4,679.01	3,185,976	256	256	254			2,018	182			4/1-5/31	C			1		4,575
14	Lower Allot.	360.00	311,320	59	59	59		19	388	3			5/5-8/12	C				1	369
15	Goodrich Ind.	200.00	105,400	37	37	40	741	1,284	154	46			4/15-6/15	C		1			0
16	Goodrich Comm.	5,261.45	4,612,680	1,117	1,850	1,096	224	1,592	3,290	133			4/1-6/30 10/16-11/15	C			1		4,511
17	County Line	80.00	36,120	9	9	8			70	10			5/16-7/15	C				1	0
18	Ball Ind.	80.00	50,440	14	14	14				80			4/16-9/30	C				1	80
19	Sheep Gulch	969.16	787,720	238	238	224				969			2/1-12/31	C		1			548
20	Barker Ind.	500.00	407,320	96	96	58				500			4/1-11/30	C		1			380
21	Basin Ind.	1,248.02	801,640	245	245	205			295	953			4/1-7/10	C			1		259
22	Beal Ind.	80.00	44,400	12	12	12			80				4/16-5/15	C				1	0
23	Bean Ind.	131.41	123,926	25	25	25			102	29			3/16-12/15	C				1	0
24	Beggs Ind.	120.97	84,548	12	44	12		15	102	4			6/1-6/30	C				1	70
25	Bettis FFR	786.10	672,080	132	132	132				786			4/1-4/30	C				1	786
27	Bezates Ind.	360.00	267,300	70	70	70		56	292	12			4/16-11/15	C				1	280
28	Stillwell Ind.	200.00	151,360	36	36	36				160			4/1-4/30	C				1	200
29	Biggers Ind.	320.00	146,040	30	30	30			132	188			3/1-8/31	C		1			0
30	West Side North	1,741.31	1,837,360	737	921	481		525	863	353			5/1-5/31	C			1		1,206
31	Biggers	76.80	42,735	12	12	12			40	37			4/1-4/30	C				1	0
32	Randall	2,140.00	2,050,100	421	421	364		509	1,622	6			4/15-10/31	C			1		2,140
33	Camp Creek	203.32	146,872	36	36	36		75	120	2			5/1-10/31	C				1	203
34	Bilbao Ind.	60.00	43,410	8	8	8				60			5/1-8/31	C				1	60
35	Black Canyon Ind.	850.32	898,700	152	152	192				850			4/16-6/23	C			1		605
36	Bivens Ind.	470.86	533,320	89	176	141			34	465	26		3/1-3/30	C			1		290
37	Brownlee	1,455.45	1,454,646	330	330	327		100	1,301	54			4/16-8/9	C		1			1,395
38	Blessinger Ind.	200.00	105,400	24	24	25		100	100				7/1-10/15	C				1	200
39	Bott Ind.	536.85	494,952	50	50	51		178	294	8			4/15-6/30	C				1	430
40	Boyd Ind.	320.00	188,196	62	62	62			260	60			4/16-5/15	C				1	320
41	Granger Butte	2,910.38	2,241,560	432	432	427		72	2,626	212			4/2-6/30 10/15-12/10	C		1			438
42	West Crane Ind.	480.00	249,560	95	95	85			322	78			4/1-11/30	C		1			0
43	Indian Valley	4,102.71		793	793	1,562		763	4,789	637			4/10-6/30 10/16-11/15	C			1		1,904
43	Indian Valley Comm	2,208.12	4,382,092	719	719	707							4/15-11/15	C			1		840
44	Riley Butte	765.00	407,440	91	91	90			607	158			4/16-5/15	C		1			234
45	Branch Ind.	1,004.12	592,180	174	174	176		99	379	526			5/1-10/15	C		1			1,004
46	T. Braun Ind.	464.60	268,960	207	207	138		18	411	36			4/1-6/15 11/1-11/30	C		1			240
47	Braun/Bacon Valley	520.00	250,400	105	105	105		4	475	41			4/1-6/15 11/1-11/30	C		1			0
48	H&R Braun	120.00	66,880	30	30	30			87	33			4/1-6/30	C		1			0
50	Rudger	280.00	126,600	53	53	54			183	97			4/15-5/30	C				1	0
51	Brent Ind.	110.00	79,680	22	22	22				110			4/1-5/31	C				1	110
52	M. Brent Ind.	240.00	167,120	43	43	43			2	238			5/1-9/30	C				1	240
53	Burkhardt Ind.	280.00	220,200	32	32	30			90	180			4/16-9/15	C		1			280
54	Burt Ind.	40.00	37,840	4	4	4				40			4/1-5/31	C				1	0
55	Burton Ind.	439.29	204,440	47	47	47			264	165			4/10-6/15	C				1	0
56	Busch Ind.	1,700.81	1,249,400	225	225	219		96	956	649			4/10-6/30	C			1		958
57	Butler & Perkins	360.00	249,480	43	43	43			186	174			4/1-4/30	C		1			218
58	Sweet	80.00	44,400	24	24	24			80				4/1-6/30	C				1	80
59	Minnie	4,706.94	3,133,740	606	606	631		61	2,723	1,206			4/16-10/15	C/S			1		2,606
60	West Crane	8,459.08	4,702,240	1,260	1,659	1,200			5,178	3,281			4/26-9/25	C/S	15		1		1,008
61	R. Cada Ind.	255.18	130,440	35	35	35			136	119			8/12-9/11	C				1	0
62	Lower Crane	2,034.40	1,231,904	271	271	245				2,034			4/18-10/7 11/1-12/31	C			1		1,049
62	Lower Crane Comm.	1,930.56	1,500,520	253	253	174		9	1,802	120			3/1-8/14 10/15-12/12	C			1		247
63	T. Cada Ind.	1,076.40	648,360	83	83	83			793	283			6/16-8/15	C		1			450
64	Canaday Ind.	237.00	105,400	36	36	36			200				6/1-7/31	C		1			237
65	McMahan Ranch	40.00	32,320	9	9	9			35	5			4/1-10/31	C				1	40
66	Carr Ind.	190.00	105,640	34	34	34			82	108			4/16-5/31 11/1-12/15	C				1	176
67	Mitchell Ind.	40.00	14,520	8	8	8			40				4/16-6/15	C				1	0
68	Chandler Ind.	360.00	384,224	60	60	60		95	244	4			5/20-10/19	C				1	360
69	Chrestesen Ind.	810.00	621,320	285	285	285			84	726			4/1-9/30	C				1	675
70	Clarkson Ind.	120.00	113,520	26	26	26				120			4/1-5/31	C				1	120
71	McFadden Ind.	620.00	690,000	89	89	88			571	49			4/16-7/31	C		1			0
72	Clelland	200.00	336,744	41	41	41		60	89	1			4/15-8/15	C/H				1	200
73	Coates FFR	80.00	16,184	16	16	16				80			8/1-9/30	C				1	80
74	Cove Creek	2,455.00	1,323,245	192	192	176			516	1,939			4/1-4/10 6/1-8/31	C/S			1		775
75	Coates A&R Ind.	240.00	129,360	47	47	47				240			5/1-5/31 9/1-11/30	C				1	240
76	Fruitvale	1,000.00	933,032	158	158	130	41	446	391	12			4/10-6/30	C		1			1,000
77	Craig Ind.	280.00		6	6	6			35	5			4/1-10/31	C				1	0
78	Frisbee	40.00	217,280	39	39	39			206	74			6/16-8/15	C				1	0
79	Fruitvale Glenn	40.00	32,880	9	9	9			39	1			4/15-6/1	C				1	40
80	J. Craig Ind.	690.00	312,215	144	144	144			547	143			5/1-5/30	C		1			0
81	West Ind. Allot.	837.09	434,440	126	126	126			750	87			8/21-11/20	C				1	405
82	Cambridge	520.00	275,080	88	88	88		21	406	86			4/15-5/14	S				1	157
83	Cruickshank Ind.	815.00	770,990	113	113	113				815			4/1-5/31	C			1		360
84	Dahnke	320.00	246,220	59	59	59				319	1		4/1-5/15	C				1	320
85	Cove Springs	40.00	14,877	0	0	0				40			4/20-5/19 9/20-11/9	C				1	0
86	Darnell Ind	80.00	44,400	16	16	16				80			4/16-5/15	C				1	80
87	Webb Creek FFR	290.00	210,320	48	48	48			185	105			5/1-5/31	C				1	10
88	Round Valley FFR	80.00	42,160	17	17	0			80				7/1-7/21	C				1	0
89	Squaw Butte	2,686.24	2,589,440	670	670	389		350	1,741	560			5/15-10/10	C			1		1,563
90	Gambril Ind.	120.00	65,800	9	9	10			98	22			4/10-5/31	C				1	120
92	East Garden Valley	2,351.79	1,259,504	374	374	105			900	1,452			5/1-10/15	C			1		2,352
93	Dickerson Ind.	40.00	20,880	12	12	12				40			4/1-9/30	C				1	40
94	Dishner Ind.	40.00	15,720	8	8	10			2	38			5/1-9/30	C				1	0
95	Horse Flat	4,146.71	2,700,000	356	356	356	62	404	3,510	158			4/10-5/31 11/1-11/9	C			1		3,242
96	Dotson	120.00	51,800	7	7	7			100	20			4/1-5/31	C				1	40
97	Dunham Ind.	40.00	15,920	7	7	7				40			4/15-5/14	C				1	0
98	Eakin Ind.	118.34	46,200	18	18	18			76	42			4/20-5/31	C				1	0
99	Emery Ind.	1,742.44	1,592,760	60	60	60		749	658	25			4/1-7/31	C			1		1,742
100	Brownlee	1,931.72	1,626,274	286	286	286							4/1-4/30	C			1		1,776
101	Sage Creek	1,663.88	953,080	250	250	250	23	104	1,109	446			4/16-6/30	C			1		500
102	Newbold	200.00	87,200	27	27	25			145	55			4/16-7/15	C				1	30
103	Farrens	40.00	31,640	8	8	8			38	2			4/16-7/15	C				1	0
104	Big Willow FFR	808.64	640,080	187	187	187				809			4/1-4/30	C				1	663
105	Fisk Ind.	160.00	146,984	25	25	14		15	138	7			4/1-5/1	C		1			160

Allotment Number	Allotment Name	Public Land Acres	Estimated Current Production (Pounds)	Pref. Active (AUM's)	Pref. Total (AUM's)	Average License Use (AUM's)	Condition Excel	Good	Fair	Poor	Burn	Seed	Season of Use	Class of Livestock C = Cattle S = Sheep H = Horse	Wild Horses	M I C Category M = Maintain I = Improve C = Custodial	Erosion Hazard Acres High or Very High
106	Indian Creek	501.33	407,400	132	132	131				501			5/1-5/30 10/1-10/30	C		1	449
107	Indian Creek C.	204.16	152,040	40	40	40			4	100			?	C		1	104
108	Ford	80.00	32,344	15	15	15			78	1			4/16-5/15 11/1-11/30	C		1	80
109	Long Gulch	2,210.00	1,610,880	215	215	245		33	1,863	334			5/1-9/30	C		1	1,548
110	Fraisier Ind.	343.40	327,144	75	75	75		125	212	6			4/16-11/30	C		1	343
111	Uhlman	160.00	73,944	33	33	33			154	6			4/1-5/31	C/H		1	198
112	Gallant Ind.	320.00	228,240	64	64	64		17	187	116			4/1-5/31	C	1		60
113	Justus FFR	320.00	176,362	45	45	46			60	260			4/16-6/5	C		1	192
114	Gatfield Ind.	199.20	209,640	20	20	20				199			7/1-8/31	C		1	190
115	Packer John	2,906.62	1,591,989	450	820	364		100	1,907				5/15-6/14	C		1	2,907
116	Patterson & Goodwin	3,515.61	1,852,932	168	168	168			3,516				4/1-9/30	C		1	3,516
120	Bossard Ind.	422.88	172,216	78	78	76		70	349	4			5/1-6/15 10/16-11/30	C		1	423
121	Gould Ind.	160.00	142,760	34	34	34		20	135	5			4/1-5/31	C		1	0
122	Leep Ind.	656.24	431,200	170	170	31			212	444			4/1-7/1 9/1-10/30	C	1		656
123	Greenwood Ind.	160.00	126,180	33	33	33		33	127				4/1-5/10	C		1	92
124	Gutherie Ind.	40.00	27,200	8	8	5				40			5/1-9/30	C		1	0
125	Dechambeau Ind.	461.42	436,136	150	150	150			461				3/16-10/31	C		1	461
126	Hadley Ind.	200.00	70,600	26	26	26			24	176			4/12-6/11	C/H		1	200
127	Hagans Ind. A	40.00	49,360	15	15	15		2	38				4/1-5/31 9/1-11/30	C		1	40
128	Hagans Ind. B	120.00	11,000	24	24	24		2	118				4/1-9/30	C		1	120
129	Hale Ind.	120.00	66,600	24	24	24				120			3/16-9/30	C		1	0
130	Gross	221.26	338,767	12	12	12			20	300			3/1-2/28	C		1	221
131	D. Harrington Ind.	760.20	668,800	107	107	107			760				4/1-11/15	C	1		750
132	Home Ranch	187.38	131,136	263	263	263		40	97	3			4/1-4/30 11/1-11/15	C	1		187
133	Lake Ranch	980.00	1,369,000	54	54	54		188	774	18			4/1-10/15	C	1		545
134	J. Harrington Ind.	200.00	275,088	18	28	18		36	66	8			4/16-5/21	C		1	200
135	Dad Harrington	200.00	176,024	29	29	29		15	175	18			4/1-6/30 10/1-11/30	C/H		1	113
136	Kenny Ridge	40.00	26,760	8	8	8		6	32	2			4/1-5/15	C		1	40
137	Hayshed	40.00	22,280	8	8	8			37	3			4/1-4/30	C		1	0
138	L&J Harrington	240.00	109,840	42	48	42		69	169	1			4/1-5/31	C		1	240
139	Lower Field	1,561.53	1,314,824	181	181	181		425	992	108			3/1-3/30	C	1		1,562
140	Upper Field	474.00	405,256	100	100	100		79	350	18			5/16-6/15	C		1	326
141	Helwick Ind.	237.00	224,202	38	38	33				237			4/1-6/15	C		1	100
142	Wolf Creek Allot.	1,630.42	1,130,280	429	429	399		155	1,445	30			7/1-8/21 9/1-10/17	C		1	970
143	Herrick FFR	40.00	21,080	8	8	8			40				7/1-8/1	C		1	0
144	Higgins Ind.	160.00	68,800	27	27	27			119	41			4/15-6/14 10/16-11/15	C		1	0
145	Scott Creek	3,219.84	2,640,320	669	669	669		431	1,974	602		212	4/9-4/15 9/16-11/15	C		1	3,055
146	Hoffman Ind.	200.00	107,840	42	42	28			120	80			4/1-10/31	C		1	0
147	Holbrook Ind.	256.56	141,350	55	55	56			200	57			4/16-5/30	C/H		1	30
148	Indian Mtn. Com.	732.05	519,720	215	215	211		100	554	38			4/16-6/30 10/16-11/15	C	1		234
149	Holmes Ind.	80.00	41,640	7	7	7			78	2			4/16-5/31	C		1	0
150	Hopper Creek	382.12	259,888	60	60	60			200	182			4/11-5/25	C	1		0
151	Deer Creek	80.00	44,760	10	10	9			70	10			4/16-5/31	C		1	0
152	Hornet Creek	680.72	506,644	93	93	90		120	521	35			4/16-11/30	C	1		163
153	Horning Ind.	40.00	19,237	10	10	7			40				4/15-10/14	C		1	0
154	North	641.80	308,760	96	96	96		10	537	95			4/5-5/31	C	1		55
155	South	980.00	576,360	190	190	137			818	166			4/5-5/15	C	1		152
156	Upper Ranch	240.00	163,280	18	18	18		87	148	5			3/1-2/28	C		1	240
157	Hubbard Ind.	40.00	19,440	8	8	8			29	11			3/16-11/15	C		1	0
158	Jackson Creek	1,513.91	840,640	386	386	388	30	225	1,049	204			4/10-10/9	C	1		1,049
159	Isom	1,000.00	157,240	126	126	126	67	334	553	18			4/16-6/15 10/16-11/30	C		1	440
160	Jacobs Ind.	40.00	24,840	8	8	8			38	2			4/15-9/1	C		1	0
161	Goodrich Ind.	240.00	131,920	48	48	48		29	182	15			4/1-5/31 10/1-10/31	C		1	240
162	Johannsen Ind.	360.00	238,920	56	56	56				360			3/16-6/15	C		1	173
163	Kaufman Ind.	68.39	48,240	25	25	26				38	30		4/1-10/10	C		1	0
164	Keithley Ind.	1,507.03	1,091,256	173	173	173	29	188	1,115	269			4/20-6/4	C		1	388
165	J Keithley	720.00	789,000	101	101	100	69	230	607	15			5/1-5/31	C		1	423
166	Kennedy Ind.	67.55	35,836	11	11	10			68				6/1-10/31	C		1	0
167	Kilborn Ind.	160.00	149,280	33	33	33		32	122	6			4/15-10/15	C		1	160
168	Klingback Ind.	80.00	28,680	16	16	16			36	44			3/16-11/30	C		1	50
169	Langer Ind.	200.00	82,240	43	43	43			160	40			4/1-7/15	C		1	0
170	Little Jackson	2,649.79	1,906,560	473	473	473		772	1,444	151			3/1-2/28	C/H		1	2,650
171	A. Legg Ind.	40.00	35,080	6	6	3			32	8			4/1-5/31 10/1-10/31	C		1	0
172	P. Legg Ind	40.00	29,680	8	8	8			39	1			4/6-6/5	C		1	40
173	Line Ind.	40.00	42,692	8	8	8				40			4/16-10/15	C		1	0
175	Black Canyon Fenced	80.00	75,680	14	14	14				80			4/1-5/15	C		1	0
176	Black Canyon	4,540.47	4,294,840	640	640	640				4,540			3/16-4/15 12/1-12/18	S		1	2,050
177	Big Flat	721.57	606,240	63	63	63			130	592			4/1-6/30	C		1	300
178	Paddy Flat	840.00	442,680	53	53	53			840				6/16-7/15	C	1		840
179	Lyle Ind.	682.68	392,080	115	115	115			2	681			4/1-5/31 11/16-12/15	C	1		525
180	M.C.& M. Ind.	105.00	127,710	20	20	20				135			4/1-5/31 11/16-1/15	C		1	46
181	Black Canyon Ranch	1,333.33	1,261,018	180	180	180			265	1,068			4/1-6/30	C	1		1,140
182	Soldier Creek Ranch	44.23	24,420	8	8	8				44			6/1-10/30	C		1	0
183	Cabarton Ranch	84.75	44,795	8	8	8			85				7/1-9/30	C		1	0
184	Siller Ranch	207.91	107,670	28	28	28			194				4/1-6/30	C		1	175
185	Maddox Ind.	50.00	45,560	8	8	8				50			4/1-5/31	C		1	18
186	Mainvil Ind.	95.30	81,430	12	12	12			9	86			4/1-9/30	C		1	55
187	Marvin Ind.	735.00	571,680	24	24	13			26	709			9/15-12/30	C		1	185
188	West Side South	1,055.00	894,680	146	220	146			493	312			4/26-5/25	C		1	564
189	McCool Ind.	1,320.00	1,248,720	87	87	87				1,120		200	4/1-6/30	C		1	627
191	Linson Creek	5,629.08	4,247,080	892	892	713		250	1,114	4,510			4/1-5/31 12/1-12/31	C		1	4,756
193	McGinnis Ind.	23.40	12,121	3	3	3			23				5/15-10/15	C		1	0
194	McMullen	7,120.74	4,525,720	1,316	1,316	961		97	4,430	2,170			3/16-11/30	C		1	7,120
195	Syme-Moser River	422.40	299,240	92	92	92			150	90			3/16-11/30	C		1	422
196	McPherson Ind.	240.00	227,040	34	34	34				240			4/11-5/31	C		1	240
197	Meinikheim Ind.	195.02	194,959	35	35	0			195				5/1-10/31	C		1	195
198	Meyer Ind.	120.00	80,920	16	16	16			58	62			4/1-5/31 10/1-11/30	C		1	40
199	Hays	80.00	49,080	9	9	8			10	70			4/15-6/14	C		1	0
200	Advent Gulch	118.77	114,280	18	18	18			117	2			4/15-6/14	C		1	0
201	Mitchell Ind.	180.00	146,160	25	25	25			18	162			4/15-5/14	C		1	0
202	Lund	370.00	150,400	12	12	12				155			3/1-2/28	C		1	370
203	Sage Creek	2,245.90	1,650,488	300	300	300		258	1,575	457			4/16-9/15	C		1	1,662
204	Dennet & Stover	859.14	713,560	168	168	168		196	302	358			5/1-11/15	C		1	448
205	Crane Creek	1,312.21	959,640	241	241	184			5	1,299			4/21-8/15	C	1		655
206	D. Moritz Ind.	360.86	204,379	72	72	72		48	294	22			4/16-5/30	C	1		45
207	Henley Basin	3,196.23	2,309,240	684	684	684		150	2,400	571			3/26-7/31 10/1-11/30	C		1	2,956
208	Sage Creek	4,027.52	3,001,248	676	676	268	146	1,092	2,720	52			5/1-6/30	C		1	3,177
209	Burroughs	2,456.59	2,324,322	450	450	315				2,257		200	4/1-5/15 11/1-12/15	C		1	351
210	Montour Ind.	216.90	205,282	8	8	8				217			5/1-5/30	C		1	57
211	Missula Ind.	243.10	229,878	20	20	4				243			4/16-6/15	C		1	233
212	Missula Ind.	240.00	296,200	39	39	39			9	231			4/1-6/1 11/15-12/15	C/H		1	240
213	Osborn Ind.	320.60	169,167	65	65	65			321				5/1-5/31	C		1	321
214	Palmer Ind.	430.00	294,520	82	82	82		8	368	48			4/1-9/30	C	1		0
215	Parks Ind.	558.42	429,480	33	94	33				558			4/1-5/31	C		1	478
216	Patton	560.00	319,120	115	115	115				437	121		4/11-8/10	C		1	372
217	Peebles	318.61	213,320	77	77	0		17	296	6			4/1-10/15	C/H		1	187
218	Perkins Ind.	120.00	66,640	16	16	16			94	26			4/1-4/30	C		1	0
219	Peterson Ind.	554.51	253,480	113	113	113			398	157			4/1-7/31	C		1	555
220	Potter Ind.	157.80	88,500	21	21	21			144	14			5/1-7/15	C		1	72
221	Pound Ind.	2,184.42	1,250,917	219	219	219		133	1,770	284			4/16-9/15	C		1	1,137
222	Pratt Ind.	151.56	104,560	24	24	10			48	104			4/1-6/1	C		1	130
223	Putnam Ind.	720.00	568,360	130	130	129		18	437	185			4/16-7/15	C		1	461

Allotment Number	Allotment Name	Public Land Acres	Estimated Current Production (Pounds)	Pref. Active (AUM's)	Pref. Total (AUM's)	Average License Use (AUM's)	Condition Excel	Good	Fair	Poor	Burn	Seed	Season of Use	Class of Livestock C = Cattle S = Sheep H = Horse	Wild Horses	M I C Category M = Maintain I = Improve C = Custodial	Erosion Hazard Acres High or Very High
224	Ranny Ind.	522.84	281,560	96	96	96			3	520			4/1-7/31	C		I	170
225	Indian Head Mtn.	1,467.90	994,600	152	152	152			376	1,059			1/1-1/15 4/1-4/15	C		M	1,468
227	Ryals Ind.	80.00	42,280	16	16	16			77	3			4/21-6/20	C		I	80
228	Sagebrush Hill	880.00	634,560	175	175	175			210	660			4/1-5/30 11/1-12/15	C		I	880
229	Stout	328.83	168,604	18	18	18			12	317			4/1-5/30 11/1-11/30	C		I	0
230	Tarter	790.00	615,150	163	163	163			32	758			4/1-5/30 11/1-12/15	C	I		230
231	Schlehuber Ind.	563.48	292,304	109	109	108		52	442	46			4/1-5/24	C		I	146
232	Schaelzer Ind.	1,240.49	787,160	140	140	140		17	517	706			4/16-5/31	C		M	100
233	Hopper Creek	2,650.00	1,907,704	215	215	215		589	1,838	154			5/16-6/30	C		M	583
234	Mrs. Seid Ind.	775.00	355,440	71	71	74		20	632	122			4/15-6/1	C		M	39
235	Pine	2,029.36	829,920	226	226	227		49	1,786	194			4/16-5/31	C		M	27
236	Middle Fork	480.00	333,440	90	90	89		78	355	39			4/1-8/31 10/16-11/15	C		I	480
237	Black Canyon (Shaw)	10,437.75	9,874,348	1,972	1,972	1,973				4,718		5,720	3/20-5/20 6/21-1/31	C		M	6,311
238	Simplot Cattle Co.	320.23	177,600	67	67	68				320			4/1-11/30	C		I	0
239	Simplot Industries	40.00	37,840	12	12	12				40			7/1-9/30	C		I	40
240	Clipper Flat	1,238.98	902,390	219	219	219				1,239			4/16-5/31 11/16-2/28	C		I	593
241	Sisler Ind.	40.00	26,800	10	10	10			2	38			4/16-6/15	C		I	40
242	Roy Slyter	160.00	28,940	32	32	32			40	120			4/1-7/31 10/1-11/30	C		I	160
243	Rocky Ridge	725.00	478,120	110	110	109				725			4/1-5/31 11/16-12/15	C		I	725
244	Smith Ind. Allot	100.00	72,254	17	17	21			42	58			4/1-6/3	C		I	100
246	Smith-Black Canyon	580.00	548,680	86	86	86				580			4/1-5/31	C	I		485
247	Wilson Ind.	159.28	84,640	20	20	20			135	24			4/1-4/30	C		I	159
248	Hashagen Ind.	560.00	439,240	114	114	114				560			2/16-4/15	C		I	520
249	Sturgill Creek	6,421.31	5,228,824	1,285	1,285	1,233		1,038	3,559	1,163			4/1-9/30 11/1-1/31	C/S		M	6,421
250	Squaw Creek	120.00	128,642	25	25	25			120				8/1-10/5	C		I	0
252	Willow Creek	200.00	98,120	44	44	40			163	37			4/1-7/1	C		I	0
253	Butte Field	708.03	647,920	130	130	128			10	690			4/1-5/31 10/16-12/31	C	I		642
254	Sand Hollow	5,160.26	4,637,800	1,500	1,500	1,501			5	3,273	1,882		1/16-2/15 10/26-12/15	C	I		4,562
255	Sutton Ind.	40.00	25,920	10	10	10			24	16			4/15-6/15 9/15-10/15	C		I	0
256	Sutton Ranches Ind.	80.00	101,232	16	16	16			140	20			4/1-5/31	C		I	0
257	Thomason Ind.	40.00	15,920	5	5	5			36	4			4/1-9/30	C		I	0
258	Thompson	280.00	155,894	56	56	55		25	229	25			4/16-5/31 11/1-11/15	C		I	83
259	Towell	120.00	30,280	19	19	19			8	112			4/1-5/10	C		I	0
260	Crane Creek Ind.	643.25	99,345	143	143	143			568	45			4/11-6/26 11/1-11/15	C	I		0
261	Twin Sisters	3,066.80	2,559,360	314	314	309		145	2,691	231			4/16-12/15	C		M	1,267
262	Vogel & Ogle Ind.	160.00	28,680	32	32	32		22	142	18			5/1-5/31	C		I	0
263	Waite Ind.	120.00	81,640	26	26	8			120				4/16-5/15	C		I	0
264	Walker Ind.	160.00	108,800	10	10	8			160				4/1-11/30	C		I	160
265	Watson Ind.	29.90	15,810	4	4	2			30				6/1-10/31	C		I	30
266	Montour Ind.	315.58	298,936	16	16	16				316			4/1-11/30	C		I	197
267	Alder Creek Ind.	990.82	528,581	163	163	163			1,003				8/1-10/31	C		I	991
268	Weiser Sheep Co.	1,438.77	660,528	212	212	47		298	583	141			4/1-6/15	S		I	744
269	Wells Ind.	120.00	104,840	23	23	23		28	90				4/16-5/16	C		I	0
270	Whiteman Ind.	200.00	99,280	22	22	22			142	58			4/16-9/15	C		I	200
271	Williams - Fairchild	1,006.49	434,960	163	163	163			656	350			4/15-6/14	C	I		60
272	Williamson	160.00	93,440	41	41	41			18	142			4/1-10/31	C		I	50
273	Perkins Creek	340.00	211,520	93	93	93			267	73			6/1-9/15	C		I	340
274	Winegar Ind.	120.00	93,920	32	32	32				120			3/1-4/30 9/16-10/15	C		I	120
275	Woodland Ind.	770.13	601,080	128	128	128			34	736			4/1-8/31	C		I	770
276	Lindsay Ind.	200.00	125,888	40	40	40		60	95	3			4/16-6/30	C		I	200
278	Spring Valley	7,686.54	7,229,332	739	739	401			7,642				4/1-11/30	C/S		I	6,995
279	Black Canyon	3,379.50	3,197,480	496	496	344				3,380			3/16-12/13	S		M	2,364
280	Lick Creek	10,097.15	9,494,286	1,651	1,651	1,651	490	2,314	5,721	171			3/16-5/31 11/1-12/15	C		M	8,986
284	Spring Creek	7,810.95	5,963,920	1,122	1,122	1,355		615	6,598	615			4/16-10/15	C		M	2,600
286	Deardorff Ind.	120.00	55,200	28	28	28				120			10/16-12/15	C		I	0
287	Stippich Pasture	319.49	238,760	40	40	40			299				4/1-12/1	C		I	0
288	Double Diamond	79.66	75,680	16	16	13				80			3/1-3/30	C		I	80
289	Porter Creek	80.00	75,680	15	15	15				80			4/16-6/15 10/1-10/31	C		I	0
290	North Hornet	230.00	212,504	41	41	40		14	211	5			4/10-5/31	C		I	230
291	Hornet Creek	120.00	105,614	6	6	6			120				4/10-6/9	C		I	40
292	D. Moritz Ind.	120.00	108,320	24	24	24		40	80				4/1-5/31 10/16-11/15	C		I	120
293	North Fork FFR	440.00	249,104	90	90	36		42	380	19			4/1-5/31	C		I	0
294	U-Bar-M FFR	571.28	322,044	91	91	95			15	556			4/1-4/30	C		I	571
295	Little Willow	3,193.10	2,600,000	244	332	246				2,043			5/1-6/15 10/15-11/14	C		M	2,960
297	Wet Gulch	40.00	22,600	6	6	9				40			3/1-3/30	C		I	40
298	X5	897.13	368,200	143	143	134				820			5/1-6/30 10/1-12/6	C	I		302
299	Cox FFR	120.00	103,240	18	18	18				120			9/1-11/30	C		I	120
300	WRR Ind.	40.00	21,360	4	8	4			32	8			5/1-6/30	C		I	0
301	Holland Gulch	4,114.14	1,530,080	553	553	495				4,114			4/1-7/25 8/16-12/15	C		M	1,643
302	Weiser Cove	380.00	214,320	56	56	56			11	369			3/16-5/15 9/16-10/30	C	I		380
303	Skow FFR	40.00	22,560	6	6	11				40			3/1-2/28	C		I	40
304	Center Allot.	4,030.43	2,456,760	820	820	742			2,248	1,614			3/25-11/15	C/S	I		1,124
306	Big Creek	560.00	295,120	80	80	80			560				6/1-10/31	S		I	320
307	Dry Lake	80.00	75,680	0	0	210				80			4/1-10/31	C		M	0
308	Sky Ranch Ind.	110.85	58,497	20	50	20			111				6/15-10/14	C		I	0
309	Boise Front	5,836.55	4,399,072	438	438	361				4,027		1,950	4/1-1/4	C		M	5,837
310	Black Canyon	16,769.64	15,599,540	2,829	2,829	2,539				16,490			3/19-5/31 12/1-12/31	S		M	9,223
311	No Unit	5,207.99	4,983,528	1,478	1,478	949				5,268			4/16-6/30 10/25-12/4	S		M	5,208
312	Bannister Basin	2,073.08	1,961,058	266	266	264				2,073			4/1-4/30	C		M	2,013
313	Fenwick Place	80.00	58,880	13	13	13				80			4/1-4/30	C		I	80
314	Bingman	40.00	29,440	14	14	14				40			4/1-10/31	C		I	40
315	Terteling	40.00	29,440	5	5	5				40			4/1-10/31	C		I	40
350	Lucky Peak	163.84	92,000	26	39	0				125			4/1-12/15	C		I	164
352	Stephens Ind.	399.19	221,120	44	44	44			340	59			4/16-9/15	C/H		I	53
355	Robert Routson Ind.	475.00	329,620	26	26	26			379	96			4/15-11/15	C		I	475
356	Roberts Ind.	40.00	25,856	8	8	3			12	28			4/15-5/1 11/1-12/15	C		I	40
361	Crane Creek Allot.	9,804.49	5,248,092	568	568	974		102	6,027	3,525			3/1-10/20	C/S		M	4,154
362	Foothils	7,797.80	6,873,040	1,035	1,035	1,035		2,574	3,915	1,294			4/16-9/30 10/15-11/4	C/S		M	5,532
363	Drake Allot.	270.00	186,520	48	48	48			43	220			4/1-6/3	C		I	270
364	Whiskey Rapids Allot	316.17	214,880	53	53	54		2	262	52			6/4-8/13	C		I	316
365	Old Craig Allot.	320.00	210,320	49	49	42			170	150			4/16-5/31 11/1-12/15	C	I		0
366	Staley Allot.	201.25	124,920	36	36	36			141	60			4/16-6/30 9/1-10/31	C		I	60
367	Minnie Snyder FFR	175.00	122,400	97	97	83			38	295			4/1-4/30	C		I	175
368	Rock Creek FFR	3,676.94	2,260,320	576	576	576		82	2,839	327			3/1-2/28	C		M	3,693
369	McChord Butte	6,693.42	5,096,904	968	968	970		87	4,635	2,483			4/1-11/20	C		M	6,653
370	Upper	15,473.69	8,368,461	1,027	1,027	1,674		145	8,377	6,872			3/1-6/30	C/S		M	8,820
371	Callender Ind.	296.00	295,928	48	48	48			296				3/1-3/30	C		M	260
372	Warm Springs	233.00	220,418	305	305	4			233				4/21-2/28	C		I	90
373	Williams Ind.	338.43	241,160	37	37	37		83	129	21			4/15-5/14	C		I	338
374	1000 Acre Field	100.00	101,800	12	12	12			3	97			3/1-2/28	C		I	100
375	Gibson Allot.	120.00	73,720	12	12	12				120			4/15-5/30	C		I	0
376	Fry Ind.	92.00	87,032	22	22	22			110	10			5/1-6/30	C		I	0
377	Dennet Creek Ind.	770.00	772,520	96	96	96		130	527	112			3/1-3/30	C		I	770
378	Lower Raft Creek	2,119.98	1,876,720	266	266	256		242	719	1,118			3/1-2/28	C/H		M	2,120
379	Upper Raft Cr. FFR	245.00	153,060	51	51	51		27	157	61			3/1-3/30	C		I	245
380	Mineral	951.40	987,960	143	143	143		350	492	80			4/15-12/14	C		I	951
381	Cow Camp	242.56	221,040	27	27	27		15	150	50			4/1-11/30	C/H		I	243
382	Beef Trap	985.00	827,110	232	232	231		150	683	152			4/1-11/30	C/H	I		985
383	Forsgren Ind.	40.00		6	6	6							4/1-4/30	C		I	0
384	Jenkins Creek	2,108.57	1,783,240	196	196	192		175	1,664	270			5/1-10/31	C		I	2,029
385	Putnam Custodial	40.00	19,237	5	5	5				40			7/1-11/30	C		I	40
386	White Butte Allot.	466.00	440,836	66	66	67				466			3/1-4/15 11/15-2/28	C		I	0

