

John Day Basin

Record of Decision and Resource Management Plan



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.

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We are committed to functioning with technical excellence, fiscal responsibility, and human sensitivity in fulfilling the following objectives:

- Instilling a stewardship ethic for conservation and prudent use of the land and its resources.
- Promoting public partnerships and global policies that sustain health and diversity of ecosystems.
- Fostering social and economic responsibility in the use and management of lands and resources.



U.S. Bureau of Land Management
John Day Basin RMP
3050 NE 3rd Street
Prineville, Oregon 97754
541-416-6700
Email: John_Day_Basin_RMP@blm.gov
Website: <http://www.blm.gov/or/districts/prineville>

Privacy

Comments, including names and street addresses of respondents, will be retained on file in the Prineville District Office as part of the public record for this planning effort. Individual respondents may request confidentiality. If you wish to withhold your name or street address from public inspection, or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Prineville Field Office

3050 NE Third St.

Prineville, OR 97754

In reply refer to: 1610

Dear Interested Party:

In accordance with the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA), the Bureau of Land Management (BLM) has prepared the attached Record of Decision (ROD) and approved John Day Basin Resource Management Plan (JDBRMP). The JDBRMP addresses management of about 456,600 acres of public land in eight counties in central Oregon.

The JDBRMP integrates all resource management activities in the plan area into a single unified land use plan that replaces three land use plans, one Wild and Scenic River Plan, and one Coordinated Resource Management Plan. The ROD was prepared in accordance with 40 CFR Part 1505.2, which requires a concise document linking the final decision to the analysis presented in the Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS).

A 30-day protest period was provided on the proposed land use planning decisions in the John Day Basin PRMP/FEIS in accordance with 43 CFR Part 1610.5-2. The BLM received 27 protest letters. All but three were classified as form or comment letters. After careful consideration of all points raised in those protests, the BLM Director concluded that the BLM Oregon State Director and the Prineville District followed all applicable laws, regulations, policies, and pertinent resource considerations in developing the proposed plan. Responses were sent from the BLM Director to all protesting parties to address their concerns. The BLM's protest summary report is available on the Prineville BLM District's planning web page at: <http://www.blm.gov/or/districts/prineville/plans/johndayrmp/jdbsupportdocs.php>.

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

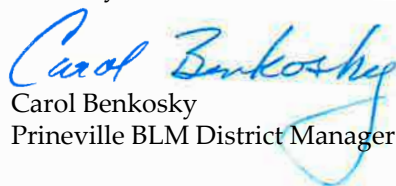
The ROD serves as the final decision for the land use plan decisions described in the attached approved JDBRMP and becomes effective on the date the ROD is signed. No further administrative remedies are available at this time for these land use plan decisions. Some of these planning decisions will require preparation of a detailed, project-specific environmental analysis prior to on-the-ground implementation. Future public involvement opportunities will be provided as appropriate at that time.

Other decisions have been addressed to a sufficient level of detail in the John Day Basin PRMP/FEIS process to be implemented over time without further NEPA analysis. These are considered to be new "implementation decisions" (see the Implementation Decisions section of the ROD). These will be implemented as funding and staff are available. A separate appeal opportunity for these selected decisions is being provided at this time. The appeal period will close 30 days from the date the Notice of Availability of the John Day Basin ROD/RMP appears in the Federal Register. This date will also be announced via local news releases, legal notices, and/or individual mailings. Please review the ROD carefully for more detailed discussion of the appeal process.

Updates on implementation of the JDBRMP will be available on the internet at: <http://www.blm.gov/or/districts/Prineville/index.php>.

We appreciate your interest and help in this planning effort and look forward to your continued participation as the plan is implemented.

Sincerely,



Carol Benkosky
Prineville BLM District Manager

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Acronyms and Abbreviations

AACEC - Area of Critical Environmental Concern
ACS - Aquatic Conservation Strategy
AML - Appropriate Management Level
AMS - Analysis of the Management Situation
AR - Appropriate Response
ARPA - Archaeological Resources Protection Act of 1979
ARV - Acceptable Range of Variability
ASQ - Allowable Sale Quantity
ATV - All-Terrain Vehicle
AUM - Animal Unit Month

BLM - Bureau of Land Management
BMP - Best Management Practices
BPA - Bonneville Power Administration
BPS (BpS) - Biophysical Setting

CAA - Clean Air Act
CAMP - Cooperative Area for the Management of Paleontology
CEQ - Council on Environmental Quality
CFR - Code of Federal Regulations
CFS - Cubic Feet per Second
COFMS - Central Oregon Fire Management Service
CTWSRO - Confederated Tribes of the Warm Springs Reservation of Oregon
CWA - Clean Water Act
CWPP - Community Wildfire Protection Plan

DBH - Diameter at Breast Height
DEIS - Draft Environmental Impact Statement
DEQ - Department of Environmental Quality (Oregon)
DOI - Department of Interior
DRMP - Draft Resource Management Plan

EA - Environmental Assessment
EDRR - Early Detection and Rapid Response
EIS - Environmental Impact Statement
EPA - United States Environmental Protection Agency
ERMA - Extensive Recreation Management Area
ESA - Endangered Species Act

FEIS - Final Environmental Impact Statement
FLPMA - Federal Land Policy and Management Act
FLTFA - Federal Land Transaction - Fire Management Unit
FR - Federal Register
FRCC - Fire Regime Condition Class
FS - Forest Service

GIS - Geographic Information System

HMA - Herd Management Area
HRV - Historic Range of Variability
HUC - Hydrologic Unit Code

ICBEMP - Interior Columbia Basin Ecosystem Management Project

IM - Instruction Memorandum (BLM)

INFISH - Inland Fish Strategy for managing native fish-producing watersheds in eastern Oregon and Washington, Idaho, western Montana, and portions of Nevada

IWM - Integrated Weed Management

JDB - John Day Basin (Plan Area)

JDBRMP - John Day Basin Resource Management Plan

JDBPRMP - John Day Basin Proposed Resource Management Plan

JDMWSR - John Day Mainstem Wild and Scenic River

JDR - John Day River

LAC - Limits of Acceptable Change

MBF - Thousand Board Feet

MMBF - Million Board Feet

MMHOS - Millimhos (a unit of electrical conductance)

MOU - Memorandum of Understanding

MRDG - Minimum Requirements Decision Guide

NF - National Forest

NHPA - National Historic Preservation Act

NEPA - National Environmental Policy Act

NMFS - National Marine Fisheries Service

NPS - National Park Service

NRCS - Natural Resources Conservation Service

NSO - No Surface Occupancy

NTT - National Technical Team

OAR - Oregon Administrative Rules

ODEQ - Oregon Department of Environmental Quality

ODFW - Oregon Department of Fish and Wildlife

OHV - Off-Highway Vehicle

OLEA - Oregon Land Exchange Act of 2000

OMSI - Oregon Museum of Science and Industry

ONDA - Oregon Natural Desert Association

OPRD - Oregon State Parks and Recreation Department

ORV - Off-Road Vehicle or Outstandingly Remarkable Value

OWRD - Oregon Water Resources Department

PACFISH - Pacific Anadromous Fish Strategy (Interim strategies for managing anadromous fish-producing watersheds in eastern Oregon and Washington, Idaho, and portions of California)

PFC - Proper Functioning Condition

PGH - Preliminary General Habitat (sage-grouse)

PIBO - PACFISH/INFISH Biological Opinion

PNC - Potential Natural Community

PNW - Pacific Northwest

PPH - Preliminary Priority Habitat (sage-grouse)

PRMP/FEIS - Proposed Resource Management Plan/Final Environmental Impact Statement

PSQ - Probable Sale Quantity

PWR - Public Water Reserve

R&PP - Recreation and Public Purposes Act

RM - River Mile

RMA - Riparian Management Area

RMP - Resource Management Plan
RMZ – Recreation Management Zone
RNA - Research Natural Area
ROD - Record of Decision

S&Gs - Standards and Guidelines
SRMA - Special Recreation Management Area
SRP - Special Recreation Permit
Stat. - United States Statutes at Large
SWCD - Soil and Water Conservation District

TMA - Travel Management Area
TMDL - Total Maximum Daily Load
TMP - Travel Management Plan

USACE- United States Army Corps of Engineers
U.S.C - United States Code
USDA - United States Department of Agriculture
USDC - United States Department of Commerce
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

WEPP - Water Erosion Prediction Project
WQMP - Water Quality Management Plan (State)
WQRP - Water Quality Restoration Plan (Federal)
WSR - Wild and Scenic River
WSA - Wilderness Study Area
WUI - Wildland Urban Interface

Record of Decision

for the John Day Basin Resource Management Plan



Record of Decision

Summary

This decision selects the Resource Management Plan set forth in the March 2012 John Day Basin PRMP/FEIS (USDI BLM 2012). The FEIS analyzed management of approximately 456,600 acres of BLM-administered public land dispersed throughout eight counties in central and eastern Oregon. These lands are mostly within the John Day River Basin and are administered by the Prineville BLM District's Central Oregon Resource Area.

The RMP provides one consolidated plan to guide management of the subject BLM-administered public lands as mandated under the Federal Land Policy and Management Act (FLPMA) and numerous other laws and regulations that govern management of public lands. The RMP provides a balance between those reasonable measures necessary to protect existing resource values and the public's continued need to make beneficial use of the plan area. This plan also provides direction so that future actions taken in accordance with the plan will comply with all other applicable laws including, but not limited to, the Endangered Species Act, Mineral Leasing Act, and the Clean Water Act.

Major elements of this plan:

- Set objectives for management of BLM-administered public lands and resources.
- Establish land use allocations relative to future uses for the purposes of achieving the various objectives.
- Provide management direction that identifies where future actions may or may not be allowed and what restrictions or requirements may be placed on those future actions to achieve the objectives.

Five alternatives for the management of BLM-administered public lands and resources were analyzed in the FEIS: Alternative 1 (No Action), Alternative 2 (identified as the preferred alternative and PRMP in the FEIS), Alternative 3, Alternative 4, and Alternative 5. The decision to select the PRMP as the approved RMP is based on the conclusion that it best meets the purpose and need; will have favorable outcomes for various resources and programs; and will result in relatively low adverse environmental impacts in comparison to the other alternatives.

The effectiveness of future actions implemented in accordance with the approved JDBRMP will be monitored in accordance with the monitoring plan in Appendix B of the plan.

