Andrews/Steens Resource Management Plan

ROD/RMP

Andrews Management Unit Record Of Decision and Resource Management Plan

BLM

Burns District Office

August 2005

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

Photo courtesy of Mark Armstrong.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Burns District Office
28910 Hwy 20 West
Hines, Oregon 97738

IN REPLY REFER TO:

1610 (OR-026) P

Dear Interested Party:

In accordance with the Federal Land Policy and Management Act and the National Environmental Policy Act (NEPA), the Bureau of Land Management (BLM) has prepared the attached Andrews Management Unit (AMU) Resource Management Plan (RMP) and Record of Decision (ROD) for management of BLM-administered lands in the planning area. The AMU RMP integrates all resource management activities into a single, unified land use plan that replaces the Andrews Management Framework Plan and subsequent amendments addressing management of approximately 1.2 million acres of public land in Harney and Malheur Counties, Oregon.

The ROD was prepared in accordance with BLM's planning regulations at 40 Code of Federal Regulations (CFR), Part 1505.2, which require a concise document linking final land use plan decisions to the analysis presented in the Proposed RMP/Final Environmental Impact Statement (FEIS). Minor changes or points of clarification have been incorporated in response to further staff review and consideration of issues raised in the protest process.

A 30-day protest period was provided on the proposed land use planning decisions contained in the Proposed RMP/FEIS in accordance with 43 CFR Part 1610.5-2. Six protests were received. After careful consideration of all points raised in these protests, the BLM Director concluded the responsible planning team and decision makers followed all applicable laws, regulations, policies, and pertinent resource considerations in developing the proposed plan. All protesting parties received a response from the BLM Director addressing their concerns. In accordance with the planning regulations, the BLM Director's decision on the protests is final for the Department of the Interior.

The Governor of Oregon was provided a formal 60-day review period to determine if the proposed plan is consistent with existing State and local plans, programs, and policies. No such inconsistencies were identified.

The ROD serves as the final decision for "Land Use Planning Decisions" described in the attached RMP. Land use planning decisions are those which consist of desired outcomes (goals and objectives), allowable uses (uses or allocations that are allowable, restricted or prohibited), and management actions necessary to achieve those outcomes. Examples of land use planning decisions are visual resource management classifications, off-highway vehicle designations, and designation of right-of-way avoidance/exclusion areas. No further administrative remedies are available for these land use planning decisions.

Land use planning decisions provide management direction and guide future actions. Although land use planning decisions are final and effective upon signing of the ROD, most require additional decision steps (such as permit approvals) before activities having on-the-ground effects can proceed. The additional decision steps may require further analysis and would be subject to appeal.

Other "Implementation-Level Decisions" (e.g., road maintenance assignments, motorized vehicle parking, and motorized access) addressed to a sufficient level of detail in the RMP/EIS process can be implemented over time without further NEPA analysis. Only one decision was addressed to a sufficient level of detail in this RMP/EIS process to be implemented over time without further NEPA analysis. This decision will be implemented as funding and staff are available. The decision allows a right-of-way to protect additional acreage at the BLM Fields administrative site. A separate appeal opportunity for this decision is being provided at this time. The appeal period will close 30 days from the date the Notice of Availability of the ROD/RMP appears in the *Federal Register*. This date will also be announced via local news releases, Burns District Web site, and/or individual newsletter mailings. Please review the ROD carefully for a more detailed discussion of the appeal process.

Additional hard copies and CD-ROM versions of the RMP/ROD may be obtained at the address above. The document is also available on the internet at http://www.or.blm.gov/burns/Planning/Planning_Index.htm.

We appreciate your help in this planning effort and look forward to your continued participation as the plan is implemented. For additional information or clarification regarding the attached document or the planning process, please contact Gary Foulkes at (541) 573-4541 or by e-mail to gfoulkes@blm.gov.

Sincerely,

Karla Bird

Karla Bird
Andrews Resource Area Field Manager

Andrews Management Unit
Record of Decision and
Resource Management Plan

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Acronyms

Reader note: *Please refer to the list below for acronyms that may be used in this document.*

ACRONYM	DEFINITION
ACEC	Area of Critical Environmental Concern
AML	Appropriate Management Level
AMP	Allotment Management Plan
AMR	Appropriate Management Response
AMS	Analysis of the Management Situation
AMU	Andrews Management Unit/Andrews Resource Area outside the CMPA
APHIS	Agricultural Plant and Animal Health Inspection Service
AUM	Animal Unit Month
BCB	Back Country Byway
BLM	Bureau of Land Management
BMPs	Best Management Practices
CAA	Clean Air Act
CCD	Census County Divisions
CD	Compact Disc
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CMPA	Cooperative Management and Protection Area
CWA	Clean Water Act
DEQ	Oregon Department of Environmental Quality
DEIS	Draft Environmental Impact Statement
DO	District Office
DRC	Desired Range of Conditions
DRMP	Draft Resource Management Plan
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ERMA	Extensive Recreation Management Area
ESA	Endangered Species Act
ESI	Ecological Site Inventory
FAR	Functional At Risk
FEIS	Final Environmental Impact Statement
FFR	Federal Fenced Range
FLPMA	Federal Land Policy and Management Act
FMP	Fire Management Plan
GIS	Geographic Information System
GPS	Global Positioning System
HMA	Herd Management Area
HUC	Hydrologic Unit Code
ICBEMP	Interior Columbia Basin Ecosystem Management Project
ID	Interdisciplinary
Malheur NWR	Malheur National Wildlife Refuge
MFP	Management Framework Plan
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MRDG	Minimum Requirement Decision Guide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NSO	No Surface Occupancy
ODA	Oregon Department of Agriculture
ODF	Oregon Department of Forestry

ODFW	Oregon Department of Fish and Wildlife
OHV	Off-Highway Vehicle
ONHP	Oregon Natural Heritage Program
ORS	Oregon Revised Statute
ORV	Outstandingly Remarkable Value
OWRD	Oregon Water Resources Department
PFC	Proper Functioning Condition
PILT	Payments In Lieu of Taxes
PL	Public Law
PM	Particulate Matter
PNC	Potential Natural Community
PRIA	Public Rangelands Improvement Act of 1978
PVG	Potential Vegetation Groups
R&PP	Recreation & Public Purpose
RA	Resource Area
RAC	Southeast Oregon Resource Advisory Council
RAP	Resource Area Profile
RMIS	Recreation Management Information System
RMP	Resource Management Plan
RNA	Research Natural Area
ROD	Record of Decision
ROW	Right-of-Way
RPS	Rangeland Program Summary
RTR	Redband Trout Reserve
S&Gs	Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington
SBR	Subbasin Review
SEORMP	Southeastern Oregon Resource Management Plan
SIP	State Implementation Plan
SMAC	Steens Mountain Advisory Council
SRMA	Special Recreation Management Area
SRP	Special Recreation Permit
T&E	Threatened and Endangered
TMDL	Total Maximum Daily Load
TNC	The Nature Conservancy
TNR	Temporary Non-Renewable
TP	Transportation Plan
TR	Technical Reference
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VRM	Visual Resource Management
WJMA	Wildlands Juniper Management Area
WQMP	Water Quality Management Plan
WQRP	Water Quality Restoration Plan
WSA IMP	Interim Management Policy for Lands Under Wilderness Review
WSA	Wilderness Study Area
WSR	Wild and Scenic River
WUI	Wildland Urban Interface
ybp	years before present

Record of Decision

Introduction

The Bureau of Land Management (BLM) Burns District Office (DO) manages 3,275,694 acres of public land located primarily in Harney County, Southeastern Oregon (Map 1). The Burns District is divided into two Resource Areas (RA): the Andrews RA and the Three Rivers RA. The two RAs are further divided into land contained within the boundary of the Steens Mountain Cooperative Management and Protection Area (CMPA) and those in the Andrews RA outside the CMPA boundary; the latter is titled the Andrews Management Unit (AMU). The AMU covers a total of 1,221,314 acres of public land, and the CMPA covers a total of 428,156 acres of public land (these numbers do not include private, State, or U.S. Fish and Wildlife Service [USFWS] lands).

The primary decision is to approve the attached AMU Resource Management Plan (RMP). This Record of Decision (ROD) also covers a variety of management actions that are considered to be implementation decisions rather than land use planning decisions. Therefore, this decision has been separated into those actions that are land use planning decisions, which were protestable under the land use planning regulations 43 Code of Federal Regulations (CFR) 1610, and those actions that are implementation decisions, and are appealable under the U.S. Department of the Interior's (USDI) appeal regulations (43 CFR 4).

What the Decision/Resource Management Plan Will Provide

This ROD and RMP provide overall direction for management of all resources on BLM-administered land in the AMU.

What the Decision/Resource Management Plan Will Not Provide

Many decisions are not appropriate at this level of planning and are not included in the ROD. Examples of these types of decisions include:

Statutory requirements. The decision will not change the BLM's responsibility to comply with applicable laws and regulations including the Clean Air Act (CAA), Clean Water Act (CWA), Endangered Species Act (ESA), National Environmental Policy Act (NEPA), Federal Land Policy and Management Act (FLPMA), Steen Mountain Cooperative Management and Protection Act of 2000 (Steens Act) (Public Law [PL] 106-399) (Appendix A), or any other Federal law.

National Policy. The decision will not change BLM's obligation to conform with current or future National policy.

Funding levels and allocations. These are determined annually at the National level and are beyond the control of the RA.

Land Use Plan Decisions

The decision is hereby made to approve the attached RMP for the AMU. This plan was prepared under regulations issued under the authority of the FLPMA (43 CFR Part 1600) and other applicable laws. An Environmental Impact Statement (EIS) was prepared for this RMP in compliance with NEPA. Except for separating the text for the two plans, only minor editorial modifications were made to the Proposed AMU/CMPA RMP and Final EIS (FEIS) published in August 2004. These modifications corrected errors that were noted during review of the Proposed RMP/FEIS and provide further clarification for some of the decisions. Specific management decisions for public land within the AMU are presented in the section titled "Resource Management Plan" later in this document.

Land use plan decisions identified in the attached RMP include:

- Rights-of-Way (ROW) avoidance/exclusion areas;
- Land tenure zoning classifications;
- Designations of Special Recreation Management Areas (SRMA);
- Visual Resource Management (VRM) classifications;
- Off-Highway Vehicle (OHV) designations;
- Designation of Areas of Critical Environmental Concern (ACEC);
- Extent of allowable livestock grazing;
- Wildland fire management; and
- Wild horse Herd Management Area (HMA) boundary changes.

A 30-day protest period was provided on the land use plan decisions contained in the Proposed RMP/FEIS in accordance with 43 CFR Part 1610.5-2. Six protest letters were received on the Proposed RMP/FEIS and subsequently resolved by the BLM Director, whose decision is final for the USDI. This ROD then serves as the final decision for the land use plan decisions for the AMU described above, and the RMP becomes effective on the date this ROD is signed. No further administrative remedies are available at this time for these land use plan decisions.

Continuity of Previous Decisions

The AMU RMP is necessary not only to revise the Andrews Management Framework Plan (MFP) (1982), but also to address the mineral withdrawal area established by the Steens Act, grazing management, and wild horse and burro HMAs. The Southeastern Oregon RMP (SEORMP) incorporates management of the mineral withdrawal area for the Vale District BLM. The following activity-level plans are consistent with the RMP; therefore, they are incorporated into the RMP and remain in effect: South Steens Wild Horse HMA Plan (USDI 1984); Steens Mountain Final Recreation Area Management Plan (USDI 1985); Recovery Plan for the Pacific Bald Eagle (USDI 1986b); Trout Creek Mountains Allotment Management Plan (AMP)(USDI 1989); Pueblo-Lone Mountain Management Plan Environmental Assessment (EA)/AMP (USDI 1995a); Long Draw Research Natural Area (RNA)/ACEC Management Plan (USDI 1990); Mickey Basin RNA/ACEC Management Plan (USDI 1990); Pueblo Foothills RNA/ACEC Management Plan (USDI 1994); Tum Tum Lake Research Natural Area (RNA)/ACEC Management Plan (USDI 1995); Recovery Plan for the Borax Lake Chub, Gila boraxobius (USDI 1997a); and Burns District EA for Commercial Day-Use Activities (OR-020-EA-99-24) (USDI 1999).

Final decisions on this RMP supersede the Andrews MFP and subsequent amendments.

Implementation Decisions

It is the BLM's intent to implement, over time, a number of specific, project-level decisions described in the attached RMP, as funding and staff are available. These are called "implementation decisions" (as opposed to land use planning decisions described above).

Some decisions in the RMP will require the preparation of detailed, project-level NEPA analyses prior to implementation. Public involvement, including further appeal opportunities, may be provided at that time.

Only one decision was addressed to a sufficient level of detail in the RMP/EIS process to be implemented without further NEPA analysis. An appeal opportunity for this decision is being provided at this time as described in the following section. The decision allows an ROW to protect additional acreage at the BLM Fields administrative site (Lands and Realty Section).

Appeal Procedures for Implementation Decisions

Any party adversely affected by an implementation decision may appeal within 30 days of publication of the Notice of Availability of the RMP/ROD in the *Federal Register* in accordance with the provisions of 43 CFR Part 4.4. The appeal must include a statement of reasons or file a separate statement of reasons within 30 days of filing the appeal. The appeal must state if a stay of the decision is being requested in accordance with 43 CFR 4.21 and must be filed with the Field Manager at the following address:

Burns District Office
Andrews Resource Area
Bureau of Land Management
28910 Highway 20 West
Hines, OR 97738

A copy of the appeal, statement of reasons, and all other supporting documents should also be sent to the Regional Solicitor, Pacific Northwest Region, U.S. Department of the Interior, Lloyd 500 Building, Suite 607, 500 N.E. Multnomah Street, Portland, Oregon 97232. If the statement of reasons is filed separately, it must be sent to the Interior Board of Land Appeals, Office of Hearings and Appeals, 4015 Wilson Boulevard, Arlington, Virginia 22203. It is suggested that any appeal be sent certified mail, return receipt requested.

Request for Stay

Should you wish to file a motion for stay pending the outcome of an appeal of these implementation decisions, you must show sufficient justification based on the following standards under 43 CFR 4.21:

- The relative harm to the parities if the stay is granted or denied.
- The likelihood of the appellant's success on the merits.
- The likelihood of immediate and irreparable harm if the stay is not granted.
- Whether or not the public interest favors granting the stay.

As noted above, the motion for stay must be filed in the office of the authorized officer.

Overview of the Alternatives

Alternatives Considered but Eliminated from Detailed Analysis

The range of alternatives was sufficiently broad to accommodate all other variations of existing alternatives. No other alternatives were presented that differed sufficiently from the five existing alternatives to warrant independent consideration.

Alternatives Analyzed in Detail

The BLM planning process calls for development of goals, objectives, and actions to manage resources and uses within the AMU. Every decision proposed through the planning process is actually a string of components. The primary components are goals, objectives, and management direction. Additional components include rationale and monitoring. Each of these components is defined as follows:

Goal - a broad statement of a desired outcome. Goals are usually not quantifiable and may not have established timeframes for achievement.

Objective - a description of a desired condition for a resource. Objectives can generally be quantified and measured and, where possible, have established timeframes for achievement.

Rationale - primary reasoning behind the importance of pursuing the stated management goal (referred to as "Management Framework" in Proposed RMP/FEIS).

Management Direction - measures to be undertaken to achieve the stated management objective. Management direction states management activities or land uses allowed, restricted, or excluded, and provide the basis for subsequent implementation and effectiveness monitoring.

Monitoring - assessment of the resources conducted to determine if identified management objectives are being accomplished.

Alternatives will generally meet the goals identified for all resources. However, there are differences between alternatives. These differences address how quickly the management goals are met, the degree to which they are met, the priorities within the program, the emphasis placed on different management activities, and whether or not those actions are active or passive. They also identify what resources or uses society is willing to forego. Integrated resource management was emphasized in formulating alternatives. A primary concern was that all major ecological and social and economic systems are considered in the selection of specific management actions. Input from the public, intergovernmental agencies, and cooperating agencies was used to develop the alternatives.

Management goals associated with the alternatives may not be completely met over the life of the plan. Funding and staffing levels will affect rates of implementation.

General Management Themes of the Alternatives

The following is a description of the five alternatives considered in detail in the Proposed RMP/FEIS. Not all aspects of any given alternative will pertain to both the AMU and CMPA (referred to collectively as the Planning Area).

Alternative A (No action. Continues current management):

This alternative continues management under the existing Andrews MFP and amendments, and the Andrews Grazing Management FEIS and RPS. In addition to these, the dictates of the Steens Act and the various existing activity plans will apply to the CMPA. Resource values and sensitive habitats will receive management emphasis at current levels. Emphasis will focus on maintaining existing conditions. No comprehensive plan for restoration of degraded systems would be used. Restoration will take place on a case-by-case basis and will utilize either active or passive methods.

Alternative B (Excludes commodity production and limits other uses to maximize natural processes):

This alternative excludes all permitted discretionary uses of the public land including, but not limited to, livestock grazing, mineral sale or leasing, realty actions, recreation uses requiring permits, and new commercial ROWs. The BLM will petition the USDI to withdraw the entire Planning Area from locatable mineral entry. This alternative will allow no commodity production and will include only those management actions necessary to maintain or improve natural values and protect life and property. Any management actions will utilize primarily passive methods. Some components of the alternative may not be possible to implement in the CMPA because of legal requirements and constraints of the Steens Act, but the alternative is included for purposes of impact analysis and comparison.

Alternative C (Emphasizes protection of natural values):

This alternative emphasizes the restoration of natural systems that are degraded and the maintenance of those that are functioning at a high level of condition. Commodity production would be constrained to protect natural values and systems that are in advanced ecological status or to accelerate improvement in those that are in less than advanced ecological status. Constraints to protect sensitive resources would be the most restrictive. In some cases and in some areas, commodity production could be excluded to protect sensitive resources, while still providing for overall sustainable commodity production as provided for in the Steens Act. Both active and passive restoration methods would be utilized to achieve management goals.

Alternative D (Balances cultural, economic, ecological, and social health in a manner that encourages cooperative management practices) (Preferred Alternative):

This alternative emphasizes natural resource use, protection, and environmental health, and places high importance on balancing cultural, economic, ecological, and social values. This will be accomplished within the limits of the natural system's ability to provide commodities on a sustainable basis and within the constraints of laws and regulations, including the Steens Act as it pertains to the CMPA. This alternative encourages cooperative management of the Planning Area by collaborative arrangements with landowners, permit holders, other land managers, and interested parties. This alternative recognizes that the long-term cultural, economic, social, and ecological integrity of the Planning Area is intertwined and cannot be maintained without involving landowners, permit holders, local and tribal governments, and interested parties in relationships involving cooperation, consultation, and coordination. This alternative will balance the values that through the generations created the area's cultural and physical environment. Constraints to protect sensitive resources will be implemented, but are less restrictive than under Alternative B, so that sustainable commodity uses and production are maintained.

Alternative E (Emphasizes commodity production and public uses):

This alternative emphasizes commodity production and production of goods and services such as mining, grazing, commercial recreation, harvesting commercial woodlands products, and tourism. Under this alternative, constraints on commodity production for protection of sensitive resources would be the least restrictive possible within legal limits, while still meeting the requirements of the Steens Act for management of the CMPA. Potential impacts to sensitive resources would be mitigated on a case-by-case basis. Emphasis would be on maintaining resource conditions where required. Restoration actions that will enhance commodity production will utilize primarily active methods. Other restoration actions will utilize passive methods.

Environmental Preferability of the Alternatives

Environmental preferability is judged using the criteria in NEPA and subsequent guidance by the Council on Environmental Quality (CEQ, 1981). The CEQ has defined the environmentally preferable alternative as the alternative that will promote the National environmental policy as expressed in Section 101 of NEPA. This section lists six broad policy goals for all Federal plans, program, and policies as follows:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- Preserve important historic, cultural, and natural aspects of our National heritage, and maintain, whenever possible, an environment which supports diversity and variety of individual choice;
- Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Based on these criteria, identification of the most environmentally preferable alternative involves a balancing of current and potential resource uses with that of resource protection, and Alternative D best fulfills that role. Therefore, BLM finds Alternative D best meets the definition of the environmentally preferred alternative.

Management Considerations

Rationale for the Decision

Based on the input received during the planning process, there was both support and opposition to certain components of the proposed plan. No formal comments were received from Federal or State agencies or

Tribal governments indicating the proposed plan was inconsistent with other existing plans or policies. The majority of comments received on the proposed plan related to transportation, recreational developments, grazing management, OHV designations, WSAs, mineral exploration, and wildlife.

The BLM is tasked with the job of multiple-use management as mandated under the FLPMA and other laws and regulations governing management of public land. The Proposed RMP (Alternative D) provides a balance between those reasonable measures necessary to protect existing resource values and continued public need to make beneficial use of the AMU. Therefore, implementation of the Proposed RMP is the alternative best able to comply with all applicable laws, regulations, policy, and agency direction.

Mitigation Measures

In order to minimize impacts from implementation of the decisions contained in the RMP, the Best Management Practices (BMPs) are identified in Appendix B.

Plan Monitoring

The BLM planning regulations (43 CFR 1610.4-9) call for monitoring of RMPs on a continual basis with a formal evaluation done at periodic intervals. Implementation of the AMU RMP will be monitored over time. Plan evaluations will occur on about five-year intervals. Management actions arising from activity plan decisions will be evaluated to ensure consistency with RMP objectives. This evaluation process is described in more detail in the monitoring sections of the attached RMP.

Public Involvement in the Planning Process

Public involvement is an integral part of the BLM's resource management planning process. Public involvement activities for this RMP/EIS included a mass mailing of a scoping brochure; holding public meetings; meeting with local government and Tribal government officials; conducting a Subbasin Review (SBR) (Appendix C); mailing the Analysis of the Management Situation (AMS) Summary (USDI 2002); mailing newsletters as follow-up to publication of the AMS (USDI 2002), Draft RMP (DRMP) and Proposed RMP; and other correspondence.

Scoping

The BLM began its public involvement in February 2002 with mailing of a scoping brochure that briefly described the RMP/EIS process, outlined the planning schedule, and requested comments on the first major planning step, which constitutes identification of issues. The brochure was sent to approximately 1,220 individuals, organizations, and agencies. Additional copies of the scoping brochure were made available at four scoping meetings. The BLM invited the public to identify issues or concerns they believed should be addressed during the RMP/EIS process.

A Notice of Intent to prepare the DRMP/Draft EIS (DEIS) was published in the Federal Register (December 6, 2001). The Federal Register Notice also announced dates and locations of four public meetings to be held. A news release with the same information and a request for publication or announcement was mailed to 19 media groups including the Burns Times-Herald, the Bend Bulletin, the Oregonian, and KZZR Radio. The BLM representatives attended meetings with Harney County Officials to inform them of the DRMP/DEIS and to encourage them to make comments, request information, and generally be involved in the process. The same information was distributed to the Burns Paiute Tribal Government. Other meetings with the Burns Paiute Tribe were also conducted at key steps in the planning process. The Southeast Oregon Resource Advisory Council (RAC), cooperating agencies designated under the CEQ regulations, and other participating partners were involved throughout the process.

Subbasin Review

Although technically not part of the public participation process, from October 2001 through January 2002, the BLM conducted an SBR (Appendix C). This review resulted in identification of a number of issues and management concerns to be addressed in the RMP.

Analysis of the Management Situation

The AMS assessed physical and biological characteristics and condition of resources within the AMU as well as the current management situation. Members of the public, local and Tribal governments, and Federal and State agencies were mailed copies of the AMS Summary and were asked to comment, particularly on the planning criteria and DRMP/DEIS alternatives. Approximately 2,313 comment letters were received. A follow-up newsletter outlining the primary comments was mailed to 257 individuals in July 2002. An additional 143 copies of the AMS Summary were sent to interested individuals and organizations by request. The full version of the AMS was published and made available to the public in November 2002.

Draft Resource Management Plan/Draft Environmental Impact Statement

On October 3, 2003, the Environmental Protection Agency's (EPA) Notice of Availability of the combined AMU/CMPA DRMP/DEIS was published in the Federal Register which initiated a 90-day comment period. A news release was sent to media groups including the Burns Times-Herald, the Bend Bulletin, the Oregonian, and KZZR Radio announcing availability of the DRMP/DEIS. Approximately 307 hard copies and 80 Compact Disc (CD) copies of the combined DRMP/DEIS were sent to individuals, agencies, and organizations. An RMP newsletter was also distributed to about 538 names on the mailing list announcing availability of the DRMP/DEIS as well as announcing the public comment period and meeting dates. The DRMP/DEIS was also made available on the Burns DO website. During the 90-day public comment period, public meetings were held in Portland (October 27, 2003), Bend (October 28, 2003), Burns (October 29, 2003), and Frenchglen (October 30, 2003), Oregon, with a total of 103 people attending. The BLM received approximately 5,563 public comment letters on the DRMP/DEIS, a majority of which were form communications. Approximately 923 letters were individualized letters and 84 letters contained substantive comments, which were addressed in Volume II of the Proposed RMP/FEIS. Comments made during the SEORMP process specific to the Andrews RA were also considered. The comment period ended January 5, 2004. The BLM continued to involve the RAC and cooperating agencies throughout the process.

Proposed Resource Management Plan/Final Environmental Impact Statement

A 30-day protest period was provided on the combined AMU/CMPA Proposed RMP/FEIS in accordance with 43 CFR Part 1610.5-2. Six protests on the Proposed RMP/FEIS were received and resolved by the BLM Director.

Consultation with U.S. Fish and Wildlife Service

The USFWS is a cooperating agency and was involved in the planning process since the beginning. Therefore, informal consultation has occurred throughout formulation of the plan. Their participation is in accordance with the Memorandum of Agreement (MOA) between the BLM and the USFWS dated August 30, 2000. The USFWS provided its biological opinion to the BLM in May 2005 (Appendix D).

Tribal Participation

Federal law and regulations require formal consultation with American Indian tribes who have an interest in the AMU in addition to other formal and informal input sought at each stage of the planning process. The Burns Paiute Tribe signed an MOA with the BLM to become a cooperating agency in the planning process. A representative of the Burns Paiute Tribe attended Interdisciplinary (ID) team meetings with BLM staff.

Other Participation

Numerous meetings were held and coordination was conducted with the Oregon Department of Fish and Wildlife (ODFW), Oregon Department of Environmental Quality (DEQ), USFWS - Malheur National Wildlife Refuge (Malheur NWR) and Ecological Services, City of Burns, City of Hines, Oregon Water Resources Department (OWRD), Harney County Court, Harney County Chamber of Commerce, RAC, and adjacent BLM offices as well as with the Burns Paiute Tribe. A number of these groups received formal cooperating agency status in the process including the Burns Paiute Tribe, Harney County, City of Hines, City of Burns, Oregon DEQ, USFWS - Ecological Services and Malheur NWR, and ODFW. Representatives from the cooperating agencies participated in ID meetings conducted by the BLM as part of the RMP/EIS process.

Resource Management Plan Implementation

Public involvement in plan implementation decisions is discussed in the "Plan Implementation" Section of the RMP.

In addition, the Andrews RA will develop an implementation strategy or "business plan" allowing further opportunities for public involvement in determining what portions of the RMP should be the highest priority for future implementation. The extent of public involvement in this effort has yet to be determined. Further details will become available in the future.

Managers' Recommendations

Having considered a full range of alternatives, associated effects, and public input, I recommend adoption and implementation of the attached Andrews Management Unit Resource Management Plan.

Karla Bird — **7/14/2005**

Karla Bird
Andrews Resource Area Field Manager — Date

Dana R. Shuford — **7/14/2005**

Dana R. Shuford
Burns District Manager — Date

State Director Approval

I approve the attached Andrews Management Unit Resource Management Plan as recommended. This document meets the requirements for a Record of Decision as provided in 40 CFR Part 1505.2 and for the Resource Management Plan as described in 43 CFR Part 1610.0-5(k).

Elaine M. Brong — 7/15/05

Elaine M. Brong
Oregon/Washington State Director — Date

Resource Management Plan

Introduction and Background

The Bureau of Land Management (BLM) Burns District Office (DO), manages 3,275,694 acres of public land located primarily in Harney County, Southeastern Oregon (Map 1). The Burns District is divided into two Resource Areas (RAs): the Andrews RA and the Three Rivers RA. The two RAs are further divided into land contained within the boundary of the Steens Mountain Cooperative Management and Protection Area (CMPA) and those outside the boundary within the Andrews RA; the latter is titled the Andrews Management Unit (AMU).

This Resource Management Plan (RMP) and resulting Record of Decision (ROD) for the AMU are intended to provide land use planning and management direction at a broad scale and to guide future actions. The regulations for making and modifying land use plan decisions, which comprise an RMP, are found in 43 Code of Federal Regulations (CFR) 1600. Land use plan decisions consist of desired outcomes (goals, standards, and objectives), allowable uses (including allocations, levels of use, and restrictions on use), and management actions necessary to achieve those outcomes. The RMP decisions can be distinguished from implementation decisions in that, although the former are themselves final and effective upon adoption, they normally require additional implementation decision steps (such as permit approvals) before activities having on-the-ground effects can be carried out. Implementation decisions generally constitute BLm's final approval for on-the-ground actions to proceed. These types of decisions usually require site-specific planning and National Environmental Policy Act (NEPA) analysis.

Purpose of and Need for the Plan

Resource management of the public lands within the Andrews RA was directed by the Andrews Management Framework Plan (MFP) completed in 1982 (U.S. Department of the Interior [USDI] 1982a). As used in this document, public lands are defined as "those lands administered by the Secretary of the Interior through the BLM." As a result of legislation, changes in BLM management polices and regulations, and increasing and changing demands on resources, an updated comprehensive management plan was warranted. The AMU encompasses 1,681,675 acres of public, private, State, and U.S. Fish and Wildlife Service (USFWS) lands.

In 1995, preparation of the Southeastern Oregon RMP (SEORMP) was initiated by the Vale and Burns Districts of the BLM. The SEORMP initially included the Andrews RA. However, as a result of the Steens Mountain Cooperative Management and Protection Act of 2000 (Steens Act) (Appendix A), the Burns DO determined it appropriate to separate the Andrews RA from the SEORMP and develop a separate plan in order to address changes in land management resulting from mandates of the Steens Act. This RMP provides the BLM with a comprehensive framework for managing public land within the AMU (Map 2). Completion of the RMP meets the requirements of the Federal Land Policy and Management Act (FLPMA), which mandates public land be managed for multiple-use and sustained yield under an approved RMP. An RMP contains a set of comprehensive long-range decisions concerning use and management of resources administered by the BLM. In general, an RMP does two things: (1) provides an overview of goals, objectives, and needs associated with public land management, and (2) resolves multiple-use conflicts or issues that drive the preparation of the RMP. In addition, an Environmental Impact Statement (EIS) must be prepared to analyze alternatives proposed in the RMP as required by the NEPA.

This RMP also considers and, where appropriate, incorporates the science and findings derived from assessments of the Interior Columbia Basin Ecosystem Management Project (ICBEMP) and the Interior Columbia Basin EIS and Proposed Decision (United States Department of Agriculture [USDA]/USDI 2000a). No ROD was finalized for the Interior Columbia Basin EIS and Proposed Decision; however, a Memorandum of Understanding (MOU) was entered into by several agencies, including the BLM, to implement the ICBEMP Strategy (USDA/USDI 2003). The Strategy provides guidance for incorporating science data and resource information developed by the ICBEMP into land use planning efforts.

Planning Area

The AMU covers a total of 1,221,314 acres of public land (these numbers do not include private, State, or USFWS lands) within the Andrews RA located primarily in Harney County with a small portion present in Malheur County.

Planning Process

An RMP is a land use plan as prescribed by the FLPMA (Sections 201 and 202) and establishes, in a written document, the following:

- Land areas for limited, restricted, or exclusive resource uses or for transfer from BLM administration;
- Allowable resource uses and related levels of production or use to be maintained;
- Resource condition, goals, and objectives to be reached;
- Program constraints and general management practices;
- Identification of specific required activity plans;
- Support actions required to achieve the above;
- General implementation schedule or sequences; and
- Intervals and standards for monitoring effectiveness of the RMP.

The underlying goal of an RMP is to provide efficient on-the-ground management of public land and associated resources over time.

Planning Issues

As a result of internal scoping for development of the preliminary plan and the Analysis of the Management Situation (AMS), the following 17 issues were identified by BLM staff to be addressed in the RMP/EIS. Not all aspects of any given issue will pertain to both the AMU and CMPA (referred to collectively as the Planning Area).

1) BLM management of resource uses to improve and maintain the integrity of upland ecological communities;

- How will livestock grazing be managed to sustain resource values while maintaining stable watersheds and continued production of forage?
- What areas previously ungrazed could be grazed and under what circumstances? Are there areas where, or situations when, grazing should be excluded?
- What practices will be authorized and implemented to provide wildlife habitat and forage for livestock while maintaining other uses and values of public land resources?
- Under what conditions is grazing compatible with management of areas such as Wilderness Study Areas (WSAs), Wild and Scenic Rivers (WSRs), and Areas of Critical Environmental Concern (ACECs)? What are the visual considerations related to upland conditions, and how will the BLM's Visual Resource Management (VRM) play a role?
- What indicators will be used to identify levels of wild horse use compatible with sustaining a thriving, natural, ecological balance?
- What practices will the BLM implement to manage wild horses consistent with the legislative mandate that all management activities be at minimum feasible level?
- What practices will be authorized and implemented to provide adequate habitat and forage for wildlife while maintaining other resource uses and values?
- What grazing practices are necessary to protect sensitive resource values such as riparian areas and Special Status Species?
- What new and existing rangeland projects, including seedings, are needed to improve rangeland resource values?
- What rehabilitation practices will be implemented following rangeland project construction and maintenance that disturb established vegetation cover?

- What criteria should be considered for fire rehabilitation, for restoration of wildlife habitat, and to determine whether or not native or introduced species should be seeded to stabilize watersheds?
- How should the BLM prioritize implementation of management practices to maintain desired conditions and improve undesirable conditions where feasible?
- What criteria should be established to determine conditions and timetables for improvements?
- What resource uses and management practices will be employed in geographic areas with lower management priority?
- Is the current strategy of full wildland fire suppression compatible with upland management objectives?
- How, and to what extent, should fire be used to manage western juniper and aspen woodlands?
- Can cottonwood stands be restored along Donner und Blitzen WSR and the east side of Steens Mountain?
- Can juniper treatments in corridors be accomplished?