Allotment Number	Allotment Name	Public Land Acres	Estimated Current Production (Pounds)	Pref. Active (AUM's)	Pref. Total (AUM's)	Average License Use (AUM's)	Condition Excel	Condition Good	Condition Fair	Condition Poor	Burn	Seed	Season of Use	Class of Livestock C = Cattle S = Sheep H = Horse	Wild Horses	M	I	C	Erosion Hazard Acres High or Very High
																M = Maintain I = Improve C = Custodial			
387	Individual	80.00	75,680	12	12	10				80			3/1-2/28	C				1	40
388	Pedro & Upper Wolf	205.00	104,840	25	25	25			154	51			5/1-5/30	C				1	120
389	Long Hollow Field	1,627.82	897,240	190	190	143		544	651	611			9/1-9/30	C		1			1,331
390	Fenced Federal Range	726.40	686,796	114	114	114				726			3/1-3/30	C				1	540
391	Little Emmett Allot.	24,322.66	23,088,116	4,253	4,257	3,5[illegible]				22,970		1,448	3/1-2/28	C			1		6,809
392	Fenced Federal Range	180.[illegible]	170,280	58	58	60				180			3/1-3/30	C				1	38
393	Indian Jake	17,223.8[illegible]	12,126,768	3,303	3,303	3,262		929	5,437	10,787			3/1-2/28	C			1		8,004
396	Bivens Purchase	200.00	205,520	34	34	34				26	174		4/1-4/30	C				1	160
1,278	Quartzberg	2,179.24	unsuitable	200	200	0				2,179			7/1-10/31	C				1	2,179
388	Fenced Federal Range	120.00	108,120	124	124	124				120			3/1-3/30	C				1	60
		Public Land Acres	Estimated Current Production	Pref. Active	Pref. Total	Average License Use	E	G	F	P	B	S			Wild Horses	M	I	C	Erosion Hazard Acres High Very High
TOTALS		464,920.28	346,155,336	72,571	74,662	66,424	1,922	33,201	210,315	158,329	2,234	9,730			25	52	78	208	295,972

APPENDIX F

LIVESTOCK FORAGE LEVELS

Allotment Number	Allotment Name	Pref. Active AUM's	Pref. Total AUM's	Average License Use AUM's	ALTERNATIVE A 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease	ALTERNATIVE B 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease
1	Pearl Ind.	10	10	10	0	0	0	0	0	0	0	0
2	Pickles Butte	142	142	58	210	0	210	0	0	(100)	0	(100)
3	Jerusalem	1,428	1,428	957	957	0	957	0	947	(1)	988	3
4	Bissell Creek	1,134	1,134	1,134	1,134	0	1,134	0	1,021	(10)	1,065	(6)
5	Big Willow Cr.	4,700	4,700	3,758	3,758	0	3,758	0	3,851	2	4,309	15
6	Sheep Cr. Comm.	2,103	2,103	1,016	1,016	0	1,016	0	1,040	2	1,156	14
7	Tommy Carr	781	781	567	567	0	567	0	567	0	591	4
8	Succor Hansen Field	65	65	65	65	0	65	0	47	(28)	49	(25)
9	Butte Ranch	20	20	20	20	0	20	0	45	125	173	565
10	Chacartegui	175	175	175	175	0	175	0	146	(17)	214	22
11	Round Valley	57	57	0	0	0	0	0	0	0	0	0
12	Armacost Ind.	50	50	50	50	0	50	0	27	(46)	28	(44)
13	Wildhorse	256	256	254	243	0	243	0	243	(4)	253	(0)
14	Lower Allot.	59	59	59	59	0	59	0	59	0	62	5
15	Goodrich Ind.	37	37	40	40	0	40	0	0	(100)	0	(100)
16	Goodrich Comm.	1,117	1,850	1,096	1,013	0	1,013	0	1,013	(8)	1,057	(4)
17	County Line	9	9	8	8	0	8	0	0	(100)	0	(100)
18	Ball Ind.	14	14	14	14	0	14	0	0	(100)	0	(100)
19	Sheep Gulch	238	238	224	224	0	224	0	152	(32)	159	(29)
20	Barker Ind.	96	96	58	58	0	58	0	0	(100)	0	(100)
21	Basin Ind.	245	245	205	205	0	205	0	210	2	255	24
22	Beal Ind.	12	12	12	12	0	12	0	0	(100)	0	(100)
23	Bean Ind.	25	25	25	25	0	25	0	25	0	26	4
24	Beggs Ind.	12	44	12	12	0	12	0	11	(8)	12	0
25	Bettis FFR	132	132	132	132	0	132	0	132	0	138	5
27	Bezates Ind.	70	70	70	70	0	70	0	54	(23)	56	(20)
28	Stillwell Ind.	36	36	36	36	0	36	0	29	(19)	30	(17)
29	Biggers Ind.	30	30	30	30	0	30	0	15	(50)	17	(43)
30	West Side North	737	921	481	481	0	481	0	470	(2)	490	2
31	Biggers	12	12	12	12	0	12	0	0	(100)	0	(100)
32	Randall	421	421	364	364	0	364	0	364	0	380	4
33	Camp Creek	36	36	36	36	0	36	0	36	0	38	6
34	Bilbao Ind.	8	8	8	8	0	8	0	8	0	8	0
35	Black Canyon Ind.	152	152	192	192	0	192	0	212	10	280	46
36	Bivens Ind.	89	176	141	141	0	141	0	141	0	147	4
37	Brownlee	330	330	327	327	0	327	0	309	(6)	322	(2)
38	Blessinger Ind.	24	24	25	25	0	25	0	25	0	26	4
39	Bott Ind.	50	50	51	51	0	51	0	50	(2)	52	2
40	Boyd Ind.	62	62	62	62	0	62	0	0	(100)	0	(100)
41	Granger Butte	432	432	427	427	0	427	0	417	(2)	474	11
42	West Crane Ind.	95	95	85	85	0	85	0	24	(72)	67	(21)
43	Indian Valley	793	793	1,562	1,562	0	1,562	0	1,547	(1)	1,614	3
43	Indian Valley Comm	719	719	707	707	0	707	0	707	0	737	4
44	Riley Butte	91	91	90	90	0	90	0	100	11	136	51
45	Branch Ind.	174	174	176	176	0	176	0	176	0	184	5
46	T. Braun Ind.	207	207	138	138	0	138	0	24	(83)	25	(82)
47	Braun/Bacon Valley	105	105	105	105	0	105	0	21	(80)	61	(42)
48	H&R Braun	30	30	30	30	0	30	0	0	(100)	0	(100)
50	Rudger	53	53	54	54	0	54	0	0	(100)	0	(100)
51	Brent Ind.	22	22	22	22	0	22	0	22	0	23	5
52	M. Brent Ind.	43	43	43	43	0	43	0	43	0	45	5
53	Burkhardt Ind.	32	32	30	30	0	30	0	9	(70)	9	(70)
54	Burt Ind.	4	4	4	4	0	4	0	0	(100)	0	(100)
55	Burton Ind.	47	47	47	47	0	47	0	0	(100)	0	(100)
56	Busch Ind.	225	225	219	219	0	219	0	219	0	228	4
57	Butler & Perkins	43	43	43	43	0	43	0	0	(100)	0	(100)
58	Sweet	24	24	24	24	0	24	0	0	(100)	0	(100)
59	Minnie	606	606	631	631	0	631	0	639	1	690	9
60	West Crane	1,260	1,659	1,200	1,200	0	1,200	0	1,251	4	1,640	37
61	R. Cada Ind.	35	35	35	35	0	35	0	0	(100)	0	(100)
62	Lower Crane	271	271	245	245	0	245	0	245	0	256	4
62	Lower Crane Comm.	253	253	174	174	0	174	0	179	3	202	16
63	T. Cada Ind.	83	83	83	83	0	83	0	80	(4)	83	0
64	Canaday Ind.	36	36	36	36	0	36	0	36	0	38	6
65	McMahan Ranch	9	9	9	9	0	9	0	0	(100)	0	(100)
66	Carr Ind.	34	34	34	34	0	34	0	34	0	36	6
67	Mitchell Ind.	8	8	8	8	0	8	0	0	(100)	0	(100)
68	Chandler Ind.	60	60	60	60	0	60	0	60	0	63	5
69	Chrestesen Ind.	285	285	285	285	0	285	0	285	0	297	4
70	Clarkson Ind.	26	26	26	26	0	26	0	26	0	27	4
71	McFadden Ind.	89	89	88	88	0	88	0	98	11	135	53
72	Clelland	41	41	41	41	0	41	0	25	(39)	26	(37)
73	Coates FFR	16	16	16	16	0	16	0	0	(100)	0	(100)
74	Cove	80	80	65	65	0	65	0	89	37	165	154
74	Cove Creek	112	112	111	111	0	111	0	111	0	116	5
75	Coates A&R Ind.	47	47	47	47	0	47	0	47	0	49	4
76	Fruitvale	158	158	130	130	0	130	0	130	0	136	5
77	Craig Ind.	6	6	6	6	0	6	0	0	(100)	0	(100)
78	Frisbee	39	39	39	39	0	39	0	0	(100)	0	(100)
79	Fruitvale Glenn	9	9	9	9	0	9	0	9	0	9	0
80	J. Craig Ind.	144	144	144	144	0	144	0	165	15	235	63
81	West Ind. Allot.	126	126	126	126	0	126	0	108	(14)	113	(10)
82	Cambridge	88	88	88	88	0	88	0	81	(8)	84	(5)
83	Cruickshank Ind.	113	113	113	113	0	113	0	113	0	150	33
84	Dahnke	59	59	59	59	0	59	0	59	0	62	5
85	Cove Springs	0	0	0	0	0	0	0	0	0	0	0
86	Darnell Ind	16	16	16	16	0	16	0	0	(100)	0	(100)
87	Webb Creek FFR	48	48	48	48	0	48	0	48	0	50	4
88	Round Valley FFR	17	17	0	0	0	0	0	0	0	0	0
89	Squaw Butte	670	670	389	389	0	389	0	389	0	406	4
90	Gambril Ind.	9	9	10	10	0	10	0	10	0	10	0
92	East Garden Valley	374	374	105	105	0	105	0	118	12	163	55
93	Dickerson Ind.	12	12	12	12	0	12	0	0	(100)	0	(100)
94	Dishner Ind.	8	8	10	10	0	10	0	0	(100)	0	(100)
95	Horse Flat	356	356	356	356	0	356	0	356	0	371	4
96	Dotson	7	7	7	7	0	7	0	2	(71)	2	(71)
97	Dunham Ind.	7	7	7	7	0	7	0	0	(100)	0	(100)
98	Eakin Ind.	18	18	18	18	0	18	0	0	(100)	0	(100)
99	Eaery Ind.	60	60	60	60	0	60	0	60	0	63	5
100	Brownlee	286	286	286	286	0	286	0	70	(76)	73	(74)
101	Sage Creek	250	250	250	250	0	250	0	250	0	261	4
102	Newbold	27	27	25	25	0	25	0	0	(100)	0	(100)
103	Farrens	8	8	8	8	0	8	0	8	0	9	13
104	Big Willow FFR	187	187	187	187	0	187	0	0	(100)	0	(100)
105	Fisk Ind.	25	25	14	14	0	14	0	0	(100)	0	(100)
106	Indian Creek	132	132	131	131	0	131	0	131	0	137	5
107	Indian Creek C.	40	40	40	40	0	40	0	24	(40)	25	(38)

Allotment Number	ALTERNATIVE C 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease	ALTERNATIVE D 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease	ALTERNATIVE E Initial Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease
1	7	100	7	100	0	0	0	0	10	0	0	0
2	154	166	168	190	109	88	126	117	210	0	0	(100)
3	693	(28)	728	(24)	947	(1)	1,003	5	957	0	984	3
4	828	(27)	869	(23)	1,021	(10)	1,081	(5)	1,134	0	1,156	2
5	2,804	(25)	3,126	(17)	3,892	4	4,528	20	3,758	0	4,056	8
6	757	(25)	839	(17)	1,050	3	1,211	19	1,016	0	1,050	3
7	414	(27)	435	(23)	567	0	600	6	567	0	571	1
8	47	(28)	49	(25)	47	(28)	50	(23)	65	0	62	(5)
9	33	65	86	330	60	200	179	795	20	0	98	390
10	141	(19)	187	7	188	7	237	35	175	0	221	26
11	0	0	0	0	0	0	0	0	57	0	57	100
12	36	(28)	38	(24)	27	(46)	29	(42)	50	0	53	6
13	175	(31)	184	(28)	243	(4)	257	1	243	0	204	(20)
14	43	(27)	45	(24)	59	0	62	5	59	0	55	(7)
15	29	(28)	31	(23)	0	(100)	0	(100)	40	0	42	5
16	717	(35)	753	(31)	1,013	(8)	1,072	(2)	1,013	0	1,074	(2)
17	6	(25)	6	(25)	4	(50)	4	(50)	8	0	0	(100)
18	10	(29)	11	(21)	0	(100)	0	(100)	14	0	0	(100)
19	164	(27)	172	(23)	152	(32)	161	(28)	224	0	161	(28)
20	42	(28)	44	(24)	0	(100)	0	(100)	58	0	57	(2)
21	158	(23)	188	(8)	215	5	278	36	205	0	243	19
22	9	(25)	10	(17)	0	(100)	0	(100)	12	0	0	(100)
23	18	(28)	19	(24)	25	0	27	8	25	0	25	0
24	8	(33)	8	(33)	11	(8)	12	0	12	0	7	(42)
25	96	(27)	101	(23)	132	0	140	6	132	0	127	(4)
27	51	(27)	54	(23)	54	(23)	57	(19)	70	0	66	(6)
28	19	(47)	20	(44)	29	(19)	31	(14)	36	0	29	(19)
29	22	(27)	23	(23)	15	(50)	16	(47)	30	0	30	0
30	351	(27)	369	(23)	470	(2)	498	4	481	0	495	3
31	9	(25)	10	(17)	0	(100)	0	(100)	12	0	12	0
32	266	(27)	279	(23)	364	0	385	6	364	0	363	(0)
33	11	(69)	12	(67)	36	0	38	6	36	0	36	0
34	0	(100)	0	(100)	8	0	9	13	8	0	8	0
35	118	(39)	153	(20)	197	3	316	65	192	0	258	34
36	103	(27)	106	(25)	141	0	149	6	141	0	149	6
37	230	(30)	242	(26)	309	(6)	327	0	327	0	347	6
38	0	(100)	0	(100)	25	0	27	8	25	0	25	0
39	37	(27)	39	(24)	50	(2)	53	4	51	0	47	(8)
40	45	(27)	47	(24)	0	(100)	0	(100)	62	0	62	0
41	320	(25)	361	(15)	422	(1)	503	19	427	0	475	11
42	70	(18)	98	15	97	14	158	86	85	0	127	49
43	1,141	(27)	1,198	(23)	1,547	(1)	1,638	5	1,562	0	1,641	5
43	504	(29)	529	(25)	707	0	749	6	707	0	749	6
44	73	(19)	96	7	105	17	155	72	90	0	125	39
45	66	(63)	69	(61)	176	0	186	6	176	0	186	6
46	101	(27)	106	(23)	114	(17)	121	(12)	138	0	146	6
47	85	(19)	114	9	124	18	186	77	105	0	148	41
48	22	(27)	23	(23)	30	0	32	7	30	0	32	7
50	39	(28)	41	(24)	0	(100)	0	(100)	54	0	0	(100)
51	16	(27)	17	(23)	22	0	23	5	22	0	22	0
52	32	(26)	34	(21)	43	0	46	7	43	0	43	0
53	22	(27)	23	(23)	9	(70)	10	(67)	30	0	29	(3)
54	3	(25)	3	(25)	0	(100)	0	(100)	4	0	0	(100)
55	34	(28)	36	(23)	13	(72)	14	(70)	47	0	47	0
56	160	(27)	168	(23)	219	0	232	6	219	0	213	(3)
57	41	(5)	70	63	0	(100)	0	(100)	43	0	83	93
58	18	(25)	19	(21)	0	(100)	0	(100)	24	0	0	(100)
59	466	(26)	504	(20)	641	2	713	13	631	0	661	5
60	944	(21)	1,200	0	1,354	13	1,982	59	1,200	0	1,524	27
61	26	(26)	27	(23)	0	(100)	0	(100)	35	0	35	0
62	179	(27)	188	(23)	245	0	259	6	245	0	277	13
62	130	(25)	146	(16)	182	5	214	23	174	0	270	55
63	61	(27)	64	(23)	83	0	88	6	83	0	70	(16)
64	26	(28)	27	(25)	36	0	38	6	36	0	38	6
65	7	(22)	7	(22)	0	(100)	0	(100)	9	0	0	(100)
66	25	(26)	26	(24)	34	0	36	6	34	0	34	0
67	6	(25)	6	(25)	0	(100)	0	(100)	8	0	0	(100)
68	44	(27)	46	(23)	60	0	64	7	60	0	56	(7)
69	208	(27)	218	(24)	285	0	302	6	285	0	280	(2)
70	19	(27)	20	(23)	26	0	28	8	26	0	26	0
71	60	(32)	63	(28)	103	17	153	74	88	0	119	35
72	5	(88)	5	(88)	25	(39)	27	(34)	41	0	41	0
73	12	(25)	13	(19)	0	(100)	0	(100)	16	0	0	(100)
74	62	(5)	109	68	99	52	204	214	65	0	136	109
74	81	(27)	85	(23)	111	0	118	6	111	0	103	(7)
75	34	(28)	36	(23)	47	0	50	6	47	0	47	0
76	0	(100)	0	(100)	130	0	138	6	130	0	138	6
77	5	(17)	5	(17)	0	(100)	0	(100)	6	0	0	(100)
78	29	(26)	30	(23)	0	(100)	0	(100)	39	0	0	(100)
79	0	(100)	0	(100)	9	0	10	11	9	0	9	0
80	118	(18)	163	13	174	21	272	89	144	0	208	44
81	92	(27)	97	(23)	108	(14)	114	(10)	126	0	126	0
82	64	(27)	67	(24)	86	(2)	86	(2)	88	0	81	(8)
83	77	(32)	96	(15)	123	9	165	46	113	0	143	27
84	43	(27)	45	(24)	59	0	62	5	59	0	59	0
85	0	0	0	0	0	0	0	0	0	0	0	0
86	12	(25)	13	(19)	0	(100)	0	(100)	16	0	0	(100)
87	35	(27)	37	(23)	48	0	51	6	48	0	46	(4)
88	0	0	0	0	0	0	0	0	17	100	17	100
89	284	(27)	298	(23)	389	0	412	6	389	0	398	2
90	7	(30)	7	(30)	10	0	11	10	10	0	10	0
92	25	(76)	114	9	124	18	186	77	105	0	148	41
93	9	(25)	10	(17)	0	(100)	0	(100)	12	0	12	0
94	7	(30)	7	(30)	0	(100)	0	(100)	10	0	0	(100)
95	260	(27)	273	(23)	356	0	377	6	356	0	377	6
96	6	(14)	6	(14)	2	(71)	3	(57)	7	0	2	(71)
97	6	(14)	6	(14)	0	(100)	0	(100)	7	0	0	(100)
98	13	(28)	14	(22)	0	(100)	0	(100)	18	0	0	(100)
99	44	(27)	46	(23)	60	0	64	7	60	0	63	5
100	0	(100)	0	(100)	70	(76)	74	(74)	286	0	53	(81)
101	183	(27)	192	(23)	250	0	265	6	250	0	247	(1)
102	18	(28)	19	(24)	0	(100)	0	(100)	25	0	25	0
103	7	(13)	7	(13)	8	0	9	13	8	0	8	0
104	137	(27)	144	(23)	0	(100)	0	(100)	187	0	0	(100)
105	11	(21)	17	21	0	(100)	0	(100)	14	0	15	7
106	96	(27)	101	(23)	131	0	139	6	131	0	139	6
107	29	(28)	30	(25)	24	(40)	25	(38)	40	0	24	(40)

Allotment Number	Allotment Name	Pref. Active AUM's	Pref. Total AUM's	Average License Use AUM's	ALTERNATIVE A 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease	ALTERNATIVE B 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease
108	Ford	15	15	15	15	0	15	0	15	0	16	7
109	Long Gulch	215	215	245	245	0	245	0	245	0	256	4
110	Fraisier Ind.	75	75	75	75	0	75	0	66	(12)	69	(8)
111	Uhlman	33	33	33	33	0	33	0	0	(100)	0	(100)
112	Gallant Ind.	64	64	64	64	0	64	0	0	(100)	0	(100)
113	Justus FFR	45	45	46	46	0	46	0	46	0	48	4
114	Gatfield Ind.	20	20	20	20	0	20	0	20	0	21	5
115	Packer John	450	820	364	364	0	364	0	364	0	380	4
116	Patterson & Goodwin	168	168	168	168	0	168	0	168	0	175	4
120	Gossard Ind.	78	78	76	76	0	76	0	76	0	79	4
121	Gould Ind.	34	34	34	34	0	34	0	0	(100)	0	(100)
122	Leep Ind.	170	170	31	31	0	31	0	31	0	32	3
123	Greenwood Ind.	33	33	33	33	0	33	0	0	(100)	0	(100)
124	Gutherie Ind.	8	8	5	5	0	5	0	0	(100)	0	(100)
125	Dechambeau Ind.	150	150	150	150	0	150	0	150	0	156	4
126	Hadley Ind.	26	26	26	26	0	26	0	26	0	27	4
127	Hagans Ind. A	15	15	15	15	0	15	0	0	(100)	0	(100)
128	Hagans Ind. B	24	24	24	24	0	24	0	0	(100)	0	(100)
129	Hale Ind.	24	24	24	24	0	24	0	24	0	25	4
130	Gross	12	12	12	12	0	12	0	12	0	13	8
131	D. Harrington Ind.	107	107	107	107	0	107	0	107	0	112	5
132	Home Ranch	263	263	263	263	0	263	0	150	(43)	156	(41)
133	Lake Ranch	54	54	54	54	0	54	0	28	(48)	29	(46)
134	J. Harrington Ind.	18	28	18	18	0	18	0	11	(39)	11	(39)
135	Dad Harrington	29	29	29	29	0	29	0	23	(21)	24	(17)
136	Kenny Ridge	8	8	8	8	0	8	0	0	(100)	0	(100)
137	Hayshed	8	8	8	8	0	8	0	0	(100)	0	(100)
138	L&J Harrington	42	48	42	42	0	42	0	42	0	44	5
139	Lower Field	181	181	181	181	0	181	0	11	(94)	12	(93)
140	Upper Field	100	100	100	100	0	100	0	62	(38)	65	(35)
141	Helwick Ind.	38	38	33	33	0	33	0	33	0	34	3
142	Wolf Creek Allot.	429	429	399	399	0	399	0	399	0	416	4
143	Herrick FFR	8	8	8	8	0	8	0	8	0	8	0
144	Higgins Ind.	27	27	27	27	0	27	0	0	(100)	0	(100)
145	Scott Creek	669	669	669	669	0	669	0	544	(19)	567	(15)
146	Hoffman Ind.	42	42	28	28	0	28	0	0	(100)	0	(100)
147	Holbrook Ind.	55	55	56	56	0	56	0	21	(63)	22	(61)
148	Indian Mtn. Com.	215	215	211	211	0	211	0	202	(4)	211	0
149	Holmes Ind.	7	7	7	7	0	7	0	7	0	8	14
150	Hopper Creek	60	60	60	60	0	60	0	73	22	116	93
151	Deer Creek	10	10	9	9	0	9	0	9	0	9	0
152	Hornet Creek	93	93	90	90	0	90	0	85	(6)	89	(1)
153	Horning Ind.	10	10	7	7	0	7	0	0	(100)	0	(100)
154	North	96	96	96	96	0	96	0	96	0	100	4
155	South	190	190	137	137	0	137	0	137	0	143	4
156	Upper Ranch	18	18	18	18	0	18	0	0	(100)	0	(100)
157	Hubbard Ind.	8	8	8	8	0	8	0	0	(100)	0	(100)
158	Jackson Creek	386	386	388	388	0	388	0	401	3	458	18
159	Isom	126	126	126	126	0	126	0	126	0	131	4
160	Jacobs Ind.	8	8	8	8	0	8	0	0	(100)	0	(100)
161	Goodrich Ind.	48	48	48	48	0	48	0	48	0	50	4
162	Johannsen Ind.	56	56	56	56	0	56	0	52	(7)	78	39
163	Kaufman Ind.	25	25	26	26	0	26	0	0	(100)	0	(100)
164	Keithley Ind.	173	173	173	173	0	173	0	173	0	180	4
165	J Keithley	101	101	100	100	0	100	0	100	0	104	4
166	Kennedy Ind.	11	11	10	10	0	10	0	10	0	10	0
167	Kilborn Ind.	33	33	33	33	0	33	0	33	0	34	3
168	Klingback Ind.	16	16	16	16	0	16	0	16	0	17	6
169	Langer Ind.	43	43	43	43	0	43	0	34	(21)	35	(19)
170	Little Jackson	473	473	473	473	0	473	0	144	(70)	150	(69)
171	A. Legg Ind.	6	6	3	3	0	3	0	3	0	3	0
172	P. Legg Ind	8	8	8	8	0	8	0	0	(100)	0	(100)
173	Line Ind.	8	8	8	8	0	8	0	0	(100)	0	(100)
175	Black Canyon Fenced	14	14	14	14	0	14	0	14	0	15	7
176	Black Canyon	640	640	640	640	0	640	0	755	18	1,127	76
177	Big Flat	63	63	63	63	0	63	0	21	(67)	22	(65)
178	Paddy Flat	53	53	53	53	0	53	0	50	(6)	52	(2)
179	Lyle Ind.	115	115	115	55	0	55	0	59	(49)	73	(37)
180	M.C.& M. Ind.	20	20	20	20	0	20	0	20	0	21	5
181	Black Canyon Ranch	180	180	180	180	0	180	0	180	0	188	4
182	Soldier Creek Ranch	8	8	8	8	0	8	0	0	(100)	0	(100)
183	Cabarton Ranch	8	8	8	8	0	8	0	8	0	9	13
184	Siller Ranch	28	28	28	28	0	28	0	28	0	29	4
185	Maddox Ind.	8	8	8	8	0	8	0	8	0	9	13
186	Mainvil Ind.	12	12	12	12	0	12	0	0	(100)	0	(100)
187	Marvin Ind.	24	24	13	13	0	13	0	13	0	14	8
188	West Side South	146	220	146	146	0	146	0	159	9	205	40
189	McCool Ind.	87	87	87	87	0	87	0	100	15	144	66
191	Linson Creek	892	892	713	713	0	713	0	713	0	744	4
193	McGinnis Ind.	3	3	3	3	0	3	0	3	0	3	0
194	McMullen	1,316	1,316	961	961	0	961	0	831	(14)	867	(10)
195	Syme-Moser River	92	92	92	92	0	92	0	92	0	96	4
196	McPherson Ind.	34	34	34	34	0	34	0	47	38	88	159
197	Meinikheim Ind.	35	35	0	0	0	0	0	0	0	0	0
198	Meyer Ind.	16	16	16	16	0	16	0	5	(69)	5	(69)
199	Hays	9	9	8	8	0	8	0	0	(100)	0	(100)
200	Advent Gulch	18	18	18	18	0	18	0	6	(67)	6	(67)
201	Mitchell Ind.	25	25	25	25	0	25	0	25	0	26	4
202	Lund	12	12	12	10	0	10	0	10	(17)	10	(17)
203	Sage Creek	300	300	300	300	0	300	0	300	0	313	4
204	Dennet & Stover	168	168	168	168	0	168	0	133	(21)	139	(17)
205	Crane Creek	241	241	184	184	0	184	0	162	(12)	169	(8)
206	D. Moritz Ind.	72	72	72	72	0	72	0	0	(100)	0	(100)
207	Henley Basin	684	684	684	684	0	684	0	538	(21)	561	(18)
208	Sage Creek	676	676	268	268	0	268	0	268	0	280	4
209	Burroughs	450	450	315	264	0	264	0	183	(42)	262	(17)
210	Montour Ind.	8	8	8	8	0	8	0	8	0	9	13
211	Missula Ind.	20	20	4	4	0	4	0	4	0	4	0
212	Missula Ind.	39	39	39	39	0	39	0	0	(100)	0	(100)
213	Osborn Ind.	65	65	65	65	0	65	0	65	0	68	5
214	Palmer Ind.	82	82	82	82	0	82	0	82	0	86	5
215	Parks Ind.	33	94	33	33	0	33	0	24	(27)	25	(24)
216	Patton	115	115	115	115	0	115	0	82	(29)	86	(25)
217	Peebles	77	77	0	0	0	0	0	0	0	0	0
218	Perkins Ind.	16	16	16	16	0	16	0	0	(100)	0	(100)
219	Peterson Ind.	113	113	113	113	0	113	0	113	0	118	4
220	Potter Ind.	21	21	21	21	0	21	0	21	0	22	5
221	Pound Ind.	219	219	219	219	0	219	0	219	0	240	10
222	Pratt Ind.	24	24	10	10	0	10	0	0	(100)	0	(100)
223	Putnam Ind.	130	130	129	129	0	129	0	129	0	135	5
224	Ranny Ind.	96	96	96	96	0	96	0	0	(100)	0	(100)
225	Indian Head Mtn.	152	152	152	152	0	152	0	152	0	159	5