In preparing the JDBRMP, the BLM worked with cooperators from six federal agencies, including the National Marine Fisheries Service and the U.S. Fish and Wildlife Service, three state agencies, and eight county governments. The BLM also consulted, on a government-to-government basis, with three federally recognized tribes with interests in the plan area. Interaction with the public regarding this resource management plan began in early 2006 and included meetings, newsletters, workshops, comment periods, and a protest period.

Decision

The decision is to approve the attached JDBRMP and Appendices A through M for approximately 456,600 acres of public land administered by the Bureau of Land Management (BLM) Prineville District.

The PRMP/FEIS for the John Day Basin analyzed management of approximately 442,000 acres within the Prineville BLM District, and 14,600 acres within the Vale District (see Map 1). These lands are dispersed throughout eight counties, mostly within the John Day River Basin. The decisions are fully described in the attached RMP.

This decision replaces the John Day RMP (1985); portions of the Two Rivers and Baker RMPs (1986 and 1989 respectively); the John Day River Management Plan 2001; the Sutton Mountain Coordinated Resource Management Plan; and the Horn Butte Habitat Management Plan. The purpose of this plan revision is to provide an RMP that compiles management direction into one document; incorporates new information and regulatory

guidance; and provides management direction where it may be lacking or requires clarification to resolve land use issues or conflicts.

The plan revision was prepared under the regulations implementing the Federal Land Policy and Management Act of 1976 (43 CFR 1600). An environmental impact statement was prepared for this plan in compliance with regulations implementing the National Environmental Policy Act of 1969 (40 CFR 1500). The attached JDBRMP carries forward the Proposed Resource Management Plan (Alternative 2 and Appendices B, C, E, F, G, I-3, J, K, M, N, S, U, V, and W) published with the John Day Basin PRMP/FEIS in March 2012. The included appendices are pertinent to implementing the decision and therefore are included in this Record of Decision. Minor editing was necessary due to changed letter numbering of appendices and renumbering of tables, maps, figures, objectives, actions, and guidelines. These edits were done to consolidate or better organize text and to reduce redundancy and did not substantially change the decisions.

The JDBRMP includes two levels of decisions in accordance with the National Environmental Policy Act and BLM regulations: (1) land use planning decisions, and (2) implementation decisions.

Land Use Plan Decisions

As described in FLPMA, land use plans are tools by which “present and future use is projected” (43 U.S.C. § 1701 [a][2]). The BLM’s planning regulations make clear that land use plans are a preliminary step in the overall process of managing public lands, and are “designed to guide and control future management actions and the development of subsequent, more detailed and limited scope plans for resources and uses” (43 CFR §1601.0-2). A land use plan, therefore, is not ordinarily the medium for affirmative decisions that implement BLM’s projections; FLPMA provides that “[t]he Secretary may issue management decisions to implement land use plans” (43 U.S.C. § 1712[e]). In other words, the decisions implementing the direction in a land use plan are distinct from the plan itself. Furthermore, the regulation defining a land use plan declares that a plan “is not a final implementation decision on actions which require further specific plans, process steps, or decisions under specific provisions of law and regulations” (43 CFR § 1601.0-5).

Land use plan decisions are identified in the attached RMP (summarized in Table 1) and include:

- Objectives, management actions, and guidelines that define desired outcomes or future conditions.
- Land use allocations, including proposed withdrawals and special management area designations.
- Visual resource management (VRM) classifications.
- Land tenure zoning classifications.
- Allowable uses and restrictions, including specific off-highway vehicle use areas; mining restrictions; and areas available for livestock grazing.
- Recreation management.

A 30-day protest period was provided on the land use plan decisions in the PRMP/Final EIS in accordance with 43 CFR Part 1610.5-2. Protests were received on seven general topics and each was subsequently resolved. This ROD serves as the final decision for the land use plan decisions described above and becomes effective on the date this ROD is signed. No further administrative remedies are available at this time for these land use plan decisions.

Implementation Decisions

It is the BLM’s intent to implement, over time, a number of specific project-level decisions described in the attached JDBRMP. These projects are called “implementation decisions.” Their implementation is subject to funding and staff availability. A list of these implementation decisions is provided below:

1. Interim Travel Management decisions (as identified on Maps 9-14).
2. Seasonal area and route closures (Map 3 and Maps 9-14, respectively).

3. Interim wilderness management decisions (Appendix J).
4. Interim management decisions (River Plan) for the portion of the North Fork of the John Day River determined to be Suitable for designation as a Wild and Scenic River (WSR).
5. Decision to replace the 2001 John Day River Plan and have direction within the John Day Basin RMP function as the River Plan for the existing WSR designations.
6. Decisions to limit the allowable decibels, hours of operation and class of Off Highway Vehicle (OHV) allowable at Little Canyon Mountain (described on page 100 of the RMP).

These implementation decisions are appealable under the Department of Interior's appeal regulations (43 CFR Part 4) upon publication of the Notice of Availability of this document in the Federal Register by the Environmental Protection Agency.

These decisions are effective upon issuance of this ROD, unless a stay of the decision is granted (see below). In accordance with 43 CFR Part 8342.2(b), public notice of these decisions was provided with publication of the Federal Register Notice of Availability of this ROD and approved RMP.

Appeal Procedures for Implementation Decisions

Any party adversely affected by an implementation decision in this document may appeal within 30 days of receipt of this decision in accordance with the provisions of 43 CFR Part 4. The appeal must include a complete statement of reasons why you are appealing. The statement of reasons may be included with the Notice of Appeal or filed separately within 30 days of filing the Notice of 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:

Bureau of Land Management
Central Oregon Resource Area
3050 N.E. 3rd St.
Prineville, OR 97754

A copy of the appeal, statement of reasons, and all other supporting documents should be sent to the Regional Solicitor, Pacific Northwest Region, U.S. Department of the Interior, 805 S.W. Broadway, Suite #600, Portland, Oregon 97205. 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, VA 22203. It is suggested that any appeal be sent by certified mail, return receipt requested.

Request for Stay

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

1. Relative harm to the parties if the stay is granted or denied.
2. Likelihood of the appellants' success on the merits.
3. Likelihood of immediate and irreparable harm if the stay is not granted.
4. Whether the public interest favors granting the stay.

The motion for stay must be filed in the office of the Field Manager at the address provided above for the BLM's Central Oregon Resource Area.

What the Plan Will Provide

This ROD and RMP provide overall direction for management of all resources on BLM-administered land in the plan area. Major provisions in this resource management plan include:

- Objectives for management of BLM-administered lands and resources.
- Management direction that identifies where future actions may or may not be allowed and what restrictions or requirements may be placed on those future actions to achieve the objectives set for the BLM-administered lands and resources.
- Replaces the John Day River Management Plan and provide direction for management of the suitable sections of the North Fork of the John Day River until Congress makes a final determination. Direction in this RMP is intended to function as a WSR Plan for the North Fork in the event that Congress designates it.

What the Plan Will Not Provide

The plan does not authorize on-the-ground projects other than those specifically listed above under Implementation Decisions. Implementation of future projects under the resource management plan will be authorized, funded, or carried out subsequently only after completion of further appropriate National Environmental Policy Act analysis or documentation, consultation under the Endangered Species Act of 1973, and decision-making processes.

Application of the Plan to Existing Projects

Revision of the three RMPs necessarily involves a transition from application of the old resource management plans to the new resource management plan. The planning of future projects, such as vegetative management, typically requires NEPA analyses before a site-specific project can be designed and a decision reached. Allowing for a transition from the old RMPs to the new RMP avoids disruption of the management of the BLM-administered lands and allows the BLM to utilize work already begun on the planning and analysis of projects.

This section addresses application of the JDBRMP to three categories of future projects, which are set out below and then discussed individually in more detail:

- Projects for which site-specific decisions have been signed prior to the effective date of this ROD, but which have not yet been implemented.
- Projects for which site-specific decisions have not yet been signed, but for which preparation of NEPA documents has begun prior to the effective date of this ROD.
- Projects for which site-specific project planning and preparation of NEPA documents have not begun prior to the effective date of this ROD.

First, implementation of projects for which a decision has been signed prior to the effective date of this ROD are not affected by this ROD. The effects of implementing these projects were factored into the analysis in the FEIS as an analytical assumption about current land treatment types and levels of activity, or were generally considered as part of the current condition of the affected environment.

Second, site-specific projects that do not have a decision signed prior to the effective date of this ROD but have preparation of NEPA documentation begun prior to the effective date of this ROD and have a decision on the project signed within two years of the effective date of this ROD, may be implemented at the discretion of the decision-maker and if consistent with management direction of one of the following:

- John Day RMP (1985) as amended by the John Day River Management Plan (2001)
- Two Rivers RMP (1986)
- Baker RMP (1989)

In this context, preparation of NEPA documentation is considered to have begun upon the earliest of one of the following:

- Public notification that the BLM will be preparing a NEPA document.

- Initiation of external scoping.
- Completion of documentation of a Determination of NEPA Adequacy.
- Completion of documentation of a Categorical Exclusion Review.

However, such projects cannot proceed within this two-year period of transition if they would result in destruction or adverse modification of critical habitat designated for species listed as endangered or threatened under the Endangered Species Act.

If the decision-maker elects to implement such projects consistent with the management direction in the previous three aforementioned RMPs, such projects may include features not consistent with management direction in the JDBRMP and its ROD. However, any difference in the specific effects resulting from implementation of such projects that is not consistent with the management direction in the JDBRMP would not alter the analysis of effects in the FEIS because of the geographic extent of such projects. Additionally, any inconsistencies with the management direction in the JBRMP and its ROD, in almost all cases, are anticipated to result in less change to the current condition of the affected environment than if the other projects were implemented consistent with the management direction in the JDBRMP.

Third, projects for which preparation of National Environmental Policy Act documentation begins after the effective date of this ROD, or for which a decision is signed more than two years after the effective date of this ROD, must be consistent with the management direction in the JDBRMP.

Valid Existing Rights

This decision does not alter or extinguish valid existing rights on BLM-administered lands. Valid existing rights may be held by other federal, state, or local government agencies; tribes; or by private individuals or companies. Valid existing rights may pertain to mining claims, mineral or energy leases, easements, permits, leases, rights-of-way, and water rights.