2) BLM management of resource uses to improve or maintain the integrity of riparian ecological communities;

- How will riparian vegetation communities be managed to improve or maintain ecological status, species diversity, bank stability, water quality, and the timing of watershed discharge while providing for resource uses such as grazing, recreation, water development, mineral exploration and development, and woodland products harvest?
- What areas previously excluded from grazing could be grazed and under what circumstances? Are there areas or situations when grazing should be excluded?
- What are the visual considerations relating to riparian conditions, and how will the BLM's VRM play a role?
- How will riparian systems be managed to improve or maintain habitat quality for fish, wildlife, plants, and invertebrates?
- How will riparian and wetland areas be managed to incorporate State of Oregon water quality standards and approved management plans addressing water quality concerns?
- Is the current strategy of full wildland fire suppression compatible with riparian management objectives?
- How will management actions in upland communities be handled to be compatible with the needs of riparian communities?
- How should management actions with potential to affect riparian communities be identified and prioritized?
- What timeframes are acceptable to achieve riparian management objectives?
- When does establishment of juniper threaten other resource values, and what management actions can be used to control the invasion?
- Is collection of baseline riparian information and Proper Functioning Condition (PFC) on acquired and isolated stream segments necessary?
- Should the riparian habitat inventory be redone?

3) BLM maintenance or improvement of woodland communities and how woodlands will be managed to maintain or improve rangeland and wildlife habitat;

- What should be done to preserve and manage the 20.1 acres of grand fir forested areas on public land on Steens Mountain?
- Are there juniper woodland areas that should be preserved?
- What types of woodland products should be harvested?
- What are the potential effects of woodland management on wildlife, watersheds, soils, vegetation, recreation, aesthetics, and other resources?
- What kind of woodland management is compatible with management of wilderness, ACECs, WSRs, and other designated areas?

4) BLM provisions for wildlife habitat while considering other resource uses;

- To what extent will livestock management and brush control be conducted to meet habitat requirements of wildlife?

- Which areas, if any, are appropriate for reintroduction of wildlife, and what species could be reintroduced?
- What management practices avoid conflicts between wildlife and livestock for vegetation, especially between bighorn sheep and domestic sheep?
- What are the long-term strategies for managing wildlife?
- To what extent will the BLM adopt Oregon Department of Fish and Wildlife (ODFW) management objectives for game and nongame species of wildlife?
- What management practices best address areas of biodiversity, the needs of species at the limits of their range, and species assemblages?

5) Public land management contributions to the preservation of and increase in healthy, sustainable populations of species now considered in Special Status. Land management for successful prevention of habitat destruction, which will lead to listing of additional species;

- To what extent will livestock management and brush control be conducted to meet habitat requirements of Special Status Species?
- Which areas, if any, are appropriate for reintroduction of Special Status Species?
- What are the long-term strategies for managing habitat for Special Status Species?
- To what extent will the BLM adopt ODFW management objectives for Special Status Species?
- What management practices best address areas of biodiversity, the needs of Special Status Species at the limits of their range, and species assemblages?

6) BLM management of energy and mineral resources on public land;

- Are there areas where some types of energy and mineral development should be restricted or prohibited?
- Are there areas where mineral development should be recognized as being the highest and best use?
- How will energy and mineral development be managed to minimize resource conflicts?
- What are the visual considerations relating to management of energy and mineral resources, and how will the BLM's VRM play a role?
- How should recreational rock collecting be managed?
- What reclamation practices will be implemented following mineral development activities?
- Which remediation methods should be used for each identified abandoned mine site?
- What leasing stipulations will be applied to the area outside of the mineral withdrawal?

7) Special area management within the CMPA and in the AMU;

- Should existing ACECs be retained under their current designations and management prescriptions?
- Are there other areas that warrant special designations to protect unique or special values?
- Will designating new special areas or eliminating existing special areas affect other resource values or management?
- How will effects from nonconforming but acceptable uses and administrative needs in the Steens Mountain Wilderness be managed in order to meet objectives but also preserve wilderness characteristics?
- How will wilderness values be protected against effects of unauthorized uses such as Off-Highway Vehicle (OHV) use and other mechanized or motorized transport?
- What management actions are needed to protect and preserve wilderness values while offering opportunities for quality recreational experiences?
- Where and under what conditions will access be permitted to provide reasonable use and enjoyment of private land within wilderness?
- How will WSRs be managed as they relate to wilderness or other special areas?
- How will the Historic District be managed with the continuing interest and visitation from the public?
- What preventive measures will need to be in place to successfully manage the No Livestock Grazing Area?
- How will removal of livestock from the No Livestock Grazing Area affect natural ecological processes?
- What management actions will be introduced to control spread of western juniper and rejuvenate depleted aspen stands in the Wildlands Juniper Management Area (WJMA)?

- How will the Redband Trout Reserve (RTR) be managed to protect habitat for fish and provide for research and education opportunities?
- How will land acquired subsequent to the Oregon Wilderness Inventory/EIS, and determined to contain wilderness characteristics, be managed?

8) BLM management of wildland fire and fuels to meet and be consistent with resource objectives, while protecting life and property. BLM and private landowners working together to manage wildland fires;

- While the BLM continues to protect life, property, and important resources from fire, are there areas where Appropriate Management Response strategies should be implemented? If so, where and under what conditions will these strategies be applied?
- Which areas are appropriate for using wildland fire as a management tool? How will this tool be used?
- Which areas may be subject to constraints (e.g., Oregon Department of Environmental Quality [DEQ] air quality standards) that could limit use of wildland fire?
- Which areas should continue to have full suppression to protect important values?
- What rehabilitation practices will be implemented following fire?

9) BLM management of recreation opportunities for both developed and dispersed recreation uses while meeting other resource objectives;

- What types and levels of recreation should the Planning Area provide?
- How, when, and to what extent should the BLM improve recreation opportunities?
- What conflicts with resource values or other uses will restrict recreation opportunities?
- How should the BLM address Special Recreation Permits (SRPs) and any needed allocations?
- Will changes in existing OHV designations affect recreation opportunities?
- To what extent should the BLM develop facilities (campgrounds, trails, etc.) and generally improve recreation access opportunities to meet public demand, to provide for public health and safety, and to direct use away from areas of conflict?
- What role, if any, should the BLM serve in encouraging tourism?
- How should the BLM provide for public awareness of recreation resources and opportunities?

10) BLM administration of land status and values to improve management efficiency and cooperation with private landowners;

- Should some BLM-administered land in the Planning Area be exchanged for other land with high public value if the exchange is consistent with land tenure objectives of the BLM? If so, which land should be exchanged?
- What effect does the Oregon Division of State Land's *Asset Management Strategy* have on management of public land?
- Should some Federal agency withdrawals be considered for revocation?
- What land should be returned to BLM administration?
- Should State or other non-Federal mineral estates under public surface ownership be acquired through mineral estate exchanges?
- Where should the BLM consider exchanging BLM-administered land for other land with higher public values or consider selling isolated or difficult-to-manage land? Should the BLM consider selling land for public purposes and community expansion?
- What areas within the Planning Area should be identified as unsuitable for Right-of-Way (ROW) routes for major utilities and roads?
- What areas within the Planning Area should be identified as open for ROWs or other land use authorizations?
- What mitigation measures will be appropriate for land that is suitable for ROWs routes?
- Which land in the Planning Area should have current withdrawals or classifications revoked, continued or modified? Which land in the Planning Area not currently withdrawn should be withdrawn in order to protect Planning Area resources?
- Where should utility corridors, avoidance, and exclusion areas be designated?
- Is there land within the Planning Area that should be identified for retention, acquisition, sale, exchange, or other disposal in order to address management objectives and issues?

- What criteria should be applied when considering acquisition from willing sellers of non-Federal land to be added to the Planning Area?
- Are there public lands more suitable for administration by other Federal, State, or local agencies?

11) Management of wild horses in the Herd Management Areas (HMAs) for maintenance of a sustainable, viable, healthy population for existence in thriving, natural, ecological balance with their habitat and other multiple-uses of the area;

- How do goals and objectives of the CMPA affect management of HMAs and wild horse populations?
- Should existing Appropriate Management Levels (AMLs) for HMAs inside the CMPA boundary be changed considering the following:
  - reduced acreage within the HMAs,
  - effects of existing and potential fencing (inside HMAs) to implement the Act's No Livestock Grazing Area,
  - potential effects of fence removal within the HMAs,
  - potential effects of fence additions in the HMAs and outside of the No Livestock Grazing Area, or
  - potential effects of less water being available to horses in the area west of the No Livestock Grazing Area?
  - Should the Alvord-Tule Springs and Coyote Lakes HMAs be combined and the herds managed as one population?
  - Are past decisions and current management practices still valid regarding HMAs and Herd Areas within the Planning Area?

12) Management of significant cultural sites and localities for protection and preservation. Use of interpretation as an education tool to increase the public's awareness and appreciation of the Planning Area's cultural resources. Gaining scientific information to form the basis of this interpretation. Consideration and protection of American Indian interests, traditional practice sites, landforms, and resources;

- How can cultural and paleontology inventories (beyond project-specific clearances) be focused primarily on areas most likely to contain significant intact properties most susceptible to effects such as erosion, livestock trampling, OHV use, artifact looting, and concentrated recreation use?
- How can sites and localities be evaluated for significance and managed as such, given timeframes and constraints imposed by needs of other resource management?
- Can all data pertaining to sites and localities continue to be successfully tracked in an automated database?
- Can cost-share agreements with universities, research teams, undergraduate and graduate students, and tribes continue to be implemented to gain scientific and cultural information that will form the basis for interpretation?
- Will resources, both internal and external, be available for BLM cultural personnel to gain the training and experience required to make oral and written interpretive presentations as well as to prepare design and construction of interpretative panels and facilities?
- Will active consultation with Indian tribes be ongoing and continue to establish baseline data for traditional practices and use areas?
- Will a Planning Area tribal use plan be developed by the BLM with cooperation of tribes, and will it increase coordination with tribes?

13) Controlling and eradicating noxious weeds;

- Should the Burns District's Noxious Weed Management Program Environmental Assessment (EA) (OR-020-98-05) continue to be implemented in its present form or should it be evaluated and modified if necessary?
- How will management of noxious weeds in special areas (including wilderness) be successfully conducted within the restraints required by guidelines and requirements of those areas?
- Can data in the Burns District weed database be successfully broken out, summarized, and utilized specific to the Planning Area?

- Can the BLM effectively increase cooperative work with other agencies to monitor locations and spread of weeds? If so, how can this be accomplished?

14) Management of OHV use in the Planning Area;

- What criteria will be used to determine whether current and future OHV use is compatible with OHV designations in existing BLM OHV strategy?
- What criteria will be used to determine whether OHV use is causing "considerable adverse effects" to Planning Area resources?
- What changes should occur to current OHV designations if determined to be incompatible with current BLM OHV Strategy or Planning Area objectives?

15) BLM management of resource uses to improve unacceptable aquatic habitat and water quality conditions such as stream reaches listed as Water Quality Limited 303(d) by the DEQ or maintain aquatic habitat and water quality currently in acceptable conditions;

- Do water developments/alternative water developments (reservoirs, springs) need to have application made to the State for water rights? (For smaller water developments, lag time will be approximately seven months to gain certificate.)
- Will workload and water quality monitoring objectives need to be determined under new management priorities? As the upper Donner und Blitzen drainage area is under new management strategies, should the BLM take steps to get the tributaries and main stream delisted from 303(d), or should the State focus on these areas?
- To what extent will livestock management and brush control be conducted to meet fisheries habitat requirements?
- What management practices for range and woodlands accommodate fisheries habitat requirements?
- Which areas, if any, are appropriate for reintroduction of native fish species?
- What are the long-term strategies for managing fisheries?
- To what extent will the BLM adopt ODFW management objectives for fisheries?
- What management practices best address areas of biodiversity, the needs of species at the limits of their range, and species assemblages?
- How can grazing management techniques improve water quality?

16) BLM management of transportation issues in the Planning Area;

- What roads and trails are needed for administrative use and/or public access?
- Where are easements or other use agreements needed to secure future access?
- Which roads and trails should be open or closed to motorized vehicles or limited to nonmotorized, nonmechanical traffic, and where?
- Which roads or trails should be seasonally closed for protection and improvement of resources or for public safety, and where?
- To what standards should roads and trails be maintained?
- Can roads or trails that no longer serve management purposes be abandoned and reclaimed?
- Should new roads or trails be considered to provide access to important public resources, prevent environmental degradation, or to improve transportation?
- What existing roads are needed to provide reasonable access to private land or areas involving other private rights or interests?
- What areas may need new roads to provide future private access?

17) Changes in current resource uses and management practices affecting the economic and social status of rural communities in the Planning Area;

- How can public land management contribute to the economic stability of small rural communities in the Planning Area?
- How will changing land use and tourism affect traditional rural life styles?
- How will land tenure adjustments affect the economic stability of small rural communities in the Planning Area?

- How, and to what extent, will creation of the Steens Mountain specially designated areas affect communities and residents?

Issues Eliminated from Detailed Study

A number of issues were determined to be beyond the scope of the RMP. For example, issues related to private and State lands were not analyzed because the RMP prescribes management only for BLM-administered land. Issues related to block grants for communities/counties/States, potential changes in Federal law (e.g., laws relating to energy and mineral development and grazing), and release of WSAs are outside the scope of the RMP because they are based on Congressional actions. Abandoned mine lands reclamation actions were not analyzed in this document but will be dealt with on a case-by-case basis through individual NEPA analyses. Hazardous materials issues were not discussed in this document, as they involve public health and safety; acting on hazardous materials situations is not discretionary. The issue of grazing permit relinquishment was not analyzed in this document but may be determined on a case-by-case basis under grazing regulation authority. There is no known potential for disproportional effects on minority or economically disadvantaged populations within the AMU; therefore, Environmental Justice was not analyzed further in connection with this RMP.

The BLM identified and reviewed the findings from the ICBEMP Scientific Assessment (USDI/USDA 1999) relevant to issue identification across the Interior Columbia Basin. The findings that applied to the Subbasin Review (SBR) area supporting this RMP are discussed in Appendix C of this document. Those findings determined not to be applicable to BLM-administered land in the AMU were eliminated from analysis.

Planning Criteria

The BLM planning regulations require preparation of planning criteria for all RMPs. Planning criteria are the constraints or ground rules guiding and directing development of RMPs. The criteria determine the planning team and public approach for development of alternatives and ultimately selection of a Preferred Alternative. Criteria assist with tailoring the RMP to identified issues and in avoiding unnecessary data collection and analyses. Planning criteria are based on analyses of information pertinent to the AMU, professional judgment, standards prescribed by applicable laws, regulations, and agency guidance, and are the result of consultation and coordination with the public, other Federal, State, and local agencies, the Burns Paiute Tribe and other American Indian tribes.

Planning criteria help to accomplish the following:

- Streamline the RMP's preparation and focus;
- Establish standards, analytical techniques, and measures to be used in the process;
- Guide development of the RMP;
- Guide and direct issue resolution; and
- Identify factors and data to consider in making decisions.

Principles of ecosystem management, as well as a continuing commitment to multiple-use and sustained yield, will also guide land use decisions in the AMU. The commitment to multiple-use will not mean all land will be open for all uses. Some uses may be excluded on some land to protect specific resource values or uses. Any such exclusion, however, will be based on laws or regulations or be determined through the planning process and subject to public involvement. Appendix E contains a detailed description of the planning criteria and legal authorities used in development of this RMP.

This RMP was prepared using the most appropriate and best available information.

Relationship to Federal, State, Local and Tribal Government Plans

Federal Plans

The BLM and other Federal agencies have developed a number of land use plans or RMPs that relate to or otherwise govern how management is currently implemented within the AMU. The BLM is responsible for determining if the RMP is in conformance with these plans. The following Federal plans have been identified as applicable to the AMU and CMPA and, unless otherwise noted, are believed to be in conformance with the RMP. Where appropriate, management direction and previous management decisions set forth by these documents are used to tier analyses performed in the RMP, or are incorporated by reference and therefore are not repeated in detail within this document. Consequently, pertinent decisions already established by these documents are not being revisited here, but are mentioned to give the reader a broad perspective of all management direction pertaining to the AMU.

The BLM program documents or interagency plan/NEPA documents and decisions applicable to the AMU (and CMPA) include the following:

- Visual Resource Management Program (USDI 1980);
- 1613 - Areas of Critical Environmental Concern Resource Management Planning Guidance (USDI 1988b);
- Oregon Wilderness Final Environmental Impact Statement (USDI 1989);
- Vegetation Treatment on BLM Lands in Thirteen Western States Final Environmental Impact Statement (USDI 1991a);
- Federal Land Policy and Management Act of 1976, as amended;
- Land Use Planning Handbook H-1601-1 Handbook (USDI Updated 2005);
- National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands (USDI 2001e);
- National Environmental Policy Act Handbook H-1790-1 (USDI 1988c);
- Wilderness Management (USDI 2001f);
- Wilderness Management: Final Rule (USDI 2001g);
- Proposed Southeast Oregon Resource Management Plan and Final Environmental Impact Statement, Volume 1 of 3 - Text (USDI 2000a);
- Rangeland Reform ‘94, Draft Environmental Impact Statement Executive Summary (USDI 1994b);
- Interior Columbia Basin Final Environmental Impact Statement (USDA/USDI 2000b);
- House Report 101-405 (Arizona Desert Wilderness Act of 1990);
- House Report 101-405 Appendix A, Grazing Guidelines (1990);
- The National Environmental Policy Act of 1969, as amended;
- H-8550-1: Interim Management Policy for Lands under Wilderness Review (WSA IMP) (USDI 1995b);
- Wildland and Prescribed Fire Management Policy (National Park Service et al. 1998);
- Endangered and Threatened Wildlife and Plants: Animal Candidate Review for Listing as Endangered or Threatened Species, Proposed Rules (USDI 1991b); and
- Greater Sage-Grouse and Sagebrush-Steppe Ecosystems Management Guidelines (USDI et al. 2000b).

State and Local Government Plans

The Department of Land Conservation and Development’s “Oregon’s Statewide Planning Goals” guides land use planning within the State and requires local governments to develop comprehensive plans, which implement State goals on the local level (Department of Land Conservation Development 1995) (Appendix F). Also shown in Appendix F are the Division of State Lands asset management prescriptions for State lands.

The Governor and various State agencies were given an opportunity to review the Proposed RMP/Final EIS (FEIS) and comment on its consistency with their goals, policies, and plans. No comments were provided.

The RMP is consistent with the Oregon Statewide Comprehensive Outdoor Recreation Plan, which was last updated in part by the Oregon Outdoor Recreation Plan: 1994-1999 (Oregon Parks and Recreation Department 1994). The RMP is also consistent with the *Southeast Oregon Recreation Plan for Harney, Lake, and Malheur Counties* (Oregon Parks and Recreation Department 2000); the *Oregon Wildlife Diversity Plan, Second*

Edition (Puchy and Marshall 1993); *Noxious Weed Policy and Classification System* (Oregon Department of Agriculture [ODA] 1997); *Oregon's Bighorn Sheep Management Plan* (ODFW 1992-1997); *Oregon's Elk Management Plan* (ODFW 1992); *Mule Deer Plan* (ODFW 1990); *Oregon Cougar Management Plan Public Review Draft* (ODFW 1993); *Catlow Redband Trout and Catlow Tui Chub Conservation Agreement and Strategy* (ODFW 1997); *Oregon Natural Heritage Plan* (Oregon Natural Heritage Advisory Council 1998); and the *Oregon Outdoor Recreation Plan 2003-2007* (Oregon Parks and Recreation Department Draft 2002).

Harney County Plan

Harney County has an existing land use plan developed in response to the State of Oregon's requirements. The Harney County Commissioners were provided with an opportunity to review the Proposed RMP/FEIS and comment on its consistency with their approved plans and policies. Harney County did not indicate there were inconsistencies.

Malheur County Plan

Malheur County has an existing land use plan developed in response to the State of Oregon's requirements. This RMP is consistent with the Malheur plan for those sections of the AMU in Malheur County.

City of Burns Plan

This RMP is consistent with the *Reformatted Comprehensive Plan for the City of Burns, Oregon* (1997).

Tribal Government Plans

The Burns Paiute Tribe is known to have an active interest in the AMU. Burns BLM management representatives and the RMP team leader met with tribal leaders of the Burns Paiute Tribe to discuss the RMP/EIS process and to identify tribal goals, needs, or plans which may conflict with or support any of the alternatives. Additional meetings occurred at key points during the process. The Burns Paiute Tribe had a representative on the Southeast Oregon Resource Advisory Council (RAC). Also, a Tribal representative participated in RMP Interdisciplinary (ID) team meetings. The RMP is in conformance with Burns Paiute Tribal land use plans.

Desired Range of Conditions

Introduction

The Desired Range of Conditions (DRC) describes land, resource, social, and economic conditions that are desired in the AMU as a result of plan implementation. The following DRCs are descriptions of what physical and biological conditions are moving toward during the life of the plan. However, certain conditions, goals, or objectives may take longer to achieve. The DRC has been factored into the goals of each resource management program.

Description of Desired Range of Conditions

Rangeland vegetation (sagebrush steppe) includes a mosaic of multiple-aged shrubs, forbs, and native perennial grasses. Shrub overstories are present in a variety of spatial arrangements and scales across the landscape level, including large continuous blocks, disjunct islands, and corridors. Plant communities not meeting DRC show upward trends in condition and structural diversity. Desirable plants continue to improve in health and vigor. New infestations of noxious weeds are not common across the landscape, and existing large infestations are declining. Populations and habitat of rare plant species and associated communities are stable or continue to improve in vigor and distribution.

Large portions of the landscape have a protective soil cover of deep rooted plants and litter, which supports proper hydrologic function. In thin-soiled areas and other appropriate soils, biological soil crusts are present that increase soil stability, contribute to nutrient cycles, and act as indicators of rangeland health.

Western juniper dominance is limited to rocky outcrops, ridges, and other historic (old growth) sites where wildland fire frequency is limited by lower site productivity and sparse fuels. Western juniper occurs in low densities in association with vigorous shrubs, grasses, and forbs (where site potential permits). Historic western juniper sites retain old growth characteristics. Quaking aspen groves occupy historic range and are in stable or improving condition.

Rangeland vegetation and water sources support viable, healthy herds of wild horses through time. Individual herds have diverse age structures, good conformation, and are quality animals exhibiting characteristics unique to each herd. Wild horse numbers are in balance with the rangelands that support them. Improvements in grass/shrubland steppe and riparian areas increase the health of the herd.

The amount and diversity of wildlife habitat are maintained or improved through time. Late seral grass/shrublands exist in blocks of various sizes in well distributed patterns across the landscape. Ongoing management of rangeland habitat components and conditions (such as vegetation cover, and forage) and management of key areas help to maintain big game populations near State wildlife agency objectives. Hunting opportunities continue to be provided throughout the AMU. Improvement in the condition of grass/shrubland steppe and riparian areas benefits a variety of wildlife species by increasing the quality, quantity, and variety of habitat. Such species include upland game, raptors, and nongame species. Management has helped to create long-term habitat changes that contribute toward restoring some sensitive species and toward recovery of listed species.

The area provides a wide variety of recreational opportunities for a growing demand, as the population increases and urban dwellers seek to experience open spaces commonly found on public land. Additional recreation facilities, restored and maintained recreation sites, and more intensive management are a few of the means used to meet increased demand. Protection of the natural landscape is an important consideration when designing recreation facilities and planning for related activities. Certain areas are excluded from recreational development to preserve their natural character. Areas such as ACECs preserve the integrity of special or unique values over the long term.

Upland soils have sufficient vegetation cover to minimize accelerated soil erosion. Physical and chemical soil properties are adequate for vegetation growth and hydrologic function appropriate to the specific soil type, landform, and climate.

Wildland fire plays an active role in defining the composition of vegetation and limiting dominance of woody species including shrubs and invasive juniper.

Riparian areas and stream habitat conditions have improved as a result of protection and management. Watersheds are stable and provide for capture, storage, and safe release of water appropriate to soil type, climate, and landform. Most riparian/wetland areas are stable and include natural streamflow and sediment regimes related to contributing watersheds. Soil supports native riparian/wetland vegetation to allow water movement, filtration, and storage. Riparian/wetland vegetation structure and diversity are progressing toward controlling erosion, stabilizing streambanks, healing incised channels, shading water areas, filtering sediment, aiding in flood plain development, dissipating energy, delaying floodwater, and increasing recharge of ground water appropriate to climate, geology, and landform. Stream channels are narrower, water depth and channel meanders are increasing, and flood plains are developing. Stream channels and flood plains are making important progress in dissipating energy at high water flows and transporting and depositing sediment as appropriate for geology, climate, and landform. Riparian/wetland vegetation is increasing in canopy volume (height and width) and in healthy uneven-aged stands of key woody plants, increasing in herbaceous ground cover, and shifting toward late succession. Surface disturbances inconsistent with the physical and biological processes described above have been reduced. Disturbances such as roads, dispersed recreation sites, and inappropriate livestock use are decreasing as vegetation and soils recover naturally. There is no downward trend in riparian condition and function.

Human use of natural resources is managed for the benefit of fisheries and to improve water quality, and promote healthy riparian conditions. Water quality is managed so most streams are providing cool, clear, and clean water. High quality water is in greater demand from all users. Better regulation of runoff has improved the water supply from rangelands. There is increased infiltration on upland sites, increased ground water

recharge, increased spring flow, reduced peak flow during floods, and increased stability of base flow during late summer and winter.

Management activities have been implemented on nearly all high risk sites to facilitate recovery of upland, riparian, aquatic, and water quality conditions. Improved aquatic habitat conditions allow populations of Threatened and Endangered (T&E) aquatic species to stabilize and expand into appropriate, previously occupied habitat. Populations of native aquatic species are increasing.

Water quality is improved to provide stable and productive riparian and aquatic ecosystems. Water quality of high priority streams is within State standards, and remaining streams have made important progress toward attaining those standards. Upland, riparian, and aquatic ecosystems are stable and productive to a degree that leads to acceptable water quality for identified beneficial uses. Improvement has occurred in stream channel integrity and channel processes, under which riparian and aquatic systems developed. Hydrologic and sediment regimes (the characteristic behavior or orderly occurrence of a natural phenomenon or process) in streams, lakes, and wetlands are appropriate to surrounding soils, climate, and landform. Instream flows are sufficient to support healthy riparian and aquatic habitats, and stream functions are stable and effective. Flooding streams discharge without substantial damage to the watershed. Riparian vegetation provides sufficient vegetation debris, adequate regulation of air and water temperatures during both summer and winter, and helps reduce surface erosion, bank erosion, and channel migration to levels characteristic of natural conditions. Riparian and aquatic habitats support populations of well-distributed native and desired nonnative plant, vertebrate, and invertebrate populations.

A desirable social and economic quality of life has been established and maintained for local residents and visitors.

Land Use Plan Goals

The mission of the BLM is to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations. In order to accomplish this mission, the BLM has developed a strategic plan (BLM Strategic Plan) containing a comprehensive set of broad goal statements and a subset of mission goals. Two goal statements and a subset of mission goals dealing with public land management are shown below. (The complete BLM Strategic Plan 2000-2005 is available at the BLM web site: www.blm.gov/nhp/info/stratplan)

Goal Number 1: Serve current and future publics.

- Provide opportunities for environmentally responsible recreation.
- Provide opportunities for environmentally responsible commercial activities.
- Preserve natural and cultural heritage resources.
- Reduce threats to public health, safety, and property.
- Provide land, resource, and title information.
- Provide economic and technical assistance.

Goal Number 2: Restore and maintain the health of the land.

- Understand and plan for the condition and use of the public lands.
- Restore at risk resources and maintain functioning systems.

The RMP incorporates the following goals identified under Part II, Vision, of the Interior Columbia Basin Strategy (USDI 2003):

- Sustain, and where necessary, restore the health of the forest, rangeland, aquatic, and riparian ecosystems.
- Provide a predictable, sustained flow of economic benefits within the capability of the ecosystems.
- Provide diverse recreational and educational opportunities within the capability of the ecosystems.
- Contribute to recovery and delisting of T&E species, and 303(d) listed waters.
- Manage natural resources consistent with treaty and trust responsibilities to American Indian tribes.

In addition, goals and objectives were developed specific to each resource/use. These goals are found later in this document.

Other Strategies

Interior Columbia Basin Ecosystem Management Project Implementation Strategy

The ICBEMP was established in 1994 "...to develop and then adopt a scientifically sound, ecosystem based strategy for managing all United States Forest Service (USFS) - or BLM-administered lands within the (Interior Columbia) Basin" (USDA 2000). The ICBEMP covers an area of 145 million acres including all of eastern Oregon. Fifty-three percent of the ICBEMP area is public land managed by the BLM or the USFS. As part of the project, a science integration team was set up and directed to "...study ecological, economic and social systems; examine current and historical conditions; and evaluate whether outcomes from current practices and trends will be consistent with long-term maintenance of ecological integrity and ecosystem health." This was all completed at the basin scale. Therefore, a "step-down" process was required to bring findings and information down to a local level where they could be applied in a USFS or BLM management unit such as a ranger district or RA. This is called the SBR process. The ICBEMP area was divided for analysis and review into four geographic scales: broad-scale (Interior Columbia Basin), mid-scale (subbasins or groups of subbasins), fine scale (watershed), and site scale (project). The mid-scale or subbasin level is the level at which field offices do long-range planning for all resources within their respective administrative boundaries. In March 2000, an ICBEMP supplemental Draft EIS (DEIS) was published, followed in December 2000 with an FEIS and proposed ROD (USDA/USDI 2000a, 2000b, 2000c). The ROD was not finalized; the State Directors and regional foresters have instead chosen to complete the project through an Implementation Strategy. Scientific data and resource information from the ICBEMP have been incorporated into the RMP where applicable per the Implementation Strategy.

As part of the preparation for the RMP/EIS, the BLM conducted an SBR (Appendix C). The subbasins are based on the United States Geological Survey (USGS) fourth field Hydrologic Unit Codes (HUCs). On average, fourth field HUCs comprise an area of 500,000 to 1,000,000 acres. There are six subbasins wholly or partially within the AMU or CMPA or both identified in the ICBEMP scientific assessment: Guano, Harney/Malheur Lakes, Alvord Lake, Donner und Blitzen, Thousand-Virgin, and Crooked-Rattlesnake, comprising an area of approximately 6,200,110 acres. Landownership and administrative responsibilities include private, State of Oregon, BLM, and the USFWS. The majority of the land in the SBR area is administered by the BLM, Andrews RA.

The BLM team examined the ICBEMP findings as well as the science behind the findings and identified a number of relevant issues applicable across the Interior Columbia Basin. The BLM determined some findings and science assessments applied to the SBR area. Appendix C of this document contains a complete report of the SBR and the ICBEMP findings applicable to the SBR area. The RMP incorporates multi-scale issues and priorities identified in the SBR.

Ecosystem Management

As described by the ICBEMP "Summary of Scientific Findings" (USDA/USDI 1996), "Ecosystem management is scientifically-based land and resource management that integrates ecological capabilities with social values and economic relations to produce, restore, or sustain ecosystem integrity and desired conditions, uses, products, values, and services over the long term...." Ecosystem management "concentrates on overall ecosystem health and productivity through an understanding of how different parts of the ecosystem function with each other, rather than on achieving a set of outputs." Human activities, including social values, regarding use of public lands and biophysical components are part of the total picture.

The ICBEMP emphasized gathering, organizing, and understanding information at the basin scale. In order to apply the findings of ICBEMP to the local level (i.e., the AMU), management planning should go through a "step-down" process. "Step-down" is the process of applying broad-scale science findings and land use decisions to site-specific areas using a hierarchical approach in order to understand current resource conditions, risks, and opportunities (USDA 2000). Information developed through this process provides the context by which projects can be developed to meet multiple management objectives.

The ICBEMP describes four levels of analysis below the basin-level analysis. These levels are intended to provide the context to appropriately apply the scientific findings to individual National forests or BLM districts:

- Subregional analysis – programmatic or broad overview EIS such as those associated with an RMP;
- Mid-scale analysis–SBR;
- Watershed scale analysis; and
- Site-specific NEPA analysis.

In order to better define issues and to identify ICBEMP findings applicable to the AMU and adjacent public land, staff conducted an SBR between September 2001 and January 2002. The SBR, or the second layer of the step-down process, is an intergovernmental process tiering mid- and fine-scale information to ICBEMP scientific findings. It is also an assessment of ecosystem processes and functions at the subbasin level.

Subbasin Review

The AMS (available at the Burns DO) serves as the SBR report. Findings and recommendations from the SBR were carried forward into the combined AMU/CMPA RMP/EIS in issues to be resolved and alternatives identified to resolve those issues. These findings and recommendations are identified in Appendix C.

Ecosystem Analysis at the Watershed Scale

In this RMP a watershed scale analysis was not conducted due to the nature of the topography of the planning area.

Rangeland Health and Health of the Land Strategies

The plan includes management direction intended to complement the Standards for Rangeland Health and Guidelines for Livestock Grazing Management (S&G) (USDI-BLM 1977a) and Standards for Land Health for Lands Administered by the Bureau of Land Management in the States of Oregon and Washington (USDI-BLM 1998). These standards are discussed further in Appendix G.

Management Theme

The RMP emphasizes natural resource use, protection, and environmental health, and places high importance on balancing cultural, economic, ecological, and social values. Uses, protection and balance of values will be accomplished within limits of the natural system's ability to provide commodities on a sustainable basis and within constraints of laws and regulations. The plan encourages cooperative management of the AMU by collaborative arrangements with landowners, permit holders, other land managers, and interested parties. The plan recognizes the long-term cultural, economic, social, and ecological integrity of the AMU is intertwined and cannot be maintained without involving landowners, permit holders, local and tribal governments, and interested parties in relationships involving collaboration, cooperation, consultation, and coordination. The plan balances the values that through the generations created the area's cultural and physical environment. Constraints to protect sensitive resources will be implemented while sustaining commodity uses and production.

Resource Management Plan Components

The RMP encompasses six general components 1) individual resource or program sections (e.g., Air Quality, Cultural Resources); 2) individual management goals (broad statements of desired outcome) for each resource program; 3) objectives (desired condition) for each resource program; 4) management direction necessary to achieve individual management goals; 5) plan implementation; and 6) monitoring. Each of the resource-specific management actions is considered in combination with all other goals and actions to arrive at the DRCs described earlier. The management goals may not be completely met over the life of the plan. Funding and staffing levels will affect the rate of implementation.