Allotment Number	ALTERNATIVE C 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease	ALTERNATIVE D 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease	ALTERNATIVE E Initial Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease
108	11	(27)	12	(20)	15	0	16	7	15	0	15	0
109	179	(27)	188	(23)	245	0	259	6	245	0	245	0
110	0	(100)	0	(100)	66	(12)	70	(7)	75	0	64	(15)
111	24	(27)	25	(24)	0	(100)	0	(100)	33	0	0	(100)
112	47	(27)	49	(23)	0	(100)	0	(100)	64	0	68	6
113	34	(26)	36	(22)	46	0	49	7	46	0	46	0
114	15	(25)	16	(20)	20	0	21	5	20	0	20	0
115	266	(27)	279	(23)	364	0	385	6	364	0	386	6
116	123	(27)	129	(23)	168	0	178	6	168	0	178	6
120	9	(88)	9	(88)	76	0	80	5	76	0	76	0
121	25	(26)	26	(24)	0	(100)	0	(100)	34	0	0	(100)
122	23	(26)	24	(23)	31	0	33	6	31	0	29	(6)
123	24	(27)	25	(24)	0	(100)	0	(100)	33	0	33	0
124	4	(20)	4	(20)	0	(100)	0	(100)	5	0	0	(100)
125	110	(27)	116	(23)	150	0	159	6	150	0	150	0
126	19	(27)	20	(23)	26	0	28	8	26	0	25	(4)
127	11	(27)	12	(20)	0	(100)	0	(100)	15	0	15	0
128	18	(25)	19	(21)	0	(100)	0	(100)	24	0	24	0
129	18	(25)	19	(21)	24	0	25	4	24	0	24	0
130	9	(25)	9	(25)	12	0	13	8	12	0	11	(8)
131	0	(100)	0	(100)	107	0	113	6	107	0	113	6
132	88	(67)	92	(65)	150	(43)	159	(40)	263	0	159	(40)
133	39	(28)	41	(24)	28	(48)	30	(44)	54	0	57	6
134	2	(89)	2	(89)	11	(39)	12	(33)	18	0	18	0
135	4	(86)	4	(86)	23	(21)	24	(17)	29	0	23	(21)
136	6	(25)	6	(25)	0	(100)	0	(100)	8	0	0	(100)
137	6	(25)	6	(25)	0	(100)	0	(100)	8	0	8	0
138	0	(100)	0	(100)	42	0	44	5	42	0	42	0
139	0	(100)	0	(100)	11	(94)	12	(93)	181	0		(100)
140	35	(65)	37	(63)	62	(38)	66	(34)	100	0	50	(50)
141	24	(27)	25	(24)	33	0	35	6	33	0	33	0
142	291	(27)	306	(23)	399	0	422	6	399	0	405	2
143	0	(100)	0	(100)	8	0	9	13	8	0	8	0
144	20	(26)	21	(22)	27	0	29	7	27	0	29	7
145	489	(27)	514	(23)	544	(19)	608	(9)	669	0	673	1
146	21	(25)	22	(21)	0	(100)	0	(100)	28	0	27	(4)
147	41	(27)	43	(23)	21	(63)	22	(61)	56	0	54	(4)
148	154	(27)	162	(23)	202	(4)	214	1	211	0	218	3
149	5	(29)	5	(29)	7	0	7	0	7	0	7	0
150	52	(13)	79	32	78	30	138	130	60	0	96	60
151	7	(22)	7	(22)	9	0	10	11	9	0	9	0
152	55	(39)	58	(36)	85	(6)	90	0	90	0	90	0
153	5	(29)	5	(29)	0	(100)	0	(100)	7	0	0	(100)
154	70	(27)	74	(23)	96	0	102	6	96	0	101	5
155	100	(27)	105	(23)	137	0	145	6	137	0	145	6
156	13	(28)	14	(22)	0	(100)	0	(100)	18	0	18	0
157	6	(25)	6	(25)	0	(100)	0	(100)	8	0	0	(100)
158	291	(25)	330	(15)	406	5	486	25	388	0	448	15
159	0	(100)	0	(100)	126	0	133	6	126	0	126	0
160	6	(25)	6	(25)	0	(100)	0	(100)	8	0	0	(100)
161	35	(27)	37	(23)	48	0	51	6	48	0	48	0
162	46	(18)	63	13	54	(4)	92	64	56	0	80	43
163	19	(27)	20	(23)	0	(100)	0	(100)	26	0	0	(100)
164	126	(27)	132	(24)	173	0	183	6	173	0	166	(4)
165	73	(27)	77	(23)	100	0	106	6	100	0	95	(5)
166	7	(30)	7	(30)	10	0	11	10	10	0	10	0
167	16	(52)	17	(48)	33	0	35	6	33	0	33	0
168	12	(25)	13	(19)	16	0	17	6	16	0	16	0
169	32	(26)	34	(21)	34	(21)	36	(16)	43	0	34	(21)
170	35	(93)	37	(92)	144	(70)	152	(68)	473	0	123	(74)
171	2	(33)	2	(33)	3	0	3	0	3	0	3	0
172	6	(25)	6	(25)	0	(100)	0	(100)	8	0	8	0
173	6	(25)	6	(25)	0	(100)	0	(100)	8	0	0	(100)
175	10	(29)	11	(21)	14	0	15	7	14	0	14	0
176	539	(16)	777	21	801	25	1,322	107	640	0	995	55
177	46	(27)	48	(24)	21	(67)	22	(65)	63	0	58	(8)
178	0	(100)	0	(100)	53	0	56	6	53	0	53	0
179	26	(77)	35	(70)	60	(48)	81	(30)	55	0	64	(44)
180	15	(25)	16	(20)	20	0	21	5	20	0	20	0
181	131	(27)	138	(23)	180	0	191	6	180	0	191	6
182	6	(25)	6	(25)	0	(100)	0	(100)	8	0	0	(100)
183	6	(25)	6	(25)	8	0	9	13	8	0	8	0
184	21	(25)	22	(21)	28	0	30	7	28	0	28	0
185	6	(25)	6	(25)	8	0	9	13	8	0	8	0
186	9	(25)	10	(17)	0	(100)	0	(100)	12	0	0	(100)
187	10	(23)	11	(15)	13	0	14	8	13	0	8	(38)
188	115	(21)	145	(1)	164	12	230	58	146	0	177	21
189	72	(17)	100	15	105	21	167	92	87	0	129	48
191	521	(27)	547	(23)	713	0	755	6	713	0	756	6
193	2	(33)	2	(33)	3	0	3	0	3	0	3	0
194	702	(27)	737	(23)	831	(14)	880	(8)	961	0	939	(2)
195	68	(26)	71	(23)	92	0	97	5	92	0	88	(4)
196	33	(3)	59	74	52	53	111	226	34	0	73	115
197	0	0	0	0	0	0	0	0	35	100	35	100
198	12	(25)	13	(19)	5	(69)	5	(69)	16	0	5	(69)
199	6	(25)	6	(25)	0	(100)	0	(100)	8	0	0	(100)
200	13	(28)	14	(22)	6	(67)	6	(67)	18	0	18	0
201	18	(28)	19	(24)	25	0	26	4	25	0	24	(4)
202	7	(42)	7	(42)	10	(17)	11	(8)	10	0	9	(25)
203	219	(27)	230	(23)	300	0	318	6	300	0	293	(2)
204	123	(27)	129	(23)	133	(21)	141	(16)	168	0	159	(5)
205	134	(27)	141	(23)	162	(12)	171	(7)	184	0	189	3
206	53	(26)	56	(22)	0	(100)	0	(100)	72	0	76	6
207	0	(100)	0	(100)	538	(21)	570	(17)	684	0	690	1
208	196	(27)	206	(23)	268	0	284	6	268	0	240	(10)
209	235	(25)	291	(8)	270	(14)	385	22	254	0	336	7
210	6	(25)	6	(25)	8	0	9	13	8	0	7	(13)
211	3	(25)	3	(25)	4	0	4	0	4	0	4	0
212	29	(26)	30	(23)	0	(100)	0	(100)	39	0	37	(5)
213	0	(100)	0	(100)	65	0	69	6	65	0	65	0
214	60	(27)	63	(23)	82	0	87	6	82	0	83	1
215	24	(27)	25	(24)	26	(21)	28	(15)	33	0	24	(27)
216	84	(27)	88	(23)	82	(29)	87	(24)	115	0	115	0
217	0	0	0	0	0	0	0	0	77	100	9	100
218	12	(25)	13	(19)	0	(100)	0	(100)	16	0	0	(100)
219	83	(27)	87	(23)	113	0	120	6	113	0	113	0
220	16	(24)	17	(19)	21	0	22	5	21	0	21	0
221	162	(26)	178	(19)	220	0	251	15	219	0	216	(1)
222	7	(30)	7	(30)	0	(100)	0	(100)	10	0	11	10
223	94	(27)	99	(23)	129	0	136	5	129	0	129	0
224	70	(27)	74	(23)	0	(100)	0	(100)	96	0	92	(4)
225	111	(27)	117	(23)	152	0	161	6	152	0	145	(5)

Allotment Number	Allotment Name	Pref. Active AUM's	Pref. Total AUM's	Average License Use AUM's	ALTERNATIVE A 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease	ALTERNATIVE B 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease
227	Ryals Ind.	16	16	16	16	0	16	0	16	0	17	6
228	Sagebrush Hill	175	175	175	175	0	175	0	175	0	183	5
229	Stout	18	18	18	18	0	18	0	16	(11)	17	(6)
230	Tarter	163	163	163	163	0	163	0	171	5	202	24
231	Schlehuber Ind.	109	109	108	108	0	108	0	70	(35)	73	(32)
232	Schweizer Ind.	140	140	140	140	0	140	0	166	19	294	110
233	Hopper Creek	215	215	215	215	0	215	0	215	0	224	4
234	Mrs. Seid Ind.	71	71	74	74	0	74	0	74	0	77	4
235	Pine	226	226	227	227	0	227	0	227	0	237	4
236	Middle Fork	90	90	89	89	0	89	0	89	0	93	4
237	Black Canyon (Shaw)	1,972	1,972	1,973	1,973	0	1,973	0	2,102	7	2,597	31
238	Simplot Cattle Co.	67	67	68	68	0	68	0	0	(100)	0	(100)
239	Simplot Industries	12	12	12	12	0	12	0	12	0	13	8
240	Clipper Flat	219	219	219	219	0	219	0	28	(87)	29	(87)
241	Sisler Ind.	10	10	10	10	0	10	0	10	0	10	0
242	Roy Slyter	32	32	32	32	0	32	0	0	(100)	0	(100)
243	Rocky Ridge	110	110	109	109	0	109	0	109	0	114	5
244	Smith Ind. Allot	17	17	21	21	0	21	0	0	(100)	0	(100)
246	Smith-Black Canyon	86	86	86	86	0	86	0	75	(13)	118	37
247	Wilson Ind.	20	20	20	20	0	20	0	0	(100)	0	(100)
248	Hashagen Ind.	114	114	114	114	0	114	0	114	0	119	4
249	Sturgill Creek	1,285	1,285	1,233	1,233	0	1,233	0	1,108	(10)	1,156	(6)
250	Squaw Creek	25	25	25	25	0	25	0	0	(100)	0	(100)
252	Willow Creek	44	44	40	40	0	40	0	40	0	42	5
253	Butte Field	130	130	128	128	0	128	0	133	4	171	34
254	Sand Hollow	1,500	1,500	1,501	1,501	0	1,501	0	1,290	(14)	1,348	(10)
255	Sutton Ind.	10	10	10	10	0	10	0	0	(100)	0	(100)
256	Sutton Ranches Ind.	16	16	16	16	0	16	0	0	(100)	0	(100)
257	Thomason Ind.	5	5	5	5	0	5	0	0	(100)	0	(100)
258	Thompson	56	56	55	55	0	55	0	55	0	57	4
259	Towell	19	19	19	19	0	19	0	0	(100)	0	(100)
260	Crane Creek Ind.	143	143	143	143	0	143	0	143	0	149	4
261	Twin Sisters	314	314	309	309	0	309	0	309	0	322	4
262	Vogel & Ogle Ind.	32	32	32	32	0	32	0	0	(100)	0	(100)
263	Waite Ind.	26	26	8	8	0	8	0	0	(100)	0	(100)
264	Walker Ind.	10	10	8	8	0	8	0	8	0	8	0
265	Watson Ind.	4	4	2	2	0	2	0	2	0	2	0
266	Montour Ind.	16	16	16	16	0	16	0	16	0	17	6
267	Alder Creek Ind.	163	163	163	163	0	163	0	163	0	170	4
268	Weiser Sheep Co.	212	212	47	47	0	47	0	44	(6)	46	(2)
269	Wells Ind.	23	23	23	23	0	23	0	15	(35)	16	(30)
270	Whiteman Ind.	22	22	22	22	0	22	0	0	(100)	0	(100)
271	Williams - Fairchild	163	163	163	163	0	163	0	193	18	306	88
272	Williamson	41	41	41	41	0	41	0	41	0	43	5
273	Perkins Creek	93	93	93	93	0	93	0	71	(24)	74	(20)
274	Winegar Ind.	32	32	32	32	0	32	0	0	(100)	0	(100)
275	Woodland Ind.	128	128	128	128	0	128	0	128	0	134	5
276	Lindsay Ind.	40	40	40	40	0	40	0	40	0	42	5
278	Spring Valley	739	739	401	361	0	361	0	316	(21)	330	(18)
279	Black Canyon	496	496	344	344	0	344	0	417	21	652	90
280	Lick Creek	1,651	1,651	1,651	1,651	0	1,651	0	1,618	(2)	1,688	2
284	Spring Creek	1,122	1,122	1,355	1,355	0	1,355	0	1,359	0	1,429	5
286	Deardorff Ind.	28	28	28	28	0	28	0	0	(100)	0	(100)
287	Stippich Pasture	40	40	40	40	0	40	0	40	0	42	5
288	Double Diamond	16	16	13	13	0	13	0	0	(100)	0	(100)
289	Porter Creek	15	15	15	15	0	15	0	9	(40)	9	(40)
290	North Hornet	41	41	40	40	0	40	0	40	0	42	5
291	Hornet Creek	6	6	6	6	0	6	0	6	0	6	0
292	D. Moritz Ind.	24	24	24	24	0	24	0	0	(100)	0	(100)
293	North Fork FFR	90	90	36	36	0	36	0	26	(28)	27	(25)
294	U-Bar-M FFR	91	91	95	95	0	95	0	83	(13)	92	(3)
295	Little Willow	244	332	246	246	0	246	0	243	(1)	253	3
297	Wet Gulch	6	6	9	9	0	9	0	0	(100)	0	(100)
298	I5	143	143	134	134	0	134	0	134	0	140	4
299	Cox FFR	18	18	18	18	0	18	0	0	(100)	0	(100)
300	WRR Ind.	4	8	4	4	0	4	0	0	(100)	0	(100)
301	Holland Gulch	553	553	495	495	0	495	0	525	6	651	32
302	Weiser Cove	56	56	56	56	0	56	0	56	0	58	4
303	Skow FFR	6	6	11	11	0	11	0	0	(100)	0	(100)
304	Center Allot.	820	820	742	742	0	742	0	602	(19)	675	(9)
306	Big Creek	80	80	80	80	0	80	0	80	0	83	4
307	Dry Lake	0	0	210	38	0	38	0	17	(92)	20	(90)
308	Sky Ranch Ind.	20	50	20	20	0	20	0	20	0	21	5
309	Boise Front	438	438	361	361	0	361	0	361	0	377	4
310	Black Canyon	2,829	2,829	2,539	2,417	0	2,417	0	2,320	(9)	3,221	27
311	No Unit	1,478	1,478	949	944	0	944	0	944	(1)	985	4
312	Bannister Basin	266	266	264	264	0	264	0	264	0	275	4
313	Fenwick Place	13	13	13	13	0	13	0	13	0	13	0
314	Bingman	14	14	14	14	0	14	0	0	(100)	0	(100)
315	Terteling	5	5	5	5	0	5	0	0	(100)	0	(100)
350	Lucky Peak	26	39	0	0	0	0	0	0	0	0	0
352	Stephens Ind.	44	44	44	44	0	44	0	44	0	46	5
355	Robert Routson Ind.	26	26	26	26	0	26	0	13	(50)	14	(46)
356	Roberts Ind.	8	8	3	3	0	3	0	0	(100)	0	(100)
361	Crane Creek Allot.	568	568	974	974	0	974	0	1,105	13	1,636	68
362	Foothils	1,035	1,035	1,035	1,035	0	1,035	0	1,037	0	1,090	5
363	Drake Allot.	48	48	48	48	0	48	0	48	0	50	4
364	Whiskey Rapids Allot	53	53	54	54	0	54	0	54	0	56	4
365	Old Craig Allot.	49	49	42	42	0	42	0	0	(100)	0	(100)
366	Staley Allot.	36	36	36	36	0	36	0	36	0	38	6
367	Minnie Snyder FFR	97	97	83	83	0	83	0	64	(23)	67	(19)
368	Rock Creek FFR	576	576	576	576	0	576	0	531	(8)	554	(4)
369	McChord Butte	968	968	970	970	0	970	0	970	0	1,012	4
370	Upper	1,027	1,027	1,674	1,674	0	1,674	0	1,647	(2)	1,828	9
371	Callender Ind.	48	48	48	48	0	48	0	0	(100)	0	(100)
372	Warm Springs	305	305	4	4	0	4	0	0	(100)	0	(100)
373	Williams Ind.	37	37	37	37	0	37	0	37	0	39	5
374	1000 Acre Field	12	12	12	12	0	12	0	12	0	13	8
375	Gibson Allot.	12	12	12	12	0	12	0	0	(100)	0	(100)
376	Fry Ind.	22	22	22	22	0	22	0	22	0	23	5
377	Dennet Creek Ind.	96	96	96	96	0	96	0	96	0	100	4
378	Lower Raft Creek	266	266	256	256	0	256	0	250	(2)	261	2
379	Upper Raft Cr. FFR	51	51	51	51	0	51	0	0	(100)	0	(100)
380	Mineral	143	143	143	143	0	143	0	143	0	149	4
381	Cow Camp	27	27	27	27	0	27	0	27	0	28	4
382	Beef Trap	232	232	231	231	0	231	0	235	2	261	13
383	Forsgren Ind.	6	6	6	6	0	6	0	0	(100)	0	(100)
384	Jenkins Creek	196	196	192	192	0	192	0	145	(24)	151	(21)
385	Putnam Custodial	5	5	5	5	0	5	0	5	0	5	0
386	White Butte Allot.	66	66	67	67	0	67	0	67	0	70	4
387	Individual	12	12	10	10	0	10	0	5	(50)	5	(50)
388	Pedro & Upper Wolf	25	25	25	25	0	25	0	10	(60)	10	(60)

Allotment Number	ALTERNATIVE C 5-Year Forage Level AUM's	% Change (-)=decrease	20 Year Forage Level AUM's	% Change (-)=decrease	ALTERNATIVE D 5-Year Forage Level AUM's	% Change (-)=decrease	20 Year Forage Level AUM's	% Change (-)=decrease	ALTERNATIVE E Initial Forage Level AUM's	% Change (-)=decrease	20 Year Forage Level AUM's	% Change (-)=decrease
227	112	600	13	(19)	16	0	17	6	16	0	16	0
228	128	(27)	134	(23)	175	0	185	6	175	0	169	(3)
229	13	(28)	14	(22)	16	(11)	17	(6)	16	0	14	(22)
230	124	(24)	145	(11)	174	7	217	33	162	0	190	17
231	79	(27)	83	(23)	70	(35)	74	(31)	108	0	70	(35)
232	127	(9)	210	50	184	31	366	161	140	0	248	77
233	157	(27)	165	(23)	215	0	227	6	215	0	198	(8)
234	50	(32)	53	(28)	74	0	78	5	74	0	70	(5)
235	166	(27)	174	(23)	227	0	240	6	227	0	218	(4)
236	39	(56)	41	(54)	89	0	94	6	89	0	86	(3)
237	1,524	(23)	1,846	(6)	2,161	10	2,839	44	1,973	0	2,454	24
238	50	(26)	53	(22)	0	(100)	0	(100)	68	0	68	0
239	0	(100)	0	(100)	12	0	13	8	12	0	12	0
240	160	(27)	168	(23)	28	(87)	30	(86)	219	0	219	0
241	7	(30)	7	(30)	10	0	11	10	10	0	10	0
242	24	(25)	25	(22)	0	(100)	0	(100)	32	0	0	(100)
243	80	(27)	84	(23)	109	0	115	6	109	0	109	0
244	15	(29)	16	(24)	0	(100)	0	(100)	21	0	21	0
246	71	(17)	99	15	80	(7)	141	64	86	0	103	20
247	16	(20)	17	(15)	0	(100)	0	(100)	20	0	20	0
248	63	(45)	66	(42)	114	0	121	6	114	0	114	0
249	815	(34)	856	(31)	1,108	(10)	1,173	(5)	1,233	0	1,146	(7)
250	18	(28)	19	(24)	0	(100)	0	(100)	25	0	25	0
252	29	(28)	31	(23)	40	0	42	5	40	0	40	0
253	101	(21)	126	(2)	128	0	190	48	128	0	153	20
254	1,103	(27)	1,178	(22)	1,295	(14)	1,415	(6)	1,501	0	1,591	6
255	7	(30)	7	(30)	0	(100)	0	(100)	10	0	0	(100)
256	4	(75)	4	(75)	0	(100)	0	(100)	16	0	16	0
257	4	(20)	4	(20)	5	0	5	0	5	0	0	(100)
258	40	(27)	42	(24)	55	0	58	5	55	0	55	0
259	14	(26)	15	(21)	0	(100)	0	(100)	19	0	0	(100)
260	104	(27)	109	(24)	143	0	151	6	143	0	152	6
261	226	(27)	237	(23)	309	0	327	6	309	0	312	1
262	24	(25)	25	(22)	0	(100)	0	(100)	32	0	32	0
263	6	(25)	6	(25)	0	(100)	0	(100)	8	0	8	0
264	6	(25)	6	(25)	8	0	9	13	8	0	8	0
265	2	0	2	0	2	0	2	0	2	0	2	0
266	12	(25)	13	(19)	16	0	17	6	16	0	16	0
267	119	(27)	125	(23)	163	0	172	6	163	0	163	0
268	34	(28)	36	(23)	44	(6)	47	0	47	0	32	(32)
269	0	(100)	0	(100)	15	(35)	16	(30)	23	0	16	(30)
270	16	(27)	17	(23)	0	(100)	0	(100)	22	0	21	(5)
271	142	(13)	215	32	287	27	369	126	163	0	254	56
272	30	(27)	32	(22)	41	0	43	5	41	0	41	0
273	68	(27)	71	(24)	71	(24)	75	(19)	93	0	93	0
274	23	(28)	24	(25)	0	(100)	0	(100)	32	0	0	(100)
275	94	(27)	99	(23)	128	0	136	6	128	0	123	(4)
276	0	(100)	0	(100)	40	0	42	5	40	0	40	0
278	232	(42)	244	(39)	351	(12)	372	(7)	361	0	335	(16)
279	297	(14)	447	30	447	30	777	126	344	0	564	64
280	1,173	(29)	1,232	(25)	1,618	(2)	1,713	4	1,651	0	1,376	(17)
284	992	(27)	1,149	(15)	1,361	0	1,458	8	1,355	0	1,416	5
286	21	(25)	22	(21)	0	(100)	0	(100)	28	0	28	0
287	29	(28)	31	(23)	40	0	42	5	40	0	38	(5)
288	9	(31)	9	(31)	0	(100)	0	(100)	13	0	0	(100)
289	11	(27)	12	(20)	9	(40)	10	(33)	15	0	15	0
290	29	(28)	30	(25)	40	0	42	5	40	0	40	0
291	5	(17)	5	(17)	6	0	6	0	6	0	6	0
292	18	(25)	19	(21)	0	(100)	0	(100)	24	0	24	0
293	26	(28)	27	(25)	36	0	38	6	36	0	33	(8)
294	69	(27)	72	(24)	88	(7)	93	(2)	95	0	82	(14)
295	180	(27)	189	(23)	243	(1)	257	4	246	0	257	4
297	78	767	7	(22)	0	(100)	0	(100)	9	0	0	(100)
298	98	(27)	103	(23)	134	0	142	6	134	0	142	6
299	13	(28)	14	(22)	0	(100)	0	(100)	18	0	0	(100)
300	3	(25)	3	(25)	0	(100)	0	(100)	4	0	4	0
301	384	(22)	467	(6)	539	9	714	44	495	0	616	24
302	42	(25)	43	(23)	56	0	59	5	56	0	56	0
303	8	(27)	8	(27)	0	(100)	0	(100)	11	0	0	(100)
304	552	(26)	609	(18)	706	(5)	813	10	742	0	830	12
306	0	(100)	0	(100)	80	0	85	6	80	0	80	0
307	78	(63)	131	(38)	105	(50)	254	21	38	0	113	(46)
308	15	(25)	16	(20)	20	0	21	5	20	0	20	0
309	264	(27)	277	(23)	361	0	382	6	301	0	279	(23)
310	1,914	(25)	2,315	(9)	2,682	6	3,523	39	2,508	0	3,113	23
311	688	(28)	722	(24)	944	(1)	999	5	944	0	1,000	5
312	193	(27)	203	(23)	264	0	279	6	264	0	265	0
313	10	(23)	10	(23)	13	0	14	8	13	0	13	0
314	10	(29)	10	(29)	0	(100)	0	(100)	14	0	0	(100)
315	4	(20)	4	(20)	5	0	5	0	5	0	5	0
350	0	100	0	100	0	0	0	0	26	0	23	ERR
352	32	(27)	34	(23)	44	0	47	7	44	0	44	0
355	19	(27)	20	(23)	13	(50)	14	(46)	26	0	21	(19)
356	3	0	3	0	0	(100)	0	(100)	3	0	0	(100)
361	813	(17)	1,154	18	1,171	20	1,912	96	974	0	1,404	44
362	755	(27)	798	(23)	1,038	0	1,111	7	1,035	0	1,045	1
363	35	(27)	37	(23)	48	0	51	6	48	0	45	(6)
364	39	(28)	41	(24)	54	0	57	6	54	0	51	(6)
365	34	(19)	46	10	49	17	75	79	42	0	57	36
366	26	(28)	27	(25)	36	0	38	6	36	0	36	0
367	61	(27)	64	(23)	64	(23)	68	(18)	83	0	64	(23)
368	421	(27)	442	(23)	531	(8)	562	(2)	576	0	569	(1)
369	708	(27)	743	(23)	970	0	1,027	6	970	0	954	(2)
370	1,245	(26)	1,376	(18)	1,674	0	1,927	15	1,674	0	1,770	6
371	35	(27)	37	(23)	0	(100)	0	(100)	48	0	51	6
372	3	(25)	3	(25)	0	(100)	0	(100)	4	0	0	(100)
373	0	(100)	0	(100)	37	0	39	5	37	0	37	0
374	9	(25)	9	(25)	12	0	13	8	12	0	12	0
375	9	(25)	9	(25)	12	0	13	8	12	0	12	0
376	16	(27)	17	(23)	22	0	24	9	22	0	22	0
377	70	(27)	74	(23)	96	0	102	6	96	0	88	(8)
378	187	(27)	196	(23)	250	(2)	265	4	256	0	265	4
379	37	(27)	39	(24)	0	(100)	0	(100)	51	0	25	(51)
380	104	(27)	109	(24)	143	0	151	6	143	0	133	(7)
381	20	(26)	21	(22)	27	0	29	7	27	0	27	0
382	172	(26)	190	(18)	238	3	275	19	231	0	249	8
383	5	(17)	5	(17)	0	(100)	0	(100)	6	0	0	(100)
384	140	(27)	147	(23)	145	(24)	154	(20)	192	0	170	(11)
385	4	(20)	4	(20)	5	0	5	0	5	0	5	0
386	49	(27)	51	(24)	67	0	71	6	67	0	67	0
387	7	(30)	7	(30)	5	(50)	5	(50)	10	0	5	(50)
388	18	(28)	19	(24)	10	(60)	11	(56)	25	0	24	(4)

Allotment Number	Allotment Name	Pref. Active AUM's	Pref. Total AUM's	Average License Use AUM's	ALTERNATIVE A 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease	ALTERNATIVE B 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease
389	Long Hollow Field	190	190	143	143	0	143	0	143	0	149	4
390	Fenced Federal Range	114	114	114	114	0	114	0	108	(5)	113	(1)
391	Little Emmett Allot.	4,253	4,253	3,970	3,964	0	3,964	0	4,247	9	5,684	43
392	Fenced Federal Range	58	58	60	60	0	60	0	60	0	63	5
393	Indian Jake	3,393	3,393	3,262	3,262	0	3,262	0	3,543	9	4,527	39
396	Bivens Purchase	34	34	34	34	0	34	0	27	(21)	28	(18)
1,278	Quartzberg	200	200	0	0	0	0	0	0	0	0	0
388	Fenced Federal Range	124	124	124	124	0	124	0	124	0	129	4
		Pref. Active	Pref. Total	Average License Use								
	TOTALS	72,571	74,662	66,424	66,014	0	66,014	0	61,872	(7)	71,076	7

Allotment Number	ALTERNATIVE C 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease	ALTERNATIVE D 5-Year Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease	ALTERNATIVE E Initial Forage Level AUM's	% Change ( )=decrease	20 Year Forage Level AUM's	% Change ( )=decrease
389	104	(27)	109	(24)	143	0	151	6	143	0	137	(4)
390	83	(27)	87	(24)	108	(5)	114	0	114	0	109	(4)
391	3,135	(21)	4,010	1	4,506	14	6,360	61	3,964	0	5,090	28
392	44	(27)	46	(23)	60	0	64	7	60	0	59	(2)
393	2,557	(22)	3,204	(2)	3,658	12	5,035	54	3,262	0	4,110	26
396	25	(26)	26	(24)	27	(21)	29	(15)	34	0	34	0
1,278	0	0	0	0	0	0	0	0	0	0	0	0
388	91	(27)	96	(23)	124	0	131	6	124	0	124	0
TOTALS	47,345	(29)	53,643	(19)	63,942	(4)	76,613	15	66,257	0	70,536	6

APPENDIX G

LIVESTOCK USE LEVELS METHODOLOGY

Alternative A

The 5-year livestock forage use levels are based on the present 5-year average license use minus forage lost to land transfers, exchanges, desert land entries, special designation, historic and cultural areas.

The 20-year livestock forage use levels are identical to the 5-year forage use levels.

Alternative B

The 5-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;

2. Adding one-quarter (1/4) of the 20-year projected forage levels gained from seedings.

Twenty-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;

2. Adding forage gained on 18% of the remaining native range, ie., total acres minus custodial range, excellent condition range, good condition range, and seedings (in other words projecting an improvement of range condition due to increased management, fencing, and water development on 18% of the remaining native range).

3. Adding all of the 20-year projected forage gained from seedings.

Alternative C

The 5-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;

2. Subtracting forage lost to wildlife, watershed, and range condition improvement (27% reduction) from the 5-year average license use;

3. Adding one-quarter (1/4) of the 20-year projected forage levels gained from seedings.

Twenty-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;

2. Subtracting forage lost to wildlife, watershed, and range condition improvement (27% reduction) from the 5-year average license use;

3. Adding forage gained on 20% of the remaining native range, ie., total acres minus acres of custodial range, excellent condition range, good condition range, and seedings (in other words projecting an improvement of range condition due to increased management, fencing, and water development on 20% of the remaining native range; 10% due to management, 10% due to wildlife reductions).

4. Adding all of the 20-year projected forage gained from seedings.

Alternative D

The 5-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;

2. Adding one-quarter (1/4) of the 20-year projected forage levels gained from seedings.

Twenty-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;

2. Adding forage gained on 25% of the remaining native range, ie., total acres minus acres of custodial range, excellent condition range, good condition range, and seedings (in other words projecting an improvement of range condition due to increased management, fencing, and water development on 25% of the remaining native range).

3. Adding all of the 20-year projected forage gained from seedings.

Alternative E

The initial livestock forage use levels were determined by subtracting forage lost to existing land transfer applications currently being processed from the 5-year average license use.

The 5-year livestock forage use levels were determined by starting with the 5-year average license use subtracting forage lost to existing land transfer applications currently being processed, and adding approximately one quarter (1/4) of the 20-year projected forage levels gained from seedings.

Twenty-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;

2. Subtracting forage lost to wildlife big game winter and summer range from the 5-year average license use;

3. Adding forage gained on 25% of the remaining native range, ie., total acres minus acres of custodial range, excellent condition range, good condition range, and seedings (in other words projecting an improvement of range condition due to increased management, fencing, and water development on 25% of the remaining native range).

4. Adding all of the 20-year projected forage gained from seedings.

APPENDIX H

AQUATIC HABITAT IMPROVEMENT PROJECTS

Stream	Location: Township	Location: Range	Location: Allotment	Proposed Alternatives	Existing Habitat Condition (miles)	Habitat Condition End of 20 Years	Project Treatment 1/
Harris Creek	6 N.	2 E.	278	A,B,C,D,E	0.4 mi Fair	Good	Rip-rap road erosion, streambank planting
Shafer Creek	6 N.	2 E.	278,045,070	A,B,C,D,E	1.5 mi Fair	Good	Rip-rap road erosion, streambank planting, fence
Big Willow Creek	9 N.	1 W.	005,393,009	A,B,C,D,E	3.1 mi Fair	Good	Fence, rip-rap, streambank plantings, instream structure
Little Weiser R.	14 N.	1 E.	041	C,E	0.7 mi Fair	Good	Rip-rap road erosion, streambank plantings
Manns Creek	13 N.	5 W.	208	A,C,D,E	1.6 mi Good	Good	Rip-rap eroding areas, streambank plantings
Dennett Creek	14 N.	6 W.	377,378,380	A,B,C,D,E	3.4 mi Poor	Good	Fence, rip-rap eroding areas, streambank plantings, instream structures
Rock Creek	13 N.	6 W.	368,207,214 032	A,B,C,D,E	3.1 mi Poor	Good	Fence, streambank planting
N. Fk. Payette R.	17 N.	3 E.		A,B,C,D	3.0 mi Fair	Fair	Streambank planting
Deer Creek	9 N.	4 E.	003	C	1.1 mi Fair	Fair	Fence small meadows
Lt. Pine Creek	16 N.	4 W.	156	A,C	0.7 mi Fair	Good	Fence/streambank plantings
Grouse Creek	12 N.	7 W.	194	A,D	0.9 mi Fair	Good	Fence
Lt. Willow Creek	10 N.	2 W.	191	A,D	3.0 mi Fair	Good	Fence

1/ These projects were designed primarily to improve aquatic habitat but will also improve riparian habitat.