Changes to the Resource Management Plan between PRMP/FEIS and the Record of Decision

The following changes and/or corrections were made to the JDBRMP.

- The method for calculating route densities was clarified to only include motorized routes in areas identified to be managed for 0 mile/square mile.
- A seasonal wildlife closure was added to the 3,971 acre area on Rudio Mountain identified as an Open OHV designation in the FEIS. This change necessitated changing the OHV designation to Limited. Outside of the seasonally restricted period, off route travel will be allowed within the designated area.
- Two roads (Hay and Standard Creek) totaling less than one mile were changed from a closed to an open designation in the interim travel plan.
- Aquatic Objectives were reorganized to clarify the desired future condition for fish habitat. Stream metrics were updated in Appendix E to more recent data and it was clarified that Appendix E would apply to all actions not just restoration.
- During development of the ROD the BLM acquired approximately 11 acres of land along the John Day River. Management allocations were applied to this parcel consistent with the purpose for which it was acquired and adjacent BLM-administered public lands.

These changes were made to provide clarifications of existing management direction, increase the consistency of the application of seasonal closures and terminology used for OHV designations, and to correct errors in the interim travel plan where county access rights were not recognized. Each of the approved changes were analyzed in other alternatives and do not constitute a substantial change to the proposed action.

In addition to the items noted here, other minor typographical, table, and mapping errors were corrected. The acres involved in the mapping corrections are small and mostly reflect slivers and overlaps in data. The changes

and corrections noted above are relatively inconsequential and would do not substantially change the analytical conclusions described in the FEIS.

Management Considerations - Rationale for the Decision

The BLM is mandated, under the Federal Land Policy and Management Act and other laws and regulations that govern management of public lands to manage for multiple uses. The JDBRMP provides a balance between those reasonable measures necessary to protect existing resource values and the public’s continued need to make beneficial use of the plan area. The JDBRMP also provides a mix of management emphases that recognize the individual identities and social economic values of the local communities (as described in the ‘Environmentally Preferable Alternative’ section below). The decision regarding approval of the JDBRMP is based on consideration and evaluation of how well the purpose and need is met, associated environmental consequences, and the cost of implementation.

Overview of the Alternatives Considered

Five alternatives for management of BLM-administered public lands and resources were analyzed in the FEIS: Alternative 1 (No Action Alternative), Alternative 2 (identified as the preferred alternative and PRMP in the FEIS), Alternative 3, Alternative 4, and Alternative 5. Key features of the alternatives are summarized and compared in Table 2-1 in the JDBPRMP/FEIS (USDI BLM 2012).

All four action alternatives were designed to address the purpose and need for the action, therefore, they share a relative commonality in their objectives. However, some management direction by which the objectives would be achieved through future actions varies among the alternatives. All four action alternatives provide the same management direction for soils, vegetation, fuels, fire, aquatics, wildlife, visual resources and lands/realty. Primary differences between the alternatives are as follows:

Table A. Comparison of Alternatives Analyzed

Resource	Alternative 1 - No Action	Alternative 2 - PRMP	Alternative 3	Alternative 4	Alternative 5
Lands with Wilderness Characteristics	Lands with wilderness characteristics outside of WSAs do not receive protection designed to maintain or enhance the identified wilderness characteristics.	Protect wilderness characteristics on 19,442 acres. Mechanical vegetation treatment consistent with VRM Class II objectives would be allowed.	Same as the PRMP (Alternative 2).	Protect wilderness characteristics on all BLM lands (35,457 acres) with wilderness characteristics. Substantive mechanical vegetation treatment would not be allowed.	Same as the PRMP (Alternative 2).
Wild & Scenic Rivers (Segment of the North Fork John Day River determined eligible for inclusion in the WSR system)	Provide interim protection of Outstandingly Remarkable Values (ORVs) without a final determination of suitability. Manage consistent with a Recreation classification from Camas Creek to Mallory Creek, and a Scenic classification from Mallory Creek to River Mile 20.4.	Recommend the North Fork John Day River as administratively suitable for designation by Congress as WSR, with a Scenic classification, and ORVs of fish, scenery, and recreation opportunities.	Recommend the North Fork John Day River as administrative-ly suitable for designation by Congress as WSR. Classify as Scenic from Mallory Creek to River Mile 20.4 and Recreational from Camas Creek to Mallory Creek with ORVs of fish, scenery, and recreation opportunities.	Do not recommend this river segment as suitable for designation by Congress as WSR. Manage segment in accordance with other RMP management objectives.	Same as the PRMP (Alternative 2).

Resource	Alternative 1 - No Action	Alternative 2 - PRMP	Alternative 3	Alternative 4	Alternative 5
Livestock Grazing	Modify grazing system, season of use, stocking density, class or type of livestock, or activity plans, or modify or install new range developments to meet the Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the BLM in the States of Oregon and Washington.				
	Continue existing grazing practices with no defined process to determine future grazing following voluntary relinquishment of grazing preference.	Following voluntary relinquishment of grazing preference, allow closure of all or portions of grazing allotments using a "Grazing Decision Tree" (described in the Livestock Grazing section).	Following voluntary relinquishment of grazing preference, allow closure of all or portions of grazing allotments using a Grazing Matrix (described in the PRMP/FEIS Chapter 2.)		
	Do not authorize grazing on the nine allotments in the North Fork John Day which are predominantly acquired lands.	In the North Fork acquired lands, portions of the Boneyard and Scaffold Creek allotments will be available for use on a temporary non-renewable basis.	Assumes North Fork John Day River acquired lands have currently occupied anadromous fish streams, and grazing would be excluded from riparian buffers.	Applies a greater degree of sensitivity to potential social and ecological conflict.	North Fork John Day River acquired lands would be treated as a 'Special Management Area'.
Recreation Opportunities	On designated WSR segments retain Special Recreation Management Area. Manage the North Fork area w/in the Baker RMP as an Extensive Recreation Management Area.				
	Do not issue new special recreation permits except for select, specified cases.	Issue new upland-based special recreation permits according to BLM policy.			
	Acres of OHV designations: Open: 234,272 Limited: 155,228 Closed: 67,332	Acres of OHV designations: Open: 3,971 Limited: 313,668 Closed: 138,732	Acres of OHV designations: Open: 4,571 Limited: 313,067 Closed: 138,732	Acres of OHV designations: Open: 2 Limited: 301,043 Closed: 155,325	Acres of OHV designations: Open: 0 Limited: 315,020 Closed: 141,350

Resource	Alternative 1 - No Action	Alternative 2 - PRMP	Alternative 3	Alternative 4	Alternative 5
Travel Management	<p>Manage an interim transportation system of 742 total miles of routes (BLM and State, County, and other Agency routes across BLM lands), including:</p> <ul style="list-style-type: none"> - 572 miles of BLM routes open year-round. - 61 miles of BLM routes open seasonally. - 250 miles of BLM routes that are currently "land locked" and inaccessible to the public without landowner permission. - 475 miles of unmaintained primitive routes accessible to high clearance or off-road vehicles. 	<p>Manage an interim transportation system of 333 total miles, including:</p> <ul style="list-style-type: none"> - 86 BLM miles open year around. - 138 miles open seasonally. - 9 miles of BLM routes that are currently "land locked" and inaccessible to the public. - 109 miles not under BLM jurisdiction - 409 miles are closed in the interim transportation system (Of these 241 miles are land locked and inaccessible; and 168 miles are duplicate, short, or ill defined.) 	<p>Manage an interim transportation system of 879 total miles, including:</p> <ul style="list-style-type: none"> - 295 BLM miles open year round. - 475 miles open seasonally. - 250 miles of BLM routes that are currently "land locked" and inaccessible to the public. - 109 miles not under BLM jurisdiction - 662 miles of primitive routes usable by high clearance or off-road vehicles are open to the public. 	<p>Same as the PRMP (Alternative 2) with the exception of a few routes in the Rudio Mtn. area.</p>	<p>Same as the PRMP (Alternative 2) with the exception of the Little Canyon Mountain area where approximately 7 miles of routes would have only administrative access.</p>
	Maintain the existing transportation system.	Assess present and future access needs. Evaluate existing trails, primitive roads, and roads. Use plan criteria to determine an appropriate travel and transportation system after completion of the RMP.			

Environmentally Preferable Alternative

The National Environmental Policy Act requires that the Record of Decision identify the environmentally preferred alternative analyzed in the Environmental Impact Statement. Environmental preference is judged using the criteria in the regulations implementing the National Environmental Policy Act and subsequent guidelines by the Council on Environmental Quality (CEQ 1981). The CEQ defines the environmental preferable alternative as the alternative that will promote the national environmental policy as expressed in Section 101 of the National Environmental Policy Act. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural and natural resources.

Title 1, Section 101(b) of the National Environmental Policy Act establishes the following six broad goals:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Assure for all Americans safe, healthful, productive, and esthetically 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 that supports diversity and variety of individual choice.
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of resources that may be depleted.

Based on these goals, the identification of the most environmentally preferable alternative involves balancing current and potential resource uses with the need to protect resources, as well as to give consideration to the human environment. The JDBRMP (which is primarily Alternative 2 in the John Day Basin PRMP/FEIS) provides the best course of action for protecting the various resource values on public lands in the plan area, and therefore is the environmentally preferable alternative. In addition, the JDBRMP is the alternative best able to comply with all applicable laws, regulations, policy, and agency direction.

The following rationale highlights those areas in which favorable outcomes are anticipated to be substantially greater under the JDBRMP than under the other alternatives, but is not intended to provide a complete list of favorable outcomes.

The JDBRMP provides more protection for soil function and productivity than current management including the addition of guidelines and Best Management Practices (BMPs) identified to limit soil impacts, sustain native plant communities, and store and cycle nutrients and water. The JDBRMP is one of two alternatives with the lowest expected soil erosion due to the reduced area of roads open to off-highway vehicle use.