Plan Implementation Process

The RMP will be implemented as funding and workforce allow. Most of the land use plan decisions are effective upon approval of this document. However, many decisions will take a number of years to implement on the ground. Plan monitoring will show which decisions have been implemented and when.

Public Involvement in Plan Implementation

Some of the decisions contained in this document will require preparation of detailed, project-level NEPA analyses prior to implementation. Tribal consultation and public involvement opportunities, including further protest or appeal opportunities, may be provided. Other decisions have been addressed to a sufficient level of detail to be implemented over time without further NEPA analysis or public involvement opportunities.

In addition, the Andrews RA will develop an implementation strategy or "business plan" allowing further opportunities for public involvement in determining what elements of the AMU RMP should be highest priority for future implementation. Public involvement will begin in the four months following publication of this RMP ROD, dependent on workload and funding.

Operation and Maintenance Actions

Projects and maintenance of existing and newly-constructed facilities will occur; however, the level of maintenance could vary based on annual funding. Normally, routine operation and maintenance actions are categorically excluded from NEPA analysis (with the exception of actions conducted within WSAs). Such activities could include, but are not limited to, routine maintenance of existing roads, ditches, culverts, water control structures, recreation facilities, reservoirs, wells, pipelines, waterholes, fences, cattleguards, seedings, fish and wildlife structures, and signs. These types of actions are part of implementation of the RMP and should not require further analysis to implement. Maintenance of existing facilities in WSAs will be considered on a case-by-case basis and will require additional NEPA analysis.

Monitoring

Land use plan monitoring is the process of tracking the implementation of land use planning decisions (implementation monitoring) and collecting data/information necessary to evaluate the effectiveness of land use planning decisions (effectiveness monitoring). Monitoring is the process of following up on management actions and documenting progress toward full implementation of the land use plan and the achievement of desired outcomes.

Implementation monitoring is the process of tracking and documenting the implementation (or the progress toward implementation) of land use plan decisions.

Effectiveness monitoring is the process of collecting data and information in order to determine if desired outcomes (expressed as goals and objectives) are being met (or progress is being made toward meeting them) as the allowable uses and management actions are being implemented.

Adaptive Management

Adaptive management is a system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and if not, facilitating management changes that will best ensure outcomes are met or to reevaluate the outcomes. This process builds on current knowledge, observation, experimentation, and learning from experience. A continuous feedback loop allows for mid-course corrections in management to meet planned goals and objectives. In addition, the process provides a model for adjusting goals and objectives as new information develops and when the public recommends management changes.

Plan Maintenance

Minor changes, refinements, or clarifications in the RMP including incorporating new data are called plan maintenance actions. Plan maintenance actions do not expand the scope of resource uses or restrictions or change terms, conditions, or decisions of the approved AMU RMP. Maintenance actions are not considered plan amendments or revisions and do not require formal public involvement and interagency coordination. However, these types of actions are reported in periodic planning updates.

Land Use Plan Evaluation

Evaluation is the process of reviewing the land use plan and the periodic plan monitoring reports to determine if land use plan decisions and the NEPA analysis are still valid and if the plan is being implemented. Land use plans are evaluated to determine if decisions remain relevant to current issues, if decisions are effective in achieving (or making progress toward achieving) desired outcomes, if any decisions need to be revised, if any decisions need to be dropped from further consideration, and if any areas require new decisions.

In making these determinations, the evaluation should consider if mitigation measures are satisfactory, if there are significant changes in the related plans of other entities, and if there are new data of significance to this plan.

This RMP will be periodically evaluated (at a minimum of every five years). Plan evaluations will be completed prior to any plan revisions and for major plan amendments. Special or unscheduled evaluations may also be required to review unexpected management actions or significant changes in the related plans of American Indian tribes, other Federal agencies, and State and local governments, or to evaluate legislation or litigation that has the potential to trigger an RMP amendment or revision.

Evaluations may identify resource needs and means for correcting deficiencies and addressing issues through plan maintenance, amendments, or new starts. They should also identify where new and emerging resource issues and other values have surfaced. Evaluations may also identify new and innovative practices that improve effectiveness and efficiency so other offices may benefit.

Resources, Goals, Objectives, Rationale, Management Direction, and Monitoring

Air Quality

Goal - ***Maintain, restore, or protect air resources to support public health, visibility, and regional haze standards and goals.***

Objective 1. Manage wildland fires to avoid degradation of the airshed.
Objective 2. Manage mining and aggregate operations to avoid degradation of the airshed.
Objective 3. Manage authorized land use activities to avoid degradation of the airshed.

Rationale

Smoke from wildland fires (naturally and human-ignited) is a factor that may affect a land manager's ability to use larger and more frequent wildland fire for restoration and maintenance of fire-dependent ecosystems.

The Clean Air Act (CAA) requires Federal agencies to comply with Federal, State, and local air pollution requirements. The CAA also requires each State to develop a State Implementation Plan (SIP) to demonstrate the National Ambient Air Quality Standards (NAAQS) are attained and maintained for criteria pollutants. The DEQ is responsible for producing the SIP, but delegates the smoke management portion to the Oregon Department of Forestry (ODF). As part of the SIP, the ODF developed instructions and requirements for

wildland fire emissions in the smoke management plan. The smoke management plan does not cover those portions of the areas with rangelands or agricultural lands outside of the Willamette Valley, Oregon.

The NAAQS are described in the CAA. The NAAQS have been established for six pollutants. Of these six criteria pollutants, natural resource management activities largely affect only the production of Particulate Matter (PM). However, most PM of concern is produced from fire and most of this is less than ten microns in diameter (PM_{10}), which is the size class that is currently regulated under the CAA. The PM_{10} produced from fire does not seriously affect forest and rangeland ecosystems because fire is a natural part of these systems. However, it does have effects on human health. A NAAQS has also been established for $PM_{2.5}$. The method for determining attainment with the NAAQS changed with the 1990 amendments to the CAA, to require several years of monitoring before a determination can be made. The attainment status for $PM_{2.5}$ in the AMU has not yet been determined. However, the determination should be completed in 2005.

Southeast Oregon has been designated as a "clean air source" by the Grand Canyon Visibility Transport Commission. The Environmental Protection Agency (EPA) has finalized the regional haze rule and States, including Oregon, are in the process of updating their smoke management plans to incorporate regional haze provisions. At publication of the RMP, additional requirements for the smoke management plan are not known. Once the requirements are finalized, the BLM will comply with the provisions of Oregon Smoke Management Plan.

Management Direction

The BLM will cooperate with other Federal and State agencies and local governments on smoke management related to wildland fires. This cooperation may include use of a voluntary communication plan.

Wildland fire will be utilized while meeting Federal and State air quality and opacity standards. Wildland fire use to achieve resource management objectives will not be limited. Ideally, a limited amount of area will be burned, which will enable landscape-scale objectives to be achieved in years when those opportunities are available.

Air quality permits are required from the DEQ for all mining and aggregate operations in the AMU. In addition, the BLM will require dust abatement measures at mining operations and for all other authorized activities on a case-by-case basis.

Monitoring

Air quality is monitored by the State of Oregon to identify and quantify effects of all uses and activities within the State. Except for wildland fire activities and events, BLM management activities do not affect air quality to an extent that requires monitoring or mitigation.

An air quality monitoring network has been developed for Oregon that is utilized to help quantify air quality standards. Fire prescriptions and mitigation measures shall be reviewed and records of acreages/tonnages burned shall be maintained and reported. Additional smoke management mitigation measures, including use of smoke modeling programs (e.g., simple approach smoke estimation models), will be completed for large or long-duration burns having potential to affect major population centers.

Water Resources

Goal - ***Maintain, restore, or improve water quality and quantity to sustain the designated beneficial uses on public land.***

Objective 1. Comply with State and Federal requirements to protect public waters.
Objective 2. Protect all designated beneficial uses by preventing or limiting nonpoint source pollution; maintain or improve existing water quality and quantity through implementation of Best Management Practices (BMPs).
Objective 3. Manage impaired waters on public land listed under Section 303(d) of the CWA to restore beneficial uses and to improve water quality so that listing is no longer warranted.

Rationale

The CWA of 1977, as amended, required the restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters. The State of Oregon, under delegated authority and oversight by the EPA, defines beneficial uses, and establishes policies and standards relative to managing the quality of waters of the State. Water quality is managed by the DEQ through implementation of the Antidegradation Policy and supporting policies defined in *Oregon Administrative Rules* (OAR) 340-041-0026, which includes the High Quality Waters Policy, Outstanding Resource Waters Policy, and Water Quality Limited Waters Policy. The purpose of the Antidegradation Policy is to guide decisions that affect water quality such that unnecessary degradation from point and nonpoint sources of pollution is prevented, and to protect, maintain, or improve existing surface water quality relative to designated beneficial uses. Beneficial uses designated for Malheur Lakes Basin include domestic water supply, livestock watering, irrigation, salmonid and resident fish habitat, wildlife, hunting, fishing, water contact recreation, and aesthetic quality. The High Quality Waters Policy and Outstanding Resource Waters Policy generally apply to maintenance and protection where existing water quality meets or exceeds levels necessary to support beneficial uses. The Water Quality Limited Waters Policy addresses those waters that do not currently meet water quality standard(s).

The BLM, as a Designated Management Agency, is responsible pursuant to the CWA for implementing land management activities that maintain, protect, or improve the quality of waters under its jurisdiction. In addition to the CWA, numerous laws, regulations, policies, and Executive Orders direct the BLM to manage water quality for the benefit of the Nation and its economy (Appendix E). Thus, the BLM is required to maintain water quality where it meets State water quality standards and improve water quality where it does not meet standards. Potential nonpoint source pollution is the primary water quality issue associated with public land management and is the focus of this discussion. Management of nonpoint source pollution is conducted through development and implementation of BMPs during activity level planning and analysis. BMPs are defined as methods, measures or practices selected by an agency to meet its nonpoint source control needs. BMPs include but are not limited to structural and nonstructural controls, and operation and maintenance procedures. BMPs can be applied before, during, and after pollution-producing activities to reduce or eliminate introduction of pollutants into receiving waters (40 CFR 130.2(m), EPA's Water Quality Planning and Management). In the context of public land management, development and implementation of BMPs are primarily relevant to actions such as recreation, grazing, fuels, and transportation management. Further, the design and implementation of land management actions and BMPs are relative to the management of upland and riparian vegetation, and associated attributes and processes that facilitate watershed function.

The BMPs are identified as part of the NEPA process, with ID involvement. Since control of nonpoint sources of pollution is an ongoing process, refinement of BMP design may be necessary. This adaptive management process can be described in five steps: (1) selection of design for a specific BMP; (2) application of the BMP; (3) monitoring; (4) evaluation; and (5) feedback. Data gathered through monitoring are evaluated and used to identify changes needed in BMP design, application, or in the monitoring program. The Forest Service and BLM Protocol for Addressing CWA Section 303(d) Listed Waters (Protocol) outlines the approach for the BLM to meet obligations for contributing to management of the State's impaired waters. The Protocol was developed by the USFS, BLM, EPA, and DEQ, as well as other agencies. The Protocol recognizes WQRPs as the primary mechanism to address and restore impaired waters on BLM-administered land. WQRPs or equivalent will serve the purpose of surface water temperature management plan(s) described in OAR 340-041-0026.

A watershed/subwatershed priority list (Table AMU-1) was generated to generally guide assessment of ecosystem conditions, development of site-specific management actions and associated short-term and intermediate monitoring objectives, and to provide a context of evaluating progress toward plan level objectives and goals. Work will focus on higher priority areas; however, other areas may require attention to address site-specific needs. The following list describes criteria used to prioritize watersheds and the process used to change priorities, if necessary.

- Legal mandates (CWA, ESA, WSRs Act, etc.);
- Resources at risk or of concern;
- Potential for recovery;
- Resource conflicts or controversy;

- Opportunity for interagency or partnership assessments;
- Field staff knowledge of the area; and
- Current ongoing or anticipated future management opportunities.

Management Direction

Management of riparian areas is an important component of restoring water quality. To reasonably prevent degradation of water quality, BMPs (Appendix B) will be continued or prescribed and implemented at the activity plan level. These BMPs will also be directed toward management practices to facilitate maintenance or improvement of attributes (i.e., vegetation, channel geometry) identified through PFC assessment or other qualitative or quantitative methods.

The status of waters identified on the 303(d) list will be evaluated. Impairment will be validated or, in cases where water quality improvement has resulted from restoration activities since the listing, evaluation may suggest listing is no longer warranted. In cases where listing is validated, management measures sufficiently stringent to restore water quality may be recognized. In other impaired waters, WQRPs will be developed and implemented. Other available mechanisms may be explored for removing impaired waters from the 303(d) list, such as changes in water quality standards. Development and implementation of sufficiently stringent measures and WQRPs to address water quality will be based upon assessment and monitoring of existing activity-level management, application of appropriate BMPs, and subsequent activity-level planning efforts. Site/reach-specific objectives, guidelines, or standards will be determined through development of the WQRP and Total Maximum Daily Loads (TMDL).

All perennial waters listed under Section 303(d) of the CWA, as well as contributing perennial and intermittent streams, will be managed toward an appropriate ecological status to attain or progress toward attainment of water quality standards or other surrogate measures of water quality standards necessary to protect beneficial uses. Determination of appropriate ecological status to protect beneficial uses, and implementation of BMPs to maintain, protect or restore riparian and aquatic function and processes will be identified in the relevant WQRP and TMDL. Development and implementation of WQRPs and associated management (BMPs) will be generally guided by the stream/watershed priority list encompassing the CMPA and AMU (Table AMU-1) along with consideration of new circumstances or cooperative management opportunities. Initial WQRP priority will be assigned to waters where Lahontan cutthroat trout, protected pursuant to the ESA, are the most sensitive beneficial use.

Through watershed assessment, WQRP, or other processes, stream reaches or sites will be identified that provide or contribute summertime cold-water habitat in subwatersheds where stream temperatures limit the distribution and abundance of aquatic species. Protection measures (BMPs) in WQRPs, or activity level plans for such reaches/sites will be identified and implemented. The BLM will coordinate with the DEQ on locations and rationale of stream reaches/sites for evaluation as ecologically important cold-water refuges.

Developed water sources (i.e., spring developments, reservoirs, and wells) will be inventoried and evaluated for contribution to beneficial uses though site-specific assessments. Existing and future water developments will be maintained or implemented when determined to contribute to beneficial uses or to facilitate management, or protection of offsite values, such as water quality and riparian resources through distribution of wildlife, livestock, or wild horses. Active and passive restoration efforts may occur in reclaiming developed water sources determined as no longer providing beneficial uses.

Monitoring

Water resources monitoring is primarily designed to measure water quality attributes as an indicator of reach or watershed scale condition relative to identified beneficial uses (e.g., salmonid habitat) and standards prescribed under the CWA. Water quality monitoring is primarily in the context of performance monitoring, relying on monitoring of other resources, such as vegetation, that generally indicate an earlier response to land management activities and function as surrogate measures of water quality. The prioritization, intensity, and scale (watershed, subwatershed or reach/site) of implementation, effectiveness, and performance monitoring shall be determined through watershed or reach/site assessments, activity plans, or WQRPs.

Table AMU-1: Priority Streams/Subwatersheds Identified to Guide Development of Watershed Management Actions and WQRPs for the AMU and CMPA

PRIORITY STREAMS/WATERSHEDS			
Alvord Subbasin (TMDL 2004)			
Relative Priority	**Location**	**Stream**	**Rationale**
1	East Steens Mountain	Little McCoy**, Mosquito*, Willow*, Little Wildhorse***, Cottonwood**, Big Alvord**, Little Alvord**, Pike**, Wildhorse*** (Streams within CMPA)	303(d) List; Lahontan cutthroat trout (ESA); AMPs (2004); Biological Opinion(s); Wilderness/WSA
2	Pueblo Mountain	Van Horn*, Denio*, Little Cottonwood, (All streams within AMU)	303(d) List; Lahontan cutthroat trout (ESA); Biological Opinion(s); WSA
9	Trout Creek Mountains	Big Trout***, East Fork Big Trout***, Little Trout*** (Streams within AMU)	303(d) List; rainbow-cutthroat trout hybrid; WSA
Donner Und Blitzen Subbasin (TMDL 2010)			
3	Upstream of Page Springs	Donner und Blitzen*, Little Blitzen*, Ankle*, Mud*, Big Indian*, Indian*, Deep*, Fish*, Little Indian** (Streams within CMPA)	303(d) List; redband trout, Malheur mottled sculpin, and Columbia spotted frog; RTR; Aquatic Stronghold (redband trout); Priority Watershed; Wilderness; WSR
7	Downstream of Page Springs	Bridge**, Mud** (Streams within CMPA)	Redband trout, Malheur mottled sculpin, Columbia spotted frog; WSA
6	Downstream of Page Springs	Kiger**, Little Kiger** (Streams within CMPA)	Redband trout and Malheur mottled sculpin; WSR; Wilderness
5	Downstream of Page Springs	McCoy*, Cucamonga** (Streams within CMPA and AMU)	303(d) List; redband trout, Malheur mottled sculpin, and Columbia spotted frog
11	Downstream of Page Springs	Krumbo** (Stream within CMPA and AMU)	Redband trout (possible introduced rainbow/hybrids)
Guano Subbasin (TMDL 2010)			
4	Catlow Rim	Home*, Threemile** (Streams within CMPA)	303(d) List; redband trout and Catlow tui chub; Wilderness
Harney-Malheur Lakes Subbasin (TMDL 2010)			
8		Riddle*, Coyote** (Streams within CMPA)	303(d) List; redband trout and Malheur mottled sculpin
10		Smyth** (Stream within CMPA)	Redband trout

*303(d) List/T&E, Candidate, or BLM Special Status aquatic species present
**T&E, Candidate, and BLM Special Status aquatic species present
***303(d) List/nonsensitive aquatic species

Identification of specific riparian attributes of vegetation, hydrology/geomorphology and erosion/deposition to be monitored shall be identified through PFC assessments (USDI 1988 and 1999) and activity level planning. The relevance of vegetation management to the maintenance, restoration, or improvement of water quality and quantity will be reflected in monitoring implementation and effectiveness of BMPs, and may include a variety of techniques to assess condition and trend.

Soils and Biological Soil Crusts

Goal 1- ***Manage soils on public land to maintain, restore, or improve soil erosion classes, watershed health, and areas of fragile soils.***

Objective. Manage mineral soil to limit accelerated erosion on critical sites, protect soil characteristics on noncritical sites, and maintain or improve existing infiltration and permeability rates.

Table AMU-2 Water Resources Monitoring*

Monitoring Method	Monitoring Type**	Monitoring Measurement	Prioritization Criteria	Related Resources Measured***	Monitoring Interval
PFC Assessment	E, P	Qualitative assessment of riparian/stream physical function that considers hydrology, vegetation, and soil/landform attributes	Habitat for T&E or Special Status aquatic species; other perennial or intermittent streams.	Riparian-wetland vegetation, fisheries habitat, wildlife habitat, grazing management, wild horse management, recreation management, transportation management	Single baseline assessment; reassess streams at less than PFC following indication of change in identified limiting factors
Water Temperature	E, P	Quantitative measurement of daily fluctuation and 7-day average maximum of stream temperature	WQRP implementation and development; T&E salmonid habitat; Special Status salmonid habitat.	Riparian vegetation, fisheries habitat, grazing management	1 to 3 consecutive years within a 10-year timeframe, or as specified in WQRP
Stream Shade	E, P	Quantify site-specific or reach average percent stream shade	WQRP implementation and development.	Riparian vegetation, fisheries habitat, grazing management	Determined through WQRP
Macroinvertebrate Sampling	E, P	Presence, composition, and diversity of aquatic macroinvertebrates	303(d) listed streams.	Riparian vegetation, fisheries habitat, grazing management	Infrequent-issue specific
Stream Channel Cross Sections	E, P	Quantify channel configuration and width-to-depth ratio	WQRP implementation and development; project-specific actions that may modify stream channel configuration.	Riparian vegetation, fisheries habitat, grazing management, recreation management, transportation management	Infrequent-issue specific

* This list of potential monitoring methods is neither all inclusive nor exclusive of new monitoring techniques or methodologies. Monitoring efforts will be implemented based upon accepted BLM technical references and accepted science research.
** I = Implementation, E = Effectiveness, P = Performance
*** Those additional resources which are directly monitored as a result of water resources monitoring, or for which inferences regarding condition can be derived from water resources monitoring.

Rationale

Soils provide the foundation for vegetation growth and site productivity. Management goals for vegetation, watershed, wildlife, and livestock are more difficult to achieve without healthy, productive, and intact soils. Within the semiarid AMU soils are young and poorly developed. Biological and chemical soil development processes such as rock weathering and decomposition, plant material decomposition, accumulation of organic matter, and nutrient cycling proceed slowly in this environment. Due to slow soil recovery processes, disruption of soils can lead to long-term changes in soil ecology and productivity.

Management Direction

The BMPs will be developed and implemented to protect and manage soil for all ground-disturbing activities including new projects, livestock grazing, road maintenance, and construction.

Goal 2 - ***Increase the understanding of the management of Northern Great Basin biological soil crusts.***

Objective. Collect biological soil crust data within the AMU.

Rationale

Biological soil crusts (also known as cryptogamic, biotic, microbiotic, and microphytic crusts) play a role in a functioning ecosystem. For an expanded discussion on how biological soil crusts contribute to functional, structural, and compositional parts of a functioning ecosystem, see Technical Reference (TR) TR-1730-2 (*Biological Soil Crusts: Ecology and Management 2001*).

Biological soil crusts may represent up to 70 percent of the living cover in some arid ecosystems. In addition to providing biological diversity, biological soil crusts contribute to soil stability through increased resistance to erosion, nutrient cycling, and microtopography formation (TR-1730-2).

Guidance contained in 43 CFR 4180 directs public land management toward the maintenance or restoration of the physical function and biological health of vegetative ecosystems. The 1997 S&Gs (Appendix G) also provide guidance on this subject.

Biological soil crusts are one of at least 12 potential indicators used in evaluating watershed function for uplands. The condition or degree of function of a site in relation to the standards, and its trend toward or away from any standard, is determined through use of reliable and scientifically sound indicators. The consistent application of such indicators can provide an objective view of the condition and trend of a site when used by trained observers (USDI 1997). The AMU RMP will provide for monitoring of indicators of rangeland health, including biological soil crusts, and the BLM will use data resulting from this monitoring to inform decisions regarding management of grazing and other resource uses (USDI Office of Hearings and Appeals settlement of OR-020-97-01 and OR-020-96-01).

The BLM will then develop a soil crust monitoring strategy appropriate to the Pueblo-Lone Mountain Allotment (USDI Office of Hearings and Appeals settlement of OR-020-97-01 and OR-020-96-01). Management direction is specifically related to the strategy for biological soil crust monitoring that is being developed by the Burns BLM.

Management actions authorized or implemented by the BLM could influence future biological soil crust communities. These actions may include season, intensity, and duration of livestock grazing; the influence of wildland fire and fire suppression activities; emergency fire rehabilitation and reintroduction of grazing following fire; use of natural fuel breaks and management-created fuel breaks to protect resources from frequent fire return intervals; rehabilitation and reclamation actions following soil-disturbing activities; OHV and mechanized vehicle use; wild horse management; recreational use; and mining.

Management Direction

A standard monitoring methodology will be developed and implemented to monitor the Pueblo-Lone

Mountain Allotment and other allotments within the AMU. In addition, the biological soil crust community is to be monitored as one indicator for the S&Gs.

Data from biological soil crust monitoring will be used to inform decisions that balance cultural, economic, ecological, and social health and accommodate cooperative management practices in areas containing biological soil crusts.

Monitoring

Direct monitoring of soils is not typically implemented except in the case of major erosion features, such as head-cuts or gully erosion. These features are usually monitored for movement and expansion utilizing photo points and fixed-point measurement. Other direct soil monitoring shall be conducted by research and educational entities to study effects of western juniper encroachment and control treatments. These monitoring efforts, which measure soil attributes such as infiltration rate, are outside the scope of BLM resource monitoring.

Information on soil processes, as required by the S&Gs, is typically inferred from other monitoring information, such as vegetative cover and density, litter cover, and stream sediment loading and turbidity. It can be assumed, in the absence of measurable and observable soil erosion and in the presence of healthy vegetative communities, soil processes are functioning correctly.

The S&Gs identified biological soil crusts as one of at least 12 potential indicators to be used in evaluating watershed function for uplands. Biological soil crust monitoring is intended to establish presence or absence of biological soil crusts, and where they are present, to measure the effects of long-term climatic variations, precipitation, elevation, soils and topography, and disturbance to biological soil crusts.

Disturbance can result from natural and BLM management-related influences. Human-caused influences are the one effect to biological soil crusts, which can be correlated, either positively or negatively, to the BLM management actions. Monitoring data of biological soil crusts can be directly correlated to known activities occurring within a particular area. The effects monitored can then be translated into correlating resource condition, including but not limited to soil stability and soil erosion.

Biological soil crust monitoring is focused primarily on those distinct morphological groups of biological soil crusts easily identified in the field. These morphological groups are also useful because they are representative of the ecological function of the organisms (TR-1730-2). Data gathered on these morphological groups can then be analyzed against factors influencing distribution of biological soil crusts, including elevation, soils and topography, disturbance, and timing of precipitation. Monitoring typically focuses on presence or absence and cover.

Initial prioritization of biological soil crust monitoring will focus on the Pueblo-Lone Mountain Allotment. This prioritization will satisfy a series of actions required by the BLM to comply with a settlement (USDI Office of Hearing and Appeals Settlement of OR-020-97-01 and OR-020-97-02) between the BLM and the appellants. The appellants maintained that the BLM did not consider biological soil crusts when preparing the 1995 Pueblo-Lone Mountain AMP EA. The resulting settlement provided opportunity for the BLM to cooperate with the appellants in development of biological soil crust monitoring strategy for the Pueblo-Lone Mountain Allotment.

The agreement to cooperate with the appellants on development of a monitoring strategy for the Pueblo-Lone Mountain Allotment precludes inclusion of a specific monitoring methodology in this monitoring plan. Key BLM personnel attended a training session in February 2002, titled Roles of Microbiotic Soil Crusts in Rangeland Health. This course presented information contained in TR-1730-2, which was incorporated into a proposed monitoring strategy provided to the appellants in early 2004. Following agreement on the proposed strategy, the monitoring methodology for the Pueblo-Lone Mountain Allotment was finalized in early 2005.

BLM is implementing biological soil crust monitoring in the Pueblo-Lone Mountain Allotment in March 2005 in cooperation with the appellants. Biological soil crust monitoring strategies may be expanded to other areas, based upon prioritization of identified resource conflicts and concerns and available funding. A specific

monitoring methodology was approved by the appellants in 2004 and has been defined in the January 2005 biological soil crust monitoring paper. Monitoring intervals are defined in the 2005 paper, but may also be defined in the Implementation Plan for the AMU RMP.

Vegetation

Goal - ***Manage vegetation to achieve and maintain healthy watersheds.***

Rationale

With the passage of the FLPMA and the Public Rangelands Improvement Act (PRIA) of 1978, objectives and priorities for management of public land vegetation resources were more clearly defined. Guidance contained in 43 CFR 4180 directs public land management toward maintenance or restoration of the physical function and biological health of vegetative ecosystems. The S&Gs approved by the Secretary of the Interior on August 12, 1997, also provide guidance for management of plant communities. The S&Gs are included as Appendix G. This objective will maintain and improve the condition in plant communities that provide wildlife habitat, recreation, forage, scientific, scenic, ecological, and water and soil conservation benefits for consumptive and nonconsumptive uses. The long-term goal of vegetation management across the landscape is to maintain or improve rangeland condition to a DRC which meets management objectives.

Management actions authorized or implemented by the BLM will influence future vegetation composition. These actions may include season, intensity, and duration of livestock grazing within diverse vegetation communities; the influence of fire and associated suppression actions; emergency fire rehabilitation and reintroduction of grazing following fire; use of natural and management created firebreaks to protect early seral communities from frequent fire intervals; rehabilitation and reclamation actions following soil-disturbing activities; management of noxious weeds; OHV and mechanized vehicle use; wild horse management; recreational use; and mining.

Monitoring

Vegetation monitoring is designed to measure the response of vegetative communities or species to particular influences such as grazing use, fire, climate, vegetative treatments, recreation activities, and vehicle use. Monitoring provides information necessary to change management strategies defined in site-specific EAs, allotment evaluations, AMPs, recreation plans, and Transportation Plans (TP). Monitoring provides feedback to evaluate management decisions and implementation, and provides the evaluation necessary to change management strategies to best manage natural resources.

Vegetation monitoring must be designed to correctly monitor desired community/species, relative to known or predicted influences to vegetation. Areas with little or no resource use or concerns could require only minimal monitoring, such as occasional visual observation. Areas of higher use or resource concern could require more intensive monitoring, such as line-intercept transects, nested frequency plots, greenline transects or other more intensive monitoring methodology. Vegetation monitoring usually occurs during the allotment evaluation process followed by a report. All herbicide treatments are evaluated and reported to the ODA. Refer to Table AMU-3.

Riparian and Wetlands

Goal - ***Maintain, restore, or improve riparian vegetation, habitat diversity, and geomorphic stability to achieve healthy, productive riparian areas and wetlands and associated structure, function, process and products that provide public land values such as forage, water, cover, structure, and security necessary to meet the life history requirements of fish and wildlife; public recreation and aesthetics; water quality and quantity; and livestock forage and water.***

Objective 1. Achieve or maintain a rating of PFC for perennial and intermittent flowing and standing water bodies relative to site capability, site potential, and BLM management jurisdictions.
Objective 2. Maintain, restore, or improve riparian/wetland vegetation communities relative to ecological

Table AMU-3 Vegetation Management Monitoring

Monitoring Method	Monitoring Type**	Monitoring Measurement	Prioritization Criteria	Related Resources Measured***	Monitoring Interval
Grazing Use Supervision	I, E, P	Monitors livestock management such as pasture moves; gathering; salt placement; herding practices; and livestock locations and seasonal movements	I, M, and C category allotments; more intensive with more resource concern.	Riparian vegetation, water quality, fisheries habitat, wildlife habitat, upland vegetation	Yearly
Grazing Actual Use Data	I, E, P	Monitors actual number and timing grazing animals in an allotment and individual pastures versus permitted numbers and time, reported by permittees	I and M category allotments.	Riparian habitat, water quality, fisheries habitat, wildlife habitat, upland vegetation	Yearly
Climatic Data	E, P	Measure annual precipitation	All.	All	Yearly
Vegetation Density/ Composition/ Frequency Monitoring	E, P	A variety of monitoring methods which inventory species abundance and distribution to assess changes in composition over time, relative to site potential	Special Status Species plant populations; riparian vegetation; noxious weed infestations and treatments; other vegetation types requiring more intensive monitoring.	All vegetation, grazing management, fisheries habitat, wildlife habitat	Infrequent-issue specific
PFC Assessment	E, P	Qualitative assessment of riparian/stream physical function that considers hydrology, vegetation, and soil/landform attributes	Habitat for T&E or Special Status aquatic species; other perennial or intermittent streams.	Riparian-wetland vegetation, fisheries habitat, wildlife habitat, grazing management, wild horse management, recreation management, transportation management	Single baseline assessment; reassess streams at less than PFC following indication of change in identified limiting factors
Photo Points	E, P	Visual reference for long-term comparison	Special Status Species plant populations; riparian vegetation; noxious weed infestations; other vegetation types requiring more intensive monitoring.	All vegetation, grazing management, fisheries habitat, wildlife habitat	Yearly, or less frequently dependent upon management activity
Cole Browse Transect	E, P	Measures livestock utilization on key wildlife browse species, such as bitterbrush	Critical wildlife habitat.	Riparian vegetation, wildlife habitat	1 to 3 years
Other Methods as Developed/ Identified	I, E, P	Measure effectiveness of vegetation management strategies in relation to other resource responses	Dependent on desired resource response to be monitored.	Dependent on desired resource response to be monitored	Dependent on desired resource response to be monitored

* This list of potential monitoring methods is neither all inclusive nor exclusive of new monitoring techniques or methodologies. Monitoring efforts will be implemented based upon accepted BLM TRs and accepted science research.
** I = Implementation, E = Effectiveness, P = Performance
*** Those additional resources which are directly monitored as a result of vegetation management monitoring, or for which inferences regarding condition can be derived from vegetation management monitoring.

status, site potential and capability, or site-specific management objectives, and Transportation Plans.
Objective 3. Manage riparian/wetland areas to maintain, restore, or improve soil moisture content and retention of alluvial ground water to augment base flow conditions during warm summer months.

Rationale

The FLPMA and PRIA direct the BLM to "... manage public lands according to the principles of multiple-use and sustained yield" and "manage the public lands to prevent unnecessary degradation... so they become as productive as feasible." Section 102 of the FLPMA also requires public land be managed for multiple-use and sustained yield in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resources, and archaeological values. Section 102 also mandates public land be managed in a manner that recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber. In addition to the FLPMA, numerous laws, regulations, policies, Executive Orders, MOUs and Memorandums of Agreement (MOAs) direct the BLM to manage its riparian/wetland areas for biological diversity, and to maintain their productivity and sustainability for the benefit of the Nation and its economy. These directives are listed in Appendix E. While directives listed in Appendix E relate specifically to planning requirements, they also relate to management in general.

Functioning riparian/wetland areas are essential to maintenance and improvement of water quality and quantity, fish and wildlife habitat, and soil and alluvial ground water retention. Healthy riparian/wetland areas increase the quantity and quality of forage for wildlife and livestock. Riparian zones serve as a primary indicator of watershed health. Management of riparian/wetland areas for the DRC will be implemented to maintain or progress toward attainment of PFC. This will be a first step toward achieving water resources and fish/wildlife habitat objectives in entire watersheds and their components such as uplands, streams, riparian/wetland areas, springs, lakes, and ponds.

Section 102.8 of the FLPMA states it is the policy of the United States to manage public land in a manner that will protect the quality of multiple resources and will provide food and habitat for fish, wildlife, and domestic animals. Beaver are considered an important part of riparian habitat as discussed in *Riparian Area Management* TR 1737-5 (1990), TR 1737-6 (1992), and TR 1737-15 (1998). Habitat created behind beaver dams supports a diversity of aquatic organisms, fish, and wildlife including the Columbia spotted frog, a candidate species for listing as threatened or endangered. Although beaver are still present in locations within the AMU, they have been removed or have immigrated to other locations. To allow for transplanting or reestablishment of beaver into suitable habitat where they were found previously, BLM Manual 1745, Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife, and Plants (1992) states, "Decisions for making introductions transplants, or reestablishments should be made as part of the land use planning process... ." Recommendations for transplants of beaver onto or removal of beaver from public land will be coordinated with the ODFW.