APPENDIX I

RIPARIAN HABITAT CONDITION

Creek		Length	Existing Habitat Condition	Location: Allotment	Location: Town-ship	Location: Range	Alternatives A	B	C	D	E	Comments
Cold Springs Cr.		0.3 mi	Excellent	276	18 N.	1 W.	Ex	Ex	Ex	Ex	Ex	Maintain in all alternatives
Lt. Johnson Cr.	*	1.1 mi	Good	016	16 N.	2 W.	G	G	G	G	G	Maintain in all alternatives
		0.3 mi	Good	161			G	G	G	G	G	Maintain in all alternatives
Goodrich Cr.	*	0.8 mi	Excellent	016	16 N.	2 W.	Ex	Ex	Ex	Ex	Ex	Maintain in all alternatives
Sring Cr. (West)	*	1.6 mi	Fair	095	15 N.	3 W.	F	F	G	F	F	To good in C due to livestock reduction
	*	1.1 mi	Good	095			G	G	G	G	G	Maintain in all alternatives
Camp Cr.		0.3 mi	Good	033	15 N.	3 W.	G	G	G	G	G	Maintain in all alternatives
	*	0.9 mi	Good	095			G	F	G	F	F	To fair in B,D,E due to livestock increases
Deep Cr. (North)	*	1.6 mi	Poor	056	14 N.	4 W.	P	P	P	P	P	Maintain in all alternatives
Hopper Cr.	*	1.4 mi	Good	233	14 N.	4 W.	G	F	G	F	G	To fair in B,D due to livestock increases
Keithly Cr.	*	1.6 mi	Good	233	14 N.	4 W.	G	G	G	G	G	Maintain in all alternatives
Keithly Cr. Trib.	*	1.1 mi	Good	233	14 N.	4 W.	G	G	G	G	G	Maintain in all alternatives
Sage Cr.	*	0.3 mi	Fair	208	14 N.	5 W.	F	P	G	P	F	To poor in B,D stock increases, to good in C stock reductions
	*	1.1 mi	Good	208	14 N.	5 W.	G	G	G	G	G	Maintain in all alternatives
	*	1.5 mi	Excellent	208	14 N.	5 W.	Ex	Ex	Ex	Ex	Ex	Maintain in all alternatives
Fir Cr.		1.2 mi	Good	SD	13 N.	5 W.	G	G	G	G	G	Maintain in all alternatives
		1.0 mi	Good	068			G	G	G	G	G	Maintain in all alternatives
		0.2 mi	Good	027			G	G	G	G	G	Maintain in all alternatives
Manns Cr.	*	1.6 mi	Fair	208	13 N.	5 W.	F	F	F	F	F	Maintain in all alternatives
Trib. to "Canal Cr."	*	1.8 mi	Fair	208	14 N.	5 W.	F	F	F	F	F	Maintain in all alternatives
Indian Cr. (North)		0.7 mi	Good	280	19 N.	4 W.	G	G	G	F	G	To fair in D due to livestock increases
		0.4 mi	Excellent	280			Ex	Ex	Ex	G	Ex	To good in D due to livestock increases
Summer Cr.		1.2 mi	Good	280	18 N.	4 W.	G	G	G	F	G	To fair in D due to livestock increases
Trib. to Summer Cr.		0.6 mi	Good	280	18 N.	6 W.	G	G	G	F	G	To fair in D due to livestock increases
Jackson Gulch	*	0.2 mi	Fair	170	16 N.	6 W.	F	G	G	G	G	To good in B,C,D,E due to livestock reductions
	*	0.7 mi	Good	170			F	Ex	Ex	Ex	Ex	To fair in A due to downward trend; to excellent in B,C,D,E due to livestock reductions
Lone Pine Gulch	*	0.6 mi	Fair	249	16 N.	6 W.	F	F	F	F	F	Maintain in all alternatives
	*	0.8 mi	Good	249			F	F	F	F	F	To fair in A,B,C,D,E due to livestock levels/downward trend
Lick Cr.	*	1.5 mi	Good	249	15 N.	6 W.	F	F	F	F	F	To fair in A,B,C,D,E due to livestock levels/downward trend
Trib. to Lick Cr.	*	0.6 mi	Good	249	15 N.	6 W.	F	F	F	F	F	To fair in A,B,C,D,E due to livestock levels/downward trend
Sheep Cr.	*	0.6 mi	Fair	249	15-16 N.	6 W.	F	F	F	F	F	Maintain in all alternative
	*	0.6 mi	Good	249			F	G	G	G	G	Good to fair in A due to stocking rate/ downward trend
Dennett Cr.		0.2 mi	Good	377	15 N.	6 W.	G	G	G	G	G	Maintain due to fencing proposal
	*	0.5 mi	Fair	380			G	G	G	G	G	To good in all due to fencing proposal
	*	1.6 mi	Good	380			G	G	G	G	G	Maintain in all due to fencing proposal
Golden Goose Canyon	*	0.2 mi	Fair	369	14 N.	6 W.	F	F	F	F	F	Maintain in all alternatives
	*	0.8 mi	Good	369			F	F	G	F	G	To fair in A,B,D due to livestock levels/ downward trend
Sumac Cr.	*	1.3 mi	Fair	369	14 N.	6 W.	F	F	F	F	F	Maintain in all alternatives
Thorn Spring Cr.	*	0.4 mi	Fair	369	14 N.	6 W.	F	F	F	F	F	Maintain in all alternatives
Trib. of Wolf Cr.	*	1.0 mi	Good	142	13 N.	6 W.	G	G	G	G	G	Maintain in all alternatives
Rock Cr.	*	0.4 mi	Fair	207	13 N.	6 W.	G	G	G	G	G	To good in all due to fencing proposal
		1.0 mi	Good	214			G	G	G	G	G	Maintain due to fencing proposal
		0.3 mi	Fair	214			G	G	G	G	G	To good in all due to fencing proposal
Trib. to Rock Cr.		1.1 mi	Good	032	13 N.	6 W.	G	G	G	G	G	Maintain in all alternatives
Indian Cr. (South)	*	0.5 mi	Fair	005	9 N.	2 W.	F	F	F	F	F	Maintain in all alternatives
	*	1.7 mi	Good	370,005			G	G	G	G	G	Maintain in all alternatives
	*	0.7 mi	Excellent	370			Ex	Ex	Ex	Ex	Ex	Maintain in all alternatives
Rattlensake Cr.	*	0.8 mi	Fair	191	9 N.	2 W.	F	F	F	F	F	Maintain in all alternatives
	*	0.5 mi	Good	191			G	G	G	G	G	Maintain in all alternatives
Weiser River	*	0.5 mi	Poor	066,361,202	11-12 N.	4 W.	P	P	P	P	P	Maintain in all alternatives
	*	1.9 mi	Fair	230,202,361 243, 187			F	F	F	F	F	Maintain in all alternatives
	*	2.4 mi	Good	230,361,243 187			G	G	G	G	G	Maintain in all alternatives
Crane Cr.	*	1.3 mi	Fair	361,304,062	11-12 N.	2-3 W	F	F	F	F	F	Maintain in all alternatives
	*	2.8 mi	Good	361,304,062			G	G	G	G	G	Maintain in all alternatives
Trib. to Crane Cr.	*	0.7 mi	Fair	361	11 N.	3 W.	F	F	F	F	F	Maintain in all alternatives
	*	0.4 mi	Good	361			G	G	G	G	G	Maintain in all alternatives

Creek	Length	Existing Habitat Condition	Location: Allotment	Location: Town-ship	Location: Range	Alternatives A	B	C	D	E	Comments
S. Fk. Payette River	0.8 mi	Fair	N/A	9 N.	3-4 E	F	F	F	F	F	Maintain in all alternatives
	2.0 mi	Good	N/A			G	G	G	G	G	Maintain in all alternatives
Deer Cr. *	1.0 mi	Good	003	9 N.	4 E.	G	G	G	G	G	Maintain in all alternatives
Trib. to Deer Cr. *	1.9 mi	Good	003	9 N.	4 E.	G	G	G	G	G	Maintain in all alternatives
Cove Cr.	0.8 mi	Fair	301,021	10 N.	3 W.	F	F	F	F	F	Maintain in all alternatives
	0.7 mi	Good	301,021			G	G	G	G	G	Maintain in all alternatives
Little Willow Cr. *	2.3 mi	Fair	191	10 N.	2 W.	G	F	F	G	F	To good in A,D due to fencing proposal
	1.2 mi	Good	191			G	G	G	G	G	Maintain in all alternatives
Big Willow Cr. *	0.1 mi	Fair	393	9 N.	1 W.	G	G	G	G	G	To good in A,B,C,D,E due to fencing proposal
	1.1 mi	Good	393			G	G	G	G	G	Maintain in all alternatives
Trib. to Big Willow *	0.6 mi	Fair	005	9 N.	1 W.	F	F	F	F	F	Maintain in all alternatives
Four Mile Cr. *	1.6 mi	Fair	005	9 N.	1 W.	F	F	F	F	F	Maintain in all alternatives
Dry Cr. *	1.8 mi	Good	005	9 N.	1-2 W	G	G	G	F	G	To fair in D due to livestock increases
Coonrod Gulch *	0.6 mi	Fair	005	9 N.	1 W.	F	F	F	F	F	Maintain in all alternatives
	0.1 mi	Good	005			G	G	G	G	G	Maintain in all alternatives
Sucker Cr. *	1.1 mi	Good	393	8 N.	1 W.	G	F	G	F	G	To fair in B,D due to livestock increases
Squaw Cr. *	0.6 mi	Good	391	8 N.	1 E.	G	F	G	F	G	To fair in B,D due to livestock increases
Box Cr.	0.9 mi	Excellent	N/A	20 N.	3 E.	Ex	Ex	Ex	Ex	Ex	Maintain in all alternatives
Kennally Cr.	0.2 mi	Poor	178	17 N.	4 E.	P	P	P	P	P	Maintain in all alternatives
	0.4 mi	Good	178			G	G	G	G	G	Maintain in all alternatives
	0.2 mi	Excellent	178			Ex	Ex	Ex	Ex	Ex	Maintain in all alternatives
Rapid Cr.	0.1 mi	Poor	178	17 N.	4 E.	P	P	P	P	P	Maintain in all alternatives
	0.1 mi	Fair	178			F	F	F	F	F	Maintain in all alternatives
	0.3 mi	Good	178			G	G	G	G	G	Maintain in all alternatives
Sloans Cr.	1.0 mi	Good	038	16 N.	4 E.	G	G	G	G	G	Maintain in all alternatives
Shafer Cr.	1.0 mi	Good	070,045,278	6 N.	2 E.	G	G	G	G	G	Maintain in all alternatives
Harris Cr.	0.3 mi	Good	278	6 N.	2 E.	G	G	G	G	G	Maintain in all alternatives
Grizzly Cr.	1.0 mi	Good	041	13 N.	1 E.	G	G	G	F	G	To fair in D due to livestock increases
Mill Cr.	1.0 mi	Fair	041	13 N.	1 E.	F	F	F	F	F	Maintain in all alternatives
	1.3 mi *	Good	261			G	G	G	G	G	Maintain in all alternatives
Road Gulch *	1.7 mi	Good	006	12 N.	1 E.	G	F	G	F	G	To fair in B,D due to livestock increases
Sheep Cr. *	0.4 mi	Fair	006	11 N.	1 E.	F	F	F	F	F	Maintain in all alternatives
	1.0 mi *	Good	006			G	F	G	F	G	To fair in B,D due to livestock increases
Spring Cr. 1 *	1.0 mi	Unsuit.	284	12 N.	1 E.	Uns	Uns	Uns	Uns	Uns	Maintain in all alternatives
Spring Cr. 2 *	0.6 mi	Unsuit.	284	12 N.	1 W.	Uns	Uns	Uns	Uns	Uns	Maintain in all alternatives
Grays Cr. *	1.8 mi	Good	043	14 N.	1 E.	G	G	G	G	G	Maintain in all alternatives
N. Fk. Grays Cr.	0.3 mi	Good	293	15 N.	1 E.	G	G	G	G	G	Maintain in all alternatives
Middle Fk. Weiser R.	0.1 mi	Good	236	15 N.	1 E.	G	G	G	G	G	Maintain in all alternatives
Cottonwood Cr.	2.2 mi	Good	311	3-4 N	3 E.	G	G	G	G	G	Maintain in all alternatives
Trib to Cottonwood Cr	0.7 mi	Fair	311	4 N.	3 E.	F	F	F	F	F	Maintain in all alternatives
Orchard Gulch	1.2 mi	Good	311	4 N.	3 E.	G	G	G	G	G	Maintain in all alternatives
Hulls Gulch	2.8 mi	Good	311	4 N.	3 E.	G	G	G	G	G	Maintain in all alternatives
Picket Pin Cr.	0.5 mi	Fair	311	3 N.	3 E.	F	F	F	F	F	Maintain in all alternatives
Deer Cr. *	0.9 mi	Fair	043	14 N.	1 E.	F	F	F	F	F	Maintain in all alternatives
	1.3 mi *	Good	043			G	G	G	G	G	Maintain in all alternatives
Crumley Gulch	2.3 mi	Good	278	6 N.	3 E.	G	G	G	G	G	Maintain in all alternatives
King Hill Cr.	0.4 mi	Good	041	14 N.	1 E.	G	G	G	G	G	Maintain in all alternatives
Grouse Cr. *	0.8 mi	Good	194	12 N.	7 W.	G	G	G	G	G	Maintain in all alternatives
Adams Cr.	0.2 mi	Fair	SD	13 N.	5 W.	F	F	F	F	F	Maintain in all alternatives
Picket Pin Cr. *	1.6 mi	Fair	309	3 N.	3 E.	G	G	G	G	G	To good in A,B,C,D,E due to revised AMP
Wildhorse River	1.9 mi	Good	280,013	18 N.	4 W.	G	G	G	G	G	Maintain in all alternatives
Unnamed Drainages of *	4.5 mi	Fair	225,194,195	11-16	6-7 W	F	F	F	F	F	Maintain in all alternatives
Brownlee Reservoir			364,368	N.							
	8.5 mi	Good				G	G	G	G	G	Maintain in all alternatives
Unnamed Drainages *	3.5 mi	Fair	016	15-16	2 W.	F	F	F	F	F	Maintain in all alternatives
				N.							
Unnamed Trib. of *	1.0 mi	Fair	233	14 N.	4 W.	F	F	F	F	F	Maintain in all alternatives
Hopper Cr. *	2.3 mi	Good	233			G	G	G	G	G	Maintain in all alternatives
Polk Cr. *	1.0 mi	Good	393	8 N.	1 W.	G	F	G	F	G	To fair in B,D due to livestock increases

* Portions of these streams are in allotments with proposed new or revised AMPs. Improvement will occur though it may not be to the next higher condition class.

Unsuit. - Unsuitable Rating

SD - Stock Driveway

APPENDIX J

AQUATIC/FISHERIES HABITAT CONDITION

Watershed and Creek	Location: Allotment	Location: Township	Location: Range	Miles of Potential Fishery Habitat Not Surveyed	Habitat Condition - Existing Situation: Excellent	Habitat Condition - Existing Situation: Good	Habitat Condition - Existing Situation: Fair	Habitat Condition - Existing Situation: Poor	Total of Surveyed Miles	Alternative A Habitat Condition: Excellent	Alternative A Habitat Condition: Good	Alternative A Habitat Condition: Fair	Alternative A Habitat Condition: Poor	Alternative B: Excellent	Alternative B: Good	Alternative B: Fair	Alternative B: Poor	Alternative C: Excellent	Alternative C: Good	Alternative C: Fair	Alternative C: Poor	Alternative D: Excellent	Alternative D: Good	Alternative D: Fair	Alternative D: Poor	Alternative E: Excellent	Alternative E: Good	Alternative E: Fair	Alternative E: Poor
Boise River Watershed																													
Granite Creek	1278	7 N.	4 E.	1.8																									
Grimes Creek	1278	7 N.	5 E.	1.4																									
Elk Creek	1278	6 N.	5 E.	0.8																									
Payette River Watershed																													
Box Creek	N/A	20 N.	3 E.		0.8				0.8	0.8				0.8				0.8				0.8				0.8			
Poorman Creek	N/A	18 N.	4 E.	0.6																									
Paddy Creek	N/A	17 N.	4 E.		0.9				0.9	0.9				0.9				0.9				0.9				0.9			
Rapid Creek	178	17 N.	4 E.		0.7				0.7	0.7				0.7				0.7				0.7				0.7			
Kennally Creek	178	17 N.	4 E.		0.7				0.7	0.7				0.7				0.7				0.7				0.7			
Sloans Creek	038	16 N.	4 E.	0.5																									
N. Fk. Payette River	N/A	17 N.	3 E.				3.0		3.0			3.0				3.0				3.0				3.0				3.0	
	308,166,183	13 N.	4 E.				3.7		3.7			3.7				3.7				3.7				3.7				3.7	
	N/A	12 N.	4 E.			0.6			0.6		0.6				0.6				0.6				0.6				0.6		
	115,037,003, 256,289	8 N.	3 E.			5.6			5.6		5.6				5.6				5.6				5.6				5.6		
S. Fk. Payette River	115,003	9 N.	3-4 E			7.3			7.3		7.3				7.3				7.3				7.3				7.3		
Deer Creek	003	9 N.	4 E.				1.1		1.1			1.1				1.1			1.1						1.1			1.1	
Smith Creek	092	9 N.	4 E.			0.8			0.8		0.8					0.8			0.8					0.8			0.8		
Lt. Gooseberry Creek	092	9 N.	4 E.			1.5			1.5		1.5					1.5			1.5					1.5			1.5		
Gooseberry Creek	092	9 N.	4 E.			1.4			1.4		1.4					1.4			1.4					1.4			1.4		
Anderson Creek	092	9 N.	4 E.			0.6			0.6		0.6					0.6			0.6					0.6			0.6		
Charters Creek	064	9 N.	4 E.				0.9		0.9			0.9				0.9				0.9				0.9				0.9	
Coski Creek	267	8 N.	4 E.				0.5		0.5			0.5				0.5				0.5				0.5				0.5	
Shilling Creek	267	8 N.	4 E.				0.3		0.3			0.3				0.3				0.3				0.3				0.3	
McKenzie Creek	267	8 N.	4 E.				0.3		0.3			0.3				0.3				0.3				0.3				0.3	
Longs Creek	267	8 N.	4 E.				0.3		0.3			0.3				0.3				0.3				0.3				0.3	
Alder Creek	267	8 N.	4 E.			1.3			1.3		1.3				1.3				1.3				1.3				1.3		
Shafer Creek	278,045,070	6 N.	2 E.				1.5		1.5			1.5				1.5			1.5					1.5			1.5		
Harris Creek	278	6 N.	2 E.				0.4		0.4			0.4				0.4				0.4				0.4			0.4		
Custer Creek	278	5 N.	2 E.			0.5			0.5		0.5				0.5				0.5				0.5				0.5		
Lt. Willow Creek	191	10 N.	2 W.				3.0		3.0		3.0					3.0				3.0			3.0					3.0	
Indian Creek	370,074	9 N.	2 W.			3.0			3.0		3.0				3.0				3.0				3.0				3.0		
Big Willow Creek	005,393	9 N.	1 W.				3.1		3.1		3.1				3.1				3.1				3.1				3.1		
Weiser River Watershed																													
Weiser River	303,187,230,361 258,267,076	11-18 N	1-4 W				1.0	5.5	6.5			1.0	5.5			1.0	5.5			1.0	5.5			1.0	5.5			1.0	5.5
Lt. Weiser River	041	14 N.	1 E.				0.7		0.7			0.7				0.7			0.7				0.7				0.7	
Goodrich Creek	016	15-16 N	2 W.			1.0			1.0		1.0				1.0			1.0					1.0				1.0	
Keithly Creek	233	14 N.	4 W.			1.8			1.8		1.8				1.8			1.8					1.8				1.8	
East Keithly Creek	233	14 N.	4 W.			1.3			1.3		1.3				1.3			1.3					1.3				1.3	
Sage Creek	208	14 N.	5 W.			1.6			1.6		1.6				1.6			1.6					1.6				1.6	
Manns Creek	208	13 N.	5 W.			1.6			1.6		1.6				1.6			1.6					1.6				1.6	
Adams Creek	N/A	13 N.	5 W.			0.3			0.3		0.3				0.3				0.3				0.3				0.3	
Fir Creek	068,027	13 N.	5 W.			2.4			2.4		2.4				2.4				2.4				2.4				2.4	
Lt. Pine Creek	156	16 N.	4 W.				0.7		0.7		0.7				Transfer			0.7					Transfer					0.7	
Crane Creek	361,304,062	11-12 N	2-3 W				7.8		7.8			7.8				0.2	7.6			7.8				0.2	7.6			7.8	
King Hill Creek	041	14 N.	1 E.			0.3			0.3		0.3				0.3				0.3				0.3				0.3		
Snake River Watershed																													
Indian Creek	280	19 N.	4 W.		1.1				1.1	1.1				1.1				1.1					1.1			1.1			
Wildhorse River	280,013	18 N.	4 W.		2.0				2.0	2.0				2.0				2.0				2.0				2.0			
No Business Creek	013	18 N.	4 W.	0.6																									
Dukes Creek	139	17 N.	4 W.				1.0		1.0		1.0				Transfer				Transfer				Transfer				Transfer		
Sturgill Creek	249	15-16 N	6 W.	0.8																									
Dennett Creek	377	14 N.	6 W.					0.3	0.3		0.3				0.3				0.3				0.3				0.3		
North Dennett Creek	378,380,204	14 N.	6 W.					0.8	0.8		0.8				0.8				0.8				0.8				0.8		
South Dennett Creek	380	14 N.	6 W.					2.3	2.3		2.3				2.3				2.3				2.3				2.3		
Rock Creek	368,207,214,032	13 N.	6-7 W					3.1	3.1		3.1				3.1				3.1				3.1				3.1		
Grouse Creek	194	12 N.	7 W.				0.9		0.9		0.9					0.9			0.9				0.9					0.9	
Wolf Creek	369	14 N.	6-7 W	0.7																									
TOTALS				7.2	6.2	32.9	30.2	12.0	81.3	6.2	48.1	21.5	5.5	6.2	38.2	22.1	13.1	14.2	39.4	21.2	5.5	5.1	43.2	17.1	14.2	6.2	45.1	23.5	5.5

APPENDIX K

VISUAL RESOURCE MANAGEMENT

The Visual Resource Management (or VRM) system provides Bureau managers with a means for determining visual resource values so that visual resources can be considered in the planning and design of management activities. The inventory consists of a scenic quality evaluation, sensitivity level analysis, and a determination of distance zones. Based upon these three factors, each area of land is then classified into one of four visual resource classes. Each class has an objective for maintaining visual resources, with allowances for visual change in the existing landscape. The various classes are then submitted, as inventoried, for consideration in developing Resource Management Plans (RMP). Following management review, adjustments to the visual classes are made if necessary and the approved class objectives become part of the Resource Management Plan.

The objective of Class I is to preserve the existing character of the landscape. Only congressionally authorized wilderness areas, wild rivers, and designated natural areas will be recommended for Class I. The level of change to existing visual resources conditions will probably be extremely low because only very limited development (e.g., hiking trails) will occur in these areas. This class is primarily intended to accommodate the needs of programs such as wilderness management and botanical or scientific studies.

The objective of Class II is to retain the existing character of the landscape. The change to existing visual resource conditions can be low. Management activities can be seen but should not be noticeable to the casual observer. Changes must repeat the basic elements of form, line, color and texture found in the predominant features of the characteristics landscape.

The objective of Class III is to partially retain the existing character of the landscape. The change to existing visual resource conditions can be moderate. Management activities can attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant features of the characteristic landscape.

The objective of Class IV is to plan for major modification of the existing character of the landscape. The change to existing visual resource conditions can be high. Management activities can dominate the view and be the major focus of viewer attention. Repetition of the basic elements is not necessary, but should be done if feasible. (See Bureau Manuals 8400, 8410, 8431 for more detail on the VRM system.)

APPENDIX L

RECREATION OPPORTUNITY SPECTRUM

Recreation Opportunity Spectrum (or ROS) is a conceptual framework designed for inventory, planning and management of public lands from a recreation perspective. Six ROS classes describe settings for recreation from the very developed urban setting at one end of the spectrum to the undeveloped, natural setting of a wilderness at the other.

ROS classifications are determined on the basis of physical, social and managerial setting criteria. Physical setting criteria include remoteness, size of area, and evidence of human use. Social setting criteria reflect the level and types of contacts between individuals or groups which can be expected in an area. Managerial setting criteria reflect the kind and extent of management services and facilities provided to support recreation use, and the restrictions placed on people's actions by the administering agency.

ROS can be used to describe the existing situation or a situation to develop for the future. It recognizes the diversity of needs and desired experiences of recreationists as a whole. (Please see Bureau Manual 8320, titled Planning for Recreation Resources, for a detailed description of ROS.)

APPENDIX M

ECONOMIC SAMPLE CALCULATION

Crop	Yield/Acre[1]	Price[2]	Sales/ Acre	% of Total	Total Sales
Alfalfa Estab.	1.0 ton	$71.15	71.15	1	$ 0.71
Alfalfa	7.0 ton	71.15	498.05	5	24.90
Winter Wheat	105.0 Bu	3.99	418.95	17	71.22
Barley	113.0 Bu	2.94	332.22	17	56.48
Potatoes	425.0 CWT	5.12	2,176.00	22	478.72
Sugar Beets	32.0 ton	42.86	1,371.52	17	233.16
Dry Edible Beans	28.0 CWT	17.69	495.32	21	104.02
					$969.21

1/ As estimated for Soil Class 2, Canyon County.
2/ FY-1985 Normalized Crop Price.

Sales Per Acre	= $ 969	
Total Acres	= 560	
TOTAL Sales	= $542,600	
Earnings/Gross Output Ration	= .383	(U.S.D.C., B.E.A. 1977)
Direct Earnings	= $207,800	
Gross Output Multiplier	= 2.549	(U.S.D.C., B.E.A. 1977)
TOTAL Earnings	= $529,700	

Total Farm Earnings	= $96,317,000
% Direct of Total Farm	= 0.2%

Total RMP Area Earnings	= $2,336,753,000
% Total of Total RMP Earnings	= 0.02%

Employment Calculations

Direct Earnings	= $207,800	- $28,000	=	7 jobs
Secondary Earnings	= 321,900	- $19,000	=	17 jobs
TOTAL Earnings	= $529,700			24 jobs

APPENDIX N

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 the Cascade Resource Area.
2/ May include several Standard Industrial Classifications.

APPENDIX O

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	$\frac{1}{2.549}(.511) + (-\frac{1}{2.549})(.3008)$	0.383
18	$\frac{1}{2.022}(.289) + (-\frac{1}{2.022})(.3008)$	0.295
19	$\frac{1}{2.774}(.095) + (-\frac{1}{2.774})(.3008)$	0.227
27	$\frac{1}{2.191}(.138) + (-\frac{1}{2.191})(.3008)$	0.227
29	$\frac{1}{2.183}(.040) + (-\frac{1}{2.183})(.3008)$	0.179
34	$\frac{1}{2.060}(.220) + (-\frac{1}{2.060})(.3008)$	0.261
38	$\frac{1}{2.395}(.239) + (-\frac{1}{2.395})(.3008)$	0.275
46	$\frac{1}{2.122}(.317) + (-\frac{1}{2.122})(.3008)$	0.308
53	$\frac{1}{1.978}(.311) + (-\frac{1}{1.978})(.3008)$	0.306
54	$\frac{1}{2.262}(.513) + (-\frac{1}{2.262})(.3008)$	0.395
55	$\frac{1}{1.803}(.160) + (-\frac{1}{1.803})(.3008)$	0.223
56	$\frac{1}{2.296}(.487) + (-\frac{1}{2.296})(.3008)$	0.382

1/ Calculation Routine Described in U.S. Water Resources Council - pg. 18

APPENDIX P

MONITORING AND EVALUATION

The decisions outlined in the Cascade 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 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 or exclusion of livestock via fencing.

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 consistant 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 the Plan Decision Document. 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.

For timber management, monitoring will be on a stand basis for determining the need and timing of silvicultural practices or adjustment in harvesting techniques. The program will be monitored to ensure compliance with both timber harvest and aquatic 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, forestry activities, and grazing 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.

The discussion and outline below describes the approach and criteria for monitoring water quality, wetlands and riparian areas.

Monitoring will be conducted to resolve problems with management activities and evaluate management objectives as to whether or not they are being achieved, and if not, why not, and to recommend future actions. Where the management activity is ineffective, the manager will be notified so that other options can be initiated. In addition, effective management will be documented to make available a data base containing management activities and their associated effectiveness.

Monitoring will be conducted at a level commensurate with the level of site instability and sensitivity of the beneficial uses. Monitoring intensity as described by Meyers (1986) will be used as a guide. Level I (low level) monitoring will normally be conducted in areas that are producing few resource benefits that are generally not deteriorated and are not sensitive to change. Level II (high level) monitoring will normally be conducted where resource values are high and sensitive to change, or where there is a high potential for improvement from a low value condition, or where resource values are suspected of being impacted.

Monitoring plans will be formulated by providing clear descriptions of the prescribed management activity, the affected resource, the variables which the management activity will influence, the indicator variables which will test the attainment of management objectives, and the standards by which these indicator variables will be measured. Indicator variables will need to relate to the affected resource (i.e., beneficial use) in order to answer the monitoring question of whether or not there is a change and what the change is.

Monitoring plans developed for water quality/wetlands/riparian areas will generally include the elements of the following outline:

Water Quality/Wetlands/Riparian Area Monitoring Plan.

I. Planning

A. Description of management activity to be monitored.
B. Description of affected resource (beneficial uses and standards).
C. Description of processes connecting the management activity and affected resource.
D. Description of possible and anticipated impacts.
E. List of potential variables to monitor that relate to A-D above.
F. Evaluation of the variables with respect to:
   1. Effectiveness and usefulness to detect change.
   2. Implementation (costs, difficulty, etc.).
   3. Methodologies (temporal/spacial frequencies should be discussed).
G. Final monitoring variable list.

II. Implementation

A. Schedule
B. Data Collection
C. Data Analysis/Interpretation
D. Feedback
   1. Modification to activity
   2. Update of monitoring
   3. Effectiveness of monitoring
   4. Prepare monitoring report

Meyers, L. 1986. "Riverine Riparian Inventory and Monitoring," Draft. BLM Handbook, August 1986.

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	2/	3/
	3 (less intensive areas)	1/			
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				
Water Quality	"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 Q

WILDLIFE HABITAT ANALYSIS AND IMPACT PREDICTION METHODOLOGY

The condition and abundance of wildlife populations is highly dependent on the quality of their habitat (Dasmann 1964). Optimum food, water, and cover factors will produce healthy herds, capable of surviving periods of stress.

Major vegetation classes in the RMP area were identified using LANDSAT. Each class was analyzed as to its vegetative quality and given a range condition rating of poor, fair or good. The amount of quality forage plants and vegetative species characteristics (nutritional values, annual or perennial) were used to determine the rating of an individual vegetation class. In all cases, the good rating class provided the best wildlife habitat condition.

In Chapter 2 analysis, the term wildlife unit months was used for elk, deer and antelope. This term stands for EUMs (elk unit months), DUMs (deer unit months), AtUMs (antelope unit months).

An EUM is defined as the amount of forage needed to sustain one elk for 30 days. The same definition applies to deer and antelope respectively.

Winter use is defined as use during the months of December, January, February, and March. Yearlong use is defined as habitat use for all 12 months of the calender year.

The effects of each alternative were analyzed for each major wildlife species. Grazing systems, stocking rates, AMPs, season-of-use, timber harvest, and lands actions were major variables included in the final estimate of the impacts on wildlife. The final impacts were then compared to the population goals set for the areas by the Idaho Department of Fish and Game.

APPENDIX R

VEGETATION CONDITION CHANGE BY ALTERNATIVE

Range Condition Class	Present Status (acres)	Vegetation Condition Change by Alternative (Approximations) 1/				
		A	B	C	D	E
Excellent	1/2% (1,922)	NC	NC	NC	NC	NC
Good	7% (33,301)	-2%	+8%	+38%	+3%	+11%
Fair	47% (210,315)	-3%	+28%	+35%	+25%	+32%
Poor	43 1/2% (198,563)	-3%	+11%	+7%	+6%	+12%
Seeded (acres) 2/	2% (9,730)	NC	6% (26,400)	3% (19,000)	7% (37,000)	5% (24,279)
Total of RMP area change		3-5%	18-23%	20-25%	14-19%	22-27%

1/ This reflects change within the specific range condition class and may or may not result in a change in condition class (i.e., fair going to good).

2/ This reflects nonnative seedings dominantly on poor condition rangeland. Percentage is that of total RMP area.

APPENDIX S

WITHDRAWALS

COUNTY	SERIAL #	AGNCY	POPULAR NAME	TOWN	RANG	SEC	LAND DESCRIPTION	ACRES
ADA	I01166B	BLM	SD WITHDRAWAL	0005N	0001W	21	E1/2SW1/4,N1/2SE1/4	160.00
						22	N1/2SW1/4,W1/2SE1/4,SE1/4SE1/4	200.00
						26	S1/2N1/2	160.00
						29	N1/2N1/2	160.00
	I016372	COE	LUCKY PEAK RESERVOIR	0002N	0004E	6	NE1/4SE1/4NE1/4,LOT 7	51.04
	I04381	COE	LUCKY PEAK RESERVOIR	0002N	0004E	5	LOTS 4,5,6,7	129.80
						6	LOTS 6,8,9,10,S1/2S1/2NE1/4,S1/2NE1/4SW1/4,NW1/4SE1/4	247.73
						7	NE1/4NE1/4	40.00
				0003N	0004E	17	NW1/4SE1/4	40.00
						21	SE1/4NW1/4	40.00
						31	E1/2SE1/4NE1/4,E1/2NE1/4SE1/4,NE1/4SE1/4SE1/4	50.00
						32	LOTS 6,8,9	73.20
	I14893	BR	RECLAMATION PROJECT (NO NAME)	0002N	0003E	3	LOTS 5,6,7,8	124.70
	I14981	BR	BOISE VALLEY RECL PROJ	0002N	0001W	3	LOT2	40.20
	I15352	BLM	PW RES 107	0005N	0001W	26	NW1/4SW1/4	40.00
	I15587	COE	ARMY RESERVE TRAINING CENTER	0003N	0002E	2	METES & BOUNDS	7.16
						3	METES & BOUNDS	----
	I15588	VA	BOISE BARRACKS	0003N	0002E	---	(SEE METES & BOUNDS DESCRIPTION IN EXECUTIVE ORDER)	110.00
	I15631	FERC	PWR S RES 132	0002N	0004E	5	LOTS 4,5,6,7	129.80
						6	LOTS 6,8,9,10,SE1/4 NE1/4,NW1/4 SE1/4,S1/2 NE1/4 SW1/4	247.73
				0003N	0004E	32	LOTS 6,8,9	73.20
	I2508	FS	ADM-BOISE INTRAGNCY FIRE CNTR	0003N	0002E	27	SE 1/4 NW 1/4 NE 1/4 SW 1/4	2.50
	I2587	BLM	BIFC ADM SITE	0003N	0002E	27	W1/2NW1/4NE1/4SW1/4,NW1/4SW1/4,SE1/2NE1/4SW1/4	----
						28	METES&BOUNDS	70.80
	I2788	BLM	C&MU CLASSIFICATION	0005N	0001W	30	LOT1	37.31
	I9530	BLM	R&PP CLASSIFICATION	0004N	0001W	17	LOT7	24.55
ADAMS	I015280	FERC	PWR S CL 455	0014N	0001E	27	W1/2NW1/4	80.00
						28	SE1/4SW1/4,N1/2SE1/4	120.00
						32	NE1/4SE1/4	40.00
						33	SW1/4NE1/4,NE1/4NW1/4,SW1/4NW1/4,NW1/4SW1/4	160.00
				0015N	0001W	5	LOTS 3,4	78.97
						6	LOTS 1,2	79.35
					0002W	2	SE1/4NE1/4,SW1/4SW1/4,N1/2SE1/4	160.00
						3	N1/2SE1/4	80.00
						9	SE1/4SE1/4	40.00
				0016N	0001W	21	NW1/4NE1/4	40.00
						29	NE1/4SE1/4	40.00
						31	SW1/4NE1/4,W1/2SE1/4	120.00
						32	SE1/4SW1/4	40.00
	I14652	FERC	PWR PROJ 1971	0018N	0004W	17	LOTS 1,2,3,4,NE1/4 SE1/4	181.37
						19	LOT 1	0.39
						20	LOTS 1,2,3,4	134.82
						30	LOTS 1,2,3,4	152.78
						31	LOT 1	39.03
						4	LOT 2	44.92
						8	LOT 1	30.87
						9	LOTS 1,2,3	97.69
				0019N	0004W	17	LOTS 1,2,4,5	188.50
						20	LOT 2	34.40
							LOTS 3,4	42.00
						21	LOT 4	21.70
							LOTS 1,2	72.40
						29	LOTS 1,4	63.70
						5	LOTS 1,2,3,4	134.00
						8	LOTS 1,2,3,4	130.52
				0020N	0004W	32	LOTS 1,2	83.80
						33	LOTS 1,2	76.73
	I15639	FERC	PWR S RES 227	0017N	0004W	5	LOT 3,SW1/4 NW1/4	81.43
						6	LOTS 2,3,4,SE1/4 NW1/4,S1/2 NE1/4	229.36
				0018N	0004W	27	NE1/4NE1/4,SW1/4NE1/4,NW1/4SE1/4NE1/4,SE1/4NW1/4,W1/2SW1/4,N1/2NW1/4	270.00
						32	N1/2 SW1/4,SW1/4 SW1/4,NE1/4 NE1/4 SE1/4,NW1/4 NE1/4 SE1/4,E1/2 SE1/4	185.00
						33	E1/2 NE1/4 NE1/4,NW1/4 NE1/4 NE1/4,N1/2 SE1/4 NE1/4 NE1/4,NE1/4 NW1/4	290.00
							(CONT) SE1/4 NE1/4 SW1/4,NW1/4 NW1/4 SW1/4,SW1/4 NW1/4 SW1/4,SE1/4 NW1	----
							(CONT) S1/2 NW1/4 SE1/4 NE1/4,SW1/4 SE1/4 NE1/4,SE1/4 SE1/4 NE1/4,NE1/	----
						34	W1/2 NE1/4 NW1/4,W1/2 NW1/4	100.00
	I15640	FERC	PWR S RES 226	0018N	0004W	17	LOTS 1,2,3,4	141.37
						19	LOT 1	0.39
						20	LOTS 1,2,3,4	134.82
						30	LOTS 1,2,3,4	152.78
						31	LOT 1	39.03
						8	LOT 1	30.87
						9	LOTS 1,2,3	97.69
				0019N	0004W	17	LOTS 1,2,4,5	188.50
						20	LOT 2,3,4	76.40
						21	LOT 4	21.70
						29	LOTS 1,4	63.70
						5	LOTS 1,2,3,4	134.00
						8	LOTS 1,2,3,4	130.52
				0020N	0004W	32	LOTS 1,2	83.80
						33	LOTS 1,2,SE1/4 NW1/4	76.73
	I15693	FERC	PWR S CL 420	0018N	0004W	30	LOT 1 NE1/4NE1/4,SW1/4NE1/4 PART OF LOT 2	24.60
				0019N	0004W	4	LOT 4,SW1/4NW1/4	78.61
	I15702	FERC	PWR S CL 78	0020N	0004W	11	LOTS 1,2,3,4	118.79
						14	LOT 1,2,NW1/4SE1/4	77.52
						22	LOT 1 AND PORTIONS OF SW1/4SE1/4,SE1/4SE1/4	23.53
						23	SW1/4NW1/4,LESS HES 296	11.50
						28	LOT 1,2,3	64.80
	I15722	FERC	PWR PROJ 419	0013N	0001E	5	LOT 8,NW1/4 SW1/4	80.00
						6	SE1/4 SE1/4	40.00
						7	N1/2 NE1/4,NE1/4 NW1/4	120.00
				0014N	0001E	32	NE1/4 SE1/4	40.00
						33	SW1/4 NW1/4,NW1/4 SW1/4	80.00