The JDBRMP addresses 92 percent of rangeland and 82 percent of forestland health treatment needs over 30 years, compared to 61 percent and 35 percent, respectively for Alternative 1 (No Action). The JDBRMP moves vegetation toward an Acceptable Range of Variability (ARV) where the types, intensities, and responses of vegetation to natural disturbance are within acceptable limits. Utilizing ARV recognizes the need to adjust vegetation management decisions within an allowable range of conditions; this better accounts for activities on surrounding lands, natural disturbance, or climate change to provide more balanced ecosystems and habitats across ownerships than the one size fits all approach in the No Action. The JDBRMP allows mechanical treatments on more acres than the other action alternatives but slightly less than the No Action. The JDBRMP also allows forest and juniper products to be utilized on the largest number of acres and reduces the potential for noxious weed and invasive non-native spread by managing toward a healthy complement of vegetative conditions and limiting the miles of open routes and acres of cross-country vehicle travel.

The JDBRMP extends protection to all watersheds in the plan area, regardless of the presence or absence of fish, compared to Alternative 1 (No Action), which protects only key watersheds (those with salmonid habitat). This protection will be provided through implementation of the Aquatic Conservation Strategy on approximately 88,000 more acres than under Alternative 1 (No Action). Based on its increased restoration, updated science, and geographic specific data, the JDBRMP will result in improved conditions for fish, wildlife, people, livestock and crops. The JDBRMP, as the environmentally preferred alternative, will affect aquatic resources by: doubling the rate of recovering stream channels to properly functioning condition (compared to existing); protecting 6,700 acres of Public Source Water Protection Areas and 200 acres of other domestic water sites on BLM; restoring 3,100 acres of uncharacteristic riparian vegetation to characteristic vegetation; moving 58 miles of stream toward Proper Functioning Condition (PFC) by restoring upland watershed conditions that currently contribute to non-attainment of standards; reducing annual sediment delivery from roads to stream channels by almost 50 tons; reducing 100-year peak flows and subsequently reducing impacts to stream channel widths; restoring 40 stream miles where roads limit the ability of stream channels to naturally route sediment and convey stream flow; restoring 70 miles of stream currently lacking appropriate vegetation; and restoring 100 miles of stream that currently lack sufficient age class distribution of riparian vegetation. These beneficial outcomes from the JDBRMP are as much or more than would be expected under all other alternatives.

The JDBRMP provides social and economic opportunities for renewable energy rights-of-way and locatable, salable, and leasable mineral development. The JDBRMP maintains existing rights and provides development opportunities where consistent with other resource objectives. Outside of a few locations energy and mineral

development potential in the plan area is relatively low. The interdisciplinary team made a finding that impacts of casual use would result in more than negligible disturbance in a few areas consistent with (43 CFR § 3809.31). Areas subject to restrictions are listed in Table 8 of the JDBRMP. These determinations were made for reasons specific to each area, some of which include the presence of listed species, sensitive habitats, and archeological resources. Additional rationale is provided on page 218 and Chapter 4 of the John Day Basin PRMP/FEIS (March 2012). As part of this determination a plan of operations has been identified as being necessary for casual use exploration in these areas. The JDBRMP provides energy and mineral development opportunities equal to those in the other action alternatives, while providing slightly less opportunity than Alternative 1. The JDBRMP identifies proposed withdrawals, withdrawals, and/or terms and conditions to minimize disturbances to ecological and social values while providing mineral and energy development that supports important social and economic values at an equal or greater level than expected under all other action alternatives.

By 2037 under the JDBRMP, about 69 percent of the plan area will be in relatively low fire hazard condition (1 to 3 feet flame lengths), which is 10 percent more area than with Alternative 1 (No Action). The level of anticipated fuels treatment, as well as the use of Appropriate Response on wildfires, should reduce the potential for large wildfires and reduce the potential for unacceptable damage and risk to human life and safety from wildfires. The RMP has the fewest acres other than the No Action that would have restrictions on mechanically managing fuel loading.

The JDBRMP provides clearer objectives for vegetation management that will increase the likelihood that wildlife habitat and population objectives are met through time. An example of this is under the JDBRMP, where more than 95 percent of all key wildlife habitats have a prescribed road density and security habitat objectives not present in the No Action. The combination of vegetation, riparian, and travel management objectives in the JDBRMP is as good as, or better than, all other alternatives. Together, these objectives will provide greater potential for resiliency of habitats, protection of key wildlife habitats, and movement of individuals and genetic variability across the landscape.

The JDBRMP protects wilderness characteristics on about 19,400 acres and allows vegetative treatment to maintain or restore ecological condition and to protect long-term wilderness characteristics. The No Action does not have provisions for protection of wilderness characteristics. Alternative 4 proposes protection of wilderness characteristics on about 35,500 acres. More than 16,000 of the acres identified in Alternative 4 were also identified as needing aggressive vegetative treatments to restore natural processes; however Alternative 4 does not provide for these treatments. Even if some vegetation treatments were allowed, as in the JDBRMP, the requirement that they become substantially unnoticeable within a reasonable time would preclude the more aggressive ecological restoration needed on the additional lands identified for protection under Alternative 4. The JDBRMP provides the best complement of protections and allowable actions to protect existing wilderness characteristics while also protecting the ecological integrity and future potential for wilderness characteristics on degrading sites.

The JDBRMP provides as much or more protection of values that have the potential to facilitate development of future Lands with Wilderness Characteristics as all other alternatives. Objectives and actions in the RMP that provide protection include the travel management criteria for roads, the use of the full range of Appropriate Response on fires, increased designations of VRM Class II, and OHV designations. The BLM's focus on fish and wildlife habitat and public recreation in the North Fork will provide benefits to the ecology and public enjoyment of the area. The BLM believes that this focus will accomplish a number of ecological and social benefits whereas designation to protect wilderness characteristics would unnecessarily limit BLM's ability to conduct restoration and to provide a variety of public recreation experiences.

The JDBRMP provides special designations and recommendations for all areas determined to have special or unique characteristics requiring special management designations such as an Area of Critical Environmental Concern or Wild and Scenic River. The RMP recommends the North Fork John Day River as suitable for Scenic designation under the Wild and Scenic Rivers Act. This recommendation provides protection for the scenic values of the river while allowing recreational use that is more consistent with other management objectives (wildlife and fisheries) in the area than a recreational designation as proposed in Alternative 3.

Designation of an interim transportation system in the JDBRMP will provide a balance between protecting resources and providing public access. By identifying an interim transportation system, the BLM can perform a

more detailed analysis and allow for more public involvement in planning for a final Travel Management Plan to determine which routes provide the best access to public land.

The interim transportation system minimizes the number of roads on land-locked parcels of BLM land where there are no public access easements across private land holding. The interim system provides a change from the existing situation (Alternative 1 - No Action) to ensure public feedback when developing the final transportation system. Where multiple routes accessed private inholdings and a defined right-of-way was not recorded, in most cases, all routes were closed. Private land access will be addressed on a case-by-case basis and adjustment to public access on these routes will be addressed, where appropriate, in the Final Travel Management Plan.

Using average road densities provides more flexibility for making decisions in developing the final travel and transportation system. Using a wider range of average road density values to determine the prescribed road density standards in the North Fork John Day sub-area complies with the Congressional mandate for managing these lands. The RMP clarifies that areas identified to be managed for zero miles/square mile was intended for motorized use restrictions. This clarification allows non-motorized trail construction to facilitate public access while minimizing impacts to wildlife.

The JDBRMP was chosen because continued leasing of livestock grazing best meets the planning criteria of providing a diverse array of opportunities that result in sustained flow of economic and social benefits to communities while continuing to provide recreation opportunities and protecting resource values. The flexibility associated with making forage available on a temporary non-renewable basis, using grazing as a tool to achieve management objectives, and following drought policy allows the BLM to adjust to short-term environmental variables.

With the JDBRMP, the use of a decision tree to determine future grazing use following lease relinquishment versus a grazing matrix (Alternatives 3, 4, and 5), or no defined process in the No Action will provide improved management direction and decision making for the grazing program. Alternatives 3, 4, and 5 also meet the planning criteria with their proposal for a grazing matrix, but the decision tree in the JDBRMP is easier to understand than the grazing matrix and addresses existing rather than potential conflicts. Other rationale for the JDBRMP is that it best allows the BLM to complement the management of adjoining properties within the boundaries described by law and federal regulations. As such, the JDBRMP identifies four allotments in the North Fork area where boundary adjustments are allowed to facilitate fence construction and maintenance in locations identified as having higher potential to control cattle distribution.

The JDBRMP and Alternative 3 have more acres and Animal Unit Months (AUMs) remaining available for livestock grazing than Alternative 4, but less than Alternative 1. The limited livestock grazing of the majority of lands located along the North Fork John Day River highlights the intent of the Oregon Land Exchange Act. In the North Fork John Day, Alternatives 1 (No Action), 4, and 5 would not authorize grazing of the nine allotments identified for analysis and would reduce grazing opportunities designed to meet other resource objectives. The limited grazing allowed along the North Fork under the JDBRMP provides flexibility for the BLM and adjacent landowners to meet a variety of management objectives, such as utilizing this area and providing grazing rest for other allotments that experienced wildland fire.

A mix of recreational settings that provides a variety of opportunities and experiences for visitors will be maintained and the quality of experience will be improved. The JDBRMP expands existing and creates new Special and Extensive Recreation Management Areas, thus providing opportunities for improved management of recreational resources in the plan area. By not expanding or designating additional areas, Alternative 1 (No Action) would divert management focus away from areas with high recreational use, leaving these areas at risk of environmental damage.

The JDBRMP provides management guidance to provide for both motorized and non-motorized recreation. Overall, there are more constraints on recreation opportunities to protect resources under the RMP and Alternatives 3, 4, and 5 than with Alternative 1 (No Action). The constraints are primarily related to changes in off-highway vehicle use. However, more opportunities for non-motorized recreation are available under the JDBRMP than under Alternative 1. The JDBRMP will reduce the acreage of Open OHV designation but double the number of Limited OHV acres and close many areas. Under Alternative 1 (No Action), OHV use would be less

restricted and therefore likely to result in increased vegetative, soil, and other degradation of the areas subjected to OHV use. By comparison, Alternatives 4 and 5 would have up to only two acres designated as Open, about the same acreage designated as Limited as the JDBRMP, and many acres Closed. Changing the Rudio Mountain area from an Open to a Limited OHV designation recognizes the need for seasonal closures to protect wildlife wintering habitats. Access to this area during the closure period was already extremely limited.