Management Direction

Management prescriptions are implemented or continued at the activity plan level designed to maintain, restore, or improve specific attributes of riparian/wetland areas to maintain or progress toward attainment of PFC. Reach/site scale riparian/wetland vegetation, hydrology, morphology, and soil characteristics (subsamples) will continue to be evaluated for site potential and capability. Objectives include maintaining or progressing toward PFC at a minimum depending on site capability and potential, and higher ecological status associated with CWA 303(d) listed waters, WSRs and wilderness. The BMPs are prescribed and implemented at the activity plan level to maintain, restore, or improve flood plain function and process.

Activity level management prescriptions or WQRP prescription(s) will be developed and implemented, and will generally be guided by the stream/watershed priority list (Table AMU-1) along with consideration of new circumstances, emerging opportunities or cooperative management opportunities. Management includes passive or active measures or both based on maintaining or progressing toward attainment of PFC; obligations pursuant to the CWA, ESA, and appropriate Executive Orders; and site-specific objectives of multiple resource management.

Planting and other manipulation of riparian/wetland vegetation may occur to accelerate distribution and diversity of riparian vegetation. To assist in riparian restoration and to preserve genetics, sources of localized riparian tree and shrub (cottonwood, willow) material will continue to be established and maintained. Riparian vegetation planting or manipulation or both may be protected through installation of temporary fence exclosures/cages.

Restoration of adjacent upland vegetation communities that influence riparian/wetland areas, such as increased fire frequency or intensity or erosion potential, will include establishment and management for a range of vegetation, native to desirable nonnative, relative to site-specific emphasis of multiple resource management objective(s).

The ODFW and the BLM will coordinate on management of beaver populations on public land. Natural expansion or reintroduction of beaver may be allowed into suitable habitat on public land except that the BLM may recommend to the ODFW removal of beaver from public land if suitable habitat is not available or if economic harm or ecological damage is occurring.

Monitoring

Riparian and wetland areas are typically the first areas to be affected by uses such as grazing and recreation activities. Conversely, riparian and wetland areas tend to be more resilient to other influences, such as fire and climatic variability. Riparian and wetland areas generally respond more rapidly when management is adjusted to provide for improvement, but can degrade rapidly if management is not adjusted in a timely manner when monitoring data indicate a need for changes to management activities. Monitoring methods for riparian and wetlands may include but are not limited to PFC assessments, greenline transects, browse transects, photo points, channel cross sections, and vegetation density/composition/frequency assessments.

See the Vegetation Monitoring Section for additional monitoring.

Woodlands

Goal 1 - *Maintain or improve ecological integrity of old growth juniper woodlands*.

Objective. Maintain or improve late seral stage ecological characteristics in old growth western juniper woodlands.

Rationale

Western juniper is a long lived tree species capable of living 1,000 years or more. Historically, western juniper occupied rocky ridgetops, shallow soil areas, and other areas where surface vegetation was too sparse to carry fire. Old growth western juniper woodlands are best described on the basis of presence of pre-European settlement trees greater than 120 years before present and structural characteristics. Old growth trees generally have a nonsymmetrical appearance with rounded, spreading canopies. Individual branches or large parts of the canopies may senesce giving the canopy a sparse, open appearance. Trunks become irregular shaped with deep furrows, strip bark, and cavities. Branches will also resemble the main trunk and a bright green lichen can be found throughout the canopy. These stands accounted for less than three percent of western juniper woodlands across eastern Oregon. Old growth western juniper stands occupy less than one percent of the total AMU. The majority of western juniper expansion has primarily been on more productive plant communities; however, the number of trees in old growth stands has also increased over the last 120 years. While characteristics of old growth woodlands provide habitat for plant and wildlife species, the recent dramatic increase in trees and invasive plants has increased risk of unplanned wildland fire.

Fire was not a common occurrence in old growth western juniper woodlands. Historically, most fires were confined to small areas or single trees due to sparse ground vegetation. Once every 100 to 200 years, climatic and vegetation conditions were such that large-scale fires burned through these stands. These fires will kill some mature individuals and most younger trees. Recently, fire suppression, reduction of fine fuels by grazing, and subtle climatic shifts have allowed numerous small western juniper trees to become established. Increase in western juniper has been at the expense of associated woody and herbaceous plants.

Western juniper woodlands are not classified as commercial forests. Bole morphology and numerous branches make juniper difficult to work with and desirable only for ornamental woodworking. However, opportunities do exist for other nontraditional commercial uses such as firewood and biofuels.

Management Direction

Up to 90 percent of younger (less than 120 years old) western juniper trees in old selected growth western juniper stands will be cut. The method of cutting will be determined based on project and site-specific analysis. When appropriate, development of markets will be encouraged for byproducts of western juniper removal, such as secondary wood products (e.g., fence posts), biomass fuels for electricity generation, and firewood. Unplanned wildland fires occurring in old growth western juniper woodlands will be evaluated for resource benefits. If no threat to life or private property exists, wildland fire will be managed for resource benefits.

Goal 2 - ***Maintain, restore, or improve the ecological integrity of mountain mahogany and quaking aspen stands/groves.***

Objective. Reduce the component of western juniper and other associated woody plant species in quaking aspen and mountain mahogany stands.

Rationale

Quaking aspen and mountain mahogany communities comprise a relatively small percentage of the landscape, but contribute substantially to the biodiversity of plants and animals in the Great Basin. Quaking aspen plant communities, especially below 7,000 feet, were influenced by fire. These plant communities are often found in productive deep soil areas and in a complex mosaic of mountain big sagebrush, mountain shrub, and low sagebrush plant communities. Quaking aspen plant communities occupy less than one percent of the total vegetation in the AMU. However, quaking aspen plant communities provide important habitat for many wildlife species.

Fire played a much less important role in the development of mountain mahogany stands. Mountain mahogany is often found on shallow soil sites in areas where long periods of time can elapse between fire events. Across the AMU mountain mahogany occupies sites similar to old growth western juniper. Mountain mahogany also has a very limited distribution, occupying less than one percent of the AMU. Little information is available about the ecology of mountain mahogany and associated plant communities.

Quaking aspen and mountain mahogany plant communities share a dramatic increase in western juniper density and cover over the last 120 years. Western juniper is an effective competitor for resources. Recent expansion of western juniper into quaking aspen and mountain mahogany stands has been at the expense of associated vegetation. Western juniper has encroached upon some stands to the point associated woody vegetation has been replaced. This total type conversion alters habitat for many plant and animal species. However, some areas encroached by western juniper still have varying degrees of quaking aspen or mountain mahogany remaining. Treatment of these stands, especially small isolated pockets, may require protection from wild and domestic larger herbivores until new suckers or plants can reach heights above the browse line.

Management Direction

Western juniper will be cut from quaking aspen and mountain mahogany stands where appropriate. Development of markets will be encouraged for byproducts of western juniper removal. Targeted uses could be fence posts, molding, biomass for cogeneration, and firewood.

Where western juniper has become established and has potential to dominate aspen stands, stands will be rehabilitated by prescribed burning where possible. Naturally-ignited wildland fires in quaking aspen and mountain mahogany stands will be evaluated for resource benefits. Fires that do not threaten human life, areas of significant resource values, or private land with no established written agreements will be managed for resource benefits.

Where recovery of quaking aspen or mountain mahogany could be suppressed by browsing livestock and wildlife, treated mountain mahogany and quaking aspen stands will be fenced. In general, this will pertain to smaller stands or to stands where higher than normal browsing pressure could be expected. Some large stands might not need to be fenced in order for effective regeneration to occur.

Goal 3 - ***Manage woodland habitat so that the forage, water, cover, structure, and security necessary to meet the life history requirements of woodland-dependent and woodland-associated wildlife species are available on public land.***

Objective. Reduce the influence of western juniper trees less than 120 years old to restore riparian and sagebrush habitats.

Rationale

Over 90 percent of current western juniper woodlands established since the 1870s. The prehistoric record indicates the range of western juniper woodlands has fluctuated greatly over the last 5,000 years. Western juniper increased its range during mild, wet periods. As fire frequency increased at the end of these periods, the range of western juniper contracted. Recent expansions have occurred under different climatic conditions and in more productive and deeper soil sites than previous expansions.

Western juniper is an effective competitor for resources. Recent expansion (120 years) of western juniper into more productive big sagebrush, low sagebrush, and riparian plant communities has been at the expense of associated vegetation and animal communities. The result of this encroachment has been a reduction in the total number of species present and an increase in the amount of mineral soil exposed. Forage for livestock and wildlife has also been reduced as western juniper density and cover has increased. Part of the reduction in sagebrush obligate wildlife species can be attributed to western juniper encroachment into sagebrush plant communities of the AMU. A similar trend has occurred in riparian plant communities where western juniper has replaced riparian woody and herbaceous plants.

Management Direction

Western juniper trees less than 120 years old may be cut in riparian areas and sagebrush plant communities. Naturally-ignited fires will be evaluated for risk to public and firefighter safety, threats to private property with no written agreements, and significant resource values. Fires that do not threaten human life, private land without written agreements, and other resource values will be managed for resource benefits when appropriate. Additional considerations for suppression action include the number of fires burning on the Burns Interagency Fire Zone, sub-geographic area, the State, and Nation. At times, the number of concurrent fires may be large enough suppression action is required because few fire fighting resources are available. Human-ignited wildland fires will be used to reduce the influence of western juniper on sagebrush and riparian plant communities. Application of fire or other mechanical or nonmechanical treatments will occur after site-specific analysis.

Monitoring

Monitoring is focused on density (i.e., number of trees per acre) and age class, which can be measured through visual observation or more intensive core sampling and ring counting. Other woodland types such as quaking aspen and mountain mahogany stands are monitored for response to western juniper control activities such as cutting and burning and other management activities and uses. These woodland types are monitored for density, age class, and recruitment.

See the Vegetation Monitoring Section for additional monitoring.

Rangelands

Goal 1 - ***Maintain, restore or improve the integrity of desirable vegetation communities including perennial, native, and desirable introduced plant species. Provide for their continued existence and normal function in nutrient, water, and energy cycles.***

Objective 1. Maintain or restore native vegetation communities through sound landscape management practices.
Objective 2. Manage desirable nonnative seedings to meet resource objectives.
Objective 3. Rehabilitate plant communities that do not have the potential to meet the DRCs through management.
Objective 4. Increase species and structural diversity at the plant community and landscape levels in the big sagebrush communities. Provide multiple successional stages within the landscape.

Rationale

Beginning in the 1960s, awareness began to evolve concerning the importance of public land for maintenance of biological diversity. The passage of the FLPMA and PRIA provided objectives and priorities for management of vegetation resources on public land. Across the landscape, the long-term goal of vegetation management is to improve or maintain rangeland condition to the DRC that meets management objectives.

Management Direction

The ecological status of native plant communities will be maintained and improved.

Actions to diversify structure and composition of selected nonnative seedings will be implemented when consistent with other resource objectives. In Greater sage-grouse habitat or deer winter range or both, interseeding, preferably using locally obtained seed, to establish native plant species onto approximately 5,000 acres of nonnative seedings throughout the AMU will be utilized where vegetative species diversity is low. The term "low species diversity" means conditions in seeded areas that are predominantly crested wheatgrass, or that have reverted to cheatgrass dominance, or few herbaceous plants with an overstory of sagebrush. Other desirable nonnative species could be used in the seeding mix. Livestock grazing could be used to suppress competition and allow sagebrush establishment. In areas to be reseeded, coordination with permittees, the ODFW, and the USFWS will occur to set livestock grazing prescriptions on a site-specific basis. Emphasis of this project includes establishment of seedings on the north and west sides of Steens Mountain. Brushbeating of sagebrush in a mosaic pattern may be allowed on 50 percent of seeded areas where brush cover is high.

Plant communities that do not meet the DRC due to dominance by undesirable weedy species or invasive juniper will be rehabilitated utilizing native and nonnative plant species where appropriate.

Wildland fire and mechanical removal of western juniper will be utilized to create a mosaic of multiple successional stages, reduce the dominance of woody vegetation, and release suppressed desirable plant species.

Goal 2 - ***Manage rangeland habitats so that forage, water, cover, structure, and security necessary to meet the life history requirements of wildlife are available on public land.***

Objective 1. Manage big sagebrush, quaking aspen, and western juniper plant communities to meet habitat requirements for wildlife.
Objective 2. Manage big sagebrush communities to meet the life history requirements of sagebrush-dependent species.

Rationale

With passage of the FLPMA and PRIA, objectives and priorities for management of public land vegetation resources were more clearly defined. Guidance contained in 43 CFR 4180 directs public land management

toward maintenance or restoration of physical function and biological health of vegetative ecosystems. The S&Gs (USDI 1997a) also provide guidance for management of plant communities with relation to rangeland condition. This goal will maintain and improve the condition in plant communities that provide wildlife habitat, recreation, forage, scientific, scenic, ecological, and water and soil conservation benefits for consumptive and nonconsumptive uses. The long-term goal of vegetation management across the landscape is to maintain or improve rangeland condition to the DRC (Appendix H), which meets management objectives. Numerous wildlife species (e.g., Greater sage-grouse, mule deer, pygmy rabbits, sage sparrows, sage thrasher, other migratory birds and small mammals) depend on native upland sagebrush steppe habitats to meet life history needs. In managing uplands, the BLM needs to consider consequences and relationships of management to life history needs of wildlife. Management actions should be in conformance with the Migratory Bird Executive Order, the Greater Sage-Grouse and Sagebrush-Steppe Ecosystem Management Guidelines, the BLM National (or Oregon/Washington [OR/WA] State level) Sage-Grouse Habitat Conservation Strategy and the *Greater Sage-Grouse Conservation Assessment and Strategy for Oregon* when approved.

Management Direction

Big sagebrush, quaking aspen, and western juniper plant communities will be managed for the benefit of all wildlife and to meet the DRC in most habitats throughout the AMU.

Big sagebrush habitat will be managed for shrub cover, structure, and forage values for the benefit of game and nongame wildlife. The DRC will include shrub cover values that meet or exceed the requirements described in Wildlife Habitats in Managed Rangelands (1984) and include big sagebrush distribution over a large enough area to avoid the adverse impacts of habitat fragmentation. The DRC will strive for big sagebrush overstories that emphasize the presence of mature, light- to moderately-stocked shrub canopies capable of supporting diverse herbaceous understories and are present in a variety of spatial arrangements important to wildlife. This will apply to most native range or seeded areas in big sagebrush habitats throughout the AMU.

Monitoring

Rangelands typically encompass shrub-grass communities, most commonly used for grazing activities. Rangelands can be slow to respond to influence from grazing management and other activities, and after appropriate management changes are implemented. Monitoring methods for rangelands may include, but not be limited to, utilization studies, line-intercept transects, pace-frequency transects, Cole browse transects, nested frequency plots, photo-trend plots, climatic data, and actual use reports. As treatments are planned and implemented, specific pre-treatment and post-treatment vegetation composition and cover monitoring will be conducted as defined in site-specific planning.

See the Vegetation Monitoring Section for additional monitoring information.

Noxious Weeds

Goal - *Control the introduction and proliferation of noxious weeds and reduce the extent and density of established populations to acceptable levels.*

Objective 1. Treat noxious weeds and inventory for new infestations using the most effective means available, as outlined in the Burns District's Integrated Management Program EA/Decision Record.
Objective 2. Create public awareness on how to utilize public land without inadvertently spreading noxious weeds.
Objective 3. Maintain partnerships with local groups and government agencies to combine efforts in the control and prevention of noxious weed infestations.

Rationale

The FLPMA and PRIA direct the BLM to "…manage public lands according to the principles of multiple-use and sustained yield…" and to "…manage the public lands to prevent unnecessary degradation…so they become as productive as feasible." The introduction and spread of noxious weeds and undesirable plants within the AMU contributes to the loss of rangeland productivity, increased soil erosion, reduced species

and structural diversity, loss of wildlife habitat, and in some instances may pose a threat to human health and welfare. The Carlson-Foley Act (Public Law [PL] 90-583), the Federal Noxious Weed Act (PL 93-629), and the Burns District's Integrated Management Program EA direct noxious weed inventory and control on public land in the AMU. In the future, additional weed management direction will come from the new National Vegetation Management EIS, which is currently being developed. Protection of natural resource values depends on educating people about negative impacts of weeds, and actions, which agencies and individuals can take to prevent introduction, establishment, and spread of invasive species.

The Burns District Noxious Weed Management Program addresses the dynamic nature of noxious weeds such as the increasing number of species, changing conditions of infestations, and changing technologies. Currently, 18 noxious weed species are known to occur within the AMU, infesting 1,457 acres. Selection of appropriate control methods is based on such factors as growth characteristics of the target species, size and location of infestation, accessibility/feasibility of equipment, potential impacts to nontarget species, human use of the area, effectiveness of the treatment on target species, and cost. In addition, all BLM-authorized activities are evaluated for potential to spread or cause new infestations. If necessary, effects from proposed activities shall be mitigated so weed establishment is minimal.

Depending on plant characteristics, control methods may be used individually or in combination and may be utilized over several years. Control treatments may include cultural, mechanical, chemical, or biological methods. Due to the length of seed viability, annual germination of seed from previous years, and characteristics of certain plants, treatment could occur annually for a period of ten or more years. Since weed infestations vary annually due to new introductions, spread of existing infestations, and results of prior treatments, annual site-specific reviews of known locations will be conducted prior to initiating weed treatment activities.

Herbicides that may be used are those approved in the Vegetation Treatment on BLM Lands in Thirteen Western States EIS (1991b), or any that are approved through an amendment or other agency approval process. Application will take place only in accordance with the manufacturer's label and by qualified/certified applicators. Methods of application include wiping or wicking, backpack spraying, spraying from a vehicle with a handgun or boom, aerial spraying, or other approved methods.

Noxious weeds occurring in special management areas, including areas with T&E species/habitat, will be treated with methods to protect resource values and in accordance with provisions of the Burns District's Integrated Management Program EA directing weed management.

Management Direction

Noxious weed prevention and control will continue to be a priority. Weeds will be controlled in an integrated weed management program, which includes prevention, education, and cultural, physical, biological, and chemical treatments. Preventive measures such as public education and livestock and wildlife management will be employed to maintain or promote desirable vegetation cover and reduce distribution and introduction of noxious weed seed and plant parts. Mechanical and manual control methods and burning treatments will physically remove noxious weeds and unwanted or invasive vegetation; biological controls will introduce and cultivate factors such as insects and pathogens that naturally limit the spread of noxious weeds; and chemical treatments using approved herbicides will be applied where mechanical or biological controls are not feasible. Periodic inventories will detect new infestations. Monitoring the extent of known infestations is key to controlling or eradicating noxious weeds.

Integrated management will be implemented for control of noxious weeds. Control on disturbed areas such as roads, ROWs, waterholes, and recreational sites will be emphasized. Priority is given to land with high quality natural resource values. Emphasis is on prevention, restoration, research, and expanded efforts to inventory and detect new infestations.

Public education concerning noxious weeds will be expanded to include areas outside Harney County.

The Harney County Weed Management partnership will continue.

Monitoring

Noxious weed infestations are a serious threat to all vegetative communities. Monitoring is focused on identification of new infestations, spread of existing infestations, and effectiveness of treatment activities. Monitoring for new infestations is accomplished through inventories, most commonly in areas previously disturbed by fire or other disturbance-causing activities, and also in areas with high resource values where early detection is critical to maintain those values. Spread of existing infestations and treatment effectiveness are often monitored simultaneously using stem counts, various estimation techniques, and calculations using calibrated herbicide application equipment.

See the Vegetation Monitoring Section for additional monitoring information.

Fish and Wildlife

Goal – ***Provide diverse, structured, resilient, and connected habitat on a landscape level to support viable and sustainable populations of wildlife, fish, and other aquatic organisms.***

Objective 1. Maintain, restore, or improve habitat.
Objective 2. Manage forage production to support wildlife population levels identified by the ODFW.

Rationale

Section 102.8 of the FLPMA states the policy of the United States is to manage public land in a manner that will protect the quality of multiple resources and provide food and habitat for fish, wildlife, and domestic animals. The PRIA directs the BLM to improve rangeland conditions with due consideration given the needs of wildlife and habitats.

The character of vegetation, including arrangements, densities, and age classes, greatly influences fish and wildlife habitat quality and productivity. Since vegetation character can vary in response to Federal land use authorizations, the BLM considers consequences to the health of fish and wildlife habitat of various land uses such as grazing and mining, and treatments such as burning and seeding.

The BLM role in management of fish and other aquatic resources is to provide habitat that supports these resources. Aquatic habitat values are products of attributes and processes of properly functioning riparian and aquatic systems at a desired ecological status. Therefore, maintenance, restoration, or improvement of aquatic habitat is supported by the management direction identified under Water Resources, Vegetation, and Special Status Species Sections. Species manipulation, such as introduction or removal, is under authority of the ODFW and the USFWS.

Wildlife must have a reasonable amount of protection from adverse impacts associated with human disturbances and most human activities. This is especially true during breeding seasons and when wildlife use winter ranges.

The ODFW manages wildlife species populations through management objectives specified in its management plans; the BLM manages adequate habitat to support these numbers. The BLM and the ODFW will work cooperatively to benefit management of wildlife and wildlife habitat as described in the MOU of 2001 between the agencies. Changes in numbers of wildlife depend on availability, quality and quantity of seasonal and yearlong habitat, and other factors.

To allow for transplanting or reestablishment of wildlife into suitable habitat where they were found previously, BLM Manual 1745, Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife, and Plants (1992) states, “Decisions for making introductions, transplants, or reestablishments should be made as part of the land use planning process....” Recommendations for transplants of wildlife onto or removal from public land will be coordinated with the ODFW.

Management Direction

Maintenance, restoration, or improvement of habitat to support fish and wildlife is addressed in management direction identified under the Water Resources, Vegetation, and Special Status Species Sections. Fish and wildlife habitat management and monitoring will be coordinated with the ODFW, DEQ, USFWS, and other agencies.

Equal emphasis is placed on habitat requirements for game and nongame fish and wildlife. To the extent possible and practical, fish and wildlife community connectivity and interrelationships are emphasized in most habitats. This approach will stress landscape or ecosystem management and be distinctly different from single species management emphasis.

Throughout the AMU, approximately 5,000 acres of nonnative seedings and most native vegetation in deer winter range, where vegetative species diversity is low, will be interseeded to establish native plant species. Where appropriate, other desirable nonnative plant species could be used. Livestock grazing may be used to suppress competition and allow sagebrush establishment. In areas to be reseeded, coordination with permittees, the ODFW, and the USFWS will occur to set livestock grazing prescriptions on a site-specific basis.

Opportunities will be identified and undertaken for improvements or restoration of fish and wildlife habitat through use of wildland fire, other vegetation manipulations, and water developments. Removal of functional fences for livestock grazing will not be conducted unless necessary for improved livestock management, improved wild horse access or is an identified hazard for wildlife species.

Forage for wildlife is allocated at management objective levels. Wildlife populations may be allowed to expand naturally or through limited transplants in coordination with the ODFW.

Monitoring

Fish habitat monitoring focuses on water quality and riparian vegetation condition. Additionally, the BLM, independently or in coordination with the ODFW or the USFWS or both, periodically assesses fish and aquatic habitat using established inventory and monitoring protocols. Management and monitoring of fish population and distribution is under jurisdiction of the ODFW or the USFWS; the BLM coordinates and cooperates with these agencies relative to monitoring habitat.

Wildlife species habitats are related to other resources such as riparian/wetland areas or upland areas. Monitoring of these areas using techniques described in the Grazing Management, Vegetation Management, and Water Resources Sections, will also give a description of the condition of habitat for wildlife species. Management and monitoring of wildlife population and distribution is under jurisdiction of the ODFW or the USFWS or both; the BLM coordinates and cooperates with these agencies relative to monitoring habitat.

Special Status Species

Goal - ***Maintain, restore, or improve Special Status plant populations and animal habitats; manage public land to conserve or contribute to the recovery of threatened or endangered species; and prevent future ESA listings.***

Objective 1. Manage Special Status plant species and their habitats so management actions do not contribute to their decline or listing as T&E.
Objective 2. Conserve Special Status animal species and the ecosystems on which they depend.
Objective 3. Manage big sagebrush communities to meet the life history requirements of sagebrush-dependent Special Status Species.
Objective 4. Evaluate habitat requirements and conditions for the reintroduction of extirpated species into historic habitat in the AMU.
Objective 5. Maintain, restore, or improve bighorn sheep habitat and allow for maintenance or further expansion of bighorn sheep populations as defined by the ODFW in *Oregon's Bighorn Sheep Management Plan*.

Rationale

The ESA mandates management that leads to conservation or recovery of Federally-listed T&E species. This Act, as well as BLM policy, encourages management to conserve Special Status Species not currently listed as threatened or endangered.

Section 102.8 of the FLPMA requires public land be managed to protect the quality of ecological and environmental values and, where appropriate, to protect their natural condition. The FLPMA further requires public land be managed to protect the quality of multiple resources and provide food and habitat for fish, wildlife, and domestic animals. Rangeland health regulations identify the need to foster productive and diverse populations and communities of plants and animals.

Most plants and animals assigned to a Special Status category are limited in distribution, population, or habitat and may be at risk over various geographic areas. Where evidence suggests land uses are adversely affecting Special Status Species not currently listed as threatened or endangered, it is in the public interest to prevent need for Federal listing under the ESA. Listing of a species as threatened or endangered may lead to restrictions on land uses, and under some circumstances may cause adverse social and economic impacts to commodity users. In most cases, social, economic and biological benefits are associated with conserving species to avoid Federal listing.

Conservation efforts for Special Status Species may include maintenance, restoration, or improvement of habitat through resource management actions relative to habitat needs or specific circumstances of a species. Both active and passive measures may be developed and implemented to promote suitable habitat condition and minimize or avoid adverse effects to the species. Two potential limitations to developing and implementing conservation efforts are the lag between management implementation and the realization of environmental benefits, and physical and biological mechanisms adversely affecting a species are not necessarily fully understood.

Bats are an economically important group due to their impact on insect populations. Many bat species present in the AMU are Special Status Species. Abandoned mines can be important roosting habitats for bats, but are also subject to disturbance by humans. Gating of mine entrances can protect important bat habitat as well as reduce possibility of injury to people exploring these old mines.

Numerous wildlife species depend on native upland sagebrush steppe habitats to meet life history needs. In managing uplands, the BLM needs to consider the consequences and relationships of management to life history needs of wildlife. The Executive Order on the Responsibilities of Federal Agencies to Protect Migratory Birds, the Greater Sage-Grouse and Sagebrush-Steppe Ecosystem Management Guidelines, the BLM National (or OR/WA State level) Sage-Grouse Habitat Conservation Strategy, and the *Greater Sage-Grouse Conservation Assessment and Strategy for Oregon* (when approved), give direction to protect or restore habitat for these species, many of which are Special Status Species.

Although the ODFW and USFWS retain jurisdiction over Special Status Species populations, the BLM, ODFW, and USFWS cooperatively manage Special Status Species populations and habitats through recovery plans, conservation agreements, and management objectives specified in management plans. The BLM is involved in development of these plans and manages habitat in cooperation with the other agencies in support of these plans. The BLM and the ODFW will work cooperatively to benefit management of Special Status animal species and habitat as described in the MOU of 2001 between the two agencies.

To allow for transplanting or reestablishment of Special Status Species, BLM Manual 1745, Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife, and Plants (1992) states, “Decisions for making introductions, transplants, or reestablishments should be made as part of the land use planning process... .” Recommendations for transplants of Special Status Species onto or removal from public land will be coordinated with the ODFW and the USFWS.

Public land provides a high percentage of the total available and currently unoccupied land suitable for bighorn sheep. As principle land administrator of habitat capable of supporting bighorn sheep, BLM involvement

in this program is necessary. The BLM has a policy and a responsibility to cooperate with State agencies to accommodate species management goals consistent with principles of multiple-use management.

The ODFW has been pursuing a Statewide effort to restore bighorn sheep into unoccupied suitable habitat and increase populations in currently occupied areas. Both the BLM and the ODFW have agency management plans and have coordinated to foster communication between agencies and the public. Although the ODFW has been successfully releasing and managing bighorn sheep on public land since the mid-1960s, current populations and distributions are still considered below potential.

Bighorn sheep are native to eastern Oregon. Their presence contributes to the overall biological diversity and productivity of public land. Public interest in observing bighorn sheep in their natural setting is widespread, and they are highly prized as a big game animal.

Monitoring

Special Status plant and animal species monitoring is designed to assess the distribution, resource condition, and trend of species populations known or suspected to be limited in distribution, uncommon within a specific area, or potentially vulnerable to activities occurring on public land. Monitoring is conducted in key areas and is designed to best reflect the attribute that identified the species for a Special Status Species category.

Monitoring for Special Status plant and animal species will show the effect of management and activities on populations of Special Status Species plants, animals and habitats. Monitoring will provide data necessary for making determinations if these plants should be listed as T&E, require further observation, or removed from consideration as a Special Status Species. Monitoring of species populations not listed as T&E shall be utilized to gain information, which could lead to conservation or recovery of populations occurring in the AMU.

The categories of Special Status Species, as identified by the ESA of 1973, as amended, and the Bureau Manual are, in order of priority: Federal Endangered, Federal Threatened, Federal Proposed as Endangered, Federal Proposed as Threatened, Federal Candidate, Bureau Sensitive, and Bureau Assessment. An additional category called Bureau Tracking is identified per State Policy, but those species are not considered Special Status Species for management purposes. Monitoring will focus on the highest priority categories.

Monitoring efforts for Special Status plant species include establishment of permanent plots in critical habitats to determine the trend of individual plants or populations. Examples of monitoring methods include circle plots and line transects. Both methods include photo points, as well as measurements of individual plants within the population. Monitoring is expected to continue until the species is stable and off the T&E, Federal Candidate or BLM Sensitive lists. Monitoring is conducted on a yearly basis. Monitoring efforts for Special Status animal species include PFC assessments for riparian areas, species counts, and radio telemetry tracking.

Monitoring data for Special Status plant and animal species are incorporated in management decisions for other resources and uses. Data are evaluated and reported to the ODFW and the USFWS. Management may be corrected or adjusted to facilitate improvement of Special Status plant and animal species, or their habitats. Most commonly, management actions which affect Special Status plant and animal species are related to the following: Energy and Minerals, Wild Horses and Burros, Grazing Management, Wildland Fire Management, Transportation and Roads, Lands and Realty, OHVs, and Recreation.

Special Status Plant Species

Management Direction

Known populations of Special Status plants will be monitored periodically to assess their condition and trend. Inventories for new occurrences of Special Status plants will be completed in areas where public land is disturbed or targeted for disposal. Federal regulations, State laws, and BLM policy mandates the following actions:

- Maintain and improve critical or essential habitat to prevent deterioration and provide recovery for Federally-listed plant species.
- Maintain, restore, or increase the habitat of Federal candidate, State-listed, Bureau sensitive, and Bureau Assessment plant species to maintain populations at a level which will avoid the need to list the species by either State or Federal governments.
- Manage so that BLM-authorized actions do not result in the need to list Special Status plant species or jeopardize the continued existence of listed species.
- Increase BLM's knowledge about the status and distribution of Special Status plant species.

Special Status plant species will be intensively managed to maintain or restore habitats or populations where needed. Conservation Agreements and management plans will be completed for species considered to be at the highest risk for listing. The BLM will participate in the development of recovery plans for listed species if requested by the USFWS. Monitoring and inventory data will be collected for all Special Status plant species to assess the potential threats to habitat or individual populations.

Monitoring

See the Special Status Species Monitoring Section for additional monitoring information.

Special Status Animal Species

Management Direction

Maintenance, restoration, or improvement of habitat to support these resources focuses on management direction identified under Water Resources and Vegetation. Fish and wildlife habitat management and monitoring will be coordinated with the ODFW, DEQ, USFWS, and agencies.

The BLM will not undertake management activities likely to jeopardize the continued existence of listed species or adversely modify critical habitat pursuant to Section 7(a) (2) of the ESA.

Management of Special Status Species habitat may include active and passive measures associated with development and implementation of other resource management actions and associated themes of this RMP. Development and implementation of passive and active measures to maintain, restore, or improve specific habitat attributes will be developed through watershed assessment or site-specific activity plans, or both, to balance a variety of resource management and uses. Management prescriptions may include avoidance or mitigation measures to prevent or minimize adverse effects to Special Status Species.

Permanent protection of Borax Lake chub critical habitat will be pursued through establishment of a Conservation Agreement or other cooperative agreement among the BLM, The Nature Conservancy (TNC), USFWS, ODFW, or other private landowners to manage and protect the area for the conservation or recovery of the species, including closing the area to livestock grazing, off-road travel, and limiting or closing vehicle access. The BLM will coordinate development of water quality standards and monitoring with the DEQ, USFWS, ODFW, and TNC, or other private landowner(s), concerning habitat and population trends for Borax Lake chub.

Bat gates will be installed at entrances to abandoned mines to protect roost sites from disturbances while still allowing bat movement. Specific critical sites will be considered for withdrawal from mineral entry.

Areas used by Greater sage-grouse and other Special Status Species will be identified in efforts orchestrated with the ODFW or the USFWS. Habitat management will be coordinated across agency boundaries.

Big sagebrush habitat will be managed for the benefit of Special Status Species and to meet the DRC in most big sagebrush habitats throughout the AMU. Big sagebrush habitat will be managed in accordance with the Migratory Bird Executive Order, the Greater Sage-Grouse and Sagebrush-Steppe Ecosystem Management Guidelines, the BLM National (or OR/WA State level) Sage-Grouse Habitat Conservation Strategy and the *Greater Sage-Grouse Conservation Assessment and Strategy for Oregon* when approved.

Determination will be made to ascertain if habitat conditions exist to allow the successful reintroduction of locally or regionally extirpated Special Status Species such as Columbia sharp-tailed grouse and mountain quail. Determinations will be made on habitat improvements needed to create suitable habitat for reintroductions. Should suitable habitat be available, transplants may be allowed.