COUNTY	SERIAL #	AGNCY	POPULAR NAME	TOWN	RANG	SEC	LAND DESCRIPTION	ACRES
BOISE	I017335	BLM	PONDEROSA PINE SEED ORCHARD	0006N	0005E	27	NE1/4NE1/4SE1/4,W1/2NE1/4SE1/4,NW1/4SE1/4	70.00
	I04381	COE	LUCKY PEAK RESERVOIR	0003N	0004E	15	LOTS 1,2,3,7,8,9	179.63
	I14925	BR	OWYHEE RECL PROJ	0009N	0003E	23	LOTS1,2,3,SW1/4NW1/4,NE1/4SW1/4,SW1/4SE1/4	233.67
						24	SW1/4SE1/4	40.00
						25	LOTS1-8INCL	304.29
						26	LOTS 1-5INCL,W1/2NW1/4,SE1/4NW1/4	345.17
					0004E	20	LOTS1,2,6,7,8,E1/2SE1/4	234.66
						21	LOTS 5,6	91.99
						29	LOTS2,3,SE1/4NW1/4	78.65
						30	LOTS6,7,9-12INCL,SE1/4	383.11
	I15071	BR	BOISE RECL PROJ	0008N	0004E	1	LOTS-1,2,3,4,5,6,S 1/2 NW 1/4,S 1/2	593.28
						11	SW 1/4	160.00
	I15072	BR	BOISE RECL	0008N	0004E	10	W 1/2 W 1/2	160.00
						11	LOTS-3,4,S 1/2 NW 1/4	105.98
						2	LOT 1,SE 1/4 NE 1/4, S 1/2 SW 1/4, NE 1/4 SE 1/4	199.76
						3	LOTS-3,4,5,6,S 1/2 NW 1/4, W 1/2 SW 1/4	285.08
			BOISE RECL PROJ	0009N	0003E	24	SW 1/4 SE 1/4	40.00
						25	LOTS 9,10,W 1/2 SE 1/4, SW 1/4	319.40
						26	S1/2	360.00
					0004E	13	LOTS 1,2,3	121.80
						14	LOTS 6,7	83.58
						17	LOTS 3,4,SW1/4SE1/4	111.48
						2	LOT 6	33.12
						26	SW1/4NE1/4,N1/2SE1/4	120.00
						28	4 SW 1/4, W 1/2 SE 1/4	200.00
						29	NW 1/4 NE 1/4	40.00
						33	LOTS 1,2,S 1/2 NE 1/4	159.32
						34	SW 1/4 NW 1/4, SW 1/4	200.00
						35	LOT 8	23.40
				0010N	0004E	13	N 1/2 NE 1/4, SE 1/4 NE 1/4, SW 1/4 NW 1/4, E 1/2 SE 1/4	240.00
						22	SE 1/4 NW 1/4	40.00
						26	NW 1/4 NE 1/4	40.00
			BOISE RECL PROJECT	0007N	0002E	11	LOT 5	2.55
	I15304	BLM	SD 29	0006N	0002E	11	NE1/4NE1/4	40.00
						12	S1/2NE1/4,N1/2NW1/4,SE1/4NW1/4,NE1/4SE1/4	320.00
						2	SE1/4SE1/4	40.00
					0003E	4	LOT4	36.45
						5	LOTS1,2,3,SW1/4NE1/4,S1/2NW1/4,N1/2SW1/4,SW1/4SW1/4	347.58
						6	SE1/4SW1/4,NE1/4SE1/4,S1/2SE1/4	160.00
						7	LOTS2,3,NE1/4NW1/4,E1/2SW1/4	159.80
				0007N	0003E	33	LOTS3,4,N1/2NE1/4,SW1/4NE1/4,SE1/4NW1/4,NE1/4SW1/4	256.85
	I15337	FHWA	MATERIAL SITE	0008N	0002E	35	LOT 5	24.15
	I15636	FERC	PWR S RES 21	0007N	0002E	11	LOT 4	30.50
						14	LOT 4	3.88
							LOTS 1,2,5	71.63
						15	LOTS 2,3,4	88.65
				0008N	0002E	24	LOTS 1,2,3	88.25
						25	LOT 2	7.25
						26	LOTS 1,2,3	87.60
					0003E	17	LOTS 1,2	23.75
						18	LOTS 5,6,7	86.95
						19	LOTS 1,2	36.65
						5	LOTS 7,8,9,10	120.20
						8	LOTS 3,4	61.70
							LOTS 5,6,7,8	121.00
	I15637	FERC	PWR S RES 247	0009N	0003E	22	LOTS 1,2,3,4,8,9,10,NE1/4 NW1/4,SE1/4 NW1/4,NE1/4 SW1/4	297.66
	I15644	FERC	PWR S RES 207	0009N	0003E	22	LOTS 5,6,7,10,12,SW1/4 NE1/4,SE1/4 SE1/4	251.20
						23	LOTS 1,2,3,SW1/4 NW1/4,SW1/4 SE1/4	193.67
						24	SE1/4 SW1/4	40.00
						25	LOTS 1-8 INCL,N1/2 SW1/4	384.29
						26	LOTS 1-5 INCL,NW1/4 NW1/4,SE1/4 NW1/4,NW1/4 SW1/4,NE1/4 SE1/4	384.87
						27	LOTS 2,4,SE1/4 NW1/4,NE1/4 SW1/4,SW1/4 SW1/4	201.22
					0004E	19	LOT 4,SE1/4 SW1/4	84.67
						20	LOTS 1,2	71.65
							LOTS 6,7,8,E1/2 SE1/4	163.01
						21	LOTS 5,6	91.99
						29	LOTS 2,3,NW1/4 NE1/4,SE1/4 NW1/4	158.65
						30	LOTS 3,6,7,9,10,N1/2 SE1/4	227.33
	I15645	FERC	PWR S RES 206	0007N	0002E	27	LOT 6	38.30
						28	LOTS 1,6,7,8	112.30
						32	LOT 8,N1/2 SE1/4	124.46
	I15700	FERC	PWR S CL 146	0008N	0004E	1	LOTS 1,2,3,5,6,SE1/4NW1/4	193.73
	I15710	FERC	PWR S CL 175	0008N	0004E	1	LOT 4	39.55
				0009N	0004E	35	LOT 8	23.40
				0010N	0004E	13	NW1/4NE1/4	40.00
						26	NW1/4NE1/4	40.00
	I15718	FERC	PWR PROJ 159	0009N	0003E	22	LOTS 1-9,INCL SW1/4 NE1/4,SE1/4 NW1/4,NE1/4 SW1/4,SE1/4 SE1/4	409.86
						23	LOTS 1,2,3	113.67
						25	LOTS 3,4,5,6	152.89
						26	LOTS 1-5 INCL,NW1/4 NW1/4,SE1/4 NW1/4,NE1/4 SE1/4	225.17
	I15780	FERC	PWR PROJ 47	0003N	0004E	15	LINEAR W/D	4.82

COUNTY	SERIAL #	AGNCY	POPULAR NAME	TOWN	RANG	SEC	LAND DESCRIPTION	ACRES
CANYON	I011668	BLM	SD	0005N	0003W	12	NE1/4SW1/4,N1/2SE1/4	120.00
				0006N	0005W	27	LOTS-1,2,N1/2NE1/4,E1/2NW1/4	243.42
	I013743	BSFW	DEER FLAT NWR	0005N	0006W	23	LOT-5	4.69
	I08499	BSFW	DEER FLAT N W R	0006N	0005W	18	SECS 18-LOTS 5,6 (PATENTED)	----
						6	SECS 6-LOT 4	25.71
						7	SECS 7 (NONE ON QUAD)	----
			DEER FLAT NWR	0004N	0005W	29	ISLAND	10.00
				0005N	0006W	23	ISLANDS IN SNAKE RIVER EXCEPT UNSURVEYED ISLAND KNOWN LOCALLY AS GOOSE	4.96
	I08955	BR	SNAKE RIVER RECL PROJ	0001S	0002W	25	LOT1,SE1/4SW1/4,SW1/4SE1/4	119.14
						26	LOTS1,2,N1/2SW1/4,NW1/4SE1/4	169.40
						27	LOTS3,4,SW1/4NE1/4,S1/2NW1/4,N1/2SE1/4	271.38
	I14537	FERC	PWR PROJ 2024	0001S	0002W	25	LOT 1	39.14
						26	LOTS 1,2	49.40
						27	LOTS 3,4	71.38
	I14539	FERC	PWR S RES 117	0001S	0002W	25	LOT 1,SE1/4 SW1/4	79.14
						26	LOTS 1,2	49.40
	I14542	FERC	PWR S CL 435	0001S	0002W	25	SW1/4SE1/4	40.00
	I14655	BR	BOISE RECL PROJ	0002N	0002W	26	N 1/2 SW 1/4 NW 1/4	20.00
			BOISE RECL PROJ FIRST FORM WDL	0002N	0004W	1	SE 1/4 NW 1/4 SE 1/4	10.00
	I14980	BR	BOISE VALLEY RECL PROJ	0004N	0005W	23	N1/2NW1/4NW1/4NW1/4	5.00
	I14981	BR	BOISE VALLEY RECL PROJ	0002N	0002W	17	LOTS1,3	2.93
						26	SW1/4NW1/4	40.00
						35	NW1/4NW1/4NW1/4	10.00
						5	LOTS13,16,19	29.95
						6	LOTS9,10,11	58.44
			BOISE VALLEY RECL PROJ TEMP	0002N	0003W	2	LOTS-5,7	21.09
						3	SW1/4NW1/4,SE1/4NW1/4LESS2.13ACRES	77.87
						7	SW1/4SE1/4	40.00
				0005N	0006W	14	LOT-5	12.21
						23	LOT-5,6,7,8	9.65
			BOISE VALLEY RECL PROJ 2ND	0003N	0004W	17	LOTS8,9,NW1/4NW1/4	82.36
				0004N	0005W	28	SE1/4SE1/4	40.00
	I14983	BR	PAYETTE BOISE RECL PROJ TEMP	0002N	0003W	2	LOTS-5,7	21.09
						3	SW1/4NW1/4,SE1/4NW1/4LESS2.13ACRES	77.87
			PAYETTE-BOISE RECL PROJ	0002N	0002W	17	LOTS1,3	2.93
						5	LOTS16,19	29.20
						6	LOTS9,10,11	58.44
	I15067	BR	BOISE RECL PROJECT	0001S	0002W	2	LOTS 7,8,SE 1/4 NE 1/4 NE 1/4	19.40
	I15068	BR	BOISE RECL PROJ	0002N	0003W	24	NE 1/4 NW 1/4	40.00
	I15069	BR	BOISE RECL PROJ	0003N	0004W	17	LOTS 8,9,NW 1/4 NW 1/4	82.36
	I15070	BR	BOISE RECL PROJ	0005N	0003W	12	NW 1/4 SE 1/4, NW 1/4	10.00
						2	W 1/2 NE 1/4 SW 1/4, SW 1/4 SW 1/4	60.00
						8	SE 1/4 SE 1/4 SW 1/4	10.00
				0006N	0005W	35	SE 1/4 SE 1/4 SE 1/4	10.00
	I15079	BR	BOISE RECL PROJ	0005N	0003W	27	NE 1/4 NE 1/4	40.00
	I15317	COE	RIFLE RANGE	0002N	0002W	26	S1/2SW1/4NW1/4,W1/2SW1/4	100.00
	I15319	BR	MELBA PUBLIC RESERVE	0001S	0002W	2	LOT 8	3.14
	I15341	BSFW	DEER FLAT NWR	0001N	0002W	31	ALL ISLANDS IN SNAKE RIVER (ACREAGE UNKNOWN)	----
					0003W	35	LOT 7	4.25
						36	LOT 9	46.07
				0001S	0002W	17	ISLANDS IN SNAKE RIVER	12.78
						20	ISLANDS IN SNAKE RIVER	1.42
						21	ISLANDS IN SNAKE RIVER	2.84
						25	ISLANDS IN SNAKE RIVER	----
						26	ISLANDS IN SNAKE RIVER	2.84
						27	ISLANDS IN SNAKE RIVER	----
						28	ISLANDS IN SNAKE RIVER	48.28
						34	ISLANDS IN SNAKE RIVER	----
						35	ISLANDS IN SNAKE RIVER	4.26
						36	ISLANDS IN SNAKE RIVER	7.10
						7	ISLANDS IN SNAKE RIVER	1.42
						8	ISLANDS IN SNAKE RIVER	2.84
				0002N	0002W	17	LOT 3	2.72
						5	LOTS 13,16,19	29.95
						6	LOTS 9,10,11	58.44
					0003W	11	LOT 2	1.62
						2	LOTS-5,7 PORTIONS OF	15.62
						3	SW1/4NW1/4,SE1/4NW1/4 LESS 2.13 ACRES	21.09
						31	ALL ISLANDS IN SNAKE RIVER (ACREAGE UNKNOWN)	----
					0004W	26	----	7.10
						35	----	2.84
						36	----	4.26
				0003N	0004W	18	ISLANDS IN SNAKE RIVER	2.84
						20	ISLANDS IN SNAKE RIVER	----
					0005W	10	PAT ISL	4.68
						11	PAT ISL	0.84
						13	LOTS 9,10	15.35
						14	----	0.42
						15	NONE	----
						3	NONE	----
						4	PAT ISL	----
	I3823	BLM	SNAKE RIVER BIRDS OF PREY NATU	0001S	0002W	25	SW1/4SE1/4	40.00
	I3886	BLM	R&PP CLASSIFICATION	0006N	0005W	27	SE1/4NE1/4	40.00
	I9380	BLM	R&PP CLASSIFICATION	0006N	0005W	28	S1/2NE1/4	80.00

COUNTY	SERIAL #	AGNCY	POPULAR NAME	TOWN	RANG	SEC	LAND DESCRIPTION	ACRES
GEM	I01166B	BLM	SD	0006N	0001W	22	S1/2	320.00
						30	LOT3,E1/2SW1/4,SW1/4SW1/4,N1/2SE1/4	240.21
					0003W	17	E1/2E1/2	160.00
						20	E1/2NE1/4,W1/2SW1/4,SE1/4SW1/4,SE1/4	360.00
						21	W1/2E1/2,W1/2	480.00
						25	S1/2S1/2,	160.00
						26	NW1/4,NE1/4SW1/4,SE1/4	360.00
						27	N1/2NE1/4,N1/2NE1/4NW1/4	100.00
						8	SE1/4SE1/4	40.00
						9	LOTS-3,6,7,SW1/4NE1/4,SE1/4NW1/4,NE1/4SW1/4,S1/2SW1/4,W1/2SE1/4	411.27
				0007N	0003W	4	LOTS-1,2,3,4,S1/2NE1/4,S1/2NW1/4,E1/2SE1/4	398.90
						5	LOTS-1,SE1/4NE1/4	80.08
			STOCK DRIVEWAY	0006N	0002W	26	SE1/4SE1/4	40.00
						31	LOT1,N1/2NE1/4,NE1/4NW1/4	159.65
						33	N1/2N1/2	160.00
						35	N1/2N1/2	160.00
	I08362	FAA	AIR NAVIGATION SITE	0008N	0001W	24	S1/2S1/2NE1/4SW1/4,E1/2E1/2SW1/4SW1/4,SE1/4SW1/4,W1/2W1/2SW1/4SE1/4	70.00
						25	NW1/4NW1/4NW1/4NE1/4,N1/2NE1/4NW1/4,NE1/4NE1/4NW1/4NW1/4	25.00
	I08956	BR	BOISE RECLAMATION PROJ	0006N	0003W	10	E 1/2 SE 1/4 SW 1/4, W 1/2 SW 1/4 SE 1/4	40.00
	I14993	BR	PAYETTE-BOISE RECL PROJ	0007N	0001W	26	LOTS2,3	52.70
	I14994	BR	PAYETTE-BOISE RECL PROJ TEMP	0007N	0001E	17	LOT-4	1.56
							LOTS-2,3	66.90
						18	LOT-8	14.35
							LOTS-5,6,7	84.60
						19	LOTS-1,2,3,5	130.70
							LOTS-6,8,9	68.40
						21	LOT-3	35.30
						28	LOTS-3	23.80
							LOTS-5,6	45.20
						29	LOT-2	2.17
	I15058	BR	BOISE RECL PROJ	0007N	0001W	23	LOT 2,SW1/4NW1/4	47.90
							LOTS 3,4	62.30
						24	LOTS 1,2,3,8,SE 1/4 NW 1/4	169.35
						25	LOT 2	16.40
							LOTS 4,5	74.50
	I15062	BR	BOISE RECL PROJ	0007N	0001W	26	SE1/4NE1/4	40.00
	I15065	BR	BOISE RECL PROJ	0007N	0001E	19	LOT-7	38.00
						20	LOT 4	40.50
						28	LOT-4	42.00
	I15070	BR	BOISE RECL PROJ	0006N	0003W	22	W 1/2 SE 1/4 SW 1/4	20.00
						26	E 1/2 SW 1/4	80.00
						5	N 1/2 SW 1/4 NE 1/4	20.00
	I15079	BR	BOISE RECL PROJ	0006N	0003W	15	SW 1/4 NW 1/4,NW 1/4 SW 1/4	80.00
						26	SW 1/4 SW 1/J	40.00
	I15305	BLM	SD 20	0008N	0001W	17	W1/2NE1/4,NW1/4	240.00
						5	LOTS3,4,SW1/4NE1/4,S1/2NW1/4,N1/2SW1/4,SE1/4SW1/4,W1/2SE1/4	381.68
						6	LOT1,SE1/4NE1/4	71.19
						8	W1/2E1/2,E1/2W1/2,SW1/4SW1/4	360.00
				0009N	0001E	18	E1/2NE1/4,S1/2	400.00
						19	N1/2	320.00
						5	LOTS-2,3,4,SW1/4NE1/4,S1/2NW1/4,SW1/4,W1/2SE1/4	432.84
						6	LOT-1,SE1/4NE1/4,E1/2SE1/4	144.35
						7	SE1/4NE1/4,E1/2SE1/4	120.00
						8	NW1/4,W1/2SW1/4	240.00
					0001W	22	W1/2NW1/4,SE1/4NW1/4,NW1/4SW1/4	160.00
						23	NE1/4NE1/4,S1/2NE1/4,SE1/4NW1/4,NE1/4SW1/4,N1/2SE1/4	280.00
						24	N1/2,N1/2,SW1/4	400.00
				0012N	0001E	15	W1/2	320.00
						22	NW1/4,N1/2SW1/4	240.00
	I15603	FERC	PWR S RES 461	0007N	0001E	18	LOT 8	14.35
							LOTS 5,6,7	84.60
						19	LOTS 1,2,3,5,NE1/4 NE1/4	170.70
							LOTS 6,7,8,9	106.40
					0001W	23	LOT 2,SW1/4 NW1/4	47.90
							LOTS 3,4	62.30
						24	LOTS 1,2,3,8,SE1/4 NE1/4	169.35
						25	LOT 2	16.40
							LOTS 4,5	74.50
						26	LOTS 2,3,SE1/4 NE1/4	92.70
PAYETTE	I01166B	BLM	SD	0006N	0004W	19	LOT-1,SE1/4SW1/4,S1/2SE1/4	168.56
						26	S1/2NE1/4,NW1/4NE1/4,NW1/4	280.00
						28	N1/2N1/2	160.00
						29	N1/2N1/2	160.00
						30	N1/2NE1/4	80.00
					0005W	23	SW1/4SW1/4,S1/2SE1/4SW1/4,S1/2SW1/4SE1/4,SE1/4SE1/4	120.00
						26	N1/2N1/2	160.00
				0008N	0003W	32	NW1/4SW1/4,E1/2SW1/4,SE1/4	280.00
						33	S1/2S1/2	160.00
	I08499	BSFW	DEER FLAT NWR	0006N	0006W	13	ISLANDS IN SNAKE RIVER (BRIDGE IS PATENTED)	----
						24	PATENTED ISLAND	----
						26	PATENTED ISLAND	46.86
						35	PATENTED ISLAND	1.42
				0007N	0005W	20	ISLANDS IN SNAKE RIVER	7.10
						29	LOTS 5,6,7,8 (PATENTED)	----
				0009N	0005W	15	(PATENTED ISLAND)-POOL ISLAND	----
							4 ISLANDS W OF POOL ISLAND	38.34
						2	ISLANDS IN SNAKE RIVER	22.72
	I15070	BR	BOISE RECL PROJ	0006N	0004W	12	E 1/2 NE 1/4	80.00
						2	LOT-1	44.69
					0005W	22	LOT-2	41.66

COUNTY	SERIAL #	AGNCY	POPULAR NAME	TOWN	RANG	SEC	LAND DESCRIPTION	ACRES
PAYETTE	I15252	BR	BOISE RECL PROJ	0007N	0005W	25	NW 1/4 SW 1/4 SW 1/4	10.00
	I15305	BLM	SD 20	0008N	0003W	10	W1/2NW1/4	80.00
						2	LOTS-3,4,S1/2NW1/4,	129.00
						3	LOTS-1,2,3,S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4,N1/2SE1/4	393.30
						9	S1/2NE1/4,S1/2NW1/4,W1/2SW1/4,NE1/4SW1/4,N1/2SE1/4	360.00
				0009N	0001W	19	SE1/4SE1/4	40.00
						20	NE1/4NE1/4,S1/2N1/2,S1/2	520.00
						21	NE1/4,W1/2,N1/2SE1/4	560.00
						29	NW1/4NE1/4,W1/2	360.00
						30	E1/2E1/2	160.00
						31	E1/2E1/2	160.00
						32	NE1/4NW1/4,W1/2W1/2	200.00
						6	LOTS1-7INCLS1/2NE1/4,SE1/4NW1/4,E1/2SW1/4,SE1/4	603.34
						7	LOT1	39.63
					0002W	1	LOTS5,6,7,W1/2SE1/4	190.89
						10	SE1/4SE1/4	40.00
						11	S1/2NE1/4,S1/2	400.00
						12	LOTS1-4INCL,W1/2E1/2,E1/2W1/2,SW1/4NW1/4,W1/2SW1/4	592.15
						13	NW1/4NE1/4,N1/2NW1/4	120.00
						14	N1/2NE1/4,W1/2	400.00
						15	E1/2	320.00
						22	E1/2,E1/2NW1/4,NE1/4SW1/4	440.00
						23	N1/2NW1/4,SW1/4NW1/4BNW1/4SW1/4	160.00
						27	NE1/4,E1/2NW1/4,SW1/4NW1/4,W1/2SW1/4	360.00
						28	S1/2S1/2	160.00
						29	S1/2	320.00
						30	LOTS3,4,E1/2SW1/4,SE1/4	304.55
						32	N1/2NE1/4,	80.00
						33	N1/2N1/2	160.00
						34	NW1/4NW1/4	40.00
					0003W	25	SW1/4,N1/2SE1/4,SW1/4SE1/4	280.00
						26	SE1/4SE1/4	40.00
						34	SE1/4SE1/4	40.00
						35	E1/2NE1/4,S1/2SW1/4,SW1/4	320.00
	I4373	BR	BOISE RECL PROJ	0007N	0005W	34	NW 1/4 NW 1/4 NW 1/4 NW 1/4, NW 1/4 SW 1/4 NW 1/4 NW 1/4 NW 1/4	3.13
TETON	I14652	FERC	PWR PROJ 1971	0015N	0007W	36	LOT 1	6.80
VALLEY	I15072	BR	BOISE RECL PROJ	0011N	0003E	2	LOTS 1,2	31.70
						3	LOT 7	2.60
				0014N	0003E	10	LOTS 3,5,7	25.96
						15	LOTS 2,3,4,5,8	75.42
						22	LOTS L8MB.8U/	76.71
						23	LOTS 2	0.97
						25	LOT 3	3.94
						27	LOT 1	0.31
						4	LOTS 2,6	67.86
				0015N	0003E	21	LOT 5	14.15
						27	LOT 2	1.35
						28	LOTS 1,2,3,W1/2NE1/4	138.31
						4	LOTS 4,5,7,8,9,13,SW 1/4 SE 1/4	158.03
						9	LOTS 1,5,8	37.15
				0016N	0003E	18	LOT 2	30.37
						28	LOT 3	1.00
						33	LOTS 1,4,10,11,13	76.19
						7	LOTS 6,7,9,10,14,15	108.64
	I15076	BR	BOISE RECL PROJ	0016N	0003E	31	LOTS 7,8,11,12	67.41
						6	LOTS 2,7,8,11,16	83.75
				0017N	0003E	31	LOTS 7,8,11,12	67.41
	I15606	FERC	PWR S RES 414	0014N	0003E	25	LOT 3	3.94
	I15644	FERC	PWR S RES 207	0011N	0003E	2	LOTS 1,2,12	65.30
						3	LOT 7	2.60
				0012N	0003E	12	LOT 4	23.90
						23	LOT 3	31.30
						26	LOT 2	16.20
	I15689	FERC	PWR S CL 462	0011N	0003E	---	ALL UNSURVEYED ISLANDS WITHIN SECS 10,14,15,22,23	6.00
WASHINGTON	I015280	FERC	PWR S CL 455	0011N	0003W	19	LOT 4,SE1/4SW1/4	73.77
						30	LOT 1,2,3,E1/2NW1/4,NE1/4SW1/4	221.89
						31	S1/2NE1/4	80.00
						6	SE1/4SW1/4,S1/2SE1/4	120.00
						7	LOTS 1,N1/2NE1/4,SW1/4NE1/4,NE1/4NW1/4,NW1/4SE1/4	233.27
						8	LOTS 1,N1/2NE1/4,NE1/4NW1/4,	153.18
						9	SW1/4NE1/4,NW1/4NW1/4,S1/2NW1/4	160.00
					0004W	1	SW1/4NW1/4,SW1/4,SW1/4SE1/4	240.00
						11	N1/2NE1/4,SE1/4NE1/4,SW1/4SE1/4	160.00
						12	N1/2N1/2	160.00
						13	N1/2SW1/4,SW1/4SW1/4,W1/2SE1/4,	200.00
						14	SW1/4NW1/4,NW1/4SW1/4,SE1/4	240.00
						15	SE1/4NE1/4	40.00
						2	LOTS 1,2,S1/2NE1/4,SE1/4	316.65
						23	NU/2NE1/4,SE1/4NE1/4,E1/2NW1/4,SW1/4SE1/4	240.00
						24	NW1/4NW1/4,NE1/4SW1/4,NW1/4SE1/4,SE1/4SE1/4	160.00
						25	SW1/4NE1/4,SE1/4NW1/4,SW1/4,SE1/4	400.00
						26	SE1/4NE1/4,E1/2SE1/4	120.00
						3	LOTS 4,SW1/4NE1/4,SE1/4NW1/4,E1/2SE1/4	198.83
				0012N	0004W	10	N1/2NE1/4,SW1/4NE1/4,NE1/4SW1/4	160.00
						11	W1/2NE1/4,NW1/4NW1/4	120.00
						15	NE1/4SW1/4,S1/2SW1/4	120.00
						22	NE1/4,NW1/4,SW1/4,NE1/4SE1/4,S1/2SE1/4	600.00
						23	E1/2NW1/4,NE1/4SW1/4,SW1/4SW1/4	160.00
						26	NW1/4NW1/4	40.00
						27	N1/2N1/2,S1/2NW1/4	240.00
						28	S1/2NE1/4,W1/2SE1/4	160.00
						33	NW1/4NE1/4	40.00
						35	SE1/4NW1/4,NE1/4SW1/4	80.00

COUNTY	SERIAL #	AGNCY	POPULAR NAME	TOWN	RANG	SEC	LAND DESCRIPTION	ACRES
WASHINGTON	I015745	BR	MANN CREEK RECL PROJ	0012N	0005W	13	E1/2NW1/4	80.00
	I08499	BSFW	DEER FLAT NWR	0010N	0005W	17	----	28.40
						18	NONE	----
						19	NONE	----
						21	NOT LISTED ON ORDER	14.20
						22	----	9.94
						25	RIV NOT THRU SEC	----
						5	ISLANDS IN SNAKE RIVER - NONE	----
						8	----	157.62
				0011N	0006W	19	ISLANDS IN SNAKE RIVER	22.72
						20	NONE	----
						34	----	2.12
						35	(PATENTED ISLAND-LOT 8) LOTS 5,6,7	15.02
					0007W	17	----	2.84
						27	----	2.12
	I14652	FERC	PWR PROJ 1971	0011N	0006W	18	SE1/4 SE1/4 LOT 4,S1/2 SW1/4 SE1/4 SW1/4,SW1/4 SE1/4 SE1/4 SW1/4	10.00
						19	LOTS 3,4	13.50
					0007W	17	W1/2 NW1/4 NW1/4	20.00
						21	SW1/4 LOT 3	9.85
						24	NE1/4 NE1/4 LOT 1,S1/2 NE1/4 LOT 1,S1/2 NW1/4 LOT 1,S1/2 LOT 1,SE1/4 L	44.27
						25	LOT 1	3.90
						28	NW1/4 NE1/4 LOT 2,W1/2 LOT 2,S1/2 NE1/4 LOT 2,N1/2 SE1/4 LOT 2	9.60
						4	NW1/4 LOT 4,N1/2 SW1/4 LOT 4,SW1/4 SW1/4 LOT 4	17.33
						8	NW1/4 LOT 2,N1/2 SW1/4 LOT 2,LOT 3,N1/2 LOT 5,W1/2 LOT 6	110.93
				0012N	0007W	18	PORTIONS LOTS 1,4,SW1/4 SW1/4 SW1/4 SE1/4	34.90
						28	PORTIONS LOT 1	14.45
						32	LOT 1	0.48
						33	PORTIONS LOTS 3,4	40.09
						6	LOTS 2,3, PORTIONS OF 4,5,6	113.00
				0013N	0007W	17	LOTS 1,2,SW1/4 NE1/4,S1/2 NE1/4	191.67
							PORTIONS OF GRANT LODE	9.00
						18	PORTIONS OF GRANT LODE	3.50
						20	LOTS 1,2	45.50
						29	PORTIONS OF LOTS 3,4	34.00
						32	NW1/4 NW1/4 NW1/4 SW1/4	2.50
						4	PORTIONS OF LOT 4,E1/2 NW1/4 SW1/4 NW1/4,NW1/4 SE1/4 SW1/4 NW1/4	23.50
						5	PORTIONS OF LOTS 1,2,3	70.80
						6	LOT 1	0.19
						7	LOT 1,7,GRANT LODE & PORTIONS LEE LODE	88.56
						8	PORTIONS OF LOT 1,2	35.30
				0014N	0006W	6	NE1/4NW1/4 LOT 4,W1/2NE1/4 LOT 4,E1/2NW1/4 LOT 4,W1/2W1/2 LOT 4,W1	31.11
					0007W	13	W1/2SW1/4SW1/4SW1/4,W1/2NW1/4SW1/4SW1/4,NE1/4NW1/4SW1/4SW1/4	12.50
						14	LOT 1	0.25
							LOT 3	15.27
						23	LOTS 1,2	64.78
							SW1/4 SW1/4 SE1/4 SE1/4	2.50
						24	SW1/4 NW1/4 NW1/4 NW1/4	2.50
						26	NW1/4 NW1/4 NE1/4 NE1/4,PORTION OF LOT 2	22.34
						27	PORTION OF LOT 1,NE1/4 SW1/4 SW1/4,E1/2 SW1/4 NE1/4 SE1/4,SE1/4 SW1/4	39.81
						28	PORTIONS OF LOT 2	26.09
						33	LOTS 1,2,3,4	107.98
				0015N	0006W	17	LOT 1,2, W1/2 NE1/4 LOT 3,E1/2 NW1/4 LOT 3,W1/2 W1/2 LOT 3,NE1/4 SW1/4	81.30
						18	LOT 1, E1/2 NE1/4 LOT 2,W1/2 E1/2 LOT 2,W1/2 LOT 2,NE1/4 SE1/4 LOT 2	52.80
						19	E1/2 NW1/4 LOT 1,W1/2 W1/2 LOT 1,NE1/4 SW1/4 LOT 1,NE1/4 NE1/4 LOT 2,W	94.70
							(CONT) N1/2 NE1/4 LOT 4,W1/2 LOT 4	94.70
						30	LOT 1,N1/2 LOT 2,N1/2 S1/2 LOT 2,S1/2 SW1/4 LOT 2,SW1/4 SE1/4 LOT 2,W1	110.90
						31	W1/2 W1/2 LOT 1,SE1/4 SW1/4 LOT 1,NW1/4 LOT 2,S1/2 SW1/4 LOT 4,SE1/4 L	37.50
						4	NW1/4 NE1/4 LOT 4,NW1/4 LOT 4,W1/2 SW1/4 LOT 4	18.96
						5	LOT 1,NW1/2 LOT 2,N1/2 S1/2 LOT 2,S1/2 SW1/4 LOT 2,N1/2 LOT 3,NW1/4 SE	143.10
							(CONT) N1/2 N1/2 SE1/4 NE1/4,SW1/4 NW1/4 SE1/4 NE1/4,SW1/4 SE1/4 LOT 2	143.10
						8	W1/2 LOT 1,W1/2 E1/2 LOT 1,LOT 2,W1/2 LOT 3,LOT 4,SW1/4 NW1/4 SW1/4 NE	114.90
							(CONT) N1/2 NW1/4 NW1/4 SE1/4	114.90
				0016N	0005W	6	LOT 2	36.30
				0017N	0005W	11	LOT 4	49.40
						14	LOT 1,2	63.91
			WDL PWR PROJ 1971	0017N	0005W	1	W1/2SW1/4SW1/4	20.00
						11	LOT 4, N1/2 NW1/4 SE1/4,SW1/4 NW1/4 SE1/4,NW1/4 SW1/4 SE1/4,NW1/4 NE1/	99.40
						14	LOT 1,2, W1/2 NE1/4 NW1/4,SW1/4 NE1/4 NE1/4 NW1/4,NW1/4 SE1/4 NE1/4 NW	83.91
						23	W1/2 SW1/4 SE1/4 SW1/4	5.00
						27	LOTS 1,2,3,W1/2 W1/2 NW1/4 NE1/4	109.93
						28	LOTS 2,3,4, W1/2 NE1/4 SE1/4 SE1/4,NW1/4 SE1/4 SE1/4	90.49
						29	LOT 1	6.16
						31	LOT 1	49.07
						32	LOTS 1,2,5,N1/2 NE1/4 SW1/4	133.13
						33	NW1/4 NE1/4 NE1/4 NW1/4,NW1/4 NE1/4 NW1/4,N1/2 SW1/4 NE1/4 NW1/4,N1/2	42.50
	I14891	BR	WEISER INVESTIGATIONS RED PROJ	0015N	0003W	29	NE1/4SW1/4,SW1/4SW1/4,NW1/4SE1/4,S1/2SE1/4	200.00
						32	NW1/4,NE1/4SW1/4,NW1/4SE1/4,S1/2SE1/4	320.00
						33	SW1/4SW1/4	40.00