The public comments that BLM received related to OHV use at Little Canyon Mountain vary from allowing OHV use everywhere on Little Canyon Mountain, to desiring no OHV use in the area. The public and local working groups also suggested restrictions they felt would address concerns associated with OHV use in this area. While not as stringent as Alternative 5, which would close the Little Canyon Mountain area completely to OHV use, the JDBRMP does impose restrictions on hours of operation, available locations, vehicle sound levels, and types of vehicles allowed. These restrictions are consistent with suggested restrictions identified through scoping and public comments. The BLM believes the JDBRMP best balances recreational demand with impacts to surrounding residents for the Little Canyon Mountain area, since the JDBRMP still allows OHV recreation to occur in an area with high demand, but at the same time imposes restrictions to avoid and limit impacts to surrounding residents and non-motorized recreational users.

Future actions implemented in accordance with the JDBRMP are anticipated to contribute to the economic stability of local communities and industries by providing amenities and recreational opportunities that will bring economic support to the plan area through expenditures for lodging, transportation, services, and supplies.

Plan Maintenance

Maintenance of the JDBRMP is limited to further refining, documenting, or clarifying a previously approved decision incorporated in the plan. Maintenance is not considered a plan amendment and does not require formal public involvement, interagency coordination, or the NEPA analysis required for making new land use plan decisions. The Prineville District BLM will keep a record of all plan maintenance actions and periodically post this record on its public web page. Plan maintenance will occur continuously so that the RMP and its supporting records reflect the current status of decision implementation and knowledge of resource conditions. Where the plan direction refers to existing recovery plans, species lists, policies and other similar document direction, the plan direction will be assumed to refer to the most recent plan, list, or policy issued.

Mitigation

Regulations implementing the National Environmental Policy Act state that mitigation includes avoiding, minimizing, rectifying, reducing, eliminating, or compensating for adverse environmental impacts. Off-site and compensatory mitigation may also be utilized in accordance with policy or regulation. Analysis of the JDBRMP (Alternative 2 in the John Day Basin PRMP/FEIS) indicates that levels of impacts from implementation of future actions for the various resources are anticipated to be low. This is primarily because almost all measures to avoid, rectify, or reduce environmental impacts are incorporated into the design of the JDBRMP where practicable and consistent with meeting the purpose and need of revising the three previous plans. Additional site-specific project-level mitigation measures that are consistent with the JDBRMP objectives and direction may be implemented as determined necessary through site-specific analysis at the time of the project, but are not specifically listed in the JDBRMP. The use of BMPs is one example of project-level mitigation. Thus, the mitigation measures that are practical for adoption at the RMP level are included in this JDBRMP, whereas site-specific BMPs will need to be applied at the project level.

Plan Monitoring and Evaluation

Appendix B of the JDBRMP identifies a monitoring plan for assessing the effectiveness of future actions implemented in accordance with the RMP. The monitoring plan details the monitoring strategy to be used, monitoring questions, program reporting items, reporting intervals, and an adaptive management process. The monitoring plan is considered an integral part of the JDBRMP.

The monitoring plan focuses on monitoring the JDBRMP itself and is not intended as an overarching plan that addresses all ongoing monitoring and research efforts. The monitoring plan does not address science questions or issues of a regional or interagency scale. However, it is intended that the monitoring plan will utilize ongoing local, regional, interagency, and research monitoring efforts such as the PACFISH/INFISH Biological Opinion Effectiveness Monitoring Program (PIBO). The PIBO data is managed by the USDA Forest Service.

Adaptive management will be applied by acting on information found through monitoring. Adaptive management associated with monitoring will include corrective actions precipitated by findings of non-compliance. Corrective action precipitated by monitoring can range from simple changes in administrative procedures, refinements of the JDBRMP through plan maintenance, or more substantive changes through plan amendments.

In accordance with the BLM's Land Use Planning Handbook (H-1601-1), the JDBRMP will be evaluated periodically—typically every five years—to determine whether the land use plan decisions and NEPA analysis are still valid and whether the plan is being implemented effectively. More specifically, the JDBRMP will be evaluated to determine if: (1) the decisions remain relevant to current issues, (2) decisions are effective in achieving or making progress toward achieving the desired outcomes specified in the plan, (3) any decisions need revision, (4) any decisions need to be dropped from further considerations, and (5) any areas require new decisions.

In addition to formal evaluations, a plan evaluation may be conducted to address changed circumstances or new information that would substantially call into question the underlying assumptions, anticipated environmental consequences, or decisions of the JDBRMP. Adaptive management tools and procedures that will be used to make changes in the plan in response to monitoring information, new information, or changed circumstances include: plan maintenance, plan evaluations, plan amendments, and plan revisions.

Cooperating Agencies

Cooperating agency status provides a formal framework for governmental units (including local, state, and federal) to engage in active collaboration with a lead federal agency to implement requirements of the National Environmental Policy Act. In revising the three RMPs, the BLM worked with cooperators from six federal agencies, three state agencies, and eight county governments. Cooperators provided expertise in much of the subject matter analyzed and provided advice based on experiences with similar planning efforts.

Tribal Participation

The BLM consulted, in government-to-government relationships, with three federally recognized tribes with interests in the plan area. District staff met with or phoned Tribal representatives regularly. Copies of the Analysis of the Management Situation (fall 2006), Draft RMP/EIS (10/31/2008), and PRMP/Final EIS (4/20/2012) were sent to the tribes for review and comment. Tribal consultation is documented further in Chapter 5 of the John Day Basin PRMP/FEIS (BLM 2012).

The BLM is guided by national policy and law and is committed to continuing consultation and cooperative management whenever possible. The BLM recognizes its responsibility: to provide to federally recognized tribal governments and individuals sufficient opportunity to contribute to land use decisions; and to give proper consideration to those concerns or issues related to cultural, religious, and natural resource values. This trust relationship is acknowledged by the U.S. Constitution and is based on negotiated treaties or other agreements that recognize the sovereignty of American Indian Nations to govern themselves as distinct political communities. Treaties such as The Treaty with the Tribes of Middle Oregon [with tribes now on the Warm Springs Reservation, signed June 25, 1855, ratified March 8, 1859 (14 STAT. 751) and the Treaty of 9 June 1855 (with tribes now located on the Umatilla Reservation) (12 Stat. 945)] acknowledged the rights of tribes to fish off-reservation at usual and accustomed stations and to hunt, gather resources, and pasture animals on public lands in common with other citizens of the United States. Though a treaty with the Burns Paiute was never ratified, formal recognition on October 13, 1972 established certain rights for that tribe as well.

In April 2003, the Confederated Tribes of the Warm Springs Reservation of Oregon, the BLM, the Forest Service, and the Bureau of Indian Affairs signed a Memorandum of Understanding (MOU), "For the Purpose of Providing a Framework for Government-to-Government Consultation and Collaboration on RMPs, Proposals, Actions, and Policies and to Make a Statement of Mutual Benefits and Interests." Similar MOUs exist between the BLM and The Burns Paiute Tribe and the Confederated Tribes of the Umatilla Reservation. These three MOUs describe the rights and responsibilities of coordinating and consulting on a range of management issues. Consequently, each tribe has been offered the opportunity to become involved in the planning process for the JDBRMP.

Public Involvement in the Planning Process

The BLM is committed to providing the public with various opportunities for participation in the resource management planning process. The public was involved in the planning process regarding revision of the three RMPs prior to publication of the Notice of Intent in the *Federal Register* in February 2006 and until completion of the John Day Basin PRMP/Final EIS. This involvement included meetings, workshops, open houses, a comment period, and a protest period. Public input was also acquired through interviews with local officials, business owners, travelers and residents. Additionally, the BLM provided periodic newsletters, newspaper advertisements, news releases, and a project website to inform the general public of public meetings, public comment opportunities, the planning schedule, and contact information.

Analysis of the Management Situation

The BLM mailed approximately 2,600 copies of the Summary of the Analysis of the Management Situation (USDI BLM 2006) to federal/state/local agencies, tribal governments, various organizations, and interested individuals.

Draft Resource Management Plan/Draft EIS

The BLM released the John Day Basin Draft RMP/EIS on October, 30 2008, followed by a 90-day comment period. Approximately 1,400 unique public comments were received, and the substantive comments pertinent to the land use planning process were analyzed and responded to in Chapter 5 of the John Day Basin PRMP/FEIS (USDI BLM 2012).

During the comment period for the John Day Basin Draft RMP/EIS, five public meetings were held.

The John Day-Snake Resource Advisory Council and JDBRMP cooperators also provided input on the Draft RMP/EIS.

Proposed Resource Management Plan/Final Environmental Impact Statement

A 30-day protest period, beginning 4/20/2012, was provided for the John Day Basin PRMP/FEIS in accordance with 43 CFR 1610.5-2. Three protest letters were received by the Washington Office of the BLM. These protests were resolved by the BLM Director. The BLM's national office in Washington, D.C. mailed responses to all who provided protests

During this protest period, the BLM also received 24 comment letters, many of which were electronically generated form letters. The summary report for protest issues is posted on the planning web page at: <http://www.blm.gov/or/districts/prineville/plans/johndayrmp/jdbdocuments.php>.

Future Public Outreach

Periodic updates of the RMP's progress will be prepared and posted to the Prineville BLM District's website (<http://www.blm.gov/or/districts/prineville>).

Consultation

U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS)

Pursuant to the Endangered Species Act, Section 7, the BLM consulted with the USFWS and NMFS on proposed programs and actions to examine how the RMP revision may affect listed species and designated critical habitat. The RMP provides planning direction that will guide BLM planners to design future actions that avoid jeopardizing listed species or adversely modifying critical habitat. Both the USFWS and NMFS made a determination that the actions, as proposed, are not likely to jeopardize the continued existence of bull trout or Middle Columbia River steelhead or have adverse modifications to designated critical habitat or essential fish habitat. The Biological Assessment and Biological Opinion are available on the Prineville BLM District's planning web page at: <http://www.blm.gov/or/districts/prineville/plans/johndayrmp/jdbsupportdocs.php>.

Environmental Protection Agency

Based on their review of the FEIS and as a follow up to their comments on the DEIS, the Environmental Protection Agency submitted a comment letter on May 21, 2012. Comments provided were supportive of the Proposed Action and no inconsistencies or concerns were raised.

Consistency Review

The John Day Basin Resource Management Plan is consistent with plans and policies of the Department of the Interior and Bureau of Land Management, other federal agencies, state governments, and local governments to the extent that the guidance and local plans are also consistent with the purposes, policies, and programs of federal law and regulation applicable to public lands [43 CFR 1610.3-2(a)].