The BLM will coordinate with the ODFW on population management of bighorn sheep. Transplants, reintroductions, and natural expansion of bighorn sheep are allowed. Where needed, poor quality habitat in identified historic range will be improved. If the ODFW determines excess animals are available, transplants are authorized. In the WSAs all actions such as transplants, trapping, distribution of medicine, emergency situations, and maintenance of existing guzzlers are authorized in accordance with the WSA IMP.

Up to ten sites in the AMU will be identified for construction of low impact, natural appearing water sources or wildlife guzzlers (2,000 to 3,000-gallon capacity) in identified bighorn sheep historic habitat.

Bighorn sheep habitat maintenance, restoration, or improvement will be emphasized within existing use areas and proposed reintroduction areas as identified in current land use plans, wildlife habitat management plans, and the ODFW's most current Bighorn Sheep Management Plan. Bighorn sheep pioneering is allowed where no disease transmission conflicts exist.

All new grazing applications for domestic sheep and goat permits or proposed conversions of class of livestock from cattle to sheep or goats, will be evaluated for consistency with the BLM Revised Guidelines for Management of Domestic Sheep and Goats in Native Wild Sheep Habitats. These guidelines will be implemented where new permits or conversions could occur within or near wild sheep habitats. Cooperative efforts will be made with private landowners and domestic sheep and goat permittees to reduce the chance of mixing of domestic sheep and goats with wild sheep.

Monitoring

See the Special Status Species Monitoring Section for additional monitoring information.

Paleontological Resources

Goal 1 - *Preserve, protect, and manage vertebrate, noteworthy invertebrate, and plant paleontological resources in accordance with existing laws and regulations to make these resources available for appropriate uses by present and future generations.*

Objective 1. Using predictive modeling, locate significant localities which may be in conflict with other resource uses.
Objective 2. Scientifically excavate significant paleontological localities in cooperation with universities and other Federal agencies.
Objective 3. Protect significant paleontological localities.

Rationale

The BLM is required by law, regulations, and Executive Orders to manage paleontological resources such that they are preserved and protected from destruction, and appropriate uses are made of such resources.

The BLM regulates collection of fossils on public land under its jurisdiction according to the following laws and regulations: the FLPMA Section 310 and 302(b); 43 CFR 8365.1-5; and 43 CFR 3622. These laws provide direction for individuals who wish to collect fossils on public land. Other Federal agencies have similar authorities and policies for lands they administer.

The Federal Land Policy and Management Act

Included in the many charges given to the BLM by the FLPMA are the following: (a) manage public land in a manner that protects the quality of scientific and other values; (b) see that these lands and resources are periodically and systematically inventoried; (c) use such inventory data in developing plans for management

of these lands; and (d) manage the use of such lands and resources through easements, licenses, and permits. Management actions on public land will be inventoried for paleontological resources prior to ground-disturbing activity.

BLM Regulations 43 CFR 8365.1-5

Subject to provisions of this regulation, common invertebrate and paleobotanical fossils may be collected without a permit in reasonable amounts for noncommercial purposes. However, in order to protect significant localities, areas may be closed to collection of invertebrate and paleobotanical fossils except under permit. Vertebrate fossils such as dinosaur bones, fish, and footprints, may only be collected by permit. The BLM issues permits to qualified paleontologists who agree to put their collections into repositories where they remain the property of the American public and are accessible for study, education, and public enjoyment.

BLM Regulations 43 CFR 3622

Subject to provisions of this regulation, a person may collect petrified wood without a permit up to 25 pounds plus one piece per day to a maximum of 250 pounds in one calendar year.

All areas within the AMU are evaluated for classification into three paleontological conditions as written in the BLM Manual H-8270-II-3.

Condition 1 – includes areas known to contain vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils. Consideration of paleontological resources is necessary if the Field Office review of available information indicates that such fossils are present.

Condition 2 - includes areas with exposures of geological units or settings that have high potential to contain vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils. Geologic units from which such fossils have been recovered elsewhere may require further assessment when they are present and exposed.

Condition 3 – includes areas unlikely to produce vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils based on surficial geology, igneous or metamorphic rocks, extremely young alluvium, colluvium or aeolian deposits, or presence of deep soils. If possible, it should be noted at what depth bedrock may be expected to determine if fossiliferous deposits may be uncovered during surface-disturbing activities.

Management Direction

Implement an AMU-wide sample inventory for significant localities where they may be in conflict with other resource uses.

Significant localities will be researched to generate data for use in site management and offsite interpretation. Research efforts will be focused in areas where resource conflicts require management action. Eroding paleontological material at Thousand Springs, Catlow, Pueblo, and other similar localities will be recorded or salvaged once every five years.

Law enforcement surveillance is focused in areas in Catlow Valley, Pueblo Valley, and Long Draw. Protective measures at significant sites will be used as appropriate.

Goal 2 - *Increase public knowledge of, appreciation for, and sensitivity to paleontological resources.*

Objective. Create paleontology interpretive opportunities for public education.

Rationale

The BLM is required by law to preserve and protect cultural and paleontological resources. To do so, the public must be aware of resource values and effects human activities have upon them. Cultural and paleontological resources are fragile and irreplaceable when damaged or destroyed by actions of the public. Through vandalism and natural erosion, these resources are disappearing. If the public understands effects of its actions and

feels it has equity in the Nation's cultural and natural history heritage, resources will be appreciated and better protected from vandalism and illegal removal. Additionally, interpretation of paleontological resources improves recreational opportunities in the AMU and provides a high demand public service.

Management Direction

Actions will be initiated to develop public appreciation and protection through education regarding the values and importance of cultural resources. Interpretation projects will be implemented only if they will not affect the paleontological values at the subject locality.

Portable and static displays for local, regional, and National education will be constructed where appropriate. Brochures will be produced for offsite distribution. One paleontological poster has been completed under current management.

Cost-share programs with universities, museums, researchers, and volunteers will be continued to inventory, analyze, and research the paleontological resources within the AMU.

Monitoring

Paleontological resources monitoring is designed to measure effects of natural- and human-caused disturbance on paleontological resources, so management can be implemented to prevent or minimize deterioration or degradation. Monitoring entails measurement, description, and photo documentation of disturbed areas within localities and recording evidence of illegal collection and evacuation. Data serves as baseline information to compare with subsequent monitoring visits. All localities within the AMU will be monitored once every five years. Paleontological monitoring information is evaluated and reported in site-specific project analyses.

Cultural Resources

Goal 1 – ***Preserve, protect, and manage cultural resources in accordance with existing laws, regulations, and Executive Orders, in coordination/consultation with the Burns Paiute Tribe, other American Indian tribes, Harney County Historical Society and other heritage groups to make cultural resources available for appropriate uses by present and future generations.***

Objective 1. Using predictive modeling, locate significant sites that may be in conflict with other resource uses.
Objective 2. Use Section 110 inventories to locate significant sites in the AMU.
Objective 3. Excavate significant cultural sites in cooperation with universities, the Burns Paiute Tribe, other tribes, and other heritage partners.
Objective 4. Use protective measures to safeguard significant cultural sites.
Objective 5. Pursue land acquisitions to bring significant sites into public ownership.
Objective 6. Stabilize, restore, or reconstruct significant historic structures to provide public safety and recreational and interpretive opportunities.

Rationale

The BLM is required by laws, regulations, and Executive Orders to manage cultural resources such that they are preserved and protected from destruction, and appropriate uses are made of such resources. The Antiquities Act of 1906 provides for protection of archaeological resources on public land and requires permits for those who excavate or appropriate these resources. The Archaeological Resources Protection Act of 1979, as amended, defines and protects archaeological resources on public land, establishes a permit system for resource users, and requires agencies to provide for public education and continuing inventory of public land. Sections 106 and 110 of the National Historic Preservation Act of 1966, as amended, provide a National policy for historic preservation, establish a National Register of Historic Places designation for important properties, provide for protection of sites from destruction without appropriate data recovery, and require historic properties be utilized in agency missions, when warranted. Executive Order 11953 directs Federal agencies to inventory public land and nominate eligible properties to the National Register of Historic Places. Executive Order 13287 entitled Preserve America requires Federal agencies to "…prepare an assessment

of the current status of its inventory of historic properties…" and to "…ensure that the management of historic properties in its ownership is conducted in a manner that promotes the long-term preservation and use of those properties." These laws, regulations, and Executive Orders further require that management be coordinated with appropriate American Indian tribes and individuals.

All management actions on public land and private land projects Federally-funded, permitted, or assisted require compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. This compliance consists of a literature review, a site survey on the ground to determine presence or absence of sites, and site evaluation in coordination with the Burns Paiute Tribe and other tribes, as appropriate. Consultation with the State Historic Preservation Officer occurs with projects outside the scope of the *Oregon Protocol of the National Programmatic Agreement of 1997* and when National Register listed or eligible properties may be affected.

All sites are evaluated for placement in one of four use categories as specified in BLM Manual 8110. These four categories are as follows:

1) Conservation for future use: This category places a site in protection from destruction with the intent to have it available at an unspecified date for use in research or public interpretation.

2) Public use: Sites placed in this category are used for recreation, public interpretation, and education.

3) Experimental use: Sites placed in this category are used in scientific research. Use may result in the complete consumption of the site. Sites may be placed in public use as a result of research that is conducted.

4) Discharged sites: These are sites that no longer exist or have been so damaged they have no value. Sites may be destroyed by erosion, consumption in research, or other human-caused destruction.

Management Direction

An AMU-wide sample inventory for significant sites may be implemented where the likelihood of finding significant sites in conflict with other resource uses is high.

Current management direction entails completion of cultural program funded archaeological inventories at a rate of approximately 750 acres a year in the AMU or CMPA or a combination of both. Inventory has been conducted in recreation use areas in Alvord Valley. Inventory data are used in interpretation and public education. Management focus under the RMP will result in completed cultural program funded archaeological inventories in areas of high potential for significant sites within the AMU. A minimum of 500 acres per year is proposed for inventory in either the AMU or CMPA or combination of both.

Research at significant sites is a key component of current management. Research partners include University of Nevada, Reno; Washington State University; and University of Wisconsin, Milwaukee. Research data are routinely used in interpretation and public education. Under the RMP, management entails research of significant sites or groups of sites to generate data for use in site management and offsite interpretation. Whenever possible, research efforts are focused in areas where resource conflicts require management action.

Under current management, two regionally significant sites (site names are withheld at request of the Burns Paiute Tribe) in the AMU are visited twice yearly to record and salvage eroding material. Eroding cultural material at significant subsurface sites continue to be recorded or salvaged on an annual basis.

At significant sites in Catlow Valley and Alvord Basin, management will include fencing the BLM portion, closing the areas to OHV and mechanized vehicle use, closing roads except for administrative and permittee use, and applying riprap at a significant site in the Alvord Basin. Administrative and data recovery measures to mitigate effects will be applied, as appropriate.

In the AMU, law enforcement will be provided, focusing surveillance in Catlow Valley, Alvord Valley, and Coyote Lake regions.

Known cultural sites within wildland fire areas will be monitored to study fire effects and prevent post-fire looting.

As the opportunity arises, the private portion of a site in Alvord Valley and a site in Catlow Valley will be acquired.

Management includes inventory and assessment of other historic structures in the AMU and development and implementation of restoration plans.

Goal 2 - ***Increase public knowledge of, appreciation for, and sensitivity to cultural resources.***

Objective. Create cultural resources interpretive opportunities and sites for public education in coordination with the Burns Paiute Tribe, other tribes, and other heritage partners, as appropriate.

Rationale

The BLM is required by law, regulation, and policy to preserve and protect cultural resources. Public education and interpretation efforts are intended to improve understanding of these resources, their value, and agents of effects. The result should be a greater appreciation of resources and ultimately less site vandalism.

Another facet of public education and interpretation is the positive link to enhanced heritage tourism, a high demand public service.

Cultural resources interpretation projects will be done in coordination with American Indians, and implemented only if projects will not affect cultural resource values.

Management Direction

Interpretive panels will be constructed and installed at Andrews Town Site and other locations where appropriate.

Monitoring

Cultural resources monitoring is designed to measure effects of natural- and human-caused disturbance on cultural resources so management can be implemented to prevent or minimize deterioration or degradation. National Register of Historic Places listed and selected eligible sites shall be monitored once every ten years to determine baseline site condition. Monitoring all sites within the AMU is not practical due to the large number of known sites and limited budget.

Sites susceptible to illegal looting and excavation in the AMU shall be monitored every year. Other National Register Eligible sites shall be monitored every ten years.

Monitoring entails measurement, description, and photo documentation of disturbed areas within sites and recording evidence of looting and illegal excavation. Data serves as baseline information to compare to subsequent monitoring visits.

Cultural resources monitoring data are reported to the Oregon State Historic Preservation Officer. Data are also evaluated and reported in site-specific project analyses.

American Indian Traditional Practices

Goal – ***Protect traditional sites, landforms, burial sites, resources, and other areas of interest in consultation with the Burns Paiute Tribe and other tribes.***

Objective 1. Monitor and protect Burns Paiute tribal and other tribal interest areas.
Objective 2. Integrate maintenance and protection of native subsistence species into vegetation management activities.

Rationale

Federal policy, laws, regulations, and Executive Orders require the BLM to consult and coordinate activities with American Indian tribes so tribal rights, interests, traditions, and traditional uses are considered when land use decisions are made. Specifically, the agency must comply with the National Historic Preservation Act Sections 106 and 110; the Native American Graves Protection and Repatriation Act; the American Indian Religious Freedom Act; Regulations 36 CFR 800; and Executive Order 13007 (Sacred Sites). The BLM Manual Section 8160, entitled Native American Coordination and Consultation, establishes policy regarding American Indians and integrates their interests into resource management.

The BLM has signed MOUs with the Burns Paiute Tribe, Confederated Tribes of Warm Springs and the Confederated Tribes of Umatilla to formalize consultation and cooperation.

Management Direction

Management will continue to include consultation/coordination with the Burns Paiute Tribe and other tribes to identify traditional practice areas in the AMU. Applicable Traditional Cultural Properties will be nominated. Burial sites in the AMU will be monitored. Coordination and consultation with American Indian tribes will be documented.

Plants of cultural, traditional, and economic importance will be identified during botanical and cultural inventories, and information will be entered into the Freedom of Information Act-exempt Geographic Information System (GIS) layer.

The Burns Paiute Tribe and other tribes will be consulted on vegetation management projects, especially those involving large-scale, vegetation manipulation.

Coordination and consultation with American Indian tribes will be documented.

Monitoring

On-the-ground monitoring of other resource uses in identified traditional practice sites shall be developed in order to determine condition, amount of deterioration, and use of such sites. Procedures shall be developed to track consultation and document all written, telephone, electronic, and in-person communications, with a yearly review for adequacy.

Visual Resources

Goal - ***Manage public land actions and activities in a manner consistent with VRM class objectives***.

Objective. Protect, maintain, improve, or restore visual resource values by managing all public land in accordance with the VRM system.

Rationale

Section 102(8) of the FLPMA declares public land will be managed to protect the quality of scenic values and, where appropriate, preserve and protect certain public land in its natural condition. The NEPA, Section 101(b), requires Federal agencies to "…assure for all Americans...esthetically pleasing surroundings." Section 102 of the NEPA requires agencies to "utilize a systematic, interdisciplinary approach which will insure the integrated use of...environmental design arts in planning and in decisionmaking…." Guidelines for identification of visual resource inventory classes on public land are contained in BLM Manual Handbook H-8410-1, Visual Resource Inventory. Establishment of visual resource inventory classes on public land is based on evaluation of the landscape's scenic qualities, public sensitivity toward the landscape, and visibility of the landscape from travel routes or observation points. The VRM classes are designated through the RMP process. The VRM class objectives are managed through application of BLM Manual Handbook H-8431-1, Visual Resource Contrast Rating.

Management Direction

The WSAs are designated as VRM Class I. Should a WSA not be designated as wilderness by Congress, the area will be evaluated to determine the appropriate VRM designation, based on laws, regulations, and policies.

All visual resources are managed to improve natural values. Andrews MFP VRM classes are amended as shown on Map 3.

Monitoring

Visual resource monitoring is used to complete and implement mitigation measures incorporated into a proposed action or developed through the NEPA process. Mitigation measures are developed so VRM Class objectives for the project area are met.

Visual resource monitoring is typically implemented on a project-specific basis. The Visual Resource Contrast Rating is the basic monitoring tool used to determine if VRM Class objectives are being met or if additional mitigation measures need to be developed and implemented. Monitoring can include onsite inspections during and after project work. Documentation should include photographs or video and written reports. Personnel (proponents, contractors, and BLM staff) associated with the construction phase of projects must understand the intent of visual mitigation measures.

Management actions with the greatest potential to affect visual resources are as follows: woodlands management, development of mineral material sources, energy and minerals exploration and development, transportation corridor development, and land and realty ROWs and utility corridors. Visual resource monitoring, evaluation, and reporting will be presented in project, action-specific files and analyses.

Social and Economic Values

Goal - ***Manage public land to provide social and economic benefits to local residents, businesses, visitors, and future generations.***

Objective 1. Work cooperatively with private and community groups and local government, Burns Paiute tribal, and other tribal governments to provide for customary uses consistent with other resource objectives and to sustain or improve local economies.

Rationale

The BLM is required by Section 202 of the FLPMA to integrate "...physical, biological, economic and other sciences..." in developing land use plans (43 U.S.C. 1712). Section 102 of the NEPA requires integrated use of social sciences in assessing impacts of an action on the human environment (42 U.S.C. 4332). The Council on Environmental Quality (CEQ) regulations state that when an EIS is prepared "…and economic or social and natural or physical environmental effects are interrelated, then the [EIS] will discuss all of

Table AMU-4: VRM Class Designation Acreages in the AMU (Public Land Acres Only)

Designation	AMU Acres
Class I	560,737
Class II	131,145
Class III	154,454
Class IV	374,978
TOTAL	**1,221,314**

these effects on the human environment" (40 CFR 1508.14). Executive Order 12898 (Environmental Justice) requires Federal agencies to "...identify and address... disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States…." As indicated by these legal mandates, social science information is required to make informed, legal land use planning decisions.

Historically, commodity values on public land have been made available to private individuals or businesses through sales, permitting, or other methods. The Federal government collects revenues when commodities are used. These commodities also generate private economic activity in local, regional, National, and in some cases, international economies.

Public land provides or contributes to numerous environmental amenities such as clean water, scenic quality, and recreational opportunities. These amenities promote local communities as places to live, work, or visit. Public land also attracts visitors to the area, many of whom purchase goods and services, thereby generating local economic activity. Federal agencies, through business activities, generate economic activity in local, regional, and National economies as both employers and purchasers of goods and services.

Public land contributes to associated local governments. Many commodity programs include provisions to share collections with local governments. Payments in Lieu of Taxes (PILT) are also made to compensate counties due to public land being exempt from local property taxes. Continuation of programs limits disruption of existing economic structures. Guidance within the RMP defines economic opportunity, especially related to mining, recreation, grazing, agriculture, and tourism.

In resource management planning, the BLM generally strives for balance among current and future generations; local, regional and National interests; commodity uses and natural values; and physical, biological, and social and economic values.

Management Direction

This section outlines the management actions and emphasis for social and economic values as well as economically based resource uses including the following: energy and minerals, grazing management, lands and realty, transportation and roads, recreation, and OHVs and mechanized vehicles. See Energy and Minerals, Grazing Management, Lands and Realty, Transportation and Roads, OHVs, and Recreation Sections for more details regarding goals, objectives, and management direction for these resource uses.

The RMP emphasizes balancing social, economic, cultural, and ecological components and using cooperative management practices. Cooperative and collaborative processes, contracts, and cooperative agreements will be made for services and products available locally when need and conditions permit. In addition, local contracts will be targeted for services to restore and maintain natural systems, while providing for sustainable tourism, production, and industry. Collaboration with local populations will be implemented to encourage a high level of natural resource protection, which contributes to tourism and attracts sustainable commodities industries. Public and private partnerships will also be created to achieve shared economic objectives within existing legal, regulatory, and administrative authorities.

Management actions will provide for sustainable livestock grazing that meets allotment management (natural resource) objectives and the S&Gs (USDI 1997a). Revision of AMPs are based on evaluations and rangeland health assessments, which determine allowable Animal Unit Months (AUMs) and plant community management. Interim and long-term grazing management and stocking levels are adjusted in accordance with results of monitoring studies, allotment evaluations, and rangeland health assessments.

Accepted grazing management practices will be implemented (e.g., adjustment of the timing, duration, frequency of grazing, and periodic rest or deferment). These will be supplemented by administrative actions (e.g., season of use changes, stocking level adjustments and exclusionary pastures) or rangeland projects to accomplish natural resource management objectives.

Approximately 447,464 acres are open to locatable mineral exploration and development and 20,367 acres will be recommended for withdrawal. No acres are closed to leasable energy and mineral exploration and

development, 9,355 acres are open with No Surface Occupancy (NSO), 241,683 acres are open with seasonal and other special stipulations, and the remaining 216,793 acres are open with standard lease stipulations (Appendix I). Approximately 445,842 acres are open to saleable minerals and 22,057 acres are closed (Appendix I).

All WSAs, and ACECs are designated as renewable energy authorization avoidance areas. Applications for renewable energy authorizations in the AMU will be processed on a case-by-case basis.

Public land holdings containing WSAs, ACECs, HMAs, Special Status Species, and important cultural/historical sites will generally be retained and increased with emphasis on acquiring land with high public resource values. Emphasis is also on acquisition of nonpublic land within an ACEC; of nonpublic land containing a critical access need as identified in an approved BLM land use plan; those containing riparian or wetland values; habitat for listed T&E species; or cultural/historical resources listed on the National Register of Historic Places.

Approximately 246 miles of public land are designated as ROW corridors. Designated corridors will include all existing trans-district electrical transmission lines identified by the *Western Regional Corridor Study,* Federal and State highways, and the Fields-Denio and Catlow Valley Roads. Nominal corridor width is 1,000 feet on each side of centerline of existing facilities, except where the alignment forms the boundary of a special designated area. Here the width is 2,000 feet on the side opposite that boundary. Where the specified corridor width is constrained on both sides by special designated areas, the corridor width is the area between boundaries of the special designated areas. All ROWs for electrical transmission lines greater than 69 kV, all mainline communications facilities, and all pipelines greater than ten inches in diameter are required to be located in the designated corridors. All large-scale facilities, as specified in the Lands and Realty Section, are encouraged to be located in designated corridors. All WSAs and ACECs are designated as ROW and realty use authorization avoidance areas. Communications lease applications for new locations will be considered on a case-by-case basis and site management plans developed concurrent with processing applications. Except as noted in the Lands and Realty Section, applications for ROWs and other realty use authorizations in the AMU are processed on a case-by-case basis.

Approximately 20,367 acres will be recommended for withdrawal from public land and mining laws. Legal public or administrative access, including conservation and scenic easements, may be acquired where public demand or an administrative need exists, including any rights necessary to control and minimize access to areas containing sensitive resource values. Emphasis is placed on providing access to areas containing high public values and on protection of natural values. Land tenure transactions will be designed to maintain and improve public access. In the AMU where easement acquisition for access is not feasible or desirable but a critical access need has been identified, new roads may be constructed around nonpublic land.

A TP will be written for the AMU with a target date of December 2008. After completion of the plan, some roads could be closed, modified or relocated to minimize resource impacts. In the AMU new roads will be constructed on a case-by-case basis when needed for management purposes. Existing roads in the AMU will be maintained to appropriate standards. Traditional access to public land by the Burns Paiute Tribe is conserved, protected, and promoted.

The existing recreation sites will be maintained. New facilities or actions in the AMU will be considered in site-specific recreation project plans and EAs. The SRPs will be issued to meet the demand. An SRP allocation system could be developed for the AMU. The OHV and mechanized vehicle uses are limited to designated routes in 98% of the AMU, less than one percent is closed, and the remainder is classified as open. The Alvord Desert playa remains open to OHV and mechanized vehicle use. Sustainable recreational activities will be managed for public use and resource protection.

Monitoring

Monitoring for social and economic values allows the BLM to provide information to local governments regarding input to the local community resulting from BLM management of public land so community interests and needs are properly considered.

The BLM records may be used to determine amounts of commodity uses (e.g., AUMs, tons of minerals, and range products,). Employment in related industries may be monitored using public information sources. The BLM budget information may be utilized to project and ascertain expenditures for environmental quality projects and facilities development. This information could then be correlated to employment and revenue in related industries.

Recreation Management Information Systems (RMIS) and other site-specific measures shall be used to determine visitor use levels. The BLM procurement records may be utilized to track local versus nonlocal contracts; payroll records will be utilized to track BLM employment levels.

Information from social and economic monitoring will be used to inform future management decisions. Employment and commodities data may be reported in planning updates. No other specific reporting is anticipated, unless specific available information is requested by local government entities.

Energy and Minerals

Note: For renewable energy permitting, see the Lands and Realty Section. The primary form of authorization for wind and solar energy development is an ROW or other realty use authorization.

Goal 1 - ***Provide opportunities for the exploration and development of locatable minerals in a culturally- and environmentally-sound manner.***

Objective. Identify land with Federal mineral estate available to locatable mineral exploration and development.

Rationale

The General Mining Law of 1872 gives the public the basic right to explore and locate mining claims on public land. Section 102 of the FLPMA directs public land be managed in a manner that recognizes the Nation's need for domestic sources of minerals and other resources. The BLM regulations for locatable minerals management on public land are at 43 CFR 3802 for WSAs, 43 CFR 3809 for public land, and 43 CFR 3715 for mining-related use and occupancy. The Mining and Minerals Policy Act of 1970 declares it is the continuing policy of the Federal government to foster and encourage private enterprise in development of domestic mineral resources. The BLM mineral policy (1984) states public land shall remain open and available for mineral exploration and development unless withdrawal or other administrative action is justified and in the National interest.

The authority for mineral withdrawal rests with the Secretary of the Interior. Congressional notification is required for nonmilitary withdrawals exceeding 5,000 acres. It is USDI policy (DM603 1976) withdrawals of land shall be kept to a minimum.

Subject to valid existing rights, no mining or exploration are permitted anywhere in the Mineral Withdrawal Area designated in the Steens Act. There are six grandfathered claims in the Mineral Withdrawal Area that are located inside the AMU. In addition, WSAs are open to mining claim location but subject to the WSA IMP, including the nonimpairment criteria. Those criteria close WSAs to locatable mineral activities under a notice or plan of operations (none are grandfathered in the AMU). Locatable minerals on split-estate land resulting from patenting of the surface estate under the Stock Raising Homestead Act are managed under special procedures of PL 103-23, the Stock Raising Homestead Act Amendment of April 16, 1993.

Locatable minerals on split-estate land resulting from sale or exchange may be open to operation of the mining laws if a land use planning decision expressly restores the land to mineral entry and BLM publishes a notice to inform the public. The BLM has consulted with the Division of State Lands and has concurrence to open land with State surface and Federal mineral estate to the mining laws. As a consequence, all past and future public lands in the AMU sold or exchanged with State surface estate, where minerals are reserved to the United States, are open to operation under the mining laws upon publication in the *Federal Register* of the approval of the RMP/ROD, unless otherwise closed to the land and mineral laws in accordance with the Steens Act, other applicable laws, or land use planning decisions. The BLM will consult with other non-

Federal surface landowners on a case-by-case basis after interest in Federal mineral estate is shown and will consider site-specific surface estate values and social and economic uses before opening any other split-estate land with Federal mineral estate to locatable mineral entry.

Management Direction

Areas will be recommended for withdrawal from locatable mineral exploration and development include existing BLM recreation and administrative sites, potential BLM recreation sites when development is approved, National Register listed cultural sites, significant paleontological localities, areas containing Federally-listed species and designated critical habitat, and land within 0.6-mile of sage-grouse leks. Approximately 447,464 acres are open to locatable mineral exploration and development under a notice or plan of operations and 20,367 acres are closed (Appendix I and Map 4).

Tum Tum Lake ACEC is the only ACEC located outside of the Mineral Withdrawal Area and outside of WSAs open to locatable mineral exploration and development under a notice or plan of operations.

Goal 2 - ***Provide opportunities for the leasing and development of oil and gas, geothermal, and solid leasable mineral resources in a culturally- and environmentally-sound manner.***

Objective. Identify leasing categories for the land.

Rationale

The continuing policy of the Federal government is to foster and encourage private enterprise in development of domestic mineral resources, as declared in the Mineral Leasing Act of 1920, as amended; the Geothermal Steam Act of 1970, as amended; and the Mining and Minerals Policy Act of 1970. Section 102 of the FLPMA directs public land be managed in a manner that recognizes the Nation's need for domestic sources of mineral and other resources. The BLM regulations for leasable minerals management are at 43 CFR 3100 for oil and gas resources, 43 CFR 3200 for geothermal resources, and 43 CFR 3500 for solid mineral leasing. The BLM mineral policy (1984) states public land shall remain open and available for mineral exploration and development unless withdrawn or unless other administrative action is clearly justified in the National interest.

No mineral leasing is permitted anywhere in the Mineral Withdrawal Area designated by Congress in the Steens Act (no leases are grandfathered in the AMU). In addition, WSAs are closed to leasing activities (none are grandfathered in the AMU).

The leasing category of available BLM-administered acres with Federal mineral estate is determined by resources present on the surface and identification of the least restrictive leasing category that will protect those resources. Leasing and development decisions also apply to geophysical exploration. From most restrictive to least restrictive, the leasing categories that must be identified for areas within the AMU are as follows: (1) closed to leasing or no leasing, (2) open with NSO, (3) open with seasonal or other special stipulations or both, and (4) open with standard stipulations (BLM Land Use Planning Handbook H-1601-1). The resource values identified in the RMP process for the various leasing categories will be applied to split-estate land.

Management Direction

No new areas are closed to leasing. Areas of NSO include National Register listed cultural sites and significant paleontological localities. Areas of seasonal or special stipulations include big game winter range, areas containing Federally-listed species and their designated critical habitat, and land within 0.6-mile of sage-grouse leks.

No acres are closed to leasable energy and mineral exploration and development beyond those areas already closed by Congressional action and WSA IMP directive. Approximately 9,355 acres are subject to NSO stipulations. Approximately 241,683 acres are subject to seasonal or other special stipulations or both. Approximately 216,793 acres are open to leasing under standard leasing stipulations (Appendix I and Map 5).

Most ACECs in the AMU are within the Mineral Withdrawal Area and are Congressionally withdrawn from leasable energy and mineral exploration and development or are in WSAs and subject to no leasing under the WSA IMP. Tum Tum Lake ACEC is the only ACEC located outside of the Mineral Withdrawal Area and outside WSAs that is open to leasing. Map 5 shows Tum Tum Lake ACEC open with special stipulations because it is within deer winter range.

Goal 3 - ***Provide opportunities for the production of saleable minerals by local, State, and Federal agencies and the public in a culturally- and environmentally-sound manner.***

Objective. Permit development of mineral materials sources on a case-by-case basis in areas where development does not conflict with other resource values.

Rationale

The Materials Act of 1947, as amended, authorized disposal of mineral materials such as sand and gravel. Section 102 of the FLPMA directs public land be managed in a manner that recognizes the Nation's need for minerals and other resources. The BLM regulations for saleable minerals management on Federal mineral estate are at 43 CFR 3600. The Mining and Minerals Policy Act of 1970 declares the continuing policy of the Federal government is to foster and encourage private enterprise in development of domestic mineral resources. The BLM mineral policy (1984) states public land shall remain open and available for mineral exploration and development unless withdrawal or other administrative action is clearly justified in the National interest. The BLM Mineral Materials Manual states it is BLM policy to dispose of mineral materials provided adequate measures are taken to protect the environment and damage to public health and safety is minimized.

Development of saleable minerals on open BLM-administered land and determination of site-specific mitigation measures are discretionary decisions that are made on a case-by-case basis subject to the judgment and final decision of the BLM authorized officer.

No saleable mineral exploration or development is permitted within the Mineral Withdrawal Area except at sites specifically identified in the Steens Act as follows in Section 401 (b): "…The Secretary may permit the development of saleable mineral resources, for road maintenance only, in those locations identified…as an existing 'gravel pit' within the mineral withdrawal boundaries (excluding the Steens Mountain Wilderness, WSAs, and designated segments of the National WSR System) where such development was authorized before the date of enactment of this Act."

In addition, WSAs are closed to saleable minerals activities unless they are grandfathered (there is one grandfathered sand and gravel source in the Pueblo Mountains WSA located approximately 15 miles south of Fields adjacent to Fields-Denio Road). Management of resource values identified in the RMP process for areas closed to saleable minerals activities will be applied to split-estate land.

Management Direction

Saleable minerals development is permitted throughout the AMU on a case-by-case basis except on land closed by Congressional action and the WSA IMP, in ACECs, existing BLM administrative and recreation sites, potential BLM recreation sites, National Register listed cultural sites, significant paleontological localities, areas containing Federally-listed species and their designated critical habitat, and within 0.6-mile of sage-grouse leks.

Approximately 446,355 acres are open to saleable minerals and 22,057 acres are closed (Appendix I and Map 6).

The ACECs in the AMU are within the Mineral Withdrawal Area and are Congressionally withdrawn from saleable minerals development or are in WSAs and closed to saleable minerals activities under the WSA IMP with the exception of Tum Tum Lake ACEC. Tum Tum Lake ACEC is closed to saleable minerals development.

Monitoring

Monitoring for locatable, leasable, and saleable energy and minerals exploration and development is designed to provide compliance with applicable laws, regulations, policy, and site-specific plans. In addition, monitoring helps provide
compatibility with other resource management objectives, and other resource uses, and helps provide protection of public land.

Locatable Minerals
For locatable minerals, monitoring of activities on mining claims shall be conducted primarily to provide compliance with 43 CFR 3802/3809/3715 and site-specific plans. These regulations allow locatable minerals activities on public land while preventing unnecessary or undue degradation, require reclamation of disturbed areas, and provide for coordination with other agencies. The 43 CFR 3809 state the BLM may inspect minerals exploration and mining operations at any time. Those regulations further establish minimum inspection frequencies for mining operations as follows: at least four times each year, the BLM shall inspect all operations that are using cyanide or other leachate, or where there is significant potential for acid rock drainage. There is no stated frequency for inspections for all other activities. According to BLM policy, activities in sensitive areas or activities with a high potential for greater than usual effects shall be inspected more often than annually.

Leasable Minerals
For leasable minerals, inspections shall be conducted primarily to provide compliance with 43 CFR 3100/3200/3500 and site-specific plans. Where mineral production occurs, inspections will show (1) an accurate accounting of material removed; (2) proper compensation to the Federal government; and (3) protection of the environment, public health, and safety. Activities in sensitive areas or activities with a high potential for greater than usual effects shall be inspected more frequently, pursuant to BLM policy.