COUNTY	SERIAL #	AGNCY	POPULAR NAME	TOWN	RANG	SEC	LAND DESCRIPTION	ACRES
WASHINGTON	I15305	BLM	SD 20	0010N	0001E	17	ALL	640.00
						20	ALL	640.00
						28	LOTS-3,4,W1/2SE1/4,SW1/4	311.74
						29	ALL	640.00
						32	ALL	640.00
						33	LOTS-1,2,W1/2NE1/4,NW1/4	313.26
						4	LOT-4	39.00
						5	LOTS-1,2,3,4,S1/2N1/2,S1/2	638.00
						8	ALL	640.00
					0001W	18	ALL	629.04
						19	ALL	626.00
						30	ALL	623.52
						31	ALL	620.54
						5	SW1/4NW1/4,SW1/4	200.00
						6	LOTS1-3INCL,S1/2NE1/4,SE1/4NW1/4,SE1/4	387.00
						7	LOT4,E1/2,E1/2SW1/4	437.69
						8	NW1/4,W1/2SW1/4	240.00
				0011N	0001E	17	ALL	640.00
						20	E1/2NE1/4,NW1/4NE1/4,NW1/4,SW1/4,SE1/4	600.00
						21	SW1/4	160.00
						28	W1/2	320.00
						29	ALL	640.00
						32	ALL	640.00
						33	W1/2	320.00
						4	LOTS-2,3,4,SE1/4NE1/4,S1/2NW1/4,SW1/4,NW1/4SE1/4	433.40
						5	LOTS-1,2,3,3,4,SE1/4NE1/4,SW1/4NW1/4,SW1/4,SE1/4	548.92
						6	LOTS-1,2,3,S1/2N1/2,S1/2	590.03
						8	NE1/4,SE1/4SW1/4,SE1/4	360.00
						9	W1/2	320.00
					0001W	1	LOTS2,3,S1/2NE1/4,SE1/4NW1/4,E1/2SW1/4,SE1/4	441.10
						10	N1/2NE1/4,W1/2W1/2	240.00
						15	NW1/4NW1/4,S1/2NW1/4,SW1/4	280.00
						2	S1/2SW1/4	80.00
						21	ALL	640.00
						22	NW1/4	160.00
						28	N1/2,SW1/4,N1/2SE1/4,SW1/4SE1/4	600.00
						29	SE1/4	160.00
						3	S1/2S1/2	160.00
						31	SE1/4	160.00
						32	LOTS2,3,4,E1/2,SE1/4NW1/4,E1/2SW1/4	551.52
						33	N1/2NW1/4,SW1/4NW1/4,NW1/4SW1/4	160.00
						4	S1/2SE1/4	80.00
						9	E1/2,E1/2W1/2	480.00
				0012N	0001E	10	SW1/4NW1/4,SW1/4	200.00
						17	E1/2,E1/2W1/2	480.00
						20	E1/2,E1/2W1/2	480.00
						21	ALL	640.00
						28	W1/2E1/2,W1/2	480.00
						29	E1/2,E1/2W1/2	480.00
						32	E1/2,E1/2W1/2	480.00
						33	N1/2NW1/4,S1/2SW1/4,W1/2SE1/4	240.00
						4	ALL	580.92
						5	ALL	579.96
						6	ALL	545.40
						8	NE1/4,E1/2NW1/4,E1/2SW1/4,N1/2SE1/4,SW1/4SE1/4	440.00
						9	ALL	640.00
				0013N	0001E	22	W1/2SW1/4,SE1/4SW1/4,S1/2SE1/4	200.00
						27	ALL	640.00
						33	E1/2,E1/2W1/2	480.00
						34	NW1/4,N1/2SW1/4	80.00
					0005W	10	W1/2	320.00
						17	NE1/4,W1/2SE1/4	240.00
						19	LOTS-2,3,4,E1/2W1/2,SW1/4SE1/4	300.01
						20	NW1/4NE1/4,N1/2NW1/4	120.00
						3	LOTS-2,3,4,SW1/4NE1/4,S1/2NW1/4,SW1/4,W1/2SE1/4	453.45
						30	LOT-2,W1/2NE1/4,E1/2NW1/4,	193.34
						4	LOT-1SE1/4NE1/4,E1/2SE1/4	151.05
						8	SE1/4NE1/4,E1/2SE1/4	120.00
						9	NE1/4NE1/4,S1/2NE1/4,SW1/4,SE1/4	520.00
					0006W	25	S1/2NE1/4,S1/2NW1/4,SW1/4,W1/2SE1/4	400.00
						26	S1/2NE1/4,S1/2SW1/4,SE1/4	320.00
						35	NE1/4,N1/2NW1/4,SE1/4NW1/4,NE1/4SW1/4	320.00
				0014N	0003W	5	W1/2SW1/4	80.00
						6	LOTS,6,7,E1/2SW1/4,SE1/4	315.36
						7	LOTS,1,2,3,NE1/4,E1/2NW1/4,NW1/4SW1/4,NW1/4SE1/4	436.59
						8	NW1/4NW1/4	40.00
					0004W	1	LOT-7,SE1/4SW1/4,SW1/4SE1/4	116.09
						10	SE1/4SE1/4	40.00
						11	E1/2,SE1/4NW1/4,SW1/4,SE1/4	520.00
						12	LOTS-1,2,3,E1/2NE1/4,NW1/4,N1/2SW1/4,SW1/4SW1/4,NW1/4SE1/4	508.04
						14	N1/2NW1/4,SW1/4NW1/4,NW1/4SW1/4	160.00
						15	E1/2	480.00
						19	ALL	640.00
						20	ALL	640.00
						21	ALL	640.00
						22	LOTS-1,W1/2NE1/4,NW1/4,N1/2SW1/4	356.66
					0005W	24	NE1/4NE1/4,S1/2NE1/4,SW1/4,SE1/4	440.00
						25	N1/2NE1/4,NW1/4	240.00
						26	ALL	640.00
						34	SE1/4NE1/4,E1/2SW1/4,SE1/4	280.00
						35	N1/2NE1/4,SW1/4NE1/4,W1/2	440.00
				0015N	0003W	17	ALL	640.00
						19	SE1/4	160.00
						20	NE1/4,E1/2NW1/4,SW1/4NW1/4,SW1/4,W1/2SE1/4,NE1/4SE1/4	560.00
						29	N1/2NW1/4,SW1/4SW1/4	120.00
						30	E1/2	320.00
						5	LOT-4,SW1/4NW1/4,SW1/4,NW1/4SE1/4	281.71
						8	S1/2NE1/4,NW1/4,SW1/4,SE1/4	560.00
				0016N	0003W	32	W1/2SW1/4	80.00

COUNTY	SERIAL #	AGNCY	POPULAR NAME	TOWN	RANG	SEC	LAND DESCRIPTION	ACRES
WASHINGTON	I15321	BLM	PW RES 93	0013N	0005W	3	LOT-1	31.35
	I15332	ARMY	RIFLE RANGE	0011N	0005W	17	N1/2NW1/4,SE1/4NW1/4	120.00
						8	SW1/4SW1/4	40.00
	I15361	BLM	PW RES 107	0013N	0006W	29	NW1/4NW1/4	40.00
	I15649	FERC	PWR S RES 168	0012N	0002W	19	S1/2 SE1/4	80.00
	I15651	FERC	PWR S RES 77	0011N	0007W	4	EVERY SMALLEST LEGAL SUBDIV LYING WITHIN 1/4 MILE OF SNAKE RIVER	133.32
						9	EVERY SMALLEST LEGAL SUBDIV LYING WITHIN 1/4 MILE OF SNAKE RIVER	133.32
				0012N	0007W	18	LOT 4,SW1/4 SE1/4	62.40
				0014N	0007W	23	NE1/4 SE1/4	40.00
				0015N	0007W	36	LOT 1	6.80
				0017N	0005W	11	LOT 4	49.40
						14	LOT 1,2	63.91
						27	LOTS 1,2,3	99.93
						28	LOTS 2,3,4	75.49
						29	LOT 1	6.16
						31	LOT 1	49.07
						32	LOTS 1,2,5	113.13
						33	LOTS 2,3,4	75.49
	I15693	FERC	PWR S CL 420	0011N	0006W	18	LOTS 4	39.88
						19	LOTS 3,4	13.50
					0007W	21	LOT 3	39.40
						24	LOTS 1,2,3,4,5	138.80
						25	LOT 1	3.90
						28	LOT 2	9.60
						4	LOT 4	39.61
						8	LOTS 2,3,5	140.68
				0012N	0007W	28	LOT 1	39.45
						33	LOTS 3,4	65.12
						6	LOTS 2,3,4,5,6,SE1/4SW1/4	165.30
						7	LOT 1	38.25
				0013N	0007W	17	LOTS 1,2,SW1/4NE1/4,S1/2NW1/4	151.67
						20	LOTS 1,2	45.50
						29	LOTS 3,4	54.00
						32	NW1/4SW1/4	40.00
						4	LOT 4,SW1/4NW1/4	66.00
						5	LOTS 1,2,3,4	96.90
						6	LOT 1	0.19
						7	LOT 1	44.30
						8	LOT 1,2	77.80
				0014N	0007W	13	SW1/4SW1/4	40.00
						14	LOT 1	0.25
							LOT 3	15.27
						23	LOTS 1,2,E1/2SE1/4,	144.78
						24	NW1/4NW1/4	40.00
						26	LOT 2,NE1/4NE1/4	89.84
						27	LOT 1,SW1/4SW1/4	77.31
						28	LOT 2	38.59
						33	LOTS 1,2,3,4,	107.98
				0015N	0006W	17	LOTS 1,2,3,NE1/4NW1/4	126.30
						13	LOTS 1,2	32.50
						19	LOTS 1,2,3,4	170.00
						30	LOTS 1,2,3,4	131.54
						31	LOTS 1,2	76.30
						4	LOT 4	42.65
						5	LOTS 1,2,3,4,SE1/4NE1/4,NW1/4SE1/4	225.60
						8	LOTS 1,2,3,4,SW1/4NE1/4,NW1/4SE1/4,SE1/4SW1/4	239.90
				0016N	0005W	6	LOT 2	36.30
					0006W	1	LOTS 2,4,S1/2SW1/4	133.60
						10	LOTS 3,4	54.10
						15	LOT 5,NW1/4NE1/4	76.50
						2	LOT 1,SE1/4SE1/4	49.20
						21	LOTS 1,2	29.70
						22	LOT 1,SW1/4NW1/4,W1/2SW1/4	159.80
						28	LOTS 1,2,3,4,5,6	173.41
						33	LOTS 1,2,3,4,SW1/4NE1/4,NE1/4NW1/4,SE1/4NW1/4,NE1/4SW1/4	231.45
				0017N	0005W	11	NW1/4SE1/4	40.00
						14	NE1/4NW1/4	40.00
						27	NW1/4NE1/4	40.00
						32	NE1/4SW1/4	40.00
						33	N1/2NW1/4	80.00
	I15722	FERC	PWR PROJ 419	0011N	0003W	3	SE1/4 SW1/4	40.00
				0012N	0002W	19	LOTS 2,3,NE1/4 SW1/4,NW1/4 SE1/4,S1/2 SE1/4	225.98
					0003W	25	SW1/4 NE1/4,E1/2 W1/2	40.00
	I15728	FERC	PWR PROJ 314	0011N	0003W	2	LOTS 1,2,3,4,S1/2 N1/2,SW1/4	478.84
						3	LOTS 1,2,S1/2 NE1/4,SE1/4	317.77
				0012N	0003W	35	NE1/4,E1/2 SW1/4,SE1/4	240.00
	I15757	FERC	PWR PROJ 940	0016N	0003W	33	LINEAR	1.51
	I3639	BLM	CRANE CREEK ADM SITE	0011N	0001W	7	N1/2SW1/4SE1/4	20.00

APPENDIX T

WOODY RIPARIAN HABITAT CLASSIFICATION

Form Class	NORM	>78%		3
		64-78%		2
		50-63%		1
		<50%		0
	HEDGED	<14%		3
		14-28%		2
		29-50%		1
		>50%		0
	DEADDED & NT	<2%		3
		2-16%		2
		17-24%		1
		25-30%		0
		>30%		U
Coverage Class	CANOPY	>76%		9
		59-76%		6
		30-58%		3
		20-29%		1
		<20%		0
Size Class	REPROD.	1-10MM	11-15MM	>15MM
		>21%	>21%	<58% 3
		4-21%	9-21%	58-87% 2
		1-4%	4-9%	87-96% 1
		<1%	<4%	>96% 0
Streambank Erosion	EROSION	<4%		3
		4-15%		2
		16-30%		1
		31-39%		0
		≥40%		U

Instructions:
Rate each parameter as shown and add the cumulative score. In a few cases age classes will fall into different score brackets; score reproduction in the bracket in which two of the three categories fall. Any reach with more than 30% dead and decadent or 40% or more bank erosion routinely rates unsatisfactory (u) irrespective of total score. The total score is a good indicator to determine if the "problem" is on-site or off-site in origin.

Excellent =	19-24 points
Good =	10-18 points
Fair =	7-9 points
Poor =	<7 points

APPENDIX U

STREAM HABITAT CLASSIFICATION

Stream Survey Form

Stream:
Gradient:
Location:
Time:
Date:

Riffle & Runs:
Stream depth: 1/4: 1/2: 3/4:
Average stream width:

Pools: Width: Depth: Amt: & Type of Pool Cover:

Pool - riffle ratio:

Streambanks: Left: Right:
Bank cover type:
Hgt. of vegetation:
% Bank Cover:
% Ungulate use:
Bank stability:

Classification of Stream bottom & % of each type:
Fine gravel .1-1 in.
Coarse gravel 1-3 in.
Small rubble 3-6 in.
Large rubble 6-12 in.

Aquatic vegetation:
Percent of bottom with algae & diatoms:
Percent of bottom with rooted vegetation:

Amt. of Fish Cover:
% of Streambanks with overhanging vegetation:
% of Banks with undercut areas:
% of Stream shaded:

Sedimentation:
Percent of channel with silt cover:
depth of silt cover:

Chemical & Physical Measurements:
Time:
D. O.:
Current Velocity: 1/4: 1/2: 3/4:
Water Temp.:
Air Temp.:
PH:

Other Apparent Limiting Factors to Fisheries in Area:

STREAM HABITAT INVENTORY

	EXCELLENT	GOOD	FAIR	POOR
1) High Stream bank cover % shading	4 more than 80% shading	3 60% to 80% shading	2 40% to 60% shading	1 less than 40% shading
2) Low Stream bank cover	4 veg. well rooted & over 8", sod intact - no erosion from sodded areas.	3 veg. mostly over 4", sod mostly intact with less than 10% bare soil with broken sod, some surface erosion.	2 veg. mostly less than 3" high, less than 20% bare soil, sod broken & surface erosion apparent.	1 broken sod, over 20% bare soil showing, surface erosion a serious problem.
3) Stream bank stability	4 less than 5% of banks with active erosion.	3 5% to 10% of banks with active erosion.	2 10% to 20% of banks with active erosion.	1 more than 20% of banks with active erosion.
4) Stream channel stability	4 no or negligible lateral channel movement & bank erosion, channel scour or changing channels.	3 up to 5% lateral movement & bank erosion, minor channel scouring & changing channels within stream bed.	2 up to 10% lateral movement, scouring & redeposition obvious, channel changes occuring.	1 more than 10% lateral channel movement & bank cutting, channel changes & scouring evident & source of extreme sedimentation.
5) Sedimentation % fine sediments- sand & smaller covering stream bottom.	4 less than 10% fine sediments.	3 10% to 15% fine sediments.	2 15% to 25% fine sediments.	1 more than 25% fine sediments.
6) In-stream cover- pools, cutbanks, boulders, debris, overhanging veg., velocity breaks or turbulence	4 over 50% of stream channel containing instream cover.	3 25% to 50% instream cover, 50% to 75% exposed.	2 10% to 25% instream cover, 75% to 90% exposed.	1 less than 10% instream cover, over 90% exposed.
	Column Total _____	Column Total _____	Column Total _____	Column Total _____

Total Numerical Score _____

Overall Rating _____

Excellent = 22 to 24 Good = 16 to 21
Fair = 10 to 15 Poor = 6 to 9

APPENDIX V

LAND TRANSFERS - PROPOSED PLAN (ALTERNATIVE E)

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.1S., R.2W.				
Sec. 4, Lot 4, SW¼NW¼, E½SW¼, W½SE¼		232.94		
T.1N., R.2W.				
Sec. 13, SE¼SE¼		40.00		
13, NE¼SW¼, N½SE¼				120.00
T.1N., R.3W.				
Sec. 25, SW¼NW¼		40.00		
26, W½NE¼, SE¼NE¼, NE¼NW¼		160.00		
T.2N., R.3W.				
Sec. 21, W½SW¼NE¼, NW¼NW¼, S½NW¼, N½SW¼, SW¼SW¼, N½SE¼SW¼, W½W½SE¼	320.00			
28, NE¼SW¼, SW¼SE¼		80.00		
29, NE¼NW¼		40.00		
T.4N., R.2E.				
Sec. 7, NW¼NE¼, NE¼NW¼	80.00			
T.4N., R.1E.				
Sec. 11, SW¼NE¼		40.00		
T.5N., R.1E.				
Sec. 3, SW¼NW¼		40.00		
27, SW¼SW¼			40.00	
28, SE¼NW¼			40.00	
33, NW¼NE¼			40.00	
T.5N., R.1W.				
Sec. 14, NW¼SW¼, SE¼SE¼		80.00		
T.5N., R.2W.				
Sec. 21, NE¼NE¼, NE¼NW¼		80.00		
T.6N., R.5E.				
Sec. 23, Lot 7	0.12			
26, Lot 8	5.05			
T.6N., R.3E.				
Sec. 18, E½SW¼		80.00		

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.6N., R.2E.				
Sec. 2, Lot 2		39.66		
17, SE¼NE¼		40.00		
21, NE¼NW¼		40.00		
31, Lot 1		38.61		
T.6N., R.1E.				
Sec. 18, SW¼NE¼		40.00		
21, SE¼SW¼, S½SE¼		120.00		
22, SW¼SW¼		40.00		
27, W½NW¼		80.00		
28, N½NE¼		80.00		
32, NW¼NE¼, N½NW¼		120.00		
T.6N., R.5W.				
Sec. 1, SE¼NE¼				40.00
2, SW¼NE¼, SE¼NW¼, W½SE¼				160.00
10, S½NE¼, NE¼SE¼, S½SE¼				200.00
10, NW¼SE¼		40.00		
12, SE¼NW¼				40.00
23, NW¼NW¼SW¼		10.00		
25, NW¼	160.00			
T.7N., R.2E.				
Sec. 22, SW¼NW¼		40.00		
35, SE¼NW¼, NE¼SE¼		80.00		
T.7N., R.1E.				
Sec. 1, Lot 3, SE¼NW¼, NW¼SW¼		120.00		
2, SE¼SE¼		40.00		
T.7N., R.1W.				
Sec. 12, SW¼NW¼		40.00		
T.7N., R.2W.				
Sec. 7, Lot 1		38.42		
8, NE¼NW¼		40.00		
17, NE¼NE¼		40.00		
T.7N., R.3W.				
Sec. 2, SW¼NE¼		40.00		
4, Lots 1, 2, 3, 4, S½N½, E½SE¼		398.90		
5, Lot 1, SE¼NE¼		80.08		
8, NE¼NE¼		40.00		
12, NW¼SE¼		40.00		
32, NW¼SE¼		40.00		

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.7N., R.5W.				
Sec. 20, Lot 2a			2.80	
T.8N., R.1E.				
Sec. 23, NW¼NW¼		40.00		
28, NE¼NW¼		40.00		
T.8N., R.2W.				
Sec. 18, Lots 5, 6, E½SW¼		158.64		
19, NE¼, E½NW¼, NE¼SW¼, N½SE¼		360.00		
20, NW¼		160.00		
31, Lot 2, S½SE¼		119.13		
32, SW¼NE¼, N½SW¼		120.00		
T.8N., R.3W.				
Sec. 13, SW¼NE¼, SE¼SW¼		80.00		
23, W½NE¼, SE¼NE¼		120.00		
24, NE¼NW¼, S½NW¼, NE¼SW¼		160.00		
25, SW¼NW¼, NE¼SW¼		80.00		
28, NE¼NE¼		40.00		
31, NE¼SE¼		40.00		
32, N½SW¼, SE¼SW¼, SE¼		280.00		
33, NE¼NE¼, S½S½		200.00		
T.9N., R.2E.				
Sec. 18, Lot 2		21.98		
19, Lot 3		22.25		
T.9N., R.1E.				
Sec. 11, S½NW¼		80.00		
26, W½NE¼, SE¼NE¼		120.00		
T.9N., R.2W.				
Sec. 7, Lot 1, NE¼NW¼		74.16		
T.9N., R.3W.				
Sec. 18, SE¼SE¼		40.00		
23, NW¼SE¼		40.00		
28, N½NW¼		80.00		
T.10N., R.3W.				
Sec. 26, NW¼NW¼		40.00		
27, SW¼SE¼		40.00		
34, SE¼NE¼		40.00		
35, S½NW¼, NE¼SW¼		120.00		

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.10N., R.4W.				
Sec. 10, SE¼SW¼		40.00		
12, SW¼SW¼		40.00		
T.12N., R.3W.				
Sec. 12, Lot 3, SE¼NW¼, NW¼SE¼		118.34		
13, NW¼NE¼		40.00		
T.12N., R.4W.				
Sec. 20, NW¼SE¼		40.00		
27, SE¼SE¼		40.00		
T.12N., R.5W.				
Sec. 31, E½SW¼		80.00		
35, NE¼NE¼, NE¼NW¼		80.00		
T.11N., R.2E.				
Sec. 19, Lot 7		40.23		
T.11N., R.1E.				
Sec. 23, NW¼NE¼		40.00		
24, SW¼NW¼		40.00		
26, SE¼SW¼		40.00		
T.11N., R.2W.				
Sec. 1, Lot 1, SE¼NE¼		80.18		
4, Lot 4		43.25		
15, SE¼NE¼, S½NW¼, N½SW¼		200.00		
23, W½NE¼		80.00		
25, SW¼NW¼		40.00		
T.11N., R.5W.				
Sec. 1, W½SE¼		80.00		
5, SE¼SE¼		40.00		
6, Lot 6		40.30		
8, NE¼NE¼		40.00		
9, N½NW¼		80.00		
T.11N., R.6W.				
Sec. 5, NW¼SW¼, SE¼SE¼		80.00		
8, NE¼NE¼, SE¼SE¼		80.00		
T.11N., R.7W.				
Sec. 11, NW¼SE¼		40.00		
12, SW¼SW¼		40.00		

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.13N., R.1W.				
Sec. 17, SE¼SE¼		40.00		
20, NE¼NW¼		40.00		
T.13N., R.2W.				
Sec. 6, SE¼NW¼		40.00		
18, Lots 1, 2		66.87		
T.13N., R.3W.				
Sec. 13, SE¼NE¼		40.00		
22, SE¼NE¼		40.00		
T.13N., R.4W.				
Sec. 11, N½NE¼, SE¼NE¼		120.00		
12, NE¼NE¼, SW¼NW¼		80.00		
23, NE¼NE¼		40.00		
T.13N., R.7W.				
Sec. 25, SE¼NE¼		40.00		
T.14N., R.1W.				
Sec. 8, NW¼SE¼		40.00		
T.14N., R.2W.				
Sec. 1, SE¼SW¼, NW¼SE¼		80.00		
3, SW¼NW¼, NW¼SW¼		80.00		
4, Lots 1, 2, SE¼NE¼		119.29		
T.14N., R.3W.				
Sec. 1, Lot 1		40.00		
23, SW¼NE¼, N½NW¼, SE¼NW¼, E½SW¼, NW¼SE¼		280.00		
T.15N., R.4E.				
Sec. 3, NW¼SW¼		40.00		
T.15N., R.1W.				
Sec. 3, Lot 4		39.11		
4, Lot 4, SW¼NW¼		79.50		
9, S½NW¼		80.00		
17, NW¼NE¼		40.00		
18, NW¼SE¼		40.00		
23, NE¼NW¼, NE¼SW¼		80.00		

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.15N., R.2W.				
Sec. 3, SW¼SW¼		40.00		
13, N½N½		160.00		
14, NW¼NE¼, N½NW¼		120.00		
15, NE¼NE¼		40.00		
27, W½NW¼		80.00		
30, Lots 3, 4, E½SW¼		162.30		
31, Lot 1		41.12		
33, SE¼SE¼		40.00		
35, NW¼SE¼		40.00		
T.15N., R.3W.				
Sec. 25, SE¼SE¼		40.00		
27, SW¼SE¼		40.00		
28, SE¼SE¼		40.00		
33, NE¼NE¼		40.00		
34, NE¼NE¼		40.00		
T.16N., R.1W.				
Sec. 4, NE¼SW¼		40.00		
25, NE¼SE¼		40.00		
33, S½S½		160.00		
T.16N., R.2W.				
Sec. 30, Lot 6		7.84		
T.16N., R.4W.				
Sec. 8, NE¼NW¼			40.00	
17, NW¼NW¼			40.00	
18, E½NE¼			80.00	
T.16N., R.5W.				
Sec. 2, Lot 3			40.14	
4, NE¼SW¼			40.00	
5, N½SW¼, SE¼SW¼			120.00	
6, Lots 1, 5, 6			101.24	
8, SE¼NE¼, E½NW¼			120.00	
9, NW¼NW¼, SE¼NW¼, SE¼SW¼, W½SE¼			200.00	
10, SW¼			160.00	
11, NE¼			160.00	
15, NW¼NE¼, NW¼NW¼, N½SW¼, SW¼SW¼			200.00	
19, Lots 3, 4, E½SW¼			142.15	
21, NW¼NE¼, N½NW¼			120.00	
23, SE¼NW¼, E½SW¼			120.00	
24, E½NW¼			80.00	

Legal Description	Sale T1	Sale or Exchange T2	Exchange Only T3	DLE T4
T.16N., R.6W.				
Sec,. 1, Lot 2, NW¼SE¼			64.20	
10, E½SE¼			80.00	
14, S½NE¼			80.00	
23, SE¼SW¼, SE¼			200.00	
24, SW¼, S½SE¼			240.00	
25, W½			320.00	
26, N½, N½S½			480.00	
27, NW¼NW¼, S½			360.00	
28, SE¼NE¼, NE¼SE¼			80.00	
T.17N., R.1W.				
Sec. 5, Lot 4, SW¼NW¼		73.45		
15, SE¼SW¼		40.00		
19, S½SE¼		80.00		
21, NW¼NE¼, NW¼NW¼		80.00		
22, SW¼NE¼		40.00		
T.17N., R.4W.				
Sec. 6, Lots 6, 7, E½SW¼			133.60	
7, Lots 1, 2, E½NW¼, NE¼SW¼			173.10	
18, Lots 1, 3, 4, SE¼NW¼, E½SW¼			200.50	
19, Lots 1, 5, E½NW¼, E½SW¼NW¼, NE¼SW¼, E½NW¼SW¼, N½SE¼SW¼			210.97	
T.17N., R.5W.				
Sec. 1, E½SW¼, E½SW¼SW¼, SE¼			260.00	
11, NE¼NE¼SE¼, S½NE¼SE¼, NE¼SW¼SE¼, S½SW¼SE¼, SE¼SE¼			100.00	
12, SW¼NE¼, S½NW¼, N½SW¼, W½SE¼			280.00	
13, SW¼NE¼, S½NW¼, N½SW¼, N½SE¼			280.00	
14, N½NE¼, SE¼NE¼, NE¼SE¼			160.00	
23, SE¼SW¼			40.00	
24, E½NE¼			80.00	
25, NW¼NE¼, SE¼NE¼, E½SE¼			160.00	
27, SW¼NE¼, NE¼SW¼			80.00	
28, E½NE¼SE¼SE¼, S½SE¼SE¼			25.00	
32, SW¼SW¼			40.00	
34, S½			320.00	
35, SE¼SE¼			40.00	
T.18N., R.2W.				
Sec. 33, SW¼NE¼		40.00		
TOTALS	563.00	10,106.55	6,374.00	560.00

APPENDIX W

PETROLEUM AND GEOTHERMAL POTENTIAL

PETROLEUM POTENTIAL

Subsurface data is very limited as described in the report, "Oil and gas potential in the Cascade RMP" (Moore 1984). However, parts of the Cascade Resource Area (RA) are considered to have some potential for petroleum resources. However, with respect to the more promising areas in the Overthrust belt of eastern Idaho, the petroleum potential of the Cascade RA is relatively low.

Map 3-11 displays the petroleum potential of areas within the Cascade RA with respect to their geologic setting in Idaho.

Western Snake River Plain - Generally low potential for petroleum (natural gas) resources. A low to medium potential has been assigned to the area of numerous gas shows in exploratory wells in the Payette area.

The best potential for petroleum resources in the RA is within the western Snake River Plain. The petroleum potential of the western Snake River Plain is difficult to assess because of the persistent volcanic cover, low density of exploratory drillings, and a paucity of subsurface geophysical data. However, non-marine, carbonaceous sedimentary rocks that are intercalated with volcanic sequences beneath the Snake River Plain may have some potential as organic-rich source rocks. Numerous gas shows from exploratory wells on the Snake River Plain, particularly near the Payette area, indicate the presence of at least some minor accumulations of methane and related gases. Methane associated with ground water systems has also been reported from many water wells throughout the western Snake River Plain. The presence of larger commercial accumulations of gas is presently unknown. The western Snake River Plain is considered as "prospectively valuable" for petroleum resources (natural gas).

Idaho Batholith - Zero potential.

The widespread presence of plutonic rocks of the batholith precludes the presence of oil and gas in this area.

Columbia River Basalt Plateau - Zero to low potential.

This region is associated with the thick cover of the Miocene Columbia River Basalt. The Columbia Plateau is largely unexplored and the subsurface largely unknown because of the vast volcanic cover. Conventional geophysical techniques have been unable to penetrate the basalts. In the western part of the area along the Snake River, a variety of Pre-Tertiary rocks crop out discontinuously through the basalt. These Pre-Tertiary rocks consists mostly of a wide-range of late Paleozoic through Triassic volcaniclastic sedimentary, metasedimentary, and metavolcanic rocks. Although some of the marine sedimentary rocks may have some minor potential, the high degree of metamorphism of many of these rocks indicates a poor chance for accumulation of petroleum resources.

Carbonaceous Tertiary sedimentary rocks underlying Columbia River basalt in Washington have yielded some gas shows and have attracted industry interest in the past few years. Although the Columbia River basalts probably overlap batholith rocks to the east and Pre-Tertiary metamorphic rocks to the west, accumulations of non-marine carbonaceous sedimentary rocks may underlie central parts of this area within the RA. Therefore some minor potential cannot be ruled out.

Outlook for Petroleum Exploration in the Cascade RA

Extensive industry exploration in the Cascade RA in the immediate future is very unlikely, considering the recent downturn in the petroleum industry and the extremely speculative potential of the area. However, as in the past, when petroleum industry conditions improve, sporadic exploration activity can be anticipated on the western Snake River Plain.

Improved magnetotelluric geophysical methods on the Snake River Plain and the Columbia Plateau hold promise that knowledge of the subsurface and the petroleum potential can be improved.

Petroleum Potential Categories for the Cascade RA

Zero Potential = No potential for petroleum resources. No geologic evidence to indicate the presence of potential source rocks, reservoir rocks, trapping mechanisms, or favorable thermal history required for petroleum accumulation.

Zero to Low Potential = Little evidence of characteristics necessary for petroleum accumulations. Although the subsurface is poorly known, the presence of rocks favorable for petroleum resources could conceivably be masked by surface volcanic cover.

Low Potential = Some geologic indication of petroleum potential, particularly natural gas. Although knowledge of the subsurface is poor, the presence of thick carbonaceous sedimentary sequences which could serve as possible petroleum source rocks are present at depth.

Low to Medium Potential = Concentration of gas shows in exploratory wells indicate an increased favorability for at least minor gas accumulations.

Refer to Map 3-11 for a display of these categories within the Cascade Resource Area.

GEOTHERMAL POTENTIAL

Refer to Map 3-12 for a display of the geothermal potential in the Cascade Resource Area.

Geothermal Regions

Snake River Plain - Characterized by warm to moderate temperature (40°-150°) regional thermal aquifer systems.

Idaho Batholith - Characterized by warm to moderate isolated and localized fault or fracture controlled systems.

Columbia Basalt Plateau - The existence of thermal resources in this area is largely unknown. The area is probably partially underlain by the Idaho Batholith in the eastern one third of the area and therefore contains localized fracture controlled systems. The remainder of the area may contain isolated small low to moderate temperature systems.

Potentials

Potentials are for low to moderate temperature (40°-150°) geothermal resources. Potential for high temperature (>150°C) geothermal resources is zero to low and largely unknown for the entire Cascade Resource Area.

Zero to Low - Areas that are largely unknown but may have some potential based on higher than normal heat flow.

Low - Area contains scattered warm wells and springs and favorable geologic structures.

Moderate - Area contains numerous thermal wells and springs that appear to be related hydrologically.