On April 20, 2012, the BLM provided to the Governor of Oregon an analysis of the PRMP for consistency with applicable state plans and initiated the 60-day Governor's consistency review. The purpose of the Governor's consistency review is to ensure consistency of the PRMP with officially approved or adopted resource-related plans, and the policies and programs contained therein, of other federal agencies, State and local governments, and Indian Tribes, so long as the guidance and resource management plans are also consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands [43 CFR 1610.3-2(a)].

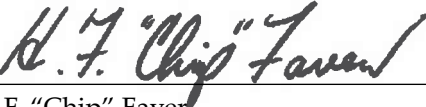
No inconsistencies or concerns were identified by the Governor's office. Therefore, no changes to the plan are warranted based on the Governor's consistency review.

RMP Implementation

Implementation of the John Day Basin Resource Management Plan will begin upon publication of the Notice of Availability of this Record of Decision in the Federal Register.

Managers' Recommendations

We have considered how the alternatives analyzed in the FEIS meet the FLPMA multiple use mandate and the purpose and need. We have also considered the public input and environmental impacts associated with the alternatives. Based on these considerations, we recommend approval of the John Day Basin Resource Management Plan for the Central Oregon Resource Area of the BLM Prineville District and portions of the Baker Resource Area administered by the BLM Prineville District.



H.F. "Chip" Faver
Central Oregon Field Manager
Bureau of Land Management

April 2015

Date




Carol Benkosky
Prineville District Manager
Bureau of Land Management

April 2015

Date

State Director's Approval

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



Jerome E. Perez
State Director
Oregon/Washington
Bureau of Land Management

April 2015

Date

John Day Basin Resource Management Plan



Introduction

This document describes the approved John Day Basin Resource Management Plan (RMP) of the Bureau of Land Management Prineville District.

The RMP provides management direction consisting of land use allocations, management objectives, management actions, and guidelines.

- **Land Use Allocations** - Areas where specific activities are allowed, restricted, or excluded in all or part of the plan area.
- **Objectives** -Desired outcomes and management requirements for key resources or resource uses.
- **Management Actions** -Required land use plan decisions that aim to achieve the objectives of a particular resource or resource use. These include actions to maintain, restore, or improve land health. These actions include proactive measures (e.g., measures to enhance watershed function and condition), as well as measures or criteria to guide day-to-day activities occurring on public lands. Actions also establish administrative designations such as Areas of Critical Environmental Concern (ACECs), recommend proposed withdrawals, establish land tenure zones, and determine suitability for congressional designations (such as Wild and Scenic Rivers). Actions include expected future activities for allowable uses such as mineral leasing, recreation, timber harvest, and livestock grazing.
- **Guidelines** - Management practices or rules that may be used to achieve objectives. Guidelines were identified for each resource objective through the planning process. The decision-maker can deviate from following guidelines correlated to the relevant RMP objectives for the project. Rationale for such a decision should be documented as part of the project record.

Plan Area

The plan area analyzed in the Final Environmental Impact Statement for the John Day Basin Resource Management Plan includes 456,600 acres of BLM public land, mostly within the John Day River Basin and under the administrative jurisdiction of the Prineville BLM District (see Map 1). Approximately 442,000 acres are within the Central Oregon Resource Area of the Prineville BLM District, and the other 14,600 acres are within the Baker Resource Area of the Vale BLM District. These lands are dispersed throughout eight counties: Grant, Wheeler, Gilliam, Wasco, Sherman, Umatilla, Jefferson, and Morrow.

Land use allocations that rely on a map to identify the spatial extent are noted within the applicable resource sections. If a section does not refer to a map the criteria or description of management actions is specific to the areas described in the text. If the allocation area is not specified on a map or within the text the management direction applies to all public lands managed by the BLM in the plan area. The objectives, actions, and guidelines are presented by individual resource program in the following sections. Management actions will be used where and when necessary and practical to achieve management objectives. However, the BLM may decide not to apply a management action when:

- Site-specific circumstances make application of the management action unnecessary to achieve resource management plan objectives.
- Site-specific circumstances make application of the management action impractical.
- Application of the management action is inconsistent with other RMP decisions.

Best Management Practices (BMPs)(see Appendix A) are a suite of techniques that guide site-specific management actions to aid in achieving desired outcomes. The BLM is required to consider appropriate mitigation measures that avoid, minimize, rectify, reduce or compensate for impacts. As such, it is mandatory that the BLM integrates applicable BMPs identified in Appendix A into the site-specific project design.

During project design, an interdisciplinary (ID) team of resource specialists relevant to the issues and resource concerns will recommend which BMPs are applicable. To assist in this determination, BMPs in Appendix A are correlated to pertinent RMP objectives. To determine if a BMP is applicable, specialists will consider baseline

environmental conditions; type of activity; proximity to water; disturbance level; direct, indirect and cumulative effects; timing; relevant new technology; monitoring data; and published studies or other sources of information. The interdisciplinary team will provide rationale for the selection of BMPs determined to be applicable.

Although Appendix A does not provide an exhaustive list of BMPs, the included BMPs are believed to cover most situations associated with projects in the plan area. The BMPs can be applied and monitored using adaptive management techniques (see Appendix B - Monitoring). The BMPs in Appendix A can be modified or updated and new BMPs can be added through plan maintenance and will not require a plan amendment. Changes to the BMPs in Appendix A will be based on a review of the same criteria specified above for BMP applicability and based on a reasonable assertion that the change will allow site-specific projects to better meet resource objectives.

Management objectives, actions, guidelines, and BMPs set the stage for site-specific resource use levels. Site-specific use levels are normally identified during implementation-level planning or the permit authorization process.

If any discrepancies are encountered between the text and maps in this RMP, the text should be considered accurate.

Table 1. Summary of Decisions

Land Allocation		Stratification	Unit	Decision
Vegetation		Forest Product Availability	Acres	74,726
		Juniper Product Availability	Acres	195,208
		Agriculture (Lease or Wildlife Food and Cover)	Acres	Up to 400
Fire Appropriate Response (AR)		Wildland Urban Interface	Acres	85,391
		Suppression Zone	Acres	22,304
		AR with fire managed to achieve multiple objectives	Acres	434,306
Water Rights Cubic Feet Per Second (cfs)		Irrigation and Wildlife	cfs	0 - 10
		Instream Leases	cfs	12 - 17
		Mining	cfs	0
		Agricultural Land Disposed	cfs	3
Agricultural Land Management	Plan Area	Permanent Conversion	Acres	100+
		Agricultural Use or Wildlife Food and Cover	Acres	0-400
	All Wild and Scenic River Segments	Agricultural Use (after 2012)	Acres	0
		Wildlife Food and Cover	Acres	0-100
		Permanent Conversion	Acres	300+
Riparian Management Areas		Aquatic Conservation Strategy	Acres	139,673
Wildlife		Seasonal Closure	Acres	332,559
Lands Managed to Protect Wilderness Characteristics		Management Designated	Acres	19,442
Visual Quality Visual Resource Management (VRM)		VRM Class I	Acres	95,893
		VRM Class II	Acres	160,199
		VRM Class III	Acres	150,994
		VRM Class IV	Acres	49,285

Land Allocation	Stratification	Unit	Decision
Wild & Scenic River Miles are across all ownerships.	Designated	Miles	Recreation: 211 Scenic: 38 Wild: 32
	Protect and recommend as Suitable	Miles	Scenic: 37
Areas of Critical Environmental Concern (ACECs)	Horn Butte	Acres	7,152
	Armstrong Canyon	Acres	3,885
	Ferry Canyon	Acres	2,364
	John Day Paleontology	Acres	38,168
	North Fork John Day River	Acres	16,837
	Black Canyon RNA	Acres	6,639
	Contingent on WSA release by Congress	Acres	40,295
Recreation	Special Recreation Management Areas	Acres	294,580
	Extensive Recreation Management Areas	Acres	162,252
	Primitive Settings	Acres	104,954
	Back Country Setting	Acres	29,500
	Middle Country Setting	Acres	155,011
	Front Country Setting	Acres	1,949
	Rural Setting	Acres	2,617
Off Highway Vehicle (OHV)	Open	Acres	0
	Limited	Acres	317,639
	Closed	Acres	138,732
Transportation TMP - Travel Management Plan <i>Approximate values</i>	Routes Open Year Round in the Interim TMP	Miles	195
	Routes Open 4/16-11/30 in the Interim TMP	Miles	138
	Routes Closed in the Interim TMP	Miles	409
	Back Country Byway	Miles	42
Road Density Standard <i>Allowable Limit</i>	0 mi./sq. mi.	Acres	139,063
	1.1 mi./sq. mi. or less	Acres	5,586
	1.5 mi./sq. mi. or less	Acres	7,628
	2 mi./sq. mi. or less	Acres	300,074
	Not Limited	Acres	3,971
Salable Minerals	Available	Acres	21,404
	Avoidance	Acres	31,130
	Avoidance with no surface occupancy (NSO)	Acres	20,399
	Closed	Acres	85,604
Locatable Minerals	Available	Acres	21,404
	Avoidance	Acres	82,230
	Closed	Acres	354,903
Leasable (Oil and Gas)	Available	Acres	72,234
	Avoidance	Acres	91,720
	Avoidance with NSO	Acres	169,775
	Closed	Acres	91,547

Land Allocation	Stratification	Unit	Decision
BLM Salable and Locatable Minerals Rights (Non-BLM Surface Owner)	Private Surface	Acres	99,891
	State Surface	Acres	6,336
	Other Federal Agencies' Surface	Acres	1,653,564
Leasable (Oil and Gas) (Non-BLM Surface Owner)	Private Surface	Acres	443,990
	State Surface	Acres	10,107
	Other Federal Agencies' Surface	Acres	1,798,554
Lands	Z1 - Retain	Acres	354,887
	Z2 - Retain or Exchange	Acres	33,253
	Z3 - Dispose	Acres	68,192
	Acquisition via willing exchange or purchase	Acres	888,405
	Eligible under Federal Lands Transaction Facilitation Act (or similar legislation)	Acres	18,429
Rights-of-Way, Communication Sites, and Renewable Energy Development	Available	Acres	73,186
	Avoidance	Acres	108,868
	Exclusion	Acres	62,243
	Withdrawn	Acres	212,532

Management Direction

The management direction listed in this section by individual resource programs includes objectives, actions, and in some cases, guidelines.