Saleable Minerals
Inspections of saleable minerals operations shall be conducted primarily to determine compliance with 43 CFR 3600 and site-specific plans. Where mineral production occurs, inspection will show (1) an accurate accounting of materials removed; (2) proper compensation to the Federal government; (3) protection of the environment, public health, and safety; and (4) identification and resolution of saleable mineral trespass. Activities in sensitive areas or with a high potential for greater than usual effects shall be inspected more frequently, in accordance with BLM policy.

Wild Horses and Burros

Goal – ***Manage and maintain healthy wild horse herds in established HMAs at AMLs to maintain a thriving natural ecological balance between wild horse populations, wildlife, livestock, vegetation resources, and other resource values. Enhance and perpetuate the special or rare and unique characteristics that distinguish the respective herds.***

Objective 1. Designate/retain/adjust HMAs.
Objective 2. Designate/retain/adjust Herd Areas in inactive status.
Objective 3. Maintain/adjust AMLs and yearlong forage allocations for each HMA.
Objective 4. Maintain a thriving natural ecological balance within HMAs.
Objective 5. Maintain/improve year-round water sources to sustain wild horse herds.
Objective 6. Maintain herd viability, genetic diversity, and the genetic and physical characteristics that distinguish individual herds.

Rationale

The Wild Free-Roaming Horses and Burros Act of 1971, as amended, requires the BLM protect and manage wild horses in areas they were found at the time this Act was passed, and in a manner designed to achieve and maintain a thriving ecological balance in keeping with the public land multiple-use concept. The BLM policy and regulations direct wild horses be managed as self-sustaining populations of healthy animals. Physical traits of members of herds are historic characteristics and are desirable to retain and maintain.

Management Direction

The existing HMAs are retained, except for the following modifications: Alvord-Tule Springs HMA (Burns District) is combined with Coyote Lake HMA (Vale District) and managed under guidelines and decisions of the SEORMP (USDI 2002), and South Steens HMA is reduced in acreage and its boundary changed to reflect legislated Steens land exchanges (Map 7 and Table AMU-5).

Herd Areas in inactive status (South Catlow and Pueblo-Lone Mountain) are retained. The inactive portion of the South Steens Herd Area is increased in size to reflect changes in landownership resulting from the Steens land exchanges (Map 7 and Table AMU-6).

Current AMLs and wild horse forage allocations are maintained in all HMAs (Table AMU-5). Permanent increases or decreases in AML and forage allocations will be considered if analysis of monitoring data indicates changes in long-term forage availability.

Table AMU-5: Wild Horse Herd Management Area Acres
HMAs are managed across administrative boundaries as one unit. Numbers displayed are for the entire HMA.

HMA	RMP Acres	AML Range	Forage Allocation (AUMs)
Alvord-Tule Springs-Coyote Lake	556,981*	198 to 390*	4,680*
Heath Creek/ Sheepshead***	198,843*	161 to 302*	2808
Kiger	26,873**	51 to 82**	984**
Riddle Mountain	28,346**	33 to 56**	672**
South Steens***	126,732	159 to 304	3,648
Total	**937,775**		**7,392**

*Includes Vale District acres, AML and AUMs.
**Includes Three Rivers RA acres, AML and AUMs.
***Includes acres in both CMPA and AMU.

Table AMU-6: Wild Horse Herd Area Acres in Inactive Status

Herd Area	RMP Acres
Kiger	157*
Pueblo-Lone Mountain	233,084**
South Catlow	42,078**
South Steens	60,055***
Total	**335,374**

*CMPA acres only. Additional acres of Herd Area in inactive status established in Three Rivers RA.
**AMU acres.
***Includes acres in both CMPA and AMU.

Wild horse numbers are managed through gathering, removal, and other approved methods of population control. The initiation of gathering or other methods of population control are based on census data, herd health, rangeland health, productivity (as determined by rangeland monitoring studies), climatic conditions, and occurrence of catastrophic events such as wildland fire and drought. Wild horse numbers are normally reduced to the low end of the AML range when gatherings are conducted.

Perimeter fences will be maintained. Wild horses that stray outside HMA boundaries will be removed or returned to the HMA. Gates in interior pasture division fences will be managed and modified, if necessary, to maximize horse access to the HMA.

Management includes maintaining water sources critical to wild horses, developing additional water sources to improve animal distribution and provide more stable water sources during periods of drought, and seeking cooperative management agreements for access to or acquiring legal access to private water sources critical to wild horses.

A diverse age structure and sex ratios ranging from 40 to 50 percent female and 50 to 60 percent male will be maintained. Wild horses returned to the HMA after a gather will possess representative characteristics of herd conformation, size, color, and unique markings. New animals from other HMAs will be introduced when needed to increase diversity of the genome or maintain herd characteristics.

Monitoring

Wild horse and burro monitoring is designed to measure health and viability of wild horse and burro populations, and measure effects of their grazing on a variety of resources and uses, including the following: wild horse and burro habitat, vegetation, riparian habitat, water quality, Special Status Species and their habitat, wildlife habitat, recreation, and grazing management operations.

Wild horse and burro monitoring falls into two distinct categories: animal/herd monitoring and resources monitoring. Animal monitoring includes animal counts, determination of animal locations and seasonal movements/use areas, annual reproduction rates, herd age structure, sex ratios, physical traits (size, color, weight, unique markings), and establishment and reassessment of herd baseline genomes. Resource monitoring includes collection of climatic data, use supervision, and actual use data. Additional vegetation condition and trend data shall be gathered during monitoring for grazing management, riparian vegetation, and rangelands. Monitoring provides information necessary to determine need for and timing of gatherings, which animals to remove, and whether or not to maintain or adjust AMLs.

Priorities for monitoring wild horses and burros are established by AMLs and herd status within HMAs for a given year. Those HMAs approaching or exceeding the upper limit of AMLs will receive priority for monitoring. Those HMAs which have recently been gathered and are at the low end of AMLs will receive minimal monitoring within a given year. Additional monitoring priority could be assigned if major changes occur within a particular HMA, such as a change to available area, a change in livestock grazing use, water distribution, or other change which could affect resident animals. Wild horse and burro populations and habitat monitoring are evaluated and reported in the allotment evaluation process and in analysis of specific gathering activities.

Table AMU-7: Wild Horses and Burros Monitoring*

Monitoring Method	Monitoring Type**	Monitoring Measurement	Prioritization Criteria	Related Resources Measured***	Monitoring Interval
Focus: Animal					
Animal Census	E, P	Animal numbers, animal locations and seasonal movement/use areas, sex ratios, annual reproduction rates, physical traits.	HMAs approaching or exceeding AML	Riparian habitat, upland vegetation	1 to 5 years
Visual Observations	E, P	Animal numbers, animal location and seasonal movement/use areas, sex ratios, annual reproduction rates, physical traits.	HMAs approaching or exceeding AML; BLM staff presence in area	Riparian habitat, water quality, upland vegetation, wildlife habitat, visitor use	When present and as needed
Gate Cuts	E, P	Sex ratios, annual reproduction rates. physical traits, herd genome.	At gather	None	At gather
Genetic Testing	E, P	Herd baseline genome.	At gather	None	At gather
Focus: Resource					
Utilization	E, P	Forage availability and utilization, conflicts with livestock use, habitat condition, animal location and seasonal movement/use areas.	HMAs approaching AML; I category livestock allotments with HMAs	Riparian habitat, water quality, fisheries habitat, wildlife habitat, upland vegetation	Yearly, or less frequently
Visual Observations	E, P	Animal numbers, animal location and seasonal movement/use areas, sex ratios, annual reproduction rates; physical traits, habitat condition, water availability.	HMAs approaching AML; BLM staff presence in the area	Riparian habitat, water quality, upland vegetation, wildlife habitat, visitor use	When present and as needed
Use Supervision	I, E, P	Monitors livestock management such as pasture moves; gathering; salt placement; herding practices; and livestock locations and seasonal movements.	I, M, and C category allotments with HMAs; more intensive with more resource concern	Riparian habitat, water quality, fisheries habitat, wildlife habitat, upland vegetation, livestock management	Yearly
Actual Use Data	I, E, P	Monitors actual number and timing grazing animals in an allotment and individual pastures versus permitted numbers and time; reported by permittees.	I and M category allotments with HMAs	Riparian habitat, water quality, fisheries habitat, wildlife habitat, upland vegetation, livestock grazing management	Yearly

* This list of potential monitoring methods is neither all inclusive nor exclusive of new monitoring techniques or methodologies. Monitoring efforts will be implemented based upon accepted BLM technical references and accepted science research.
** I = Implementation, E = Effectiveness, P = Performance
*** Those additional resources which are directly monitored as a result of wild horse and burro monitoring, or for which inferences regarding condition can be derived from wild horse and burro monitoring.

Grazing Management

Goal - ***Manage for a sustained level of livestock grazing while maintaining healthy public land resources.***

Objective 1. Provide for a sustained level of livestock grazing in the AMU, while meeting resource objectives and requirements for the S&Gs.
Objective 2. Implement administrative solutions and rangeland projects to provide proper management for livestock grazing while meeting resource objectives and requirements for S&Gs (USDI 1997a).

Rationale

The Taylor Grazing Act of 1934 provides basic legislative authority for livestock grazing on public land, with provisions for protection of the land from degradation and for orderly use and improvement of public rangelands. The Taylor Grazing Act established a system for allotment of grazing privileges to livestock operators based on grazing capacity and use priority, and for delineation of allotment boundaries. It also established standards for rangeland improvements and implemented grazing fees. Approximately 142 million acres of land in the western United States were placed under jurisdiction of the Grazing Service, which became the BLM in 1946. The FLPMA and PRIA mandate management of public land for multiple-use and sustained yield. Specifically, regulations implementing these acts call for rangeland management strategies that provide forage for economic use as well as for maintenance or restoration of watershed function, nutrient cycling, water quality, and habitat quality for Special Status Species and native plants and animals. These management strategies have been supported and implemented by development of National policies and the S&Gs. The five specific applicable standards are described in Appendix G.

Management Direction

Where livestock grazing is found to limit achievement of standards and multiple-use objectives, management changes are required to meet habitat and other resource objectives. The intent of grazing management is to maintain sufficient herbaceous material to provide adequate soil and watershed protection, provide forage and cover for wildlife and wild horses, and meet other resource objectives. Wherever existing grazing management practices on public land are determined to be contributing to nonattainment of standards and other resource objectives, appropriate actions are implemented.

Areas burned by wildland fire will be rested for a minimum of two growing seasons before being reopened to grazing, and then only when monitoring data support resumption of grazing. Rest for less than two growing seasons may be justified on a case-by-case basis, based upon resource data and plant community requirements.

Management actions will provide for sustainable livestock grazing in the AMU that meets allotment management (natural resource) objectives and the S&Gs (USDI 1997a). Revision of AMPs is based on evaluations and rangeland health assessments, which will determine allowable AUMs and plant community management.

Unless specifically needed as a vegetation management tool, the utilization level as measured at the end of the growing season will not exceed 60 percent on nonnative seedings and 50 percent on native herbaceous forage plants, on a pasture average basis, except where lower use levels may be necessary to prevent detrimental effects on habitat quality for sage-grouse.

Temporary Non-Renewable (TNR) grazing use may be authorized to make additional forage available to livestock operators in years of favorable growing conditions, consistent with meeting resource objectives. Resource objectives may include reducing competition between undesirable annual species and desirable perennial species or reducing the quantity of standing, dead herbaceous material in nonnative seedings.

Interim and long-term grazing management and stocking levels will be adjusted in accordance with results of monitoring studies, allotment evaluations, and rangeland health assessments. Accepted livestock management practices (e.g., adjustment of timing, duration, frequency of grazing, or periodic rest or

deferment) will be implemented. These will be supplemented by administrative actions (e.g., season of use changes, stocking level adjustments, and exclusionary pastures) or rangeland projects to accomplish natural resource management objectives. The results of allotment evaluations and rangeland health assessments will be reviewed as possible new information that may warrant reconsideration of RMP-level decisions and a possible RMP amendment.

In the following specific areas totaling 5,432 public land acres, the forage is no longer available for livestock use under authorities of the Taylor Grazing Act: Getty Spring, Mickey Basin Research Natural Area (RNA)/ ACEC, Mickey Hot Spring ACEC, Alvord Slough, Borax Lake ACEC, Tum Tum Lake RNA/ACEC, and Pueblo Slough. Grazing is excluded from the Highway 205 Pasture of LaVoy Tables Allotment, but trailing is allowed (Map 8).

New rangeland improvement projects could be implemented within the AMU to open under-utilized areas to grazing and relieve grazing pressure on other areas. Existing projects within the AMU will be maintained if they support livestock grazing or other uses. Existing projects that do not function to support grazing or other uses within the AMU will be abandoned and the sites rehabilitated. New proposed projects as well as management summaries for each allotment can be found in Appendix J. Allotment locations are displayed on Map 8.

Monitoring

Grazing management monitoring is designed to measure effects of grazing animals (e.g., domestic livestock, wild horses, and wildlife) on a variety of resources and uses including vegetation, riparian habitat, water quality, T&E species, wildlife habitat, recreation, and wild horse and burro habitat. Monitoring provides information necessary to change management strategies defined in EAs, allotment evaluations, AMPs and possibly the RMP itself. It provides the feedback loop to evaluate management decisions and implementation, and provides the evaluation necessary to change management strategies to best manage resources.

Improper grazing management can adversely affect natural resources and other public land uses, primarily through effects to vegetation, soils, and water. These effects may be a result of improper timing, stocking rate, or livestock distribution. Proper grazing management can be utilized to benefit natural resources and other public land uses.

Grazing management monitoring typically focuses on livestock management and vegetation response. Livestock management can be monitored through use supervision, actual use reporting, and photo documentation. Vegetation is monitored through a variety of assessment and quantitative methods.

Grazing management monitoring is prioritized according to allotment category, as follows:

I Category: The “improve” category identifies allotments with management and resource concerns. These allotments receive priority for implementation, effectiveness, and performance monitoring.

M Category: The “manage” category identifies allotments with low or no management and resource concerns. These allotments receive lower priority for monitoring, and are targeted for effectiveness and performance monitoring, unless monitoring data indicate need for a change to management strategy.

C Category: The “custodial” category identifies allotments with a very low ratio of public land to private land, and low resource values. These allotments are lowest priority for monitoring efforts, and receive minimal effectiveness and performance monitoring.

“I” category allotments are further prioritized for monitoring based on resources present. The most common resources considered for monitoring prioritization are riparian habitat, water quality, unique plant communities, wildlife habitat, and threatened or endangered species.

Grazing management monitoring is evaluated and reported through the allotment evaluation process, analyses specific to gathering wild horses and burros, Section 7 consultation on T&E species, and in annual planning updates.

Table AMU-8: Grazing Management Monitoring*

Monitoring Method	Monitoring Type**	Monitoring Measurement	Prioritization Criteria	Related ResourcesMeasured***	Monitoring Interval
Use Supervision	I, E, P	Monitors livestock management such as pasture moves; gathering; salt placement; herding practices; and livestock locations and seasonal movements.	I, M, and C category allotments; more intensive with more resource concern	Riparian habitat, water quality, fisheries habitat, wildlife habitat, upland vegetation	Yearly
Actual Use Data	I, E, P	Monitors actual number and timing grazing animals in an allotment and individual pastures versus permitted numbers and time; reported by permittees.	I and M category allotments	Riparian habitat, water quality, fisheries habitat, wildlife habitat, upland vegetation	Yearly
Utilization	I, E, P	Measures forage utilization by grazing animals, either as an ocular estimate or as a quantitative measurement.	I and M category allotments	Riparian habitat, water quality, fisheries habitat, wildlife habitat, upland vegetation	Yearly, or less frequently
Photo-Trend Plots	E, P	Measures vegetation cover and frequency through photo documentation and trend plot analysis.	I and M category allotments	Wildlife habitat, upland vegetation	5 to 7-year intervals
Nested Frequency	P	Measures vegetation presence and frequency through nested plot analysis.	I category allotments	Wildlife habitat, upland vegetation	5 to 10-year intervals
Climatic Data	E, P	Measures annual precipitation.	All	All	Yearly
Line-Intercept Transects	E, P	Measures vegetative composition and cover; often used to measure vegetation response after fire .	I and M category allotments	Wildlife habitat, upland vegetation	3 to 5-year intervals, if indicated for management
Pace Frequency Transects	E, P	Measures vegetative composition and frequency.	I category allotments	Wildlife habitat, upland vegetation	5 to 7-year intervals, if indicated for management
PFC Assessment	E, P	Qualitative assessment of riparian/stream physical function that considers hydrology, vegetation and soil/landform attributes.	Habitat for T&E or Special Status aquatic species; other perennial or intermittent streams	Riparian-wetland vegetation, fisheries habitat, wildlife habitat, grazing management, wild horse management, recreation management, transportation management	Single baseline assessment; reassess streams at less than PFC following indication of change in identified limiting factors
Greenline Transects	E, P	Measures riparian vegetative composition and cover.	I category allotments; stream segments of concern	Riparian vegetation, water quality, fisheries habitat, wildlife habitat	As indicated for management
Cole Browse Transect	E, P	Measures livestock utilization on key wildlife browse species, such as bitterbrush.	Critical wildlife habitat	Riparian vegetation, wildlife habitat	1 to 3 years
Other Methods as Developed/Identified	I, E, P	Measures effectiveness of grazing management strategies in relation to other resource responses.	Dependent on desired resource response to be monitored	Dependent on desired resource response to be monitored	Dependent on desired resource response to be monitored

* This list of potential monitoring methods is neither all inclusive nor exclusive of new monitoring techniques or methodologies. Monitoring efforts will be implemented based upon accepted BLM technical references and accepted science research.

** I = Implementation, E = Effectiveness, P = Performance

*** Those additional resources that are directly monitored as a result of grazing management monitoring, or for which inferences regarding condition can be derived from grazing management monitoring.

Wildland Fire Management

Goal 1 - ***Provide an appropriate management response to all wildland fires emphasizing firefighter and public safety.***

Objective 1. Implement appropriate fire suppression actions in the Wildland Urban Interface (WUI) and areas identified as possessing significant values that could be significantly altered by unplanned wildland fire. Pursue cooperative management agreements with private landowners to cooperatively manage wildland fire.
Objective 2. Implement the appropriate management actions upon discovery of wildland fires in areas outside of the designated WUI or areas that possess significant values that could be impaired by uncontrolled wildland fire. Pursue cooperative management agreements with private landowners to cooperatively manage wildland fire.

Rationale

Firefighter and public safety are the highest priority during all wildland fire incidents. Once life safety has been secured, protection of private property and natural and cultural resources becomes the priority in suppression actions.

The Federal Wildland Fire Management Policy and Program Review (USDA/USDI, 1995) states fire is a critical natural process and must be reintroduced into the ecosystem on a landscape scale. In many areas, this should occur at a higher frequency (shorter return interval) than has been the case over the past 50 or more years. Wildland fire evaluations and management decisions are based upon approved fire management and activity level plans that are or will be tiered to RMPs. Policy emphasizes that for all natural (i.e., lightning-caused) ignitions, the manager should be able to choose from the full spectrum of management actions from prompt and full suppression to allowing a wildland fire to burn freely and function in its natural ecological role. Wildland fire management strategies and suppression activities should minimize damage to long-term ecosystem function and emphasize protection, restoration, or maintenance of key habitat types.

A Fire Management Plan (FMP) has been developed for the Burns District, including the AMU. The WUI areas are identified in the FMP. Fire suppression actions within the AMU will follow current agency policy. Firefighter and public safety are the priority in all fire management actions. All naturally-ignited wildland fires will be evaluated to determine whether they are appropriate for wildland fire use to achieve resource benefits. Fire suppression actions, including the use of heavy equipment and aerially delivered retardant, will follow current agency policies and procedures.

Management Direction

If wildland fires are to be suppressed, appropriate management actions will be utilized. An FMP has been developed for the Burns District, including the AMU.

The WUI areas around communities of Andrews, Fields, and Frenchglen and other areas within the Burns Interagency Fire Zone, where there is a concentration of structures that may modify fire suppression objectives, are identified in the FMP.

Wildland fires that threaten human life, private property, or areas possessing significant resource or economic values will be suppressed using appropriate fire management methods. Wildland fires not threatening human life or private property will be evaluated for potential of wildland fire use for resource benefits. Factors that affect the decision to suppress or manage for resource benefits will include, but not be limited to, threats to human life, availability of resources to manage fire, and number of fires burning locally, regionally, and Nationally.

Goal 2 - ***Restore and maintain the integrity of ecosystems consistent with appropriate fire regimes and land uses.***

Objective 1. Implement management actions across the AMU that maintain or return plant communities to the historic fire regime, except where changes to the biophysical environment have progressed to the point that a return to historic conditions is impractical. In areas where the biophysical environment has changed significantly and a return to historic conditions is not possible or ecologically desirable, the appropriate fire regime will be determined based upon current conditions. Management actions will be implemented to establish the appropriate fire regime.
Objective 2. Assess burned areas for appropriate biological and physical rehabilitation activities.

Rationale

Fire is recognized as an ecological process. However, past management actions have intentionally and unintentionally altered the role of fire in the AMU. Changes to the role of fire have resulted in fuel loads outside the historic range of variability and have increased risk and probability of large, catastrophic wildland fires. Naturally-ignited wildland fires may not occur in appropriate locations or timing to achieve desired ecosystem conditions; therefore, wildland fire and mechanical treatments may be used to reduce hazardous fuels and restore ecosystems.

Unplanned wildland fires may also burn with greater intensity than historically. The severity of these fires may result in altered biological and, in some instances, physical conditions. Plants adapted to periodic burning over many generations may be severely damaged, or killed by high intensity fire. Soils may also be physically altered by high intensity fires. Risk of soil erosion may also be uncharacteristically increased following high intensity fires that severely damage the understory vegetation. Management actions may be necessary following high intensity fires to stabilize and rehabilitate the area. The primary goal of emergency stabilization and rehabilitation, after protecting human life and private property, is to protect the site from degradation. The BLM Emergency Fire Rehabilitation Handbook (H-1742-1) outlines the process for implementing emergency fire rehabilitation projects following wildland fires. Emergency fire rehabilitation funds may be used for the following purposes:

- to protect life, property, and soil, water, and vegetation resources;
- to prevent unacceptable onsite or offsite damage;
- to facilitate meeting land use plan objectives and complying with applicable laws; and
- to reduce the invasion and establishment of undesirable or invasive plant species.

Management Direction

Fuels management, stabilization, and rehabilitation activities in WSAs will be in compliance with the WSA IMP. The Minimum Requirement Decision Guide (MRDG) may be followed prior to fuels treatment within WSAs.

The WUI and other areas with resource values suitable for fuels reduction treatment will be identified. Mechanical treatments and wildland fire or both will be used to reduce fuel loading in areas where the fire regime has been altered. Naturally-ignited fires will be evaluated for resource benefits. The BLM will assist local government in developing new markets for byproducts from fuels reduction treatments.

Stabilization and rehabilitation activities will follow current BLM regulations and guidelines (Departmental Manual 620 DM 3). Selection of stabilization and rehabilitation methods will occur after site-specific analysis and follow the Interagency Burned Area Stabilization and Rehabilitation Handbook. The MRDG may be followed prior to stabilization and rehabilitation activities within a WSA.

Burned areas will be evaluated for rehabilitation actions. A combination of mechanized and nonmechanized equipment will be used to rehabilitate areas altered by fire suppression activities. A mixture of native and introduced plant species will be considered for stabilization and rehabilitation projects based on analysis of site-specific conditions and species availability.

Goal 3 - ***Identify areas that qualify for suitable fuels reduction treatments to protect urban interface areas, resource developments, and other resource values.***

Objective. Develop a management strategy that specifically identifies the WUIs, resource values, and resource developments that need to be considered for fuels reduction planning throughout the AMU. Pursue cooperative management agreements with private landowners and other State and Federal land management agencies to cooperatively manage vegetation and fuels within the WUI.

Rationale

Although the desirability of increasing fire frequencies in many areas is well established and is described above, current fuel loads are sufficiently high that wildland fires or prescribed burns may result in severe fires that are harmful to soil conditions and other habitat values. In such areas, mechanical reduction in fuel quantity or alteration of the fuels' character may be needed to reduce prescribed or wildland fire risks.

Management Direction

The WUI areas around the communities of Andrews, Fields, Frenchglen and other areas are identified in the FMP according to the current WUI definition. Areas within the Burns Interagency Fire Zone that possess significant resource values are identified.

Monitoring

Wildland fire monitoring is designed to provide safety for personnel involved in fire operations and achievement of resource management objectives, both for burning activities and rehabilitation activities. Monitoring completed after fires are suppressed will determine whether management strategies and suppression activities met safety standards and resource management objectives.

Monitoring studies are encouraged on emergency fire rehabilitation projects to determine if rehabilitation objectives are being met. Monitoring shall be carried out on all projects that employ new techniques, seed mixes, or other rehabilitation methods. Emergency fire rehabilitation funds may be used to fund monitoring studies for up to three growing seasons following fire control. Monitoring typically measures vegetative attributes, utilizing monitoring methods identified in the grazing management section. Soil monitoring may also be implemented, if there is a high potential for soil erosion or concerns regarding biological boil crusts. Noxious weed inventories are typically implemented in burned areas, as fire disturbance often provides opportunities for establishment of new noxious weed infestations.

Monitoring of fuel loads, vegetation conditions, and other ecological parameters shall be used to determine the appropriate course of action for wildland fires, fuels reduction treatments, and fire management in case of natural ignitions. Monitoring results shall be used to determine if the strategy or specific treatment that was implemented meets resource objectives.

Lands and Realty

Goal ***- Provide land, interests in land, and authorizations for public and private uses while maintaining and improving resource values and public land administration.***

Objective 1. Retain, consolidate, acquire land or interest in land with high public resource values for effective administration and improvement of resource management. Make available for disposal public land meeting the disposal criteria contained in Section 203(a) of the FLPMA.
Objective 2. Meet public, private, and Federal agency needs for realty-related land use authorizations and land withdrawals including those authorizations necessary for wind, solar, biomass, and other forms of renewable energy development.
Objective 3. Acquire legal public or administrative access to public land.
Objective 4. Eliminate unauthorized use of public land.

Rationale

Section 102 of the FLPMA requires public land be retained in public ownership unless disposal of a particular parcel will serve the National interest. Acquisition and disposal of land are necessary to consolidate

ownership patterns to provide for more efficient land management and administration for both public and private landowners. Retention and acquisition of land containing important resource values will provide for long-term protection and management of those values.

ROWs and other land uses including wind, solar, biomass, and other forms of renewable energy development are recognized as valid uses of public land and are authorized pursuant to Sections 302 and 501 of the FLPMA.

Military activities and both renewable and nonrenewable energy development are typically authorized by ROWs or other realty use authorizations. BLM policies provide consistent guidance on timely processing of applications for these uses and recognize military and energy uses are legitimate uses of public land, are authorized by law, and are encouraged in acceptable areas on public land.

Section 503 of the FLPMA provides for designation of ROW corridors and encourages utilization of ROWs in common to minimize environmental effects and proliferation of separate ROWs. The BLM policy, as described in BLM Manual 2801.13B1, is to encourage prospective applicants to locate proposals within corridors. Designation of avoidance and exclusion areas will provide early notice to potential applicants when they are planning ROW, realty use, and renewable energy projects. Only facilities and uses consistent with specially designated avoidance areas are permitted. Designation of exclusion zones will provide protection of lands and resources having values incompatible with ROW, realty, and renewable energy uses.

The primary form of authorization for wind and solar projects is an ROW or other realty use authorization. Although off-lease infrastructure such as roads, pipelines, and power lines will be permitted by realty authorizations, primary authority for geothermal development is the Geothermal Steam Act of 1970. Management direction for geothermal leasing may be found in the Energy and Minerals section of this document.

Both hazardous and nonhazardous waste disposal are prohibited on public land to limit government potential liability associated with disposal of wastes. Private land is generally available for private waste disposal. If a public need for new waste disposal sites arises, land could be made available by sale or exchange. Currently, no authorized waste disposal sites are located on public land in the AMU.

Unauthorized use of public land results in public financial loss and damage to public land and its resources. Section 102(a)(9) of the FLPMA establishes the policy to collect fair market value for use of public land. Unless uses are authorized, no compensation is received. Further, Section 303(g) of the FLPMA states, "… use, occupancy, or development of any portion of the public lands contrary to any regulation of the Secretary or other responsible authority, or contrary to any order issued pursuant to any such regulation, is unlawful and prohibited."

Due to the generally intermingled nature of public and private lands in parts of the AMU, need for acquisition of legal public and administrative access is required to continue effective administration and public use of these lands. This need becomes more acute as public use of these lands increases and landowners become more aware of the value of public and private land for recreation and other purposes. Land tenure adjustment actions (exchanges or fee purchases) can be a valuable tool for access acquisitions. However, without careful review, lands actions, particularly exchanges, can result in lost access. Other tools can also be utilized, such as constructing new roads around land where access is restricted and acquisition cost is excessive or acquisition is not feasible.

Section 204 of the FLPMA gives the Secretary of the Interior authority to make, modify, extend, or revoke withdrawals and mandates review of withdrawals.

Interior Departmental Policy (DM 603) further requires the following:

- All withdrawals shall be kept to a minimum, consistent with the demonstrated needs of the agency requesting the withdrawals.

- Lands shall be available for other public uses to the fullest extent possible, consistent with the purposes of the withdrawal.

- A current and continuing review of existing withdrawals shall be instituted.

Management Direction

Public land within the AMU has been categorized into three general Land Tenure Zones, which identifies land for retention, acquisition, or disposal. These Land Tenure Zones are applicable to surface estate, as well as mineral estate or other partial interests in land. Disposal or acquisition of land is not imminent based solely upon its placement in a particular land tenure zone. In addition to conformance with the appropriate Land Tenure Zone established by the land use plan, lands transactions require additional interdisciplinary screening, public input, site-specific environmental review, and required findings and decisions before a project can be implemented. For example, exchanges and other disposals require a specific finding that public interest is well served by making the exchange. For a general discussion of land tenure, zoning, and criteria used in land adjustments see Appendix K.

Within the AMU, Zone 1 lands (876,615 acres) are lands that contain WSAs, SRMAs, ACECs, HMAs, important cultural/historical sites, and important wildlife, range, and recreational values. Zone 2 lands (340,323 acres) have generally fragmented ownership patterns or are well-blocked public lands suspected of having less important resource values. Zone 2A lands (1,319 acres) are potentially suitable for community expansion and are adjacent to the rural communities of Frenchglen, Fields, and Denio. Zone 3 lands (3,055 acres) are those that have been found to be difficult and uneconomical to manage, are not suitable for management by another Federal department or agency, and have relatively low resource values.

Public land holdings in Zone 1 as shown on Map 9 are retained and consolidated, with emphasis on acquiring land with high public resource values. Zone 1 lands may be disposed of only by exchange for nonpublic land meeting one of the following criteria: The nonpublic land must be within a designated special area such as an ACEC, the CMPA, WSA, or SRMA; or the nonpublic land must contain a critical access need as identified in an approved BLM land use plan, riparian or wetland values, habitat for listed T&E species, or cultural/historical resources listed on the National Register of Historic Places.

Public land in Zone 2 may be disposed of by exchange for nonpublic land containing important public resource values in Zone 1 (or similarly zoned acquisition/retention areas in other planning units) or by Recreation & Public Purpose (R&PP) sale. Land in Zone 2A may be disposed of only by exchange for nonpublic land in Steens Mountain Wilderness (Zone 1A of the CMPA RMP) or by R&PP sale for community expansion purposes. R&PP sales in Zone 2A may not exceed ten acres per transaction.

Approximately 3,055 acres of public land in Zone 3 as identified on Map 9 or as described in Table AMU-9 are made available for disposal by State indemnity selection, private or State exchange, R&PP Act lease or sale, public sale, or other authorized method, as applicable. Small acreages in Zones 1 and 2 may also be sold to resolve long-term, inadvertent agricultural or occupancy trespass or to correct a survey hiatus.

Nonpublic land in Zone 1 may be acquired by exchange, purchase, donation, or other authorized method. Acquisition of nonpublic land in Zone 2 is limited to those lands necessarily included in an acquisition of Zone 1 land (or similarly zoned acquisition/retention areas in other planning units) or to land containing the following resource values: The nonpublic land must be within a designated special area such as an ACEC, the CMPA, WSA, or SRMA; or the nonpublic land must contain a critical access need as identified in an approved BLM land use plan, riparian or wetland values, habitat for listed T&E species, or cultural/historical resources listed on the National Register of Historic Places. Nonpublic land in Zone 3 may not be acquired unless necessarily included in an acquisition of Zone 1 (or similarly zoned acquisition/retention areas in other planning units).