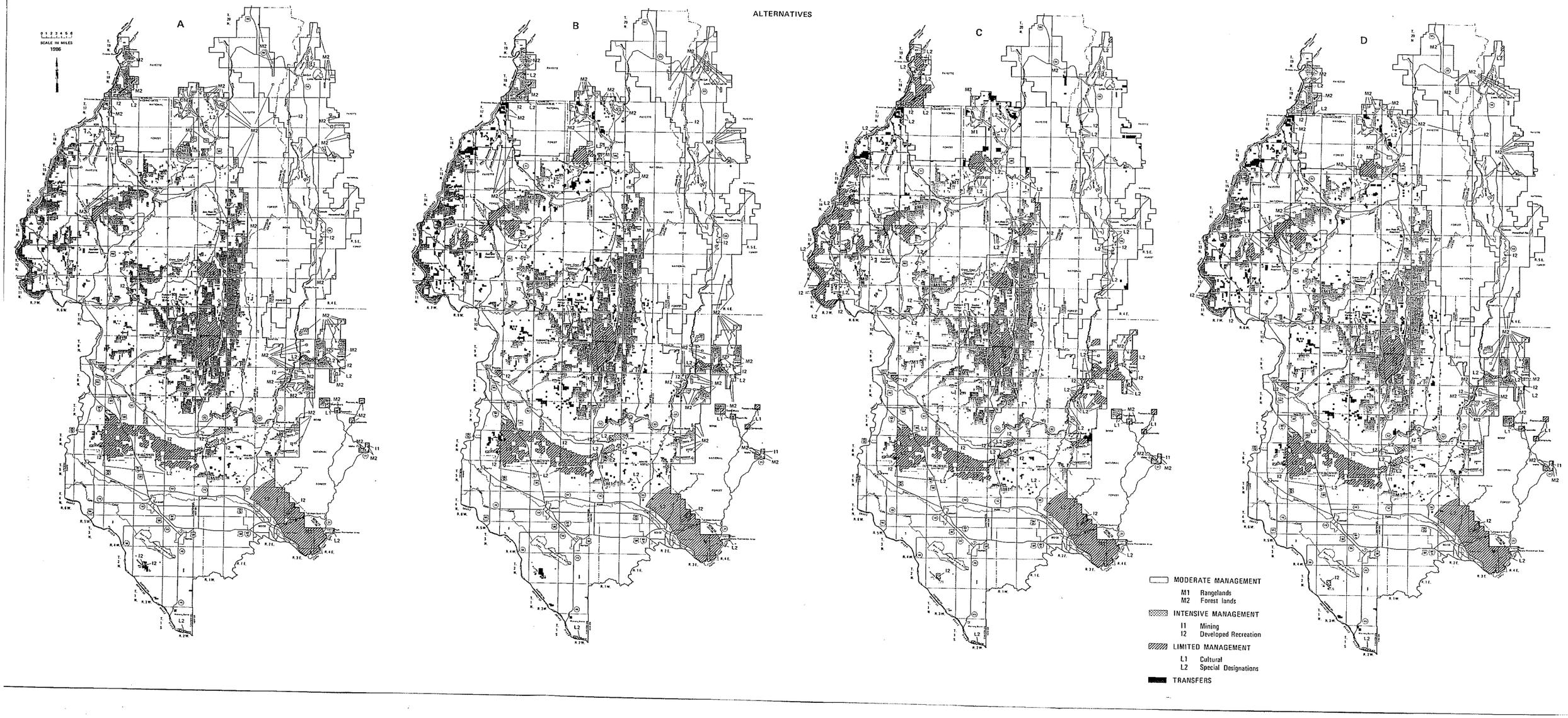
High - Area contains developed systems or systems that are well defined based on geologic and hydrologic data.

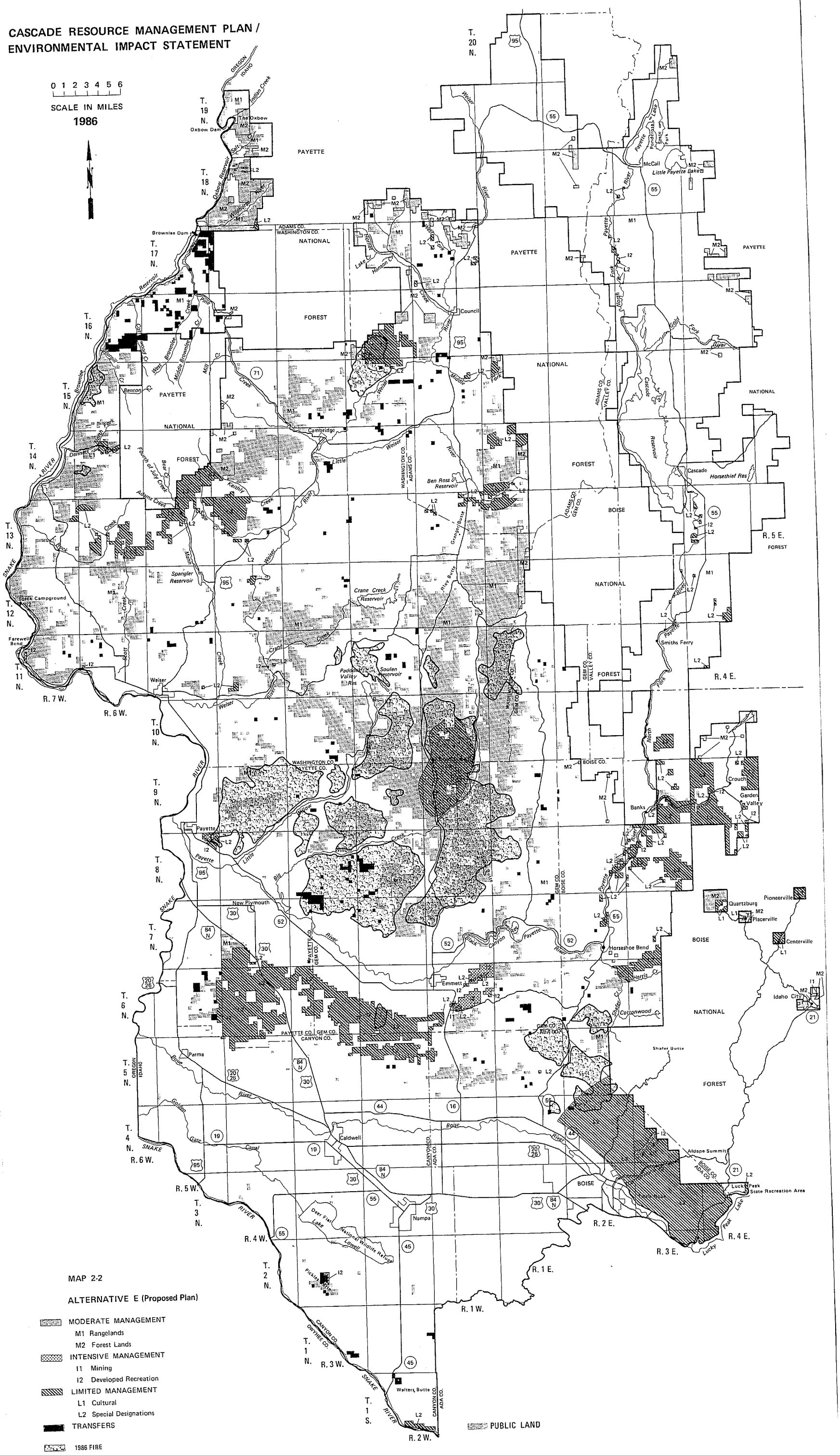
*U.S. GOVERNMENT PRINTING OFFICE: 1987-0-791-057/61002

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

MAP 2-1

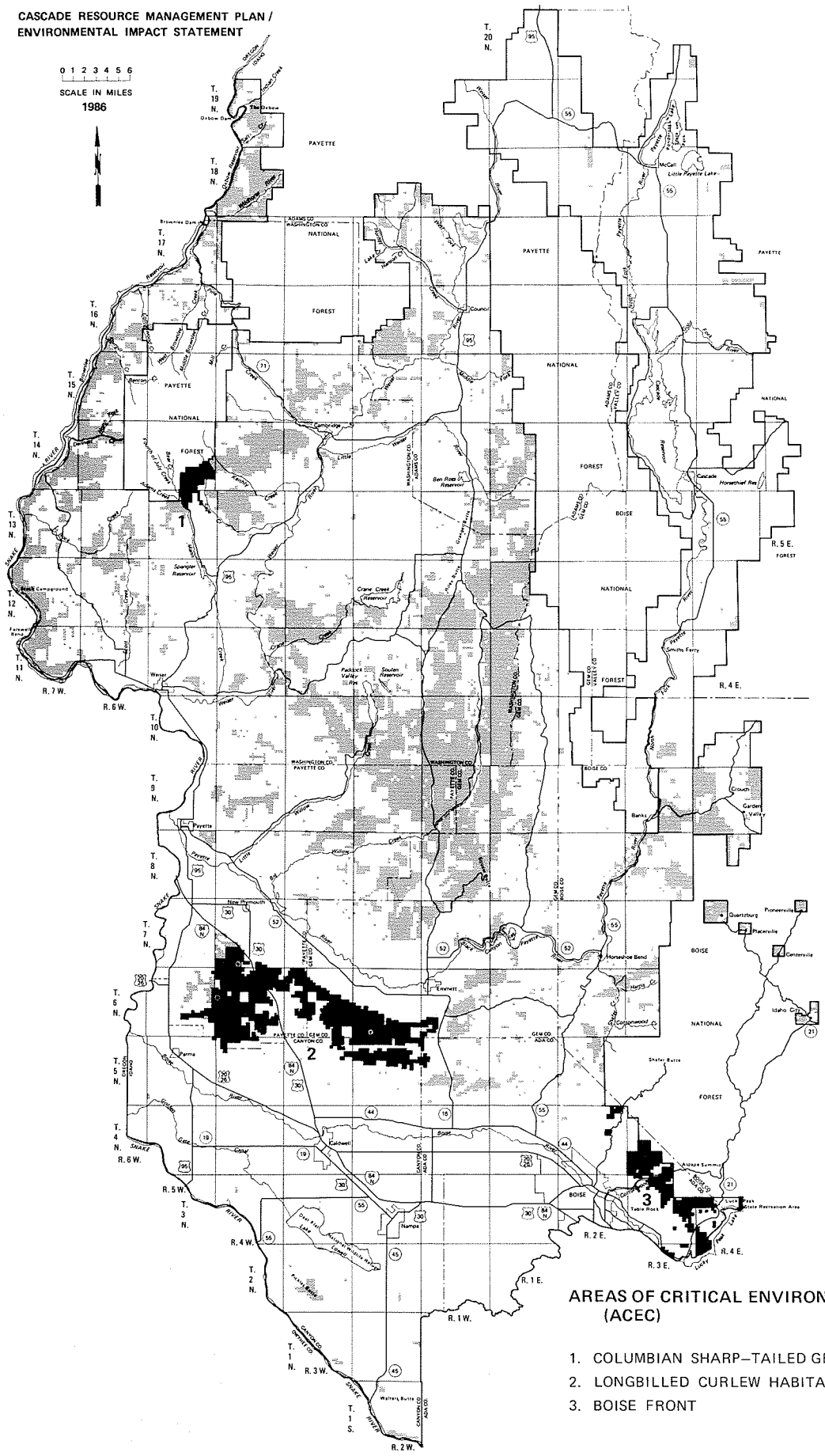
ALTERNATIVES




CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT
0 1 2 3 4 5 6
SCALE IN MILES
1986
MAP 2-2
ALTERNATIVE E (Proposed Plan)
MODERATE MANAGEMENT
M1 Rangelands
M2 Forest Lands
INTENSIVE MANAGEMENT
I1 Mining
I2 Developed Recreation
LIMITED MANAGEMENT
L1 Cultural
L2 Special Designations
TRANSFERS
1986 FIRE
PUBLIC LAND
T. 20 N.
T. 19 N.
T. 18 N.
T. 17 N.
T. 16 N.
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
T. 11 N.
T. 10 N.
T. 9 N.
T. 8 N.
T. 7 N.
T. 6 N.
T. 5 N.
T. 4 N.
T. 3 N.
T. 2 N.
T. 1 N.
T. 1 S.
R. 7 W.
R. 6 W.
R. 5 W.
R. 4 W.
R. 3 W.
R. 2 W.
R. 1 W.
R. 1 E.
R. 2 E.
R. 3 E.
R. 4 E.
R. 5 E.
OREGON
IDAHO
Oxbow Dam
The Oxbow
Brownlee Dam
Oxbow Reservoir
Brownlee Reservoir
Hells Canyon Reservoir
Weiser
Cambridge
Council
Ben Ross Reservoir
Spangler Reservoir
Crane Creek Reservoir
Paddock Valley Res
Soulen Reservoir
Horseshoe Bend
Emmett
Payette
New Plymouth
Parma
Caldwell
Nampa
Walters Butte
Deer Flat National Wildlife Refuge
Lake Lowell
Pickles Butte
Farewell Bend
Stack Campground
McCall
Little Payette Lake
Pondosa State Park
Smiths Ferry
Cascade
Horsethief Res
Banks
Crouch
Garden Valley
Quartzburg
Placerville
Pioneerville
Centerville
Idaho City
Aldape Summit
Lucky Peak State Recreation Area
Shafer Butte
Cottonwood
Darrell
Benton
Darrell
Kathly
Spangler
Gangler/Butte
Little Payette Lake
PAYETTE
NATIONAL
FOREST
BOISE
ADAMS CO.
WASHINGTON CO.
VALLEY CO.
GEM CO.
BOISE CO.
PAYETTE CO.
CANYON CO.
ADA CO.
OWYHEE CO.
SNAKE RIVER
Weiser River
Payette River
Boise River
Little Payette Lake
Lucky Peak Lake

MAP 2-3

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



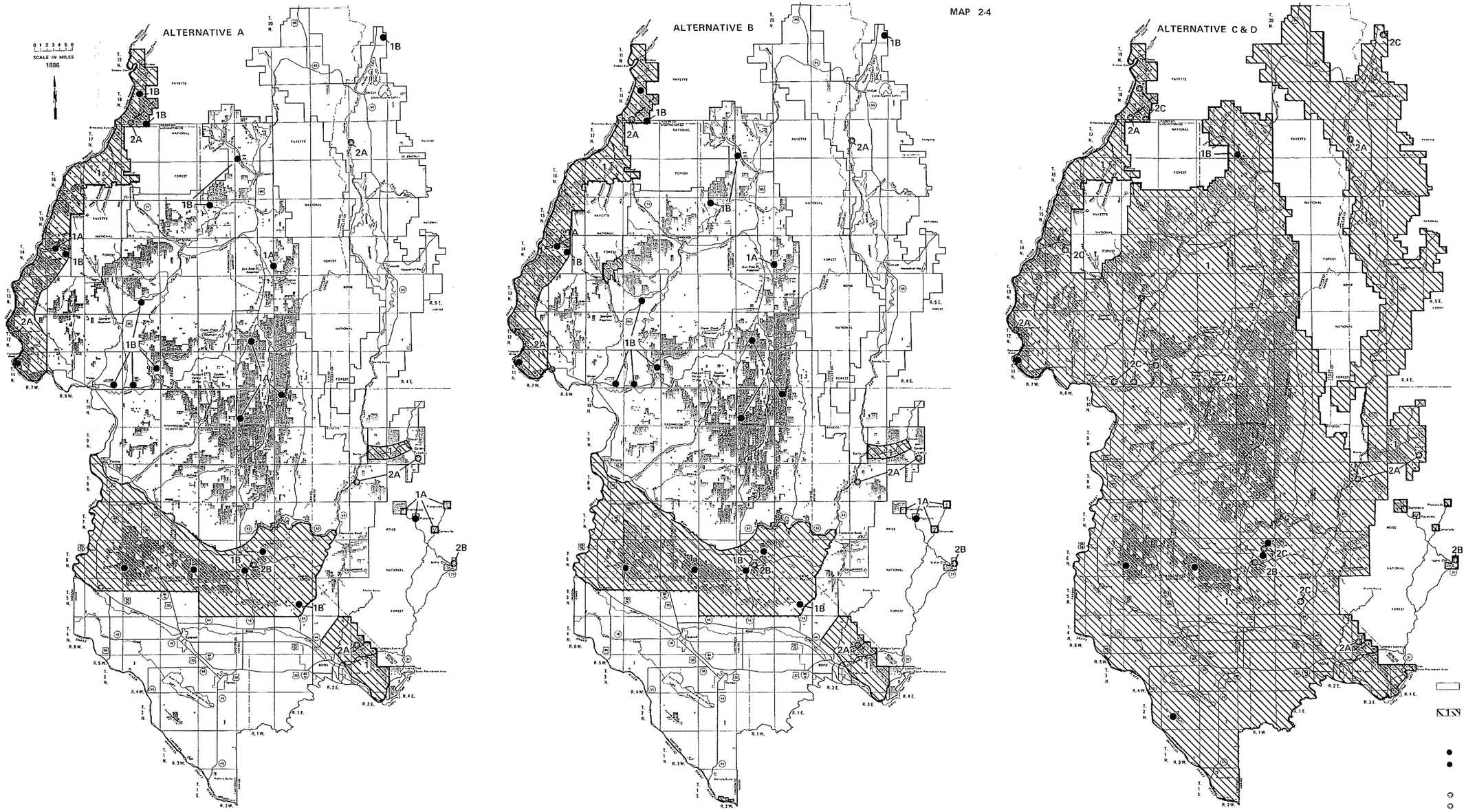
AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)

1. COLUMBIAN SHARP–TAILED GROUSE HABITAT
2. LONGBILLED CURLEW HABITAT
3. BOISE FRONT

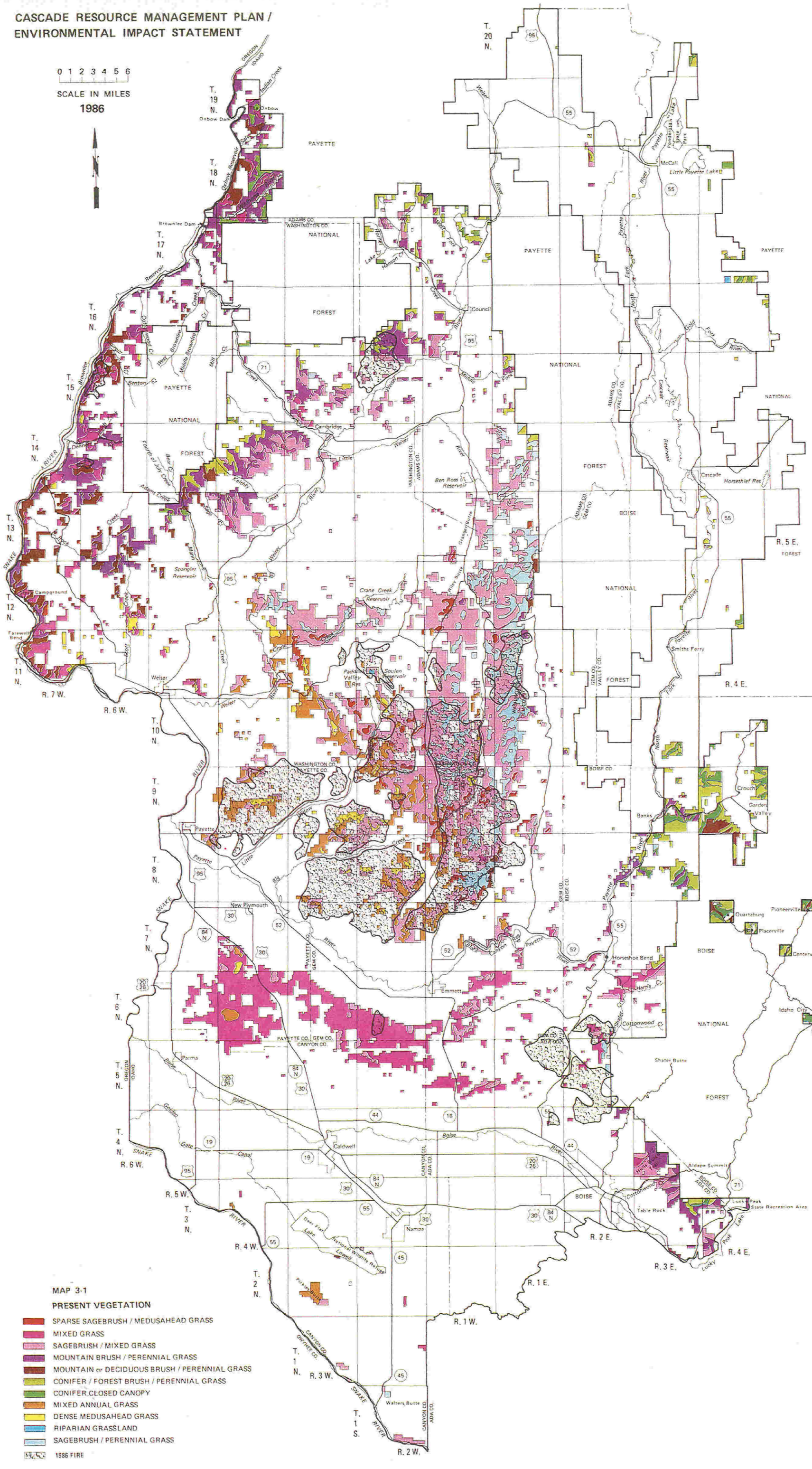
CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

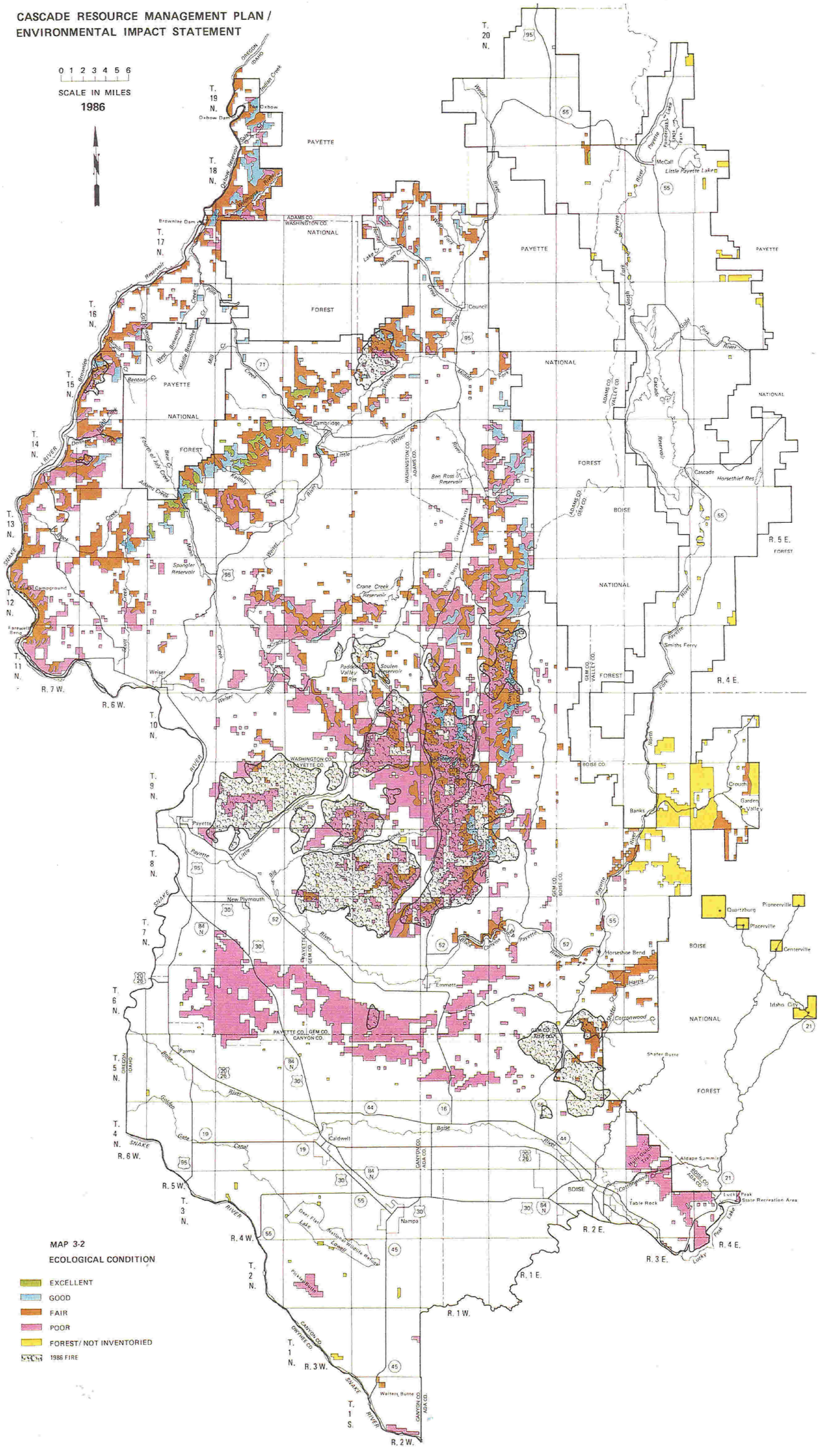
OFF-ROAD VEHICLE DESIGNATIONS BY ALTERNATIVES

MAP 2-4



CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

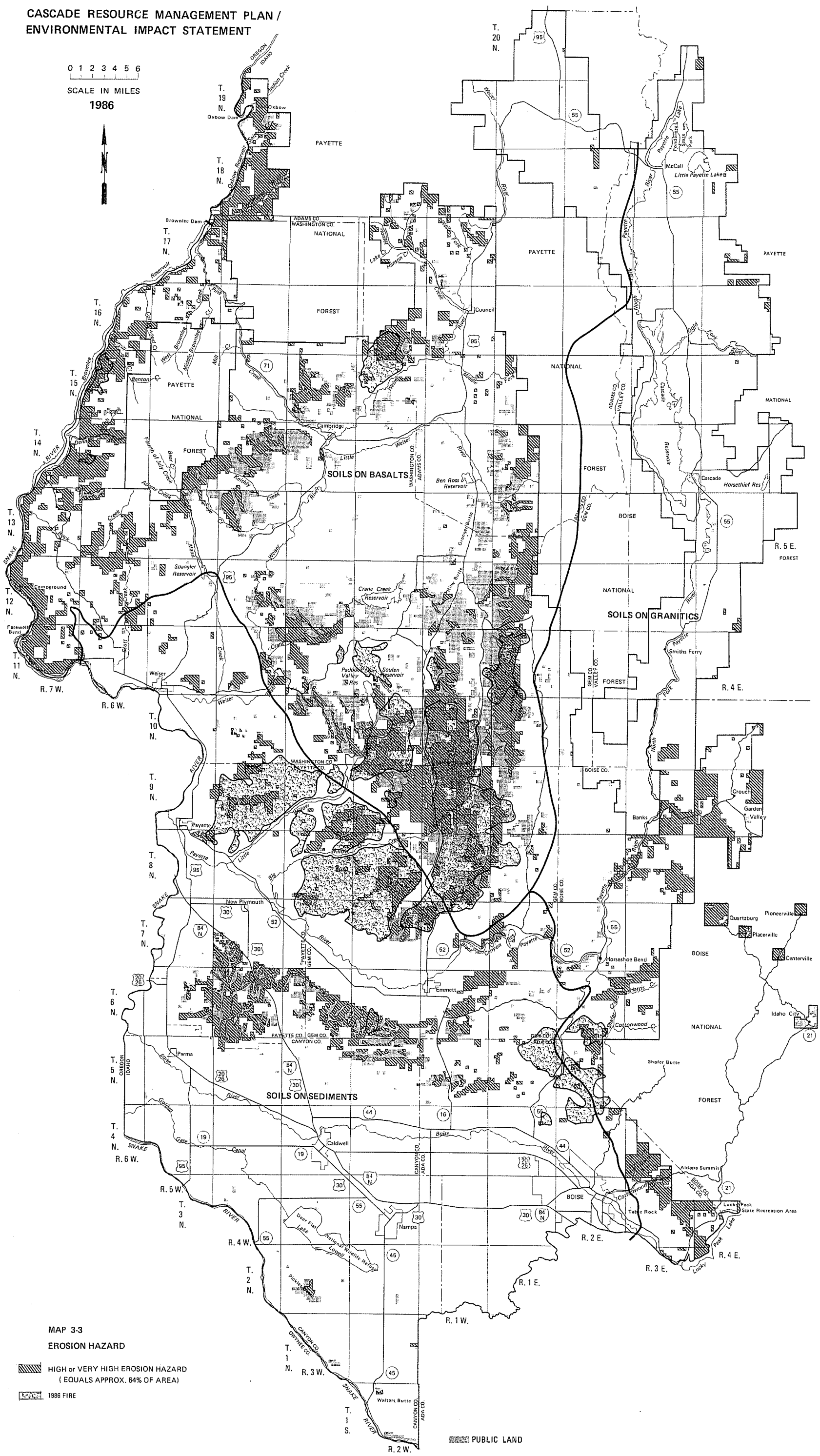




MAP 3-2
ECOLOGICAL CONDITION

- EXCELLENT
- GOOD
- FAIR
- POOR
- FOREST/ NOT INVENTORIED
- 1986 FIRE

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



MAP 3-3

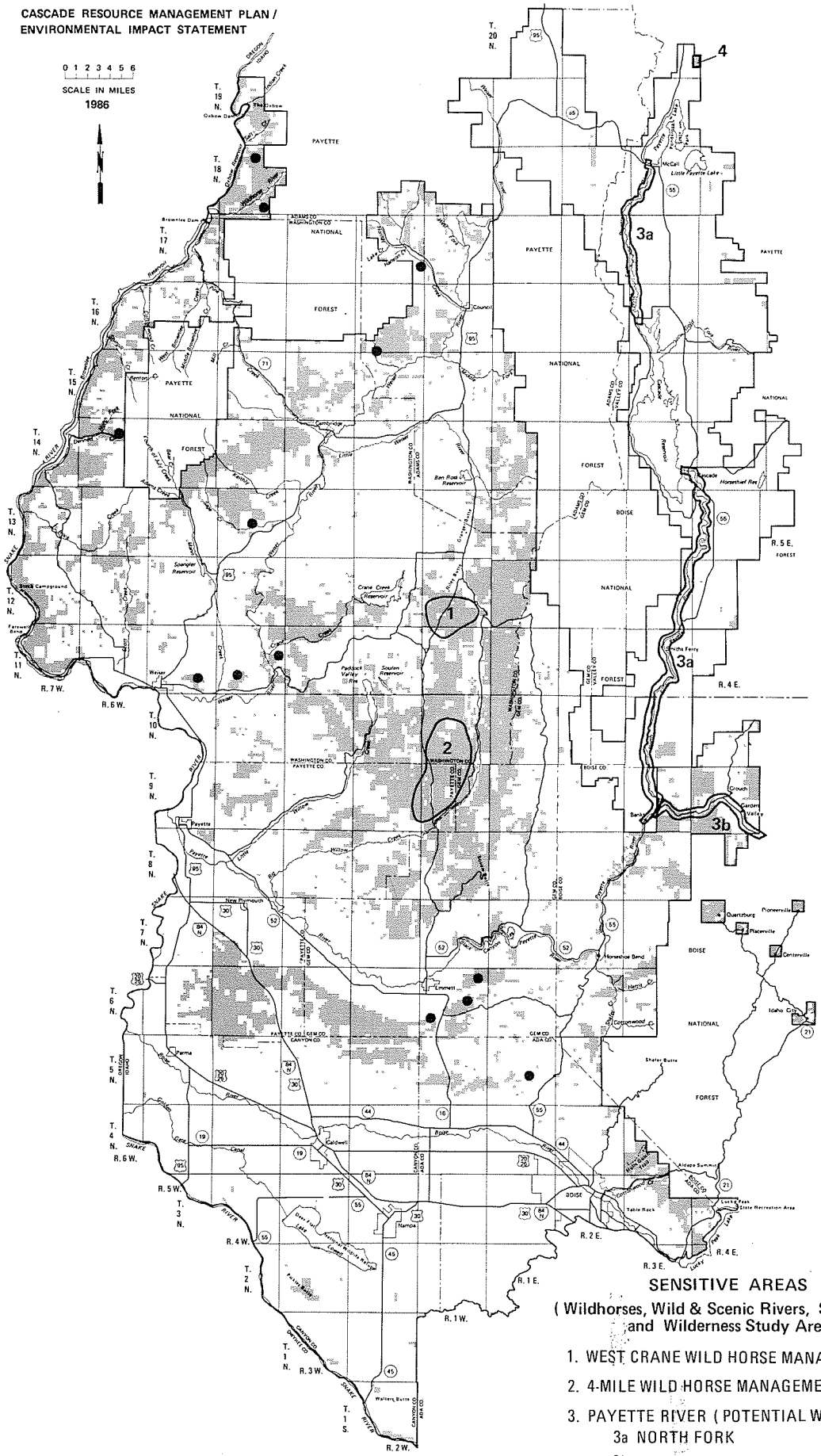
EROSION HAZARD

HIGH or VERY HIGH EROSION HAZARD (EQUALS APPROX. 64% OF AREA)

1986 FIRE

MAP 3-4

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



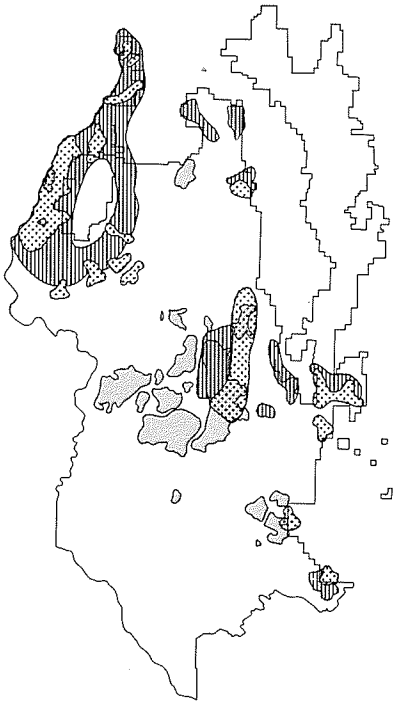
SENSITIVE AREAS

(Wildhorses, Wild & Scenic Rivers, Sensitive areas, and Wilderness Study Area)

1. WEST CRANE WILD HORSE MANAGEMENT AREA
2. 4-MILE WILD HORSE MANAGEMENT AREA
3. PAYETTE RIVER (POTENTIAL WILD & SCENIC RIVER)
   - 3a NORTH FORK
   - 3b SOUTH FORK
4. BOX CREEK WSA