Soils

Objective S1

Maintain soil productivity.

Management Actions

1. For construction of all management facilities and for vegetation manipulations, surface disturbance will be held to the minimum necessary to implement the project. Disturbed soil will be rehabilitated to blend with surrounding soil surfaces and will be revegetated as needed to replace ground cover and to reduce soil loss from wind and water erosion.
2. Take corrective actions, where practicable, to resolve erosive conditions.

Guidelines

1. Do not use clear-cutting where soil slope or other watershed conditions are fragile and subject to damage (sensitive soils - see glossary).
2. Surface disturbance at all project sites will be held to a minimum.
3. Vegetation management systems that have the least disturbance of the soil surface are preferred. Minimize compaction within the disturbed area.
4. Tractor skidding will be avoided on slopes greater than 35 percent.
5. Landings will be the minimum size commensurate with safety and equipment requirements and be located on stable areas. Avoid locating landings on steep hill areas or areas that require excessive fill or excavation.

Objective S2

- Maintain and promote long-term, sustainable soil health and proper soil-functioning condition (see glossary). Restore function of non-functioning soils when ecologically possible.
- Achieve proper soil-functioning condition, or an upward trend in condition, across BLM lands in the plan area.
- Maintain top soil by maintaining ground cover (see glossary) to prevent soil erosion, improve water infiltration for water storage, and prevent physical crust formation in areas with annual precipitation less than 12 inches.
- Maintain top soil organic matter content to provide soil structure, aggregate stability, water infiltration, nutrient-holding capacity, and biological function.
- Maintain soil with macro and micro pore space to provide sufficient air and water availability for root development and soil organism function.

Management Actions

1. Prescribe actions and restoration work in upland areas to ensure a less than 10 percent probability of erosion exceeding the Natural Resource Conservation Service (NRCS) soil loss tolerance T-Factor (see glossary) on non-sensitive soils.
2. Implement, maintain, and restore proper drainage and erosion control on all existing facilities, including but not limited to roads and trails.

3. Require bonded reclamation plans for geothermal, locatable, leasable, and salable minerals sites.
4. When developing or approving new facilities, trade expansion of soil disturbance area with proportional restoration, rehabilitation, decommissioning, or obliteration of pre-existing disturbed areas. Facilities include roads, trails, quarries, rights-of-way, recreation sites, locatable/leasable/salable mineral development, and other ground-disturbing construction. Restoration work may include, but is not limited to, restoring vegetation and soil function to all or a portion of a mineral material source pit, installing erosion control measures on nearby roads showing signs of active erosion, applying treatments to remove weeds and restore native bunchgrass communities, and similar work. Proportional trades may be required up to 10 miles away from the site of the new expansion. Planning and implementation will occur within six months of development or approval of new facilities. Prioritize rehabilitation on those sites with excess soil erosion (see glossary) first when mitigating/exchanging for disturbance from new facilities.
5. Restoration, rehabilitation, decommissioning, and obliteration efforts will seek to restore soil function, reduce erosion, and create viable protective vegetative cover within two years of the disturbance.

Guidelines

1. Limit detrimental soil impacts (see glossary), including loss of organic matter content, increased compaction, soil displacement, and erosion to less than 15 percent of the project area (6,534 square feet per acre) on non-sensitive soils. This 15 percent disturbance includes existing and new facilities and infrastructure. Projects include, but are not limited to ground-based timber harvest activities, juniper thinning, authorized OHV use off designated trails, and other activities. Re-entry of previously compacted stands will include mitigation (ripping, tilling, etc.) to reduce compaction to acceptable levels.
2. Recover and/or restore all management-related detrimental impacts on sensitive soils.
3. Retain large wood (greater than 3 inches in diameter) in contact with the ground for soil health purposes. (See Vegetation section and Table 2 for large down wood retention requirements.)
4. Develop grazing systems to favor and move toward a healthy native grass community with healthy biological soil activity.
5. Restore native ecosystem function by applying appropriate erosion control measures, such as seeding with native perennial grasses, subsoiling, and lopping and scattering cut vegetation to add extra cover for bare, erosion-prone soils.
6. Promote use of existing facilities before allowing new facilities.
7. Take corrective action to fix facility drainage and erosion problems where erosion levels are exceeding acceptable soil loss (T-factor values from the NRCS) or where concentrated erosion is causing detrimental impacts to the facility.
8. On closed portions of the transportation network, ensure an effective closure, restore vegetation (active or passive), and control erosion. Practices may include obliteration, decommissioning, and other tools.
9. Apply available scientific models to identify areas with high erosion probability (see glossary – erosion, excess).
10. On open routes of the transportation network with a high probability of excess erosion, require a change in maintenance intensity to a level where excess erosion is controlled and verified.
11. After erosion is controlled, revert to a maintenance intensity required to protect adjacent BLM lands, designated use levels, and other resource values.
12. Conduct preventative maintenance as required to keep erosion control features functioning.
13. Use Best Management Practices in Appendix A as additional guidance.

Air Quality

Objective A1

Meet the national ambient air quality standards as described in the Clean Air Act.

Management Actions

1. Consult, coordinate and comply with applicable tribal, federal, state and local air quality regulations, as required by the Clean Air Act; Executive Order 12088; and tribal, federal or state implementation plans.

Guidelines

1. Follow the direction as listed in the Oregon State Smoke Management Plan during implementation of all projects on BLM forested lands.

Vegetation

Objective V1

Maintain and restore healthy rangeland, woodland, and forest communities with diverse species compositions appropriate for the potential of the sites based on disturbance patterns and frequencies by managing undesirable vegetation.

Management Actions

1. Use an Integrated Weed Management (IWM) approach when considering control of undesirable plants. The IWM approach includes all available treatment methods, with an emphasis on preventing the decline of land health; long-term land health goals; and immediate and long-term costs. For example, the highest priority is preventing weed introduction or spread into areas that are not already infested, followed by early detection and rapid response (EDRR) to new infestations or invaders, then control of established infestations. IWM also considers the resources that are at risk of being degraded by weed presence or spread of infestations. Use current site-specific weed management environmental assessments tiering to current EISs to implement treatments. Adopt, through plan maintenance, any Record of Decision (ROD) or other documents that provide updated direction for the weed management program.
2. For projects proposed in Wilderness or Wilderness Study Areas (WSA), weed management actions are subject to site-specific analysis to ensure they do not impair wilderness values or preclude WSAs or portions of WSAs from Wilderness designation as directed in BLM Manual 6330 - Management of Wilderness Study Areas (2012).
3. Management practices may include preventative, manual, mechanical, prescribed fire, traditional biological controls, targeted grazing, and chemical (herbicide) actions.
4. Implement maintenance and restoration treatments including but not limited to: seeding or shrub/juniper reduction utilizing mechanical methods or prescribed fire.

Guidelines

1. Additional guidance for management of noxious weeds and non-native invasive plants is displayed in BLM Manuals 9011, 9014, and 9015; the Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States Programmatic EIS and ROD (USDI BLM 2007a); the Vegetation Treatments on BLM Lands in 17 Western States Environmental Assessment Report (2007b); and the Vegetation Treatments Using Herbicides on BLM Lands in Oregon FEIS and ROD (USDI BLM 2010).

Objective V2

Conserve federally listed species and the ecosystems on which they depend (BLM Manual 6840, p.0.1). Ensure that actions requiring authorization or approval by the BLM are consistent with the conservation needs of special status species and do not contribute to the need to list any special status species under provisions of the Endangered Species Act (ESA), or designate additional special status species under provisions of BLM Manual 6840.

Management Actions

1. Special status species will continue to be identified according to BLM Manual 6840, BLM OR/WA 6840 policy, criteria in Instruction Memorandum #OR-2007-072 and subsequent updates.
2. Design and implement relevant management activities to be consistent with BLM adopted recovery plans, conservation assessments and strategies, and other appropriate documents.
3. Evaluate all projects for their effects to special status species and their habitats when authorizing activities. Conduct an assessment of the botanical resources. The assessment will be commensurate to the level of anticipated impacts and include consideration of:
 - a. Species and/or habitat presence.
 - i. Review GEOBOB database, and/or conduct field surveys during appropriate seasons. In situations where data are insufficient to make an assessment of proposed actions, surveys of potential habitats will be completed prior to action being taken, or presence will be assumed.
 - b. Determination of project effects including discussion of consistency with applicable recovery plans, conservation assessments and strategies, and other appropriate documents.
 - c. Necessary mitigation measures and habitat enhancement opportunities.
4. As appropriate, adjust clearances and mitigation requirements on all ongoing or planned projects when new information becomes available for populations, habitats, or special status listing.
 - a. Include the following or similar contract specification: "The Government may direct the Contractor to discontinue all operations in the event that listed or proposed threatened or endangered plants or animals protected under the Endangered Species Act of 1973, as amended, or Federal candidate, sensitive or state listed species, identified under BLM Manual 6840, are discovered to be present in or adjacent to the project area. Actions taken under this paragraph will be subject to the Suspension of Work clause in Section I, FAR 52.242-14."
5. Formal and informal consultation with the U.S. Fish and Wildlife Service, as provided by regulation, will be initiated on all proposed actions that may affect any federally listed species or species proposed as threatened or endangered.

Guidelines

1. Take action to determine the distribution, abundance, and management needs of special status species occurring on BLM administered lands.
2. Document observations of special status species.
3. Conduct periodic surveys of potential habitats and monitor active and historic sites to determine occupancy and management consistency.
4. Balance the need for restorative actions to address long-term threats to special status species with the short-term need to protect special status species and their habitats.
5. Include individual species requirements in management prescriptions.

Objective V3

Return community composition to within the Acceptable Range of Variability (ARV) for all Biophysical Settings (BpS) to the extent possible on BLM lands (see Appendix C). Maintain and restore healthy rangeland, forest, and woodland habitats with diverse species compositions appropriate for the site's potential based on disturbance patterns and frequencies, including the maintenance of native bunchgrass and biological soil crust integrity.