Acquisition opportunities within or adjacent to special management areas are considered higher priority than acquisition of nonpublic land elsewhere in the AMU. Acquired land within WSAs, ACECs, or those that have unique or fragile resources will be managed the same as the surrounding designation. Land acquired without special management goals will be managed in the same manner as comparable surrounding public

Table AMU-9: Public Land Available for Disposal - Land Tenure Zone 3

Township/Range	Section	Subdivision	Acres	FLPMA Sale Disposal Criteria
T.29S., R.37E.	18	lot 4;	29.39	203(a)(1)
	19	lot 1.	29.49	203(a)(1)
T.31S., R.29E.	2	SE¼SW¼;	40	203(a)(1)
	21	NE¼NE¼.	40	203(a)(1)
T.31S., R.30E.	28	SE¼SW¼;	40	203(a)(1)
	33	W½NE¼, E½NW¼, NW¼NW¼.	200	203(a)(1)
T.31S., R.31E.	9	E½SE¼;	80	203(a)(1)
	10	NW¼SW¼;	40	203(a)(1)
	13	lot 4, SW¼, SW¼SE¼;	254.49	203(a)(1)
	14	SE¼SE¼;	40	203(a)(1)
	16	NE¼NE¼.	40	203(a)(1)
T.31S., R.32E.	18	lot 4, SE¼SW¼;	77.49	203(a)(1)
	19	lot 2.	37.56	203(a)(1)
T.32S., R.30E.	4	lot 1, SE¼NE¼, NE¼SE¼.	121.29	203(a)(1)
T.32S., R.32E.	20	SW¼NW¼;	40	203(a)(1)
	29	E½SE¼;	80	203(a)(1)
	32	That portion of the E½ lying west of the east ROW boundary of Harney Electric Cooperative's 115kV power line (ORE-012617);	219±	203(a)(1)
	33	That portion of the NW¼NW¼ lying west of the east ROW boundary of Harney Electric Cooperative's 115kV power line (ORE-012617).	6.75±	203(a)(1)
T.33S., R.32E.	5	lots 3, 4, 5, 6 and that portion of lots 2, 7, SE¼NW¼, NE¼SW¼ lying west of the east ROW boundary of Harney Electric Cooperative's 115kV power line (ORE-012617);	233.71±	203(a)(1)
	7	That portion of lot 6 lying west of the east ROW boundary of Harney Electric Cooperative's 115kV power line (ORE-012617);	25.01±	203(a)(1)
	8	That portion of lot 1 lying west of the east ROW boundary of Harney Electric Cooperative's 115kV power line (ORE-012617);	6.07±	
	18	That portion of lot 2 lying between the east ROW boundary of Harney Electric Cooperative's 115kV power line (ORE-012617) and the west ROW boundary of State Highway 205 (OR-56327) and that portion of lots 11, 14 lying west of the east ROW boundary of Harney Electric Cooperative's 115kV power line (ORE-012617);	64.83±	203(a)(1)
	19	That portion of the E½NW¼ lying west of the east ROW boundary of Harney Electric Cooperative's 115kV power line (ORE-012617).	51.89±	203(a)(1)

Township/Range	Section	Subdivision	Acres	FLPMA Sale Disposal Criteria
T.35S., R.33E.	23	NE¼SW¼SE¼, SE¼SE¼;	50	203(a)(1)
	34	W½NW¼NE¼, save and except that portion described as follows: Beginning at a point which is S.59° 49'E., 569 feet from the North quarter section corner of said Section 34; thence South 150 feet; thence East 150 feet, thence North 150 feet; thence West 150 feet to the point of beginning.	19.48	203(a)(1)
T.36S., R.33E.	13	W½NE¼;	80	203(a)(1)
T.39S., R.35E.	3	lot 3, SE¼NW¼, N½SW¼, SE¼SW¼;	199.1	203(a)(1)
	10	SW¼NE¼, E½SE¼;	120	203(a)(1)
	15	E½NE¼, NE¼SE¼;	120	203(a)(1)
	26	SE¼SE¼;	40	203(a)(1)
	35	E½E½.	160	203(a)(1)
T.39S., R.36E.	26	SE¼NW¼;	40	203(a)(1)
	30	lots 2, 3, 4, SW¼NE¼, SE¼NW¼, E½SW¼, W½SE¼.	360.17	203(a)(1)
T.40S., R.35E.	2	lot 1.	40	203(a)(1)

The land described above totals 3025.72 acres[1], more or less.

[1] The acreages portrayed in this table are legal acres. Acreages portrayed elsewhere in the RMP, the DEIS, and the Proposed RMP/FEIS were generated using GIS technology.

land. All forms of acquisition will be with willing landowners except as provided for in Section 205(a) of the FLPMA. This exception provides for use of eminent domain only to secure access to public land and only to the minimum corridor necessary to achieve this purpose. With this exception, the BLM does not have condemnation authority in the AMU.

Land identified in this RMP for any form of disposal, including leases and conveyances under the R&PP Act, the Desert Land Act, State Indemnity Selections, or other applicable authority are hereby classified for such disposal under Section 7 of the Taylor Grazing Act (42 U.S.C. 315f) and 43 CFR 2400.

Approximately 246 miles of public land are designated as ROW corridors as shown on Map 10. Designated corridors include existing trans-district electrical transmission lines identified by the *Western Regional Corridor Study*, Federal and State highways, and Fields-Denio and Catlow Valley County road corridors. Nominal corridor width is 1,000 feet on each side of centerline of existing facilities, except where the alignment forms the boundary of a special designated area. Here the width is 2,000 feet on the side opposite that boundary. Where specified corridor width is constrained on both sides by special designated areas, corridor width is the area between boundaries of the special designated areas. Proponents of ROWs for electrical transmission lines greater than 69 kV, mainline communications facilities, and pipelines greater than ten inches in diameter are encouraged to locate in designated corridors.

All WSAs, SRMAs, and ACECs, totaling 611,771 acres are designated as ROW, realty use, and renewable energy avoidance areas as shown on Map 10.

Buckskin Mountain is designated as a communication site and additional communications use proposals will be considered at the site. An existing road closure to the top of the mountain is continued to minimize effects to bighorn sheep. A site management plan will be developed to facilitate efficient and timely development of compatible communications uses. Communications lease applications for new locations in the AMU will be considered on a case-by-case basis, and site management plans will be developed concurrent with processing applications.

An application by a qualified entity to lease and reopen the Fields airstrip may be approved. Once the airstrip is fully developed and operational under terms of the lease and an application is filed by a qualified entity, the land may be conveyed under the Airport and Airway Improvement Act or other authorized method.

The feasibility of consolidating existing parallel utility ROW facilities through crucial wildlife habitat will be evaluated. Where feasible, consolidation of facilities will be implemented for critical areas.

In accordance with current policy, land-use authorizations may not be issued for any use that involves disposal or long-term storage of materials that could contaminate the land (e.g., landfills, hazardous waste disposal sites, etc.).

Valid existing rights not currently noted on the BLM land status records will be adjudicated, acknowledged, and noted in accordance with applicable law.

Except as noted above, applications for ROW, realty use, and renewable energy authorizations in the AMU including those for energy development and military uses, will be processed in a timely manner on a case-by-case basis in accordance with the NEPA and other applicable laws.

As identified on Map 4, 20,367 acres will be recommended for withdrawal from public land and mining laws. In addition, the existing withdrawal of five acres at the BLM Fields Administrative Site will be recommended for renewal and expansion to ten acres in the NE1/4NE1/4, Sec. 23, T.38S., R.34E., to include all existing facilities. In the interim, an ROW reservation is approved to protect the additional acreage.

Other Federal agency requests for new withdrawals or existing withdrawal relinquishments and modifications will be considered on a case-by-case basis. Withdrawal and classification continuations, modifications, revocations, and terminations will be recommended, as necessary, with special emphasis given to reviewing, revoking, and terminating overlapping and duplicative withdrawals and classifications within the mineral withdrawal area. Withdrawal and classification reviews will be considered on a case-by-case basis.

MOUs will be developed with the USFWS, or withdrawals and restorations will be considered to clarify management responsibilities along the boundary of Malheur National Wildlife Refuge (Malheur NWR).

Legal public or administrative access, including conservation and scenic easements, will be acquired where public demand or administrative need exists, including any rights necessary to control and minimize access to areas containing sensitive resource values. Emphasis will be placed on providing access to areas containing high public values and protection of natural values. Land tenure transactions will be designed to maintain and improve public access. Potential public access easements are identified on Map 12.

Where easement acquisition for access is not feasible or desirable, but a critical access need has been identified, new roads may be constructed to accommodate a reroute around nonpublic land consistent with the TP.

Realty-related unauthorized use of public land will be detected, confirmed, and abated, either by formal authorization or termination, on a case-by-case basis. Active restoration of land damaged by unauthorized use will be implemented.

Agricultural or occupancy trespass will be terminated or authorized by long-term lease, sale, or exchange, consistent with land tenure zones where the lease, sale, or exchange will serve public objectives in addition to resolving the trespass. Regardless of the zone, long-term inadvertent agricultural or occupancy trespass may be authorized or survey hiatus corrected by sale of the minimum feasible acreage necessary to abate unauthorized use. Such authorization or correction will be subject to disposal criteria of the FLPMA, other applicable laws, and the approved land use plan. Short-term permits may be utilized to authorize occupancy or agricultural trespass until a lease, sale, or exchange could be effected. Active restoration will be implemented of land damaged by unauthorized use.

Monitoring

Monitoring of land tenure is designed to track land adjustments over time so objectives of the land use plan are being met; to determine the cumulative effects on land and tax bases; and to provide land tenure information to Congress, proponents, and the public. Land tenure is typically monitored by maintaining spreadsheets, databases, and maps showing past and planned ownership changes and proposals. Information is typically updated as land tenure projects are completed. Newly-acquired land will be incorporated into ongoing resource monitoring procedures on adjacent or comparable land.

Monitoring of realty-related land uses, including those for renewable energy development and military activities, shall be undertaken to provide compliance with requirements for mitigation, restoration of the land, and other terms and conditions of the authorizing document. Monitoring of these types of activities typically involves inspection and photo documentation of the site. If deficiencies are noted during inspection, the holder of the authorization is notified and corrective measures taken until compliance is achieved. Long-term land uses are frequently inspected during the initial construction phase. Once in operation, land uses are inspected less frequently, concentrating monitoring efforts during periods of reconstruction, major maintenance, or land restoration activity. Development in sensitive areas, or activities with high potential for greater than usual effects, will be inspected more frequently than those in less sensitive areas or those having less effect potential.

Transportation and Roads

Major elements of a Transportation Plan (TP) and subsequent implementation EAs (Travel Plan) are management and protection of the basic resources of water, soils, fish, wildlife, and vegetation while providing a route system that accommodates public, private, and administrative access needs. In meeting these needs, routes should be managed to minimize undue damage, maintenance costs, and provide for safe travel. Numerous Federal laws and internal regulations give the BLM authority and guidance to develop and manage transportation systems. For a list of authorities see the Draft Washington and Eastern Oregon Transportation Management Plan.

A Travel Plan based on specific field inventories and need determinations of routes within the AMU will be developed by December 2008. Transportation within the AMU will continue under present direction until the updated Travel Plan is developed. In the interim, open roads and ways within the AMU as shown on Map 12 represent the routes known to be historically available for motorized use and shall remain available for such use until changed through development of the Travel Plan mentioned above.

Off-Highway Vehicles

Goal - ***Manage motorized (OHV) and mechanized (nonmotorized) vehicle use to protect resource values, promote public safety, provide OHV and mechanized vehicle use opportunities where appropriate and allowable, and minimize conflicts among various users.***

Objective. Manage OHV and mechanized vehicle use in conformance with OHV designations**.**

Rationale

The BLM manages OHV use under the FLPMA and Executive Order 11644 (as amended by Executive Order 11989). Federal regulations (43 CFR Part 8340) and BLM planning guidance require the BLM to designate BLM-administered land as either open, limited, or closed, in regard to off-road (now commonly termed "off-highway") vehicle use. These designations are to help meet public demand for OHV and mechanized vehicle activities, protect natural resources, promote public safety, and minimize conflicts among users. The National Strategy for Motorized OHV Use on Public Lands and the National Mountain Bicycling Strategic Action Plan provide further guidance.

Management Direction

Management for those portions of ACECs within WSAs is governed by the WSA IMP until such time as Congress makes a determination regarding wilderness designation. The OHV and mechanized vehicle designations for WSAs will remain in effect until Congressional release of the WSAs, or until such time actual or unforeseeable use levels may cause the nonimpairment criteria to be violated, in which case more restrictive designations may be made. Every effort will be made to maintain or create OHV and mechanized vehicle designations that will prevent impairment of wilderness values. Areas released from WSA status and not designated as wilderness will be evaluated and an appropriate OHV and mechanized vehicle designation proposed. Maintenance of an existing OHV and mechanized vehicle designation or change to a new designation will be based on laws, regulations, and policies.

Limitations to OHV and mechanized vehicle use do not apply to official use including any fire, military, emergency, or law enforcement vehicle used for emergency purposes; any combat or combat support vehicle used for National defense purposes; and any vehicle whose use is expressly authorized under a permit, lease, license, or contract.

The terms OHV, mechanized vehicle, road, and way are defined in the Glossary.

Access into seasonal closure areas by ranchers and private landowners may be authorized by the Field Manager if weather and road conditions permit nondestructive motorized vehicle travel on designated routes.

All roads in the AMU "limited" designation areas will be inventoried and a TP prepared. See the Transportation and Roads Section for additional information.

The OHV and mechanized vehicle use will be cooperatively managed in accordance with OHV designations shown in Table AMU-10 and Map 14. The BLM will seek cooperative agreements with OHV and mechanized vehicle clubs and other users. The OHV and mechanized vehicle organized events are allowed, when consistent with protection of resource values and OHV and mechanized vehicle designations. The OHV and mechanized vehicle designations for ACECs/RNAs are as specified in Table AMU-11. All WSA cherrystem roads and those ways identified in the WSA inventory are available for use.

All WSAs are designated limited to designated roads and ways for OHV and mechanized vehicle use. The Catlow Valley parcels, shown on Map 14, are designated closed to all OHV and mechanized vehicle use. The Alvord Desert playa is designated open to all OHV and mechanized vehicle use. The remainder of the AMU is designated limited to designated routes for OHV and mechanized vehicle use. In addition, Trout Creek Mountains and Arizona Creek/Stergen Meadows areas are closed seasonally. Two gates will be installed on Trout Creek Mountains Road. Gates will also be installed on Ten Cent Meadows and Starr Ridge Roads.

Table AMU-10: OHV Designation Acreages in the AMU (Public Land Acres Only)

Designation	AMU acres
Open	25,285
Limited to Existing	0
Limited to Designated	1,194,832
Closed	1,197
TOTAL	**1,221,314***

*94,033 acres are seasonally closed.

Monitoring

OHV monitoring is designed to evaluate compliance with OHV designations, especially closed and limited designations. OHV monitoring measures the area, extent, and severity of intrusions.

There is no formal OHV monitoring plan or protocol. The National Management Strategy for Motorized Off-Highway Vehicles on Public Lands provides for the OHV Strategy Action Team to provide National guidelines to be used in developing local OHV monitoring plans. When these guidelines are developed, a plan will need to be written for OHV management in the AMU. The monitoring plan shall include type of data and amount of funding needed to effectively monitor OHV use and its effect on public land resources.

In the interim, OHV monitoring typically consists of field observations en route to or from other work assignments, as part of WSA surveillance. If needed law enforcement is notified when a major intrusion is observed.

Recreation

Goal - ***Provide developed and undeveloped recreation opportunities, while protecting resources, to manage the increasing demand for resource-dependent recreation activities.***

Objective 1. Establish and manage recreation areas where the presence of high quality natural resources and the current or potential demand warrants intensive management practices to protect areas for their scientific, educational, or recreational values while accommodating anticipated increases in use for recreation activities in specific areas.
Objective 2. Manage recreation facilities to protect natural resources and to meet user needs.
Objective 3. Outside of the intensive use areas and developed recreation sites, manage the remainder of the AMU for dispersed recreation.
Objective 4. Manage visitor use in the AMU to protect natural resources and to provide a variety of recreation opportunities.
Objective 5. Provide information and educational opportunities to public land visitors.
Objective 6. Manage commercial, competitive, educational, and organized group recreation activities.
Objective 7. Manage Back Country Byways (BCBs) to protect the recognized values.
Objective 8. Manage the Oregon High Desert National Recreation Trail to protect the recognized values and setting.

Rationale

The FLPMA provides for recreation use of public land as an integral part of multiple-use management. Dispersed, unstructured activities typify recreational uses occurring throughout the majority of the AMU. Policy guidelines in BLM Manual 8300 direct the BLM to designate special units known as SRMAs. Management within these SRMAs focuses on providing recreation opportunities not otherwise available to the public, reducing conflicts among users, minimizing damage to resources, and reducing visitor health and safety problems. Major investments in recreation facilities and visitor assistance are appropriate in SRMAs when required to meet management objectives.

Public land in an RA not designated as an SRMA becomes an Extensive Recreation Management Area (ERMA). Management direction within an ERMA focuses on actions to facilitate recreation opportunities by providing basic information and access. Visitors to an ERMA are expected to rely heavily on their own equipment, knowledge, and skills while participating in recreation activities.

In accordance with the FLPMA, the BLM recreation plans set recreation policy on the National level. Policy emphasizes resource-dependent recreation opportunities that typify the vast western landscape, striving to meet the social and economic needs of present and future generations, providing for the health and safety of the visitor, and accomplishing these goals within constraints of achieving and maintaining healthy ecosystems.

Management Direction

Throughout the AMU, occupancy and use for recreational camping is limited to 14 days in one location.

All land not designated as an SRMA is designated as an ERMA.

In the Pueblo Mountains 94,897 acres and 92,927 acres in the Trout Creek Mountains are designated as SRMAs (Map 15). The Pueblo Mountains and Trout Creek Mountains SRMAs will be managed to provide quality recreation opportunities while protecting resource values.

Design of any new facilities will incorporate Americans with Disabilities Act standards.

If demand warrants, new recreation sites and areas will be developed to protect cultural and natural values and provide for public health and safety. Tourism opportunities are allowed if consistent with other resource objectives.

Any proposed recreation facilities or actions will be analyzed in site-specific recreation project plans. Possible project plans could be written for Pike Creek, Penland Road, specific dispersed campsites, mountain bike trails, and minimal trailhead facilities at Domingo Pass, Frog Springs, and near Denio and Fields.

Natural and cultural values will be protected while providing for public safety. Dispersed recreation opportunities, consistent with other resource objectives, will be developed.

Visitor use will be managed to encourage economic growth and cooperative management practices for recreation opportunities consistent with other resource objectives. Group size limits will be evaluated on a case-by-case basis.

All AMU RNAs and Mickey Hot Springs are closed to camping. Dispersed users are encouraged to pack out solid human waste.

Information (e.g., maps and brochures) and education opportunities will be provided to improve visitor experiences. In the AMU, signs will be installed, maintained, and replaced as needed.

The SRPs will be issued as needed to meet demand, while protecting cultural and natural resource values and providing for public safety. If needed, allocations such as limits on party size, number of trips or number of permittees, will be implemented. SRPs for organized group and commercial use of the Alvord Desert playa could be issued if wilderness values of Alvord Desert WSA will not be impaired.

Existing BCBs will be managed in conformance with existing laws and regulations. Interpretive management plans for existing BCBs may be developed and implemented. Additional byways or scenic tour routes that support cooperative management may be designated.

Management of the Oregon High Desert National Recreation Trail will continue under the current MOU with the Desert Trail Association.

Monitoring

Special Recreation Permit Monitoring

The SRP monitoring is designed to promote compliance by permittees with the SRP terms and conditions, stipulations, and operating plans. Monitoring is also designed to provide certainty commercial operations and organized groups have the required permit. Law enforcement personnel take a proactive role in contacting potential permittees in the field and providing information on the need for SRPs, and the process of obtaining a permit. The SRPs are monitored to determine if appropriate resource protection objectives are being met during the course of permitted recreational activities, and aid in developing professional relationships between the BLM and SRP holders. These relationships help to bring noncompliant users into the permit system.

Methods for monitoring SRPs vary greatly by type of permit and related activities. Resource effects, actual use, and compliance are monitored utilizing techniques such as site visits, campsite inventories, patrol logs, videos and photos, and post-use reports. The amount and type of monitoring needs to be commensurate with resource values at risk, permittee past performance, and if permitted use occurs inside special areas or WSAs. Monitoring is documented on the SRP Monitoring Form and is placed in the appropriate SRP file. Monitoring results are discussed with permittees annually.

Monitoring data provide opportunity to assess if the authorized use is the correct fit for the area and to check effects on the resource and other users. If monitoring indicates unacceptable resource effects are occurring, management can be adjusted through alterations to an SRP, permit stipulations, or operating plan.

Recreation Site Monitoring

Recreation site monitoring is designed to obtain visitor use information and levels. Information is used in recreation planning for recreation sites and to evaluate visitor satisfaction. The goal of monitoring is to provide data on types and numbers of recreation activities.

Information on activities, types of vehicles, party size, season of use, and existing resource concerns are observed and recorded during site visits. Road counters are used in various locations within the AMU, and are checked and read monthly when accessible. Counters provide information on seasonal use trends and estimated use numbers. Observations on use areas, activities, types of vehicles, and resource concerns are also recorded when counters are read. Additional recreational information is gathered at trail registers.

The information gathered is used to calculate estimated recreation use for entry into the RMIS. Data from this system is used in preparing recreation area management and project plans.

Areas of Critical Environmental Concern

Goal - ***Retain existing and designate new ACECs where relevance and importance criteria are met and special management is required to protect the identified values.***

Objective 1. Retain and manage existing ACECs if they meet relevance and importance criteria and require special management or protection.
Objective 2. Designate and manage new ACECs that meet relevance and importance criteria and need special management or protection.

Rationale

Section 202(c)(3) of the FLPMA mandates priority be given to designation and protection of ACECs. These areas are defined in Section 103(a) as areas where special management attention is required to protect and prevent irreparable damage to important values, resources, systems or processes, or to protect life and safety from natural hazards. All RNAs shall be designated as ACECs and follow the ACEC designation guidance provided by the BLM manual.

The FLPMA and BLM policy require the BLM to give priority to designation and protection of ACECs during the land use planning process. The ACECs may be nominated by BLM staff, other agencies, or members of the public at any time. The ACECs are parcels of public land requiring additional management attention to protect special features or values. The ACECs may be established to protect important historic, cultural, or scenic values; fish, wildlife, or other natural resources; or human life and safety. The RNAs are a specific type of ACEC that always contain natural resource values of scientific interest and are managed primarily for research and educational purposes. Outstanding Natural Areas are another specific type of ACEC that exhibit outstanding scenic splendor, natural wonder or scientific importance. The ACEC nominations are reviewed by a BLM ID team to determine if areas meet relevance and importance criteria in BLM Manual 1613. Nominated ACECs meeting relevance and importance criteria must be evaluated in a land use plan to determine if protection is warranted.

An existing ACEC designation could be revoked because either protection is not needed to preserve relevant and important values of the ACEC, or values contained in the ACEC do not meet relevance or importance criteria.

Management Direction

Designations for two existing ACECs and four existing RNAs are retained. One new ACEC and two new RNAs are designated. The designation of one ACEC (Pickett Rim) is revoked. The total number of ACEC and RNA acres within the AMU is 28,411 acres. Specific management actions for each ACEC or RNA are discussed under the heading for that particular ACEC or RNA and summarized in Table AMU-11. Designated ACECs are shown on Map 15 and described in Appendix L.

Disturbance to all Special Status plant and animal populations will be avoided in ACECs. General inventories, monitoring, and research will continue for Special Status plants. Conservation agreements will be written for listed plant species or those in danger of being listed.

In all ACECs and RNAs, wildland fires are managed according to appropriate management response; however, some ACECs will be analyzed for possible wildland fire use. Use of heavy equipment in ACECs, WSAs, and RNAs will be avoided and will require line officer approval. Use of retardant is allowed for initial attack. Retardant use during an extended attack is considered part of the wildland fire situation analysis, based on resource values at risk. If used, heavy equipment is restricted to existing roads and ways. Wildland fires may be used in ACECs when they will preserve the desired characteristics of the ACEC and meet management objectives.

Noxious weeds will be aggressively controlled using integrated weed management methods such as biological control, site-specific spraying, and grubbing by hand consistent with protection and promotion of relevant and important values. Any weed control measures proposed in ACECs within WSAs will be consistent with WSA IMP direction.

Table AMU-11: Management Prescriptions for Each ACEC

						Wood/ Plant		Minerals		
ACEC	**Acres**	**ROWs**	**OHV**	**VRM**	**Grazing**	**Collect**	**Roads**	**Leasable**	**Locatable**	**Saleable**
Alvord Desert	21,615	AV	Ld	I	O	L	L	NL	W	C
Borax Lake	600	AV	Ld	II	O/C	L	L	NL	W	C
Long Draw RNA	441	AV	Ld	I	O	L	L	NL	O	C
Mickey Basin RNA	560	AV	Ld	I	O/C	L	L	NL	W	C
Pueblo Foothills RNA	2,424	AV	Ld	I	O	L	L	NL	O	C
Tum Tum Lake RNA	1,689	AV	Ld	II	C	L	L	O	O	C
East Fork Trout Creek RNA	361	AV	Ld	I	O	L	L	NL	O	C
Mickey Hot Springs	42	AV	C	I/II	C	O	NA	NL	W	C
Serrano Point RNA	679	AV	Ld	II	O	L	L	NL	W	C

AV- Avoidance area for ROWs.
C – Closed.
E – Exclusion areas for ROWs.
Ld - OHV and mechanized vehicle use limited to designated routes.
L - Limited; with limitations applicable to plant collection and road maintenance.
NL - No Lease; Not available for mineral leasing.
NA - Not applicable; no roads occur here so road maintenance does not apply.
O - Open; the activity is allowed in the area. In the case of locatable minerals within WSAs, the area is open to location of mining claims but is still subject to the WSA IMP nonimpairment criteria.
W - Withdrawn from mineral exploration and development.

All management actions for those portions of the ACEC within a WSA are governed by the WSA IMP until such time Congress makes a determination regarding wilderness designation for that WSA. Any WSAs, or portions thereof, designated as an ACEC and later released from WSA status will be managed according to applicable management direction for that ACEC. Several ACECs overlap with existing WSAs.

Nondestructive research is encouraged in ACECs and is not limited only to those areas that have RNAs. Research must be authorized by the BLM in writing and, where necessary, subject to the permit process. Data gathered and shared with the BLM could help guide management of these areas.

Recreational activities are not encouraged within ACECs unless the ACEC was designated with recreational use in mind. Commercial use, or use requiring a special permit, that occurs or is proposed within an ACEC will be evaluated on a case-by-case basis and permitted, modified, or prohibited as needed to protect the ACEC values. Camping is prohibited in RNA/ACECs, except at specified RNAs. Camping is allowed in ACECs.

In accordance with 43 CFR 3809.11, an approved plan of operations is required prior to commencing any operation, other than casual use, involving locatable minerals in a designated ACEC, regardless of size of the disturbed area.

Alvord Desert ACEC

The existing ACEC is retained and an additional 3,682 acres added, making the total designation 21,615 acres. The road through the ACEC is maintained as needed. The OHV and mechanized vehicle uses are limited to designated routes. New ROWs or other realty use authorizations will be avoided unless the activity is compatible with the purpose for which the area was designated. The ACEC is managed as VRM Class I.

The area within the ACEC is withdrawn from locatable and leasable mineral entry and closed to saleable mineral removal. Livestock grazing will continue under management of existing permit stipulations and approved grazing systems. Proposed changes in grazing use or new range improvement projects will be evaluated for potential effects, and permitted if relevant and important values are maintained or improved. Where adverse effects are identified, livestock use or range improvement projects will be adjusted. Collection of plant materials is allowed by permit only.

Borax Lake ACEC

The existing ACEC designation is retained and 80 acres added, making the total designation 600 acres. Motorized and mechanized vehicle access through the ACEC is limited/controlled through a cooperative management agreement among the BLM, TNC, USFWS, ODFW, and others. No cross-country travel is permitted. ROWs and other realty use authorizations will be avoided unless the activity is compatible with the purpose for which the area was designated. Actions will be pursued to acquire private inholdings from willing private landowners. The ACEC is managed as VRM Class II.

The ACEC is withdrawn from locatable and leasable mineral entry and closed to saleable mineral removal. The area within the fenced exclosure is closed to livestock grazing. Livestock grazing and wild horse use will continue on 120 acres outside the fenced exclosure. Livestock use will be managed under existing permit stipulations and approved grazing systems. Proposed changes in grazing use or new range improvement projects will be evaluated for effects, and permitted if relevant and important values are maintained or promoted. Where adverse effects are identified, livestock use or range improvement projects will be adjusted. Collection or removal of plant materials is allowed by permit only.

Long Draw RNA/ACEC

The RNA/ACEC designation and boundaries are retained. The size remains 441 acres. The road through the RNA/ACEC is maintained as needed for safety and resource protection considerations with minimal disturbance to the natural vegetation. The OHV and mechanized vehicle uses are limited to designated routes.

In the RNA/ACEC, new ROWs or other realty use authorizations will be avoided unless the activity is compatible with the purpose for which the area was designated. Visual Resources are managed as VRM Class I.

The RNA/ACEC is a no lease area for leasable minerals and is closed to saleable mineral removal. The area is open to locatable mineral entry subject to the WSA IMP, including the nonimpairment criteria. Livestock grazing will continue under management of existing permit stipulations and approved grazing systems. Any proposed changes in grazing use or new range improvement projects will be evaluated for potential effects, and permitted if relevant and important values are maintained or promoted. When adverse effects are identified, livestock use or range improvement projects will be adjusted. Collection of plant materials is allowed by permit only.

Mickey Basin RNA/ACEC

The RNA/ACEC designation and boundaries are retained. The size remains 560 acres. The road through the RNA/ACEC is maintained as needed for safety and resource protection considerations with minimal disturbance to the natural vegetation. The OHV and mechanized vehicle uses are limited to designated routes. New ROWs or other realty use authorizations will be avoided unless activity is compatible with the purpose for which the area was designated. Visual resources are managed as VRM Class I.

The area within the RNA/ACEC is withdrawn from locatable and leasable mineral entry and closed to saleable mineral removal. Livestock grazing is not permitted within the fenced exclosure. Grazing will continue outside the exclosure fence under management of existing permit stipulations and approved grazing systems. Proposed changes in grazing use or new range improvement projects will be evaluated for potential effects, and permitted if relevant and important values are maintained or promoted. When adverse effects are identified, livestock use or range improvement projects will be adjusted. Collection of plant materials is allowed by permit only.

Pueblo Foothills RNA/ACEC

The existing RNA/ACEC designation is retained except for 79 acres that were deleted from the southeast corner. The size of the RNA/ACEC is changed to 2,424 acres. The road through the RNA/ACEC is maintained as needed for safety and resource protection considerations with minimal disturbance to the natural vegetation. The OHV and mechanized vehicle uses are limited to designated routes. In the RNA/ACEC, new ROWs or other realty use authorizations will be avoided unless activity is compatible with the purpose for which the area was designated. Visual resources are managed as VRM Class I.

The RNA/ACEC is a no lease area for leasable minerals and is closed to saleable mineral removal. The area is open to locatable mineral entry subject to the WSA IMP, including the nonimpairment criteria. Livestock grazing will continue under management of existing permit stipulations and approved grazing systems. Proposed changes in grazing use or new range improvement projects will be evaluated for potential effects, and permitted if relevant and important values are maintained or promoted. When adverse effects are identified, livestock use or range improvement projects will be adjusted. Collection of plant materials is allowed by permit only.

Tum Tum Lake RNA/ACEC

The RNA/ACEC designation is retained and 375 acres dropped due to unmanageability and surface disturbance. The size of the RNA/ACEC is 1,689 acres. The roads through the RNA/ACEC are maintained as needed for safety and resource protection considerations with minimal disturbance to the natural vegetation. The OHV and mechanized vehicle uses are limited to designated routes. New ROWs or other realty use authorizations will be avoided unless activity is compatible with the purpose for which the area was designated. Visual resources are managed as VRM Class II.

The area within the RNA/ACEC is open to leasable and locatable mineral entry and closed to saleable mineral removal. The area is closed to livestock grazing. Collection of plant materials is allowed by permit only.

East Fork Trout Creek RNA/ACEC

A portion of the headwaters of the East Fork of Trout Creek is designated as the East Fork Trout Creek RNA/ACEC covering 361 acres. The road through the RNA/ACEC is maintained as needed for safety and resource protection considerations with minimal disturbance to the natural vegetation. The OHV and mechanized vehicle uses are limited to designated routes. New ROWs or other realty use authorizations will be avoided unless the activity is compatible with the purpose for which the area was designated. Visual resources are managed as VRM Class I.

The RNA/ACEC is a no lease area for leasable minerals and is closed to saleable mineral removal. The area is open to locatable mineral entry subject to the WSA IMP, including the nonimpairment criteria. Livestock grazing will continue under management of existing permit stipulations and approved grazing systems. Proposed changes in grazing use or new range improvement projects will be evaluated for potential effects, and permitted if relevant and important values are maintained or promoted. When adverse effects are identified, livestock use or range improvement projects will be adjusted. Collection of plant materials is allowed by permit only.

Mickey Hot Springs ACEC

The Mickey Hot Springs site is designated as the Mickey Hot Springs ACEC. The size of the ACEC is 42 acres, i.e. all land within the fenced exclosure. The area is closed to OHV and mechanized vehicle use. New ROWs or other realty use authorizations will be avoided unless activity is compatible with the purpose for which the area was designated. Visual resources are managed as VRM Class I in the WSA and VRM Class II outside the WSA.

As a result of implementation of the Steens Act, the ACEC is withdrawn from locatable and leasable mineral entry and closed to saleable mineral removal. The fenced ACEC is closed to livestock grazing and open to collection of plant materials.

Serrano Point RNA/ACEC

This site is designated as the Serrano Point RNA/ACEC covering 679 acres. The road through the RNA/ACEC is maintained as needed for safety and resource protection considerations with minimal disturbance to the natural vegetation. The OHV and mechanized vehicle uses are limited to designated routes. New ROWs or other realty use authorizations will be avoided unless activity is compatible with the purpose for which the area was designated. Visual resources are managed as VRM Class II.

The area within the RNA/ACEC is withdrawn from locatable and leasable mineral entry and closed to saleable mineral removal. Livestock grazing will continue under management of existing permit stipulations and approved grazing systems. Proposed changes in grazing use or new range improvement projects will be evaluated for potential effects, and permitted if relevant and important values are maintained or promoted. When adverse effects are identified, livestock use or range improvement projects will be adjusted. Collection of plant materials is allowed by permit only.

Monitoring

Monitoring of ACECs is designed to measure uses and activities on relevant and important characteristics associated with ACECs. Some ACECs are also designated as RNAs, and monitoring is designed to measure effects of management and uses on natural features and ecosystem conditions which warrant RNA designation.

ACECs are identified under Section 103(a) of the FLPMA as areas where special management attention is required to protect and prevent irreparable damage to important values, resources, systems or processes, or to protect life and safety from natural hazards. The BLM shall protect special places and provide for visitor health and safety.

Monitoring for ACECs and RNAs is divided into two categories: visual observation and trend indicators. Baseline sampling has been established in some ACECs to document trends and conditions of relevant and important characteristics. Highest priority for monitoring efforts will be assigned to monitoring that measures potential changes from uses such as livestock grazing and recreation activity. If visual monitoring indicates a potential problem, permanent plots could be established to help identify potential causes, and provide information leading to changes in management.

Visual monitoring of key elements has been established for relevant and important characteristics of Alvord Desert ACEC and the following RNAs/ACECs: Long Draw, Mickey Basin, Pueblo Foothills, and Tum Tum Lake. Visual monitoring shall determine if outside forces are affecting key elements of the natural area (e.g., recreation and grazing). Photo points shall be established in key areas if visual monitoring indicates the need.