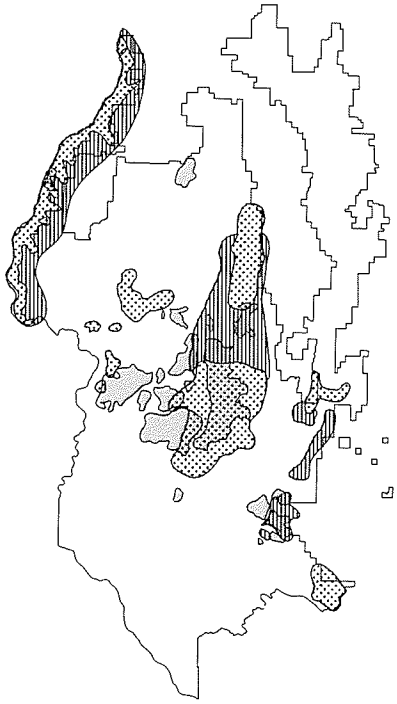
● SENSITIVE PLANT SITES

MAP 3-5
WILDLIFE HABITAT



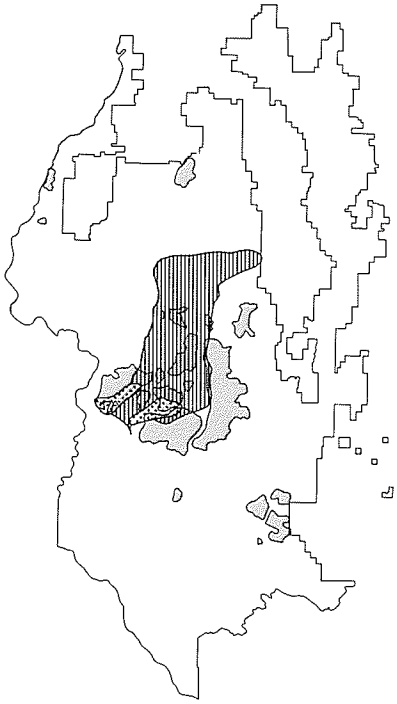
ELK

- Crucial Winter
- Fall / Winter
- 1986 FIRE



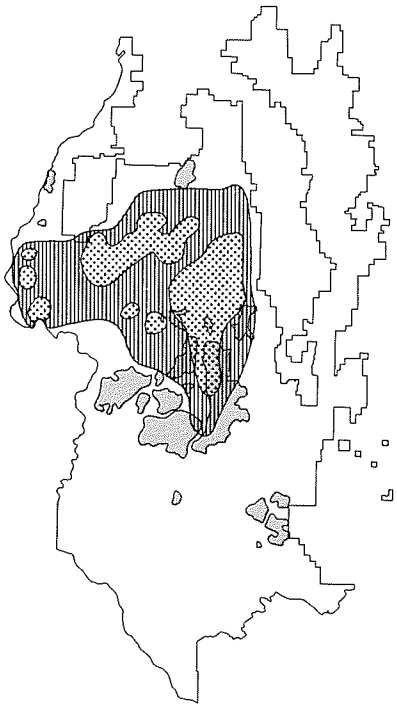
MULE DEER

- Crucial Winter
- Fall / Winter
- 1986 FIRE



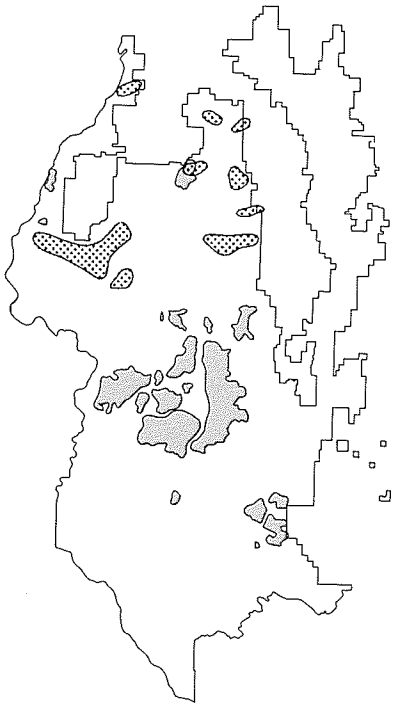
ANTELOPE

- Crucial Winter
- General Distribution
- 1986 FIRE



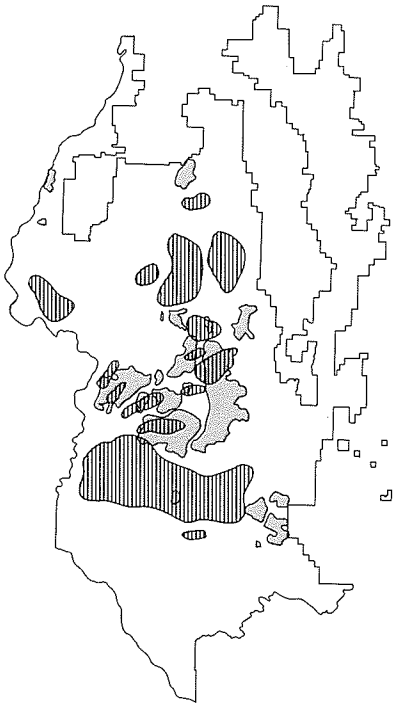
SAGEGROUSE

- Crucial Habitat
- General Distribution
- 1986 FIRE



SHARP-TAILED GROUSE

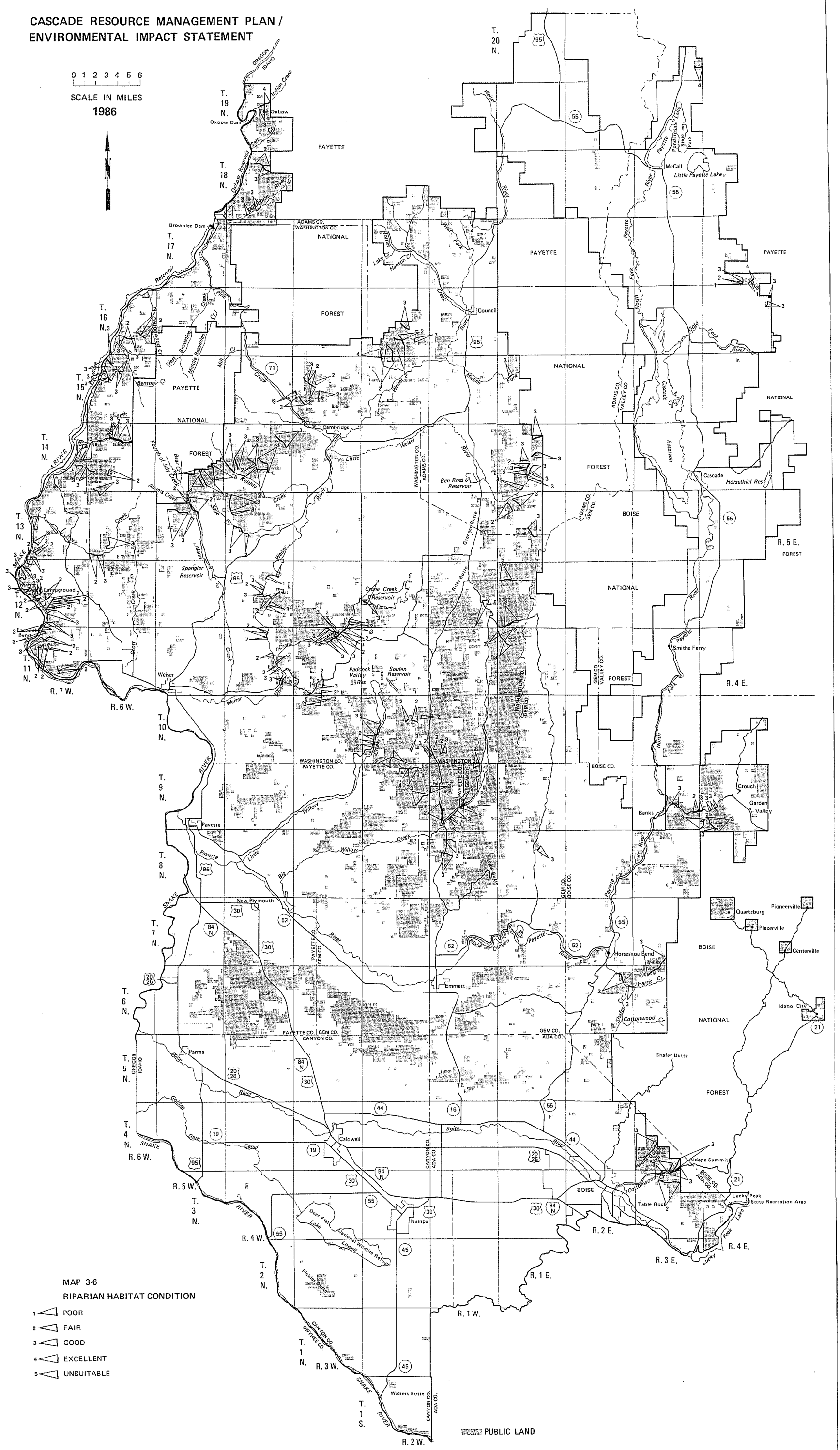
- Crucial Habitat
- 1986 FIRE

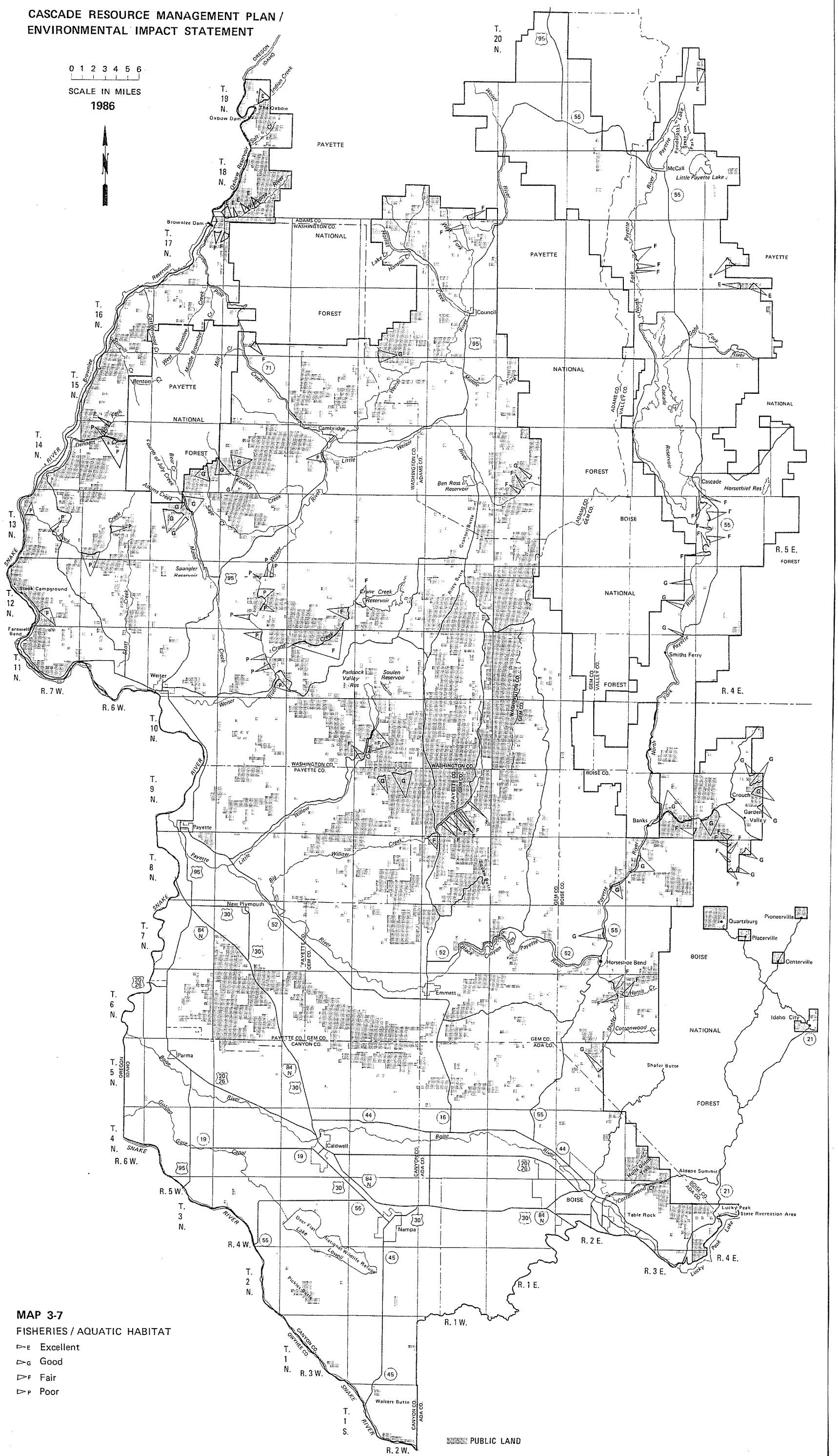


LONG-BILLED CURLEW

- Concentration Areas
- 1986 FIRE

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



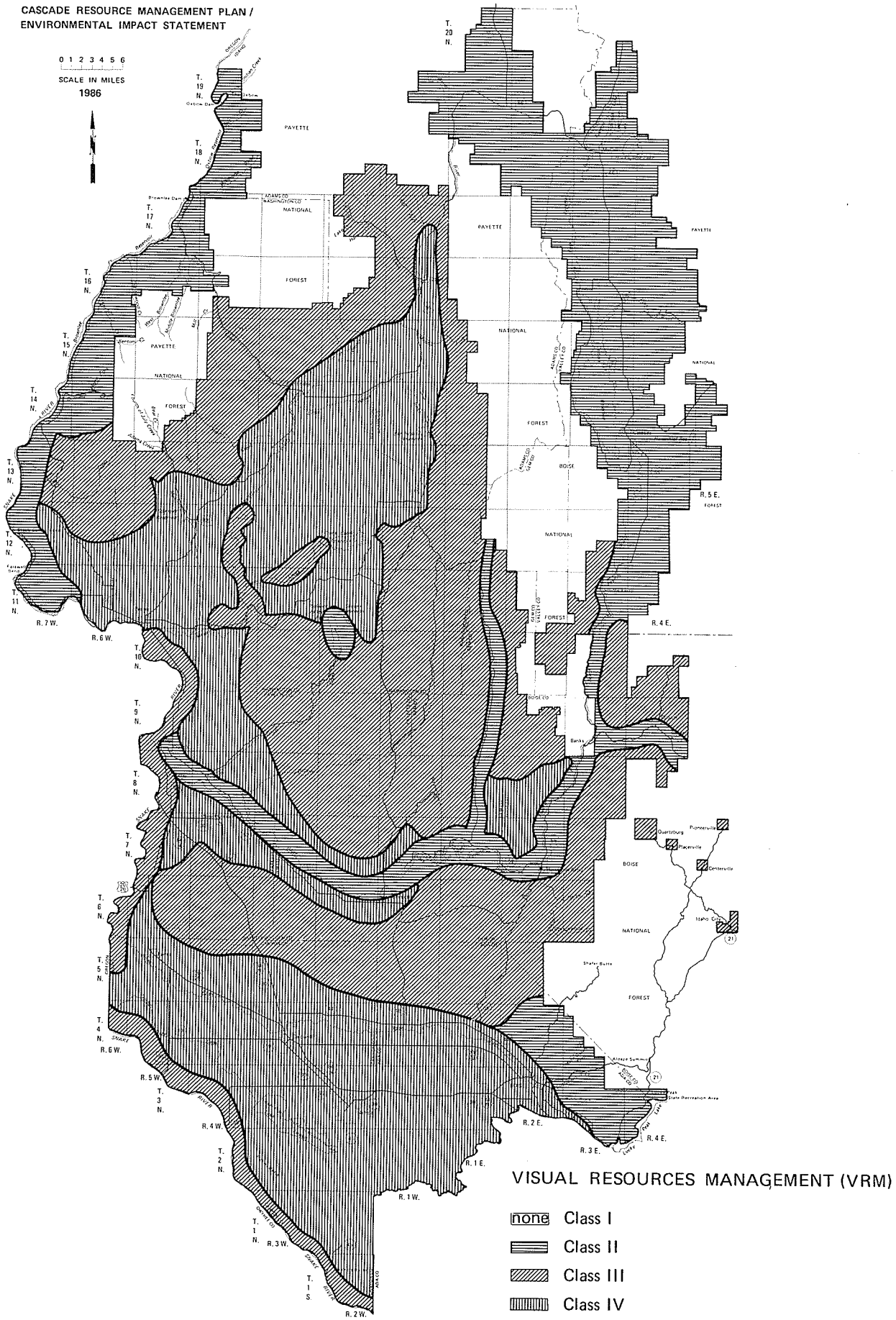


MAP 3-7

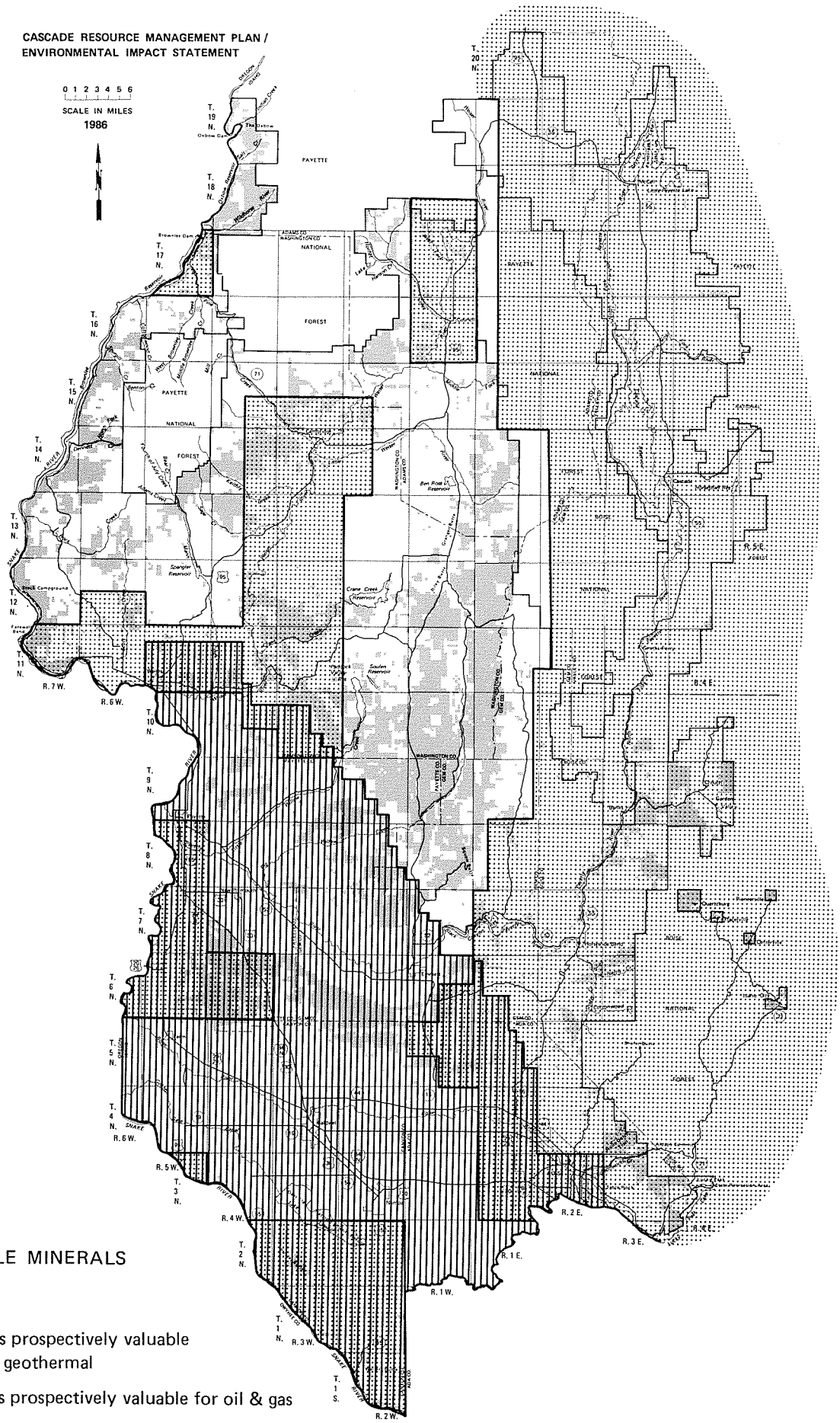
FISHERIES / AQUATIC HABITAT

- E Excellent
- G Good
- F Fair
- P Poor

MAP 3-8


CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT
0 1 2 3 4 5 6
SCALE IN MILES
1986
VISUAL RESOURCES MANAGEMENT (VRM)
none Class I
Class II
Class III
Class IV

MAP 3-9


CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT
0 1 2 3 4 5 6
SCALE IN MILES
1986
N
PAYETTE
NATIONAL
FOREST
Boise
Ben Ross Reservoir
Clark Creek Reservoir
Sawtooth Reservoir
Spangler Reservoir
Black Canyon Reservoir
Cascade
Horseshoe Bend
Emmett
Ola
Banks
Lowman
Garden Valley
Idaho City
Placerville
Pine
Atlanta
Mountain Home
Glenns Ferry
Bruneau
Grand View
Marsing
Nampa
Caldwell
Meridian
Eagle
Star
Middleton
Kuna
Melba
Nyssa
Parma
Wilder
Homedale
Greenleaf
Notus
Sunnyslope
Adams Co
Washington Co
Ada Co
Boise Co
Gem Co
Owyhee Co
Canyon Co
Elmore Co
Valley Co
Payette Co
Ada Co
Snake River
Boise River
Weiser River
Payette River
Salmon River
Owyhee River
Bruneau River
Jarbidge River
Malheur River
Lake Lowman
Lake Pleasant
Lake Fork
Lake Cascade
Deadwood Reservoir
Anderson Ranch Reservoir
Arrowrock Reservoir
Lucky Peak Reservoir
Mores Creek Reservoir
Mountain Home Reservoir
Lake Owyhee
Brownlee Dam
Oxbow Dam
Hells Canyon Dam
Black Canyon Dam
Boise Campground
Farewell Bend
Ontario
Weiser
Payette
Nampa
Caldwell
Boise
Mountain Home
Glenns Ferry
Bruneau
Marsing
Homedale
Nyssa
Parma
Wilder
Greenleaf
Notus
Sunnyslope
Middleton
Eagle
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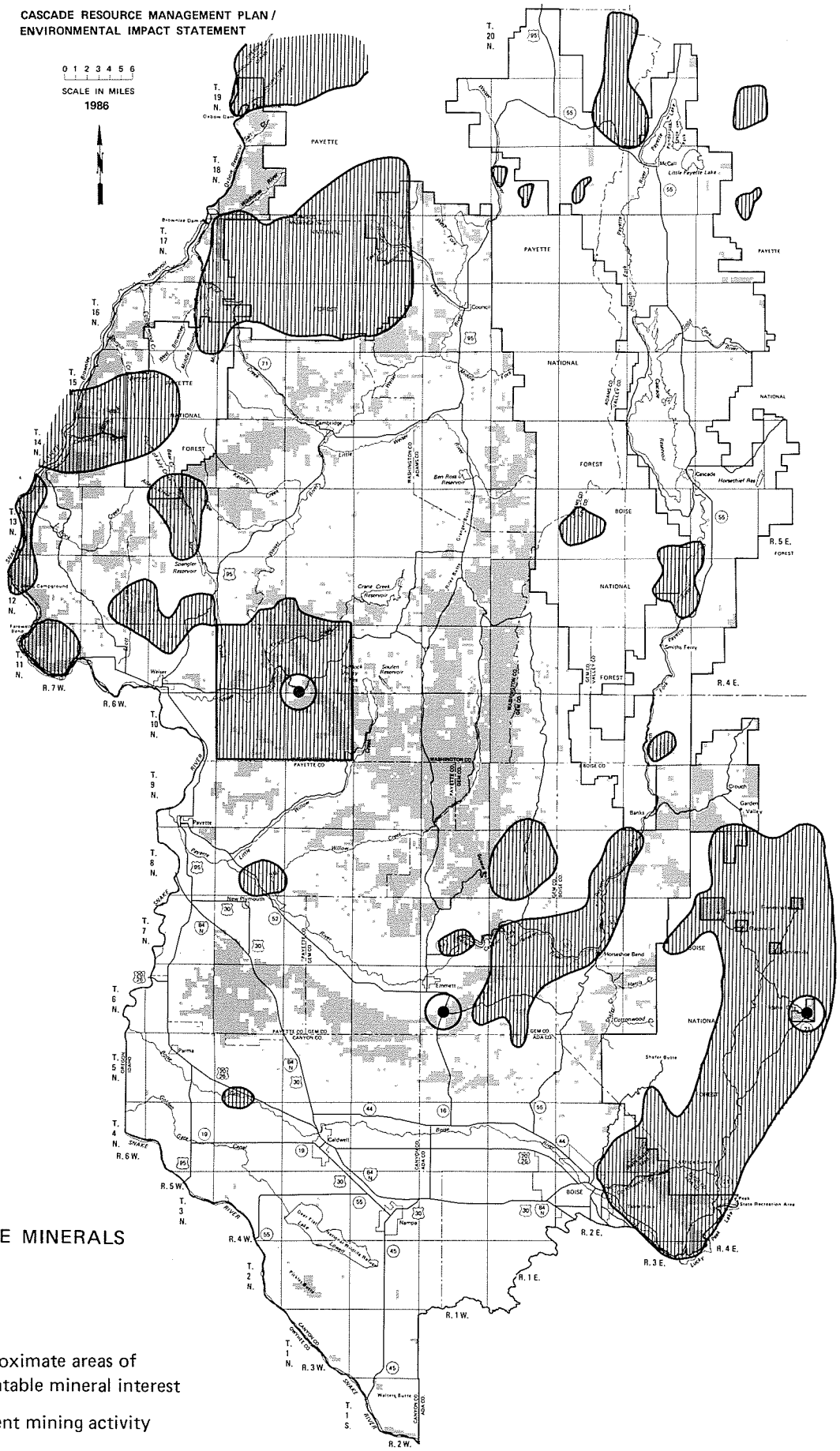
Meridian
Eagle
Star
Middleton
Kuna
Melba
Nyssa
Parma
Wilder
Homedale
Greenleaf
Notus
Sunnyslope
T. 20 N.
T. 19 N.
T. 18 N.
T. 17 N.
T. 16 N.
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
T. 11 N.
T. 10 N.
T. 9 N.
T. 8 N.
T. 7 N.
T. 6 N.
T. 5 N.
T. 4 N.
T. 3 N.
T. 2 N.
T. 1 N.
T. 1 S.
R. 7 W.
R. 6 W.
R. 5 W.
R. 4 W.
R. 3 W.
R. 2 W.
R. 1 W.
R. 1 E.
R. 2 E.
R. 3 E.
R. 4 E.
R. 5 E.
R. 6 E.
LEASEABLE MINERALS
Lands prospectively valuable for geothermal
Lands prospectively valuable for oil & gas

MAP 3 - 10



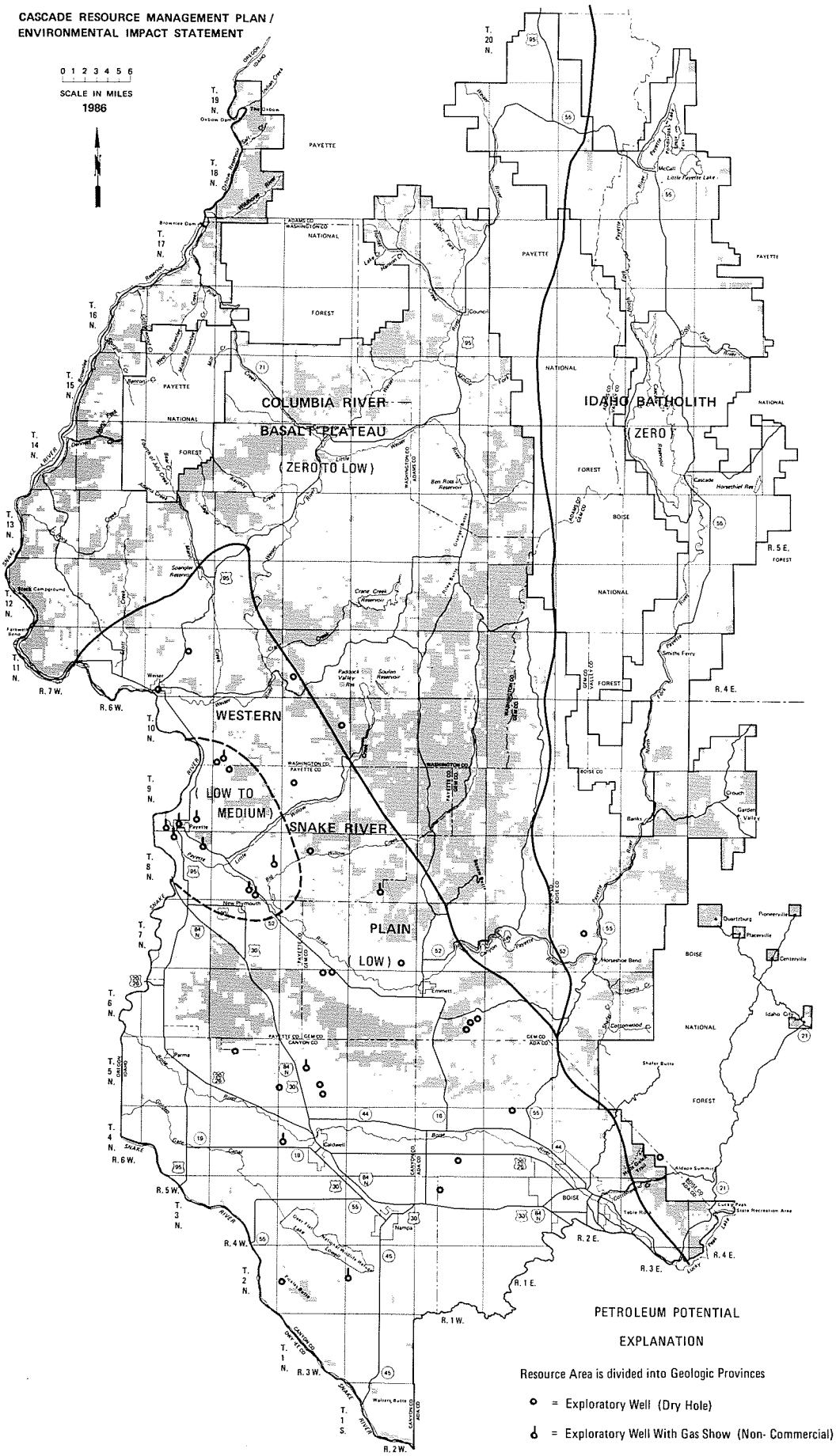
LOCATABLE MINERALS

Approximate areas of locatable mineral interest

Current mining activity

MAP 3-11

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



PETROLEUM POTENTIAL

EXPLANATION

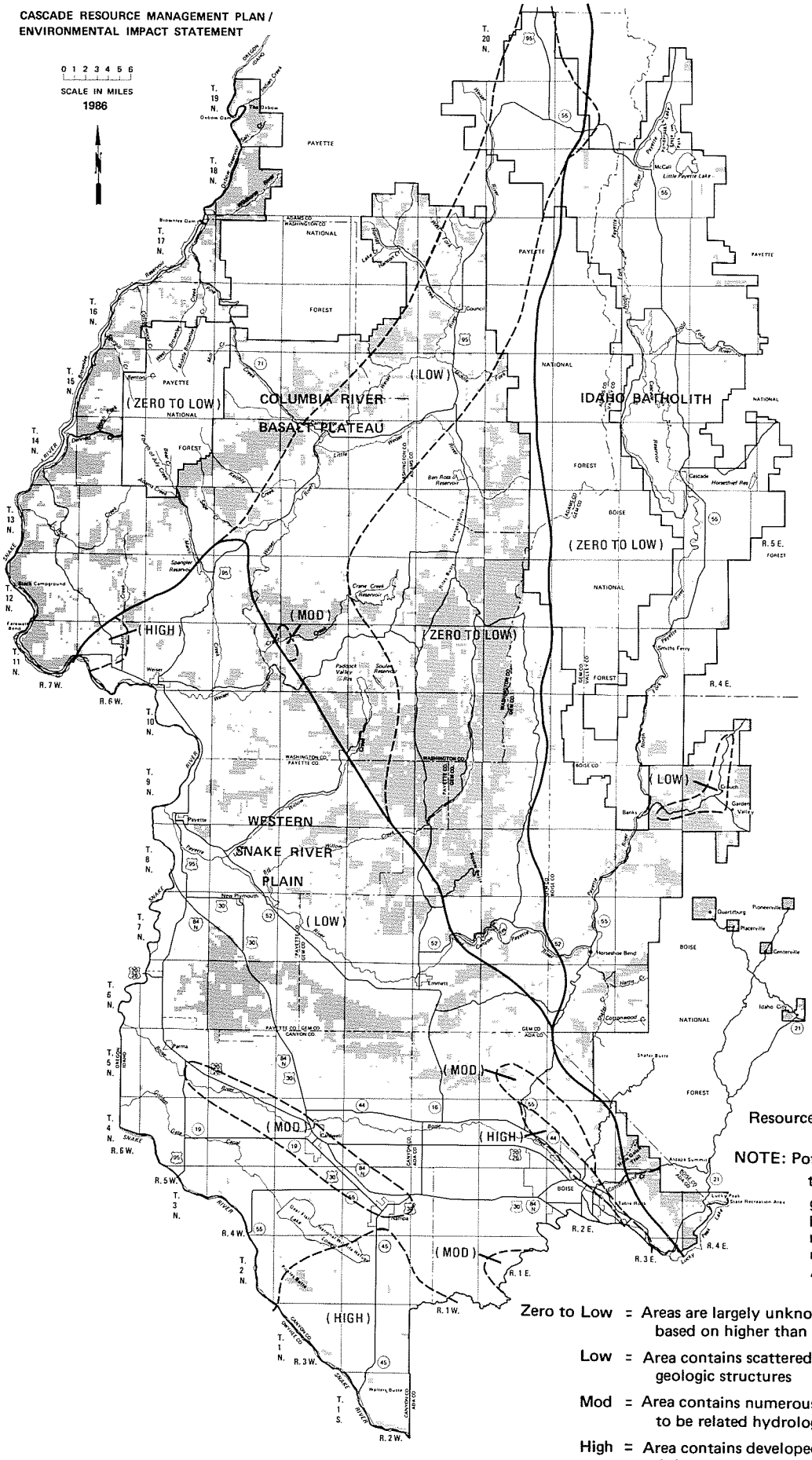
Resource Area is divided into Geologic Provinces

o = Exploratory Well (Dry Hole)

= Exploratory Well With Gas Show (Non- Commercial)

(Low) = Potential for discovery of Petroleum Resources

MAP 3 - 12



GEOTHERMAL POTENTIAL

—— Geologic Province Boundary

- - - Potential Rating Boundary

Resource Area is divided into Geologic Provinces

NOTE: Potentials are for low to moderate temperature (40° – 150°C) geothermal resources. Potential for high temperature (>150° C) geothermal resources is zero to low and largely unknown for the entire Cascade Resource Area.

Zero to Low = Areas are largely unknown but may have some potential based on higher than normal heat flow.

Low = Area contains scattered warm wells and springs and favorable geologic structures

Mod = Area contains numerous thermal wells and springs that appear to be related hydrologically.

High = Area contains developed systems or systems that are well defined based on geologic and hydrologic data.

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