Trend monitoring shall be conducted to assess the effect of grazing animals on populations of specific plant species within Long Draw, Pueblo Foothills, and Mickey Basin RNA/ACECs. Permanent plots have been established to monitor condition and assess trends of key species. Photo points and measurements are taken in Long Draw and Pueblo Foothills RNA/ACECs each year. The belt transect established in Mickey Basin RNA/ACEC is read every five years.

Wilderness Study Areas and Parcels with Wilderness Characteristics

Wilderness Study Areas

Goal - ***Manage WSAs so as not to impair their suitability for preservation as wilderness.***

Objective. Manage existing WSAs so as not to impair their suitability for preservation as wilderness.

Rationale

Wilderness preservation is part of the BLM's multiple-use mandate, and wilderness is considered in the land use planning process. WSAs are managed in accordance with the BLM's WSA IMP (USDI 1995b). The Congressional mandate of nonimpairment, the primary standard for interim management, directs land under wilderness review be managed so as not to impair its suitability for preservation as wilderness. Wilderness values, described in Section 2 (c) of the Wilderness Act of 1964 (P.L. 88-577), must be protected in WSAs. The initial task of identifying areas suitable for wilderness preservation has been completed as mandated in the FLPMA Section 603, and is documented in BLM 1989 Oregon Final Wilderness EIS and Wilderness Study Report for Oregon (USDI 1991c).

The WSA IMP takes precedence over other management direction unless the latter is more restrictive and protective than the WSA IMP, in which case the more restrictive management is followed. The WSAs are managed under the WSA IMP until Congress makes a determination regarding wilderness designation. The WSA IMP states activities must comply with specific policy guidance, including the following nonimpairment criteria:

1. The use, facility, or activity must be temporary. Temporary use that does not create surface disturbance or involve permanent placement of facilities may be allowed if such use can easily and immediately be terminated upon wilderness designation.

2. When the use, activity, or facility is terminated, wilderness values must not have been degraded so far as to significantly constrain Congressional prerogative regarding the area=s suitability for preservation as wilderness.

Exceptions to nonimpairment criteria include emergencies such as fire suppression and search and rescue operations; reclamation of effects from WSA IMP violations; emergencies and pre-FLPMA impacts; grandfathered uses or facilities or valid existing rights; or uses and facilities to protect or enhance the land's wilderness values or are the minimum necessary for public health and safety in use and enjoyment of wilderness values.

The OHV and mechanized vehicle use in WSAs is limited to existing and designated ways unless the WSA is completely closed to OHV and mechanized vehicle use. Existing ways are those existing at the time of the wilderness inventory. Ways may be closed due to resource concerns. Use of OHVs and mechanized vehicles, including mountain bikes, is only allowed on existing ways and within open areas designated prior to passage of the FLPMA (October 1976). The Andrews MFP recognizes OHV and mechanized vehicle use occurred on the Alvord Desert playa in the Alvord Desert WSA prior to the FLPMA enactment. The OHV and mechanized vehicle use of the Alvord Desert playa does not impair wilderness values and does not preclude Congress from designating the area as part of the National Wilderness Preservation System. The BLM has allowed this use to continue based on the determination managed OHV and mechanized vehicle use will not preclude future wilderness designation. Should the Alvord Desert playa be designated as wilderness, OHV and mechanized vehicle use will not be allowed on the playa.

Management direction for WSAs not designated by Congress and released from WSA status will be the same as for surrounding non-WSA lands.

Management Direction

The WSAs, which total 560,165 acres, will continue to be managed under the WSA IMP until designated wilderness by Congress or released from WSA status.

Monitoring

The WSA monitoring is designed to measure effects of activities within WSAs to preserve wilderness values in the WSAs. The goal is to prevent impairment of an area's suitability for preservation as wilderness.

Monitoring includes on-the-ground surveillance conducted at a minimum of once per month during months the area is accessible to the public, depending on workload and budget. Surveillance can be initiated more frequently if potential use activities or resource conflicts indicate a need. Monitoring data are collected through use of patrol logs, surveillance reports, BLM personnel diaries, and photographs.

Unauthorized uses and facilities may be prevented by using such measures as law enforcement patrols, cooperative agreements with local law enforcement agencies, surveillance by volunteers, posting signs at key access points, notifying various user and commodity groups of WSA locations, and regular project compliance visits to monitor actions authorized within WSAs.

Monthly monitoring reports are maintained at Burns BLM DO. Information from these reports is used for management decisions, allotment evaluations, and site-specific planning documents.

Parcels with Wilderness Characteristics

Goal - ***Manage parcels with wilderness characteristics to protect those characteristics.***

Objective. Manage parcels with wilderness characteristics to protect those characteristics.

Rationale

As a result of the settlement of Utah v. Norton, authority for the BLM to designate new WSAs under FLPMA Section 202, or manage any additional land under FLPMA Section 603, was ruled to have expired in 1993. Through land use planning the BLM may manage land newly found to have wilderness characteristics to affect, protect or preserve some or all wilderness characteristics. Management may include protecting certain lands in their natural condition or providing opportunities for solitude or primitive and unconfined recreation. Land use plan decisions include, but are not limited to, VRM class designation, OHV and mechanized vehicle designation, lands and realty designations, and conditions of use to be attached to permits, leases or other authorizations. One parcel in the AMU, Alvord Desert Addition, was determined by a BLM ID team to contain wilderness characteristics.

Management Direction

Parcels with wilderness characteristics are not provided special management status. Parcels will be managed according to RMP direction for surrounding non-WSA land. The protections afforded (e.g. the mineral withdrawal, prohibition on cross-county motorized/mechanized vehicle use, and adjacent ROW avoidance/exclusion areas) were considered as providing sufficient protection to meet the goal/objective.

Monitoring

No special monitoring will be conducted for parcels with wilderness characteristics.

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Glossary

A complete glossary of Transportation Management terms can be found in Appendix M.

A

Adaptive Management – A type of natural resource management in which decisions are made as part of an ongoing process. Adaptive management involves testing, monitoring, evaluation, and incorporating new knowledge into management approaches based on scientific findings and the needs of society. Results are used to modify management policy.

Advanced ecological status – A biotic community with a high similarity to a defined or perceived potential natural community (PNC) for an ecological site, usually late seral or PNC ecological status.

Allotment – A specific portion of public land allocated for livestock grazing, typically with identifiable or fenced boundaries and permitted for a specified number of livestock.

Allotment (grazing) – Area designated for the use of a certain number and kind of livestock for a prescribed period of time.

Allotment Management Plan (AMP) – A plan for managing livestock grazing on specified public land.

Analysis of the Management Situation (AMS) – Step 4 of the BLM's land use planning process. It is a comprehensive documentation of the present conditions of the resources, current management guidance, and opportunities for change.

Animal unit – One cow, one cow/calf pair, one horse, or five sheep.

Animal Unit Month (AUM) – The forage needed to support one cow, one cow/calf pair, one horse, or five sheep for one month. Approximately 800 pounds of forage.

Appropriate Management Level (AML) – An established population range that represents the number of animals that the designated HMA can sustain and that results in a thriving natural ecological balance with other uses and resources common to the area and avoids deterioration of the public range.

Area of Critical Environmental Concern (ACEC) – Area where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect humans from natural hazards.

Avoidance Areas – Areas with sensitive resource values where rights-of-way and land use authorizations will be strongly discouraged. Authorizations made in avoidance areas will have to be compatible with the purpose for which the area was designated and not be otherwise feasible outside the avoidance area.

B

Basalt – A dark, heavy, fine-grained silica-poor igneous rock composed largely of iron and magnesium minerals and calcium-rich plagioclase feldspars.

Basin (river) – In general, the area of land that drains water, sediment, and dissolved materials to a common point along a stream channel. River basins are composed of large river systems. In this EIS, the term refers to the equivalent of a third field hydrologic unit code, an area of about nine million acres, such as the Salmon River basin. It also is used to refer in general to the Interior Columbia River Basin.

Best Management Practices (BMPs) – A set of practices which, when applied during implementation of management actions, ensures that negative impacts to natural resources are minimized. BMPs are applied based on site specific evaluation and represent the most effective and practical means to achieve management goals for a given site.

Biological Soil Crust - Lichens, mosses, green algae, fungi, cyanobacteria, and bacteria growing on or just below the surface of soils.

Bureau of Land Management (BLM) (Bureau) – Government agency with the mandate to manage Federal lands under its jurisdiction for multiple uses.

BLM assessment species – Plant and animal species on List 2 of the Oregon Natural Heritage Data Base, or those species on the Oregon List of Sensitive Wildlife Species (OAR 635-100-040) that are identified in BLM Instruction Memo OR-91-57 and are not included as federal candidate, state listed, or BLM sensitive species.

BLM sensitive species – Plant or animal species eligible for federal listed, federal candidate, state listed, or state candidate (plant) status, or on List 1 in the Oregon Natural Heritage Data Base, or approved for this category by the BLM State Director.

BLM tracking species – Plant and animal species on List 3 and 4 of the Oregon Natural Heritage Data Base, or those species on the Oregon List of Sensitive Wildlife Species (OAR 635-100-040) that are identified in BLM Instruction Memo OR-91-57 and are not included as federal candidate, state listed, BLM sensitive, or BLM assessment species.

C

Candidate Species – Any species included in the *Federal Register* Notice of Review that are being considered for listing as threatened or endangered by the US Fish and Wildlife Service.

Canopy – In a forest, the branches from the uppermost layer of trees; on rangeland, the vertical projection downward of the aerial portion of vegetation.

Cell - Unique ecosystem type used by the Natural Heritage Plan to inventory, classify, and evaluate natural areas. Cells contain one or more ecosystem elements (i.e., plant communities or ecosystems such as Natural Heritage Resources or special species).

Classification – A process required by law for determining the suitability of public lands for certain types of disposal or lease under the public land laws or for retention in public ownership.

Climax vegetation – The stabilized plant community on a particular site. The plant cover reproduces itself and does not change as long as the environment remains the same.

Colluvium – Soil material, rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.

Commodities – Goods and services produced by industries which include but are not limited to agriculture, livestock grazing, and mining.

Community – A group of species of plants and/or animals living and interacting at a particular time and place; a group of people residing in the same place and under the same government.

Consultation – (1) An active, affirmative process that (a) identifies issues and seeks input from appropriate American Indian governments, community groups, and individuals; and (b) considers their interests as a necessary and integral part of the BLM's and USFS's decision-making process. (2) The Federal Government has a legal obligation to consult with American Indian Tribes. This legal obligation is based in such laws as the Native American Graves Protection and Repatriation Act, the American Indian Religious Freedom Act, and numerous other Executive Orders and statutes. This legal responsibility is, through consultation, to consider Indian interests and account for those interests in the decision. (3) The term also refers to a requirement under Section 7 of the ESA for federal agencies to consult with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service with regard to federal actions that may affect listed threatened and endangered species or critical habitat.

Corridor (landscape) – Landscape elements that connect similar patches of habitat through an area with different characteristics. For example, streamside vegetation may create a corridor of willows and hardwoods between meadows or through a forest.

Custodial management – Management of a group of similar allotments with minimal expenditure of appropriated funds to continue protecting existing resource values.

D

Deep soil – A soil that is 40 to 60 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Developed recreation – Recreation that requires facilities which in turn result in concentrated use of an area; for example, a campground.

Dispersed recreation – Recreation that does not occur in a developed recreation site; for example, hunting or backpacking.

Disturbance – Refers to events that alter the structure, composition, or function of terrestrial or aquatic habitats. Natural disturbances include, among others, drought, floods, wind, fires, wildlife grazing, insects, and pathogens. Human-caused disturbances include actions such as timber harvest, livestock grazing, roads, and the introduction of exotic species.

E

Ecological Site Inventory (ESI) – The basic inventory of present and potential vegetation on BLM rangelands. Ecological sites are differentiated on the basis of the kind, proportion, or amount of plant species.

Ecological status – The present state of vegetation of a range site in relation to the potential natural community for that site. Four classes are used to express the degree to which the production or composition of the present plant community reflects that of the potential natural community (climax):

Ecological Status (Seral stage)
Percent of Community in Climax Condition:

Potential natural community	76-100
Late seral	51-75
Mid-seral	26-50
Early seral	0-25

Ecosystem – A complete, interacting system of living organisms and the land and water that make up their environment; the home places of all living things, including humans.

Ecosystem Management – The use of a "whole-landscape" approach to achieve multiple-use management of public lands by blending the needs of people and environmental values in such a way that these lands represent diverse, healthy, productive, and sustainable ecosystems.

Endangered Species – Any species defined under the Endangered Species Act (ESA) as being in danger of extinction throughout all or a significant portion of its range. Listings are published in the *Federal Register*.

Environmental Assessment (EA) – One type of document prepared by federal agencies in compliance with the National Environmental Policy Act (NEPA) which portrays the environmental consequences of proposed federal actions which are not expected to have significant effects on the human environment.

Environmental Impact Statement (EIS) – One type of document prepared by federal agencies in compliance with the National Environmental Policy Act (NEPA) which portrays the environmental consequences of proposed major federal actions expected to have significant impacts on the human environment.

Ephemeral stream – A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no continuous supply from melting snow or other source, and its channel is above the water table at all times.

Exclusion Areas – Areas with sensitive resource values where rights-of-way and land use authorizations will not be authorized.

Existing Management Situation – A component of the AMP; a description of the existing management direction governing resource management programs for a Planning Area.

Extensive Recreation Management Area (ERMA) – Area where recreation is unstructured and dispersed with minimal regulatory constraints and where minimal recreation-related investments are required.

F

Federal Land Policy and Management Act of 1976 (FLPMA) – Law mandating that the BLM manage lands under its jurisdiction for multiple uses. Establishes guidelines for its administration; and provides for the management, protection, development, and enhancement of the public lands, among other provisions.

Fire Management Plan (FMP) – A strategic plan that defines a program to manage wildland and prescribed fires and documents the Fire Management Program in the approved land use plan. The plan is supplemented by operational procedures such as preparedness plans, preplanned dispatch plans, prescribed fire plans and prevention plans.

Fire regime – The characteristics of fire in a given ecosystem, such as the frequency, predictability, intensity, and seasonality of fire.

Fire return interval – The number of years between fire events for a specified area.

Flood plain – A nearly level alluvial plain that borders a stream and is subject to inundation under flood-stage conditions unless protected artificially. It is usually a constructional landform built of sediment deposited during overflow and lateral migration of the stream.

Forb – Any herbaceous plant that is not a grass or a grasslike species. Broad-leafed plants; includes plants that commonly are called weeds or wildflowers.

Functional at Risk (FAR) - Riparian/Wetland areas that are in functional condition but an existing soil, water, or vegetation attribute makes them susceptible to degradation.

G

Geographic Information System (GIS) – An information processing technology to input, store, manipulate, analyze, and display data; a system of computer maps with corresponding site specific information that can be combined electronically to provide reports and maps.

H

Herd Area – A geographic area identified as having provided habitat for a wild horse herd in 1971. A Herd Area may be solely the active Herd Management Area, or inactive, where wild horses are no longer managed, or a combination of both.

Herd Management Area (HMA) – A geographic area identified in a Management Framework Plan or Resource Management Plan for the long-term management of a wild horse herd.

Herd Management Area Plan – A plan that prescribes measures for the protection, management, and control of wild horses and their habitat on one or more HMAs, in conformance with decisions made in approved Management Framework or Resource Management Plans.

Hiking Trail - A pathway created and maintained by human foot traffic, saddle or pack stock, or constructed and maintained for these uses.

Hydrologic Unit Code (HUC) – A coding system developed by the U.S. Geological Service to map geographic boundaries of watersheds of various sizes.

Hydrothermal deposit – A mineral deposit formed by hot mineral-laden fluids.

I

Incident commander – Individual responsible for the management of all incident (fire) operations.

Interim Management Policy for Lands Under Wilderness Review (WSA IMP) – Policy for managing public lands under wilderness review. Section 603(c) of the FLPMA states: "During the period of review of such areas and until Congress has determined otherwise, the Secretary shall continue to manage such lands according to his authority under this Act and other applicable laws in a manner so as not to impair the suitability of such areas for preservation as wilderness, subject, however, to the continuation of existing mining and grazing uses and mineral leasing in the manner and degree in which the same was being conducted on the date of approval of this Act: Provided, that, in managing the public lands the Secretary shall by regulation or otherwise take any action required to prevent unnecessary or undue degradation of the lands and their resources or to afford environmental protection."

Intermittent stream – A stream, or reach of a stream, that flows for prolonged periods only when it receives groundwater discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Interior Columbia Basin Ecosystem Management Project (ICBEMP) – An on going project examining the effects (on a large regional scale) of past and present land use activities on the Interior Columbia River Basin ecosystem and a small part of the Great Basin ecosystem.

Interior drainage – A system of streams with no outlet to the sea (e.g. Great Basin).

J

K

Known Geothermal Resource Area – "An area in which the geology, nearby discoveries, competitive interest, or other indicia will, in the opinion of the Secretary, engender the belief in men who are experienced in the subject matter that the prospect for extraction of geothermal stream or associated geothermal resources are good enough to warrant expenditures or money for that purpose" (43 CFR 3200.0-5(k)).

L

Land Use Authorizations – Those realty related authorizations such as leases, permits, and easements authorized under 43 CFR2920 and the R&PP Act. Land use authorizations also include any other authorizations with the exception of rights-of-way (43 CFR2800) and Special Recreation Permits (proposed in 43 CFR2930) generally contained in 43 CFR2000 series of regulations.

Leasable Minerals – Minerals that may be leased to private interests by the federal government including oil, gas, geothermal, coal, and sodium compounds.

Locatable Minerals – Minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872, as amended. This includes deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

M

Management Concern – Procedures or land use allocations that do not constitute issues but which are recognized, through the RMP/EIS preparation process, as needing modification or decision regarding management direction.

Management Direction – A statement of goals and objectives, management prescriptions, and associated standards and guidelines for attaining them.

Management Framework Plan (MFP) – BLM land use plan, predecessor to the RMP. Older generation of land use plans developed by the BLM. This generation of planning has been replaced by the Resource Management Plan (RMP).

Management Opportunities – A component of the AMP; actions or management directions that could be taken to resolve issues or management concerns.

Map unit – The basic system of description in a soil survey and delineation on a soil map. Can vary in level of detail.

Medium textured soil - Very fine sandy loam, loam, silt loam, or silt.

Mechanized Equipment - Any machine that uses or is activated by either a living or nonliving power source. This includes, but is not limited to, chain saws, power drills, aircraft, generators, motor vehicles, snow machines, etc. The term does not include shavers, wrist watches or clocks, flashlights, cameras, camp stoves, cell phones, radio transmitters/receivers, GPS units or other similar small hand held or portable equipment.

Mechanized Vehicle (for OHV) - Any vehicle, device, or contrivance that has moving parts for moving people or material in or over land, water, snow, or air. This includes, but is not limited to, sailboats, sailboards, hang gliders, parachutes, bicycles, game carriers, carts, and wagons. It does not include wheelchairs, horses, or other pack stock, skis, snowshoes, nonmotorized river craft, sleds, travois, or similar devices without moving parts.

Migration corridor – The habitat pathway an animal uses to move from one place to another.

Mineral Estate – Refers to the ownership of minerals at or beneath the surface of the land.

Mitigation – Measures designed to counteract environmental impacts or to make impacts less severe.

Monitoring – The periodic and systematic collection of resource data to measure progress toward achieving objectives.

Monitoring and Evaluation – The collection and analysis of data to evaluate the progress and effectiveness of on-the-ground actions in meeting resource management goals and objectives.

Motor Vehicle - Any vehicle, device, or contrivance which is self-propelled and is used for moving people or materials in or over land, water, snow, or air and is powered by a motor or engine.

Motorized Equipment - Any machine that uses or is activated by a motor, engine, or other power source. This includes, but is not limited to, chain saws, power drills, aircraft, generators, motor vehicles, snow machines, etc. The term does not include shavers, wrist watches or clocks, flashlights, cameras, camp stoves, cell phones, radio transmitters/receivers, GPS units or other similar small hand held or portable equipment.

Multiple Use – Management of public land and its resources to best meet various present and future needs of the American people. This means coordinated management of resources and uses to assure the long-term health of the ecosystem.

N

National Environmental Policy Act of 1969 (NEPA) – Law requiring all federal agencies to evaluate the impacts of proposed major federal actions with respect to their significance on the human environment.

National Wildlife Refuge (NWR) – An area administered by the U.S. Fish and Wildlife Service for the purpose of managing certain fish or wildlife species.

Naturalness (a primary wilderness value) – An area that generally appears to have been affected primarily by the forces of nature with the imprint of people's work substantially unnoticeable.

Noxious Weed – A plant specified by law as being especially undesirable, troublesome, and difficult to control. A plant species designated by federal or state law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or nonnative, new, or not common to the United States. According to the Federal Noxious Weed Act (PL 93-639), a noxious weed is one that causes disease or has other adverse effects on man or his environment and therefore is detrimental to the agriculture and commerce of the United States and to the public health.

O

Objectives (management) – In this EIS, refers to indicators used to measure progress toward attainment of goals. They address short- and long-term actions taken to meet goals and the desired ranges of future conditions.

Off-Highway Vehicle (OHV) – Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding the following: 1) any nonamphibious registered motorboat; 2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; (3) any vehicle whose use is expressly permitted by the authorized officer, or otherwise officially approved; 4) vehicles in official use; and 5) any combat or combat support vehicle when used in times of national defense emergencies.

P

Perennial – A plant that lives for three or more years.

Perennial stream – A stream in which water is present during all seasons of the year.

Permeability – The quality of the soil that enables water to move downward through the profile, measured as the number of inches per hour that water moves downward through the saturated soil.

pH value – A numerical designation of acidity and alkalinity in soil.

Playa Lake – A shallow lake that is seasonally dry. Soils on the lake bottom are usually quite alkaline.

Pluvial – Referring to a period of greater rainfall.

Pluvial Lake – A lake formed during a period of exceptionally high rainfall (e.g., a time of glacial advance during the Pleistocene epoch) and now either extinct or existing as a remnant, such as Lake Bonneville.

Point source pollution – Pollution that comes from a single identifiable source such as a smokestack, a sewer, or a pipe.

Prescribed burning – Controlled application of fire to wildland fuels in either their natural or modified state, under specified environmental conditions which allow the fire to be confined to a predetermined area and at the same time to produce the fire line intensity and rate of spread required to attain planned resource management objectives.

Prescribed fire – Any fire ignited by management actions to meet specific objectives. A written and approved prescribed fire plan must exist, and NEPA requirements must be met prior to ignition. The introduction of fire to an area under regulated conditions for specific management purposes (usually vegetation manipulation).

Prescribed Natural Fire - A naturally-ignited fire that is managed for resource benefits. Currently called Wildland Fire Use.

Prescription – Written statement defining objectives to be attained, as well as measurable criteria which guide the selection of appropriate management actions. Prescription criteria may include safety, economic, public health, environmental, geographic, administrative, social or legal considerations under which the fire will be allowed to burn.

Primary wilderness values – The primary or key wilderness values described in the Wilderness Act by which WSAs and wildernesses are managed to protect and enhance the wilderness resource. Values include roadlessness, naturalness, solitude, primitive and unconfined recreation, and size.

Primitive and unconfined recreation (a primary wilderness value) – nonmotorized and undeveloped types of outdoor recreation activities. Refers to wilderness recreation opportunities such as nature study, hiking, photography, backpacking, fishing, hunting, and other related activities. Does not include the use of motorized vehicles, bicycles, or other mechanized means of travel.

Proper Functioning Condition (PFC) – PFC is both a qualitative method for assessing the physical function of riparian-wetland areas, and a defined condition of a riparian-wetland area.

Public lands – Any land or interest in land owned by the citizens of the United States and administered by the Secretary of the Interior through the BLM as defined in FLPMA.

Q

R

Rangeland – Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Range site – An area of rangeland where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. A range site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other range sites in kind or proportion of species or total production.

Record of Decision (ROD) – An official document in which a deciding official states the alternative that will be implemented from a prepared Final EIS.

Recreation site – An area where management actions are required to provide a specific recreation setting and activity opportunities, to protect resource values, provide public visitor safety and health, and/or to meet public recreational use demands and recreation partnership commitments. A site may or may not have permanent facilities.

Recreational river – A river or section of a river that is readily accessible by road or railroad. It may have had some development along the shorelines and may have undergone some impoundments or diversions in the past.

Research Natural Area (RNA) – An area where natural processes predominate and which is preserved for research and education. Under current BLM policy, these areas must meet the relevance and importance criteria of ACECs and are designated as ACECs. An area of significant scientific interest that is designated to protect its resource values for scientific research and study.

Resource advisor – Resource specialist responsible to the incident commander for gathering and analyzing information concerning values-at-risk that may be impacted by fire or fire suppression activities.

Resource Area – The "on-the-ground" management unit of the BLM comprised of BLM administered land within a specific geographic area.

Resource Area Profile – A component of the AMP; a description of the current condition, amount, location, use, and demands of the natural resources in a Resource Area.

Resource Management Plan (RMP) – Current generation of land use plans developed by the BLM under the Federal Land Policy and Management Act. Replaces the older generation Management Framework Plans. Provides long-term (up to 20 years) direction for the management of a particular area of land and its resources, usually corresponding to a BLM Resource Area.

Right-of-way (ROW) – A permit or an easement which authorizes the use of public land for certain specified purposes, commonly for pipelines, roads, telephone lines, electric lines, reservoirs, etc; also, the reference to the land covered by such an easement or permit.

Right-of-way corridor – A parcel of land that has been identified by law, Secretarial Order, through a land use plan, or by other management decision as being the preferred location for existing and future right-of-way grants and suitable to accommodate one type of right-of-way or one or more rights-of-way which are similar, identical or compatible.

Riparian area – Area with distinctive soil and vegetation between a stream or other body of water and the adjacent upland; includes wetlands and those portions of floodplains and valley bottoms that support riparian vegetation.

Risk assessment – Assessing the chance of fire starting, naturally- or human-caused, and its potential risk to life, resources and property.

Road - Constructed or evolved transportation route that is normally maintained for regular use (except during periods of closure) that can be reasonably and prudently driven by motorized or mechanized vehicles.

Route - A linear ground transportation feature such as a way or road.

S

Saleable Minerals – High volume, low value mineral resources including common varieties of rock, clay, decorative stone, sand, gravel, and cinder.

Scenic river – A river, or section of a river, that is free of impoundments and whose shorelines are largely undeveloped but accessible in places by roads.

Scoping – The process of identifying the range of consideration, issues, management concerns, preliminary alternatives, and other components of an environmental impact statement or land-use planning document. It involves both internal and external, or public, involvement.

Section 202 lands – Lands being considered for wilderness designation under Section 202 of the Federal Land Policy and Management Act of 1976.

Sensitive species – Species identified by a Forest Service regional forester, or BLM state director, for which population viability is a concern either (a) because of significant current or predicted downward trends in

population numbers or density, or (b) because of significant current or predicted downward trends in habitat capability that will reduce a species' existing distribution.

Seral – Refers to the sequence of transitional plant communities during succession. Early-seral refers to plants that are present soon after a disturbance or at the beginning of a new successional process (such as seedling or sapling growth stages in a forest); mid-seral in a forest will refer to pole or medium sawtimber growth stages; late- or old-seral refers to plants present during a later stage of plant community succession (such as mature and old forest stages).

Seral stage BThe developmental phase of a forest stand or rangeland with characteristic structure and plant species composition. The rated departure of a plant community from a described PNC for a specific ecological site. Low-seral stage is an existing plant community which is defined as 0 to 25 percent comparability to the defined PNC; Mid-seral stage is an existing plant community which has 26 to 50 percent comparability to the PNC; Late seral stage is 51 to 75 percent comparable to the PNC; PNC is an existing plant community with 76 to 100 percent comparability to the defined PNC.

Slope – The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.

Soil association – A group of soils geographically associated in a characteristic repeating pattern and defined and delineated as a single soil map unit.

Soil classification – The systematic arrangement of soils into groups or categories on the basis of their characteristics.

Soil compaction – An increase in soil bulk density of 15 percent or more from the undisturbed level.

Soil complex – A map unit of two or more kinds of soils in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping.

Soil Horizon - A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes.

Soil profile – A vertical section of the soil extending through all its horizons and into the parent material.

Soil series - A nationally defined soil type set apart on distinct soil properties that affect use and management. In a soil survey, this includes a group of soils having profiles that are almost alike, except for differences in texture of the surface layer or of the underlying material. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Soil survey – A field investigation resulting in a soil map showing the geographic distribution of various kinds of soil and an accompanying report that describes the soil types and interprets the findings.

Soil texture – The relative proportions of sand, silt, and clay particles in a mass of soil.

Solitude (a primary wilderness value) – The state of being alone or remote from habitations; a lonely, unfrequented, or secluded place. The intent is to evaluate the opportunity for solitude in comparison to habitations of people.

Special Recreation Management Area (SRMA) – An area where recreation is the principal management objective, where intensive recreation management is needed, and where more than minimal recreation related investments are required.

Special Status Species – Plant or animal species known or suspected to be limited in distribution, rare or uncommon within a specific area, and/or vulnerable to activities which may affect their survival. Lists of Special Status Species are prepared by knowledgeable specialists through the State of Oregon; the BLM

prepares a list of state sensitive species predominantly based on the list prepared biennially by the Oregon Natural Heritage Program (ONHP).

Stand – A community of trees occupying a specific area and sufficiently uniform in species, age, spatial arrangement and condition as to be distinguishable from trees on surrounding lands.

State Implementation Plan (SIP) – A document prepared by each state describing existing air quality conditions and measures that will be taken to attain and maintain national ambient air quality standards.

State Listed Species – Any plant or animal species listed by the State of Oregon as threatened or endangered within the state under Oregon Revised Statue (ORS) 496.004, ORS 498.026, or ORS 564.040.

Step-down – The process of applying broad-scale science findings and land use decisions to site specific areas using a hierarchical approach (subbasin review) of understanding current resource conditions, risks, and opportunities.

Stream channel – The hollow bed where a natural stream of surface water flows or may flow; the deepest or central part of the bed, formed by the main current and covered more or less continuously by water.

Subalpine – A terrestrial community that is generally found in harsher environments than the montane terrestrial community. Subalpine communities are generally colder than montane and support a unique clustering of wildlife species.

Subbasin review – An interagency collaborative consideration of resources, resource management issues, and management recommendations for one or more subbasins or watershed drainages approximately 800,000 to 1,000,000 acres in size, equivalent to a 4th-field HUC.

Subwatershed – A drainage area of approximately 20,000 acres, equivalent to a 6th-field HUC. Hierarchically, subwatersheds (6th-field HUC) are contained within a watershed (5th-field HUC), which in turn is contained within a subbasin (4th-field HUC).

Succession – A predictable process of changes in structure and composition of plant and animal communities over time. Conditions of the prior plant community or successional stage create conditions that are favorable for the establishment of the next stage. The different stages in succession are often referred to as "seral stages." (See Seral.)

Sustainability – (1) meeting the needs of the present without compromising the abilities of future generations to meet their needs; emphasizing and maintaining the underlying ecological processes that ensure long-term productivity of goods, services, and values without impairing productivity of the land. (2) In commodity production, refers to the yield of a natural resource that can be produced continually at a given intensity of management.

Supplemental wilderness values – Includes ecological (e.g., vegetation, wildlife, and overall biological/botanical processes and values associated with the natural environment), geological, scientific, educational, scenic, and historic values. When present, they can enhance primary wilderness values, but are not mandated by Congress.

Sustained yield – Maintenance of an annual or regular periodic output of a renewable resource from public land consistent with the principles of multiple use.

T

Terrestrial communities – Groups of cover types with similar moisture and temperature regimes, elevational gradients, structures, and used by vertebrate wildlife species.

Threatened Species – Any plant or animal species defined under the ESA as likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Listings are published in the *Federal Register*.

Trend – The direction of change in ecological status observed over time. Trend is described as toward or away from the PNC, or as not apparent.

U

Upland (geology) – Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Utilization – The proportion or degree of the current year's forage production that is consumed or destroyed by animals (including insects). Utilization may refer either to a single plant species, a group of species, or to the vegetation as a whole. Utilization is synonymous with use.

V

Values-at-risk – Any or all natural resources, improvements, or other values which may be jeopardized if a fire occurs (value-at-risk, risk of resource values).

Visual Resource Management (VRM) Objectives
Class I - The objective of this classification is to preserve the existing character of the landscape. This class provides for natural ecological changes and limited management activity. The level of change should be very low and must not attract attention. Class I is assigned to those areas where a management decision has been made to preserve a natural landscape.

Class II-The objective of this classification is to retain the existing character of the landscape. The level of change to landscape characteristics should be low. Management activities may be seen but should not attract the attention of a casual observer. Any changes must conform to the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. This class represents the minimum level of VRM for WSAs.

Class III-The objective of Class III is to partially retain the existing character of the landscape. Moderate levels of change are acceptable. Management activities may attract attention but should not dominate the view of a casual observer. Changes should conform to the basic elements of the predominant natural features of the characteristic landscape.

Class IV-The objective of Class IV is to provide for management activities that require major modification of the landscape. These management activities may dominate the view and become the focus of viewer attention; however, every effort should be made to minimize the impact of these projects by carefully locating activities, minimizing disturbance, and designing the projects to conform to the characteristic landscape.

W

Way - A travel route in a WSA maintained solely by the passage of vehicles which has not been improved and/or maintained by mechanical means to ensure relatively regular and continuous use.

Wild River - A river or section of a river that is free of impoundments and generally inaccessible except by trail, with watersheds and shorelines essentially primitive and waters unpolluted.

Wildland Fire - A general category of lightning or human-ignited fire in natural vegetation. Includes wildland fires, prescribed fires, and fire managed for resource benefits.

Wildland Fire Use - An unplanned ignition that is managed for resource benefits. Formally called Prescribed Natural Fire.

Withdrawal – Withholding an area of federal land from settlement, sale, location, or entry, under some or all of the general land laws, for the purpose of limiting activities under those laws in order to maintain other public values in the area or reserving the area for a particular public purpose or program; or transferring jurisdiction over an area of federal land, other than "property" governed by the Federal Property and Administrative Services Act, as amended (40U.S.C.472) from one department, bureau, or agency to another department, bureau, or agency.

United States Department of the Interior
Bureau of Land Management
Burns District Office
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Hines, Oregon 97738

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