- Under normal burn frequencies, juniper occupation will be cyclical but will not persist across most of the plan area. The Juniper Steppe Woodland BpS identifies those sites where fire return intervals are much lower due to topography or soils and where juniper can occupy the site for relatively extended periods. These are the areas most likely to contain old-growth juniper (see glossary for old-growth definitions). Additionally, potential old-growth juniper areas are identified using soils, local knowledge, and existing vegetation mapping. Late-seral conditions in the Mountain Big Sagebrush with Conifers, Wyoming Big Sagebrush Semi Desert with Trees, and Stiff and Low Sagebrush with Trees BpSs have the potential for old-growth juniper development and management.

Management Actions

1. Maintain or reduce juniper occupation to within the ARV for the following BpSs: Mountain Big Sagebrush with Conifers, Wyoming Big Sagebrush Semi-Desert with Trees, and Stiff and Low Sagebrush with Trees. Exceptions occur in some late-seral conditions within these BpSs where they have the potential for old-growth juniper development and management.
2. To capture the natural variability of the landscape, the smallest analysis unit for ARV analysis will normally be 20,000 acres. It is recommended that analyses be completed at the subcoregion level (see subcoregion descriptions and Table 3-1 in Chapter 3 of the John Day Basin Proposed RMP/FEIS).
3. Design restoration projects to create vegetation patches with the size, shape, structural elements, extent, and spatial juxtaposition expected under endemic disturbance processes (e.g., wildland fire) and to maintain or restore connectivity of priority wildlife habitats.
4. Manage vegetation and fuel loading to trend toward Fire Regime Condition Class 1 (FRCC 1; see glossary) to facilitate succession and future disturbance to sustain conditions within site capability. Example actions are detailed in the Fuels section.
5. Treat juniper using full and partial cutting, prescribed fire, naturally ignited fire, chaining, mowing, and/or chemical treatment.
6. Where necessary, reduce understory “young” juniper within old-growth juniper stands primarily through mechanical treatments that will not jeopardize old-growth characteristics.

Guidelines

1. Assess effects of vegetation-altering projects every five years across the plan area to ensure the affected BpSs are moving to or remaining within ARV.
2. Existing old-growth juniper trees (see glossary) and stands will be retained in all mechanical treatments, and efforts will be made to limit loss of old-growth trees when prescribed fire is used.
3. If new techniques, classification refinements, or site-specific data are obtained, adjustments in the BpS (see glossary) map or classification will be made. This will not change the objective to manage for a variety of stand conditions appropriate to the landscape potential, but will refine the data to more accurately reflect what is occurring on the ground.
4. Restoration activities may include: seeding, salvage, hydrologic control activities and devices, treatment of noxious weeds and invasive non-native plants, area closures, motorized use restrictions, repair or replacement of minor facilities, fence construction, mulching, hazard tree removal, tree and shrub planting, snag creation (chemical, biological, or mechanical), down wood placement, commercial harvest, forest health treatments, fuels treatments, and insect and rodent control.
5. Examples of the types of projects expected under the objectives, actions and guidelines for general vegetation management include:
 - a. Removing “young” juniper in areas where it exceeds ARV and is fragmenting shrub or grassland patch sizes.
 - b. Seeding annual grass or weed-dominated sites that are fragmenting shrub or grassland patch sizes.
 - c. Reducing the amount of mesic (moist) forest species on ponderosa pine and dry-mixed conifer BpS by thinning targeted species.
 - d. Removing coniferous species that are competing and encroaching into aspen stands, followed by prescribed fire where appropriate.

6. Vegetation treatments, including the use of naturally ignited fires in the Appropriate Response zone, will be based on one or more of the following needs:
 - a. Removal of public health and safety hazards or vegetation that threatens improvements.
 - b. Species composition, structure or disturbance adjustments to meet ARV or Fire Regime Condition Class objectives.
 - c. Desired stocking densities (given site capability and ARV objectives).
 - d. Desired basal area, or crown bulk density.
 - e. Insect and/or pathogen disturbance.
 - f. Excessive ladder fuels (canopy base height).
 - g. Desired fuel loads.
 - h. Allotments or portions of allotments that have failed the Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington (hereafter "Standards & Guidelines"; USDI BLM 1997), and the failure is attributed in part or whole to vegetative conditions.
 - i. A Rangeland Condition rating of "Fair" or below.
 - j. Reduction of invasive species or noxious weeds.
 - k. Reestablishment of native and desirable species.
 - l. Salvage of dead or damaged trees.
7. Prioritizing vegetation treatments
 - a. Treatment priorities will be based on an assessment of whether a single treatment (maintenance) can maintain progress toward ARV or whether multiple, sequenced treatments (restoration) are necessary. Maintenance treatments will generally receive higher priority than restoration treatments due to lower amounts of inputs and higher potential for success.
 - b. Treatment priorities will also be based on an integrated analysis of the potential multi-resource benefits of treatments in a particular area.
 - c. Treatment areas and priorities were developed based on an analysis of current vegetation conditions and their spatial relationship to other priority resource needs. These priorities will provide guidance for selecting treatment areas; however, annual funding and other priorities will be considered when making the final determination of priority treatment areas. Areas with higher scores based on the number of factors benefited will be addressed first unless funding or specific objectives are being targeted elsewhere. Prioritization is based on the following criteria:
 - i. Wildland Urban Interface (will take precedence in most situations).
 - ii. Community Watersheds.
 - iii. Resource values (special wildlife habitats and presence of forest vegetation).
 - iv. Current field data indicating vegetation treatments are needed for a variety of reasons.
8. Additional factors to consider when determining project priorities include:
 - a. Adjacent landowner interest in cooperative management or other partnerships.
 - b. Areas where biomass or other products can be realized.
 - c. Projects with targeted funding or resource objectives.
 - d. BpS communities with the furthest departure from ARV objectives.
9. Treatments that restore stand conditions consistent with objectives of allowing wildland fire to achieve resource objectives (see glossary and Fire section).
10. Criteria for using mechanical versus prescribed fire treatments:
 - a. Wildland fire is the preferred treatment method when site conditions allow.

- b. To meet resource objectives, it may be necessary to limit prescribed fire or the use of heavy equipment. The following conditions require detailed project design criteria to ensure treatment methods address site-specific resource concerns or forest product availability:
- i. Phase III juniper woodlands (see glossary).
 - ii. Densities of deep-rooted grasses are less than 1 to 2 plants per 10 square feet, annual grass compositions are greater than 25 percent, or aridic soils have less than 12 inches annual precipitation.
 - iii. Surface fuel loads are sufficient to generate an active crown fire.
 - iv. Sensitive resources are adjacent.
 - v. Potential exists for the removal of wood products that would be degraded or lost if prescribed fire were used.
 - vi. Potential for invasive species or noxious weed expansion or dominance.
11. Design vegetative treatments with irregular edges.
 12. Leave unburned patches within wildland fires when they do not compromise the safety of firefighters and the public.
 13. Design vegetation treatments to increase existing patches that are below those characteristic of patches produced by average fire size described in the BpS description (on file with the Prineville District BLM).
 14. Create snags and down woody material to meet snag and down wood retention requirements for soils and wildlife within treatment areas (see Table 2 below, Appendix D - Snags and Salvage, and the Soils and Wildlife sections).
 15. Manage for multiple canopies when appropriate for the BpS and seral stage.
 16. Manage canopy closure appropriate for the BpS, seral stage, and wildlife cover requirements.
 17. Where compatible with restoration and other resource objectives, manage for the long-term, sustained production of forest products through a program of periodic pre-commercial and commercial thinning.
 18. Apply the following criteria when determining the need for seeding (also see Appendix A - Best Management Practices):
 - a. Increase current densities of < 1 perennial bunchgrass per 10 square feet.
 - b. Stabilize the site and minimize water or wind erosion.
 - c. Reduce the spread of non-native invasive plants.
 - d. Prevent critical habitat for federal listed threatened or endangered species from being more impaired than if nothing was done.
 - e. Increase the diversity of wildlife habitats.
 - f. Provide a green strip (see glossary) in Wildland Urban Interface areas.

Table 2. Down Wood Densities for Managed Stands (total tons/acre includes large pieces)¹.

Biophysical Setting	Tons/acre of Material <3 inches dbh	Total tons/acre of Material >3 inches dbh	Pieces of Large Down Wood/acre ²
Juniper steppe woodland	N/A	1- 4	4.5
Ponderosa pine, dry and mesic	3	4-10	2.5
Dry montane mixed conifer	7 to 10	7-12	6.4
Mesic montane mixed conifer	7 to 10	7-14	23.4
Lodgepole pine	7 to 10	8-24	2.1
Aspen - mixed conifer	7 to 10	7-14	6.4

¹Large down wood: >19.7 inches diameter at the large end, decay classes 1-4, and > 6.6 feet long.

² Site-specific fuel loads will be developed for individual stands.

19. Use native seed, except as provided in these guidelines and BMPs in Appendix A. In Wilderness and WSAs, the exceptions provided in guidelines and BMPs are only applicable when consistent with program direction for these allocations.
20. Develop seed mixes appropriate to the land use and location. For example, a burned area within a Wildland Urban Interface may warrant a mix that is predominantly non-native due to its fire resistance and low cost.
21. Seed species selected for a mix will be compatible (i.e., have similar seed sizes, planting depth, and application method and timing).
22. Select species that will not likely out-compete one another.
23. In general, the use of a 'nurse crop' such as annual forbs or grasses is not recommended. If seeding is necessary, the use of perennial or short-lived perennial species is preferred.
24. When consistent with restoration objectives, incorporate pollinator habitat needs in seed mixes by including quality nectar plants and larval host plants.
25. Rehabilitation will be considered whenever there is damage caused by natural or human-caused events such as erosion, weed infestation, wildland fire, trespass, mining, road construction, and other ground-disturbing activities in order to facilitate, maintain or move conditions toward site capability.
26. Rehabilitation after disturbance events (when effects are outside the ARV) will be implemented before additional damage occurs to the disturbed area, down slope areas, or before undesirable vegetation becomes established.
27. After a disturbance event that results in undesirable soil or plant conditions, review current uses (including recreation, rights-of-way, and permitted uses) to determine whether the site has recovered sufficiently to support those uses without further degradation.
28. Assess the need for treatments on surrounding private lands as they relate to the success of treatments on public lands. If treatment is deemed desirable on private lands, the appropriate agreements and authorities will be pursued and used.
29. Following vegetation treatments or disturbance, determine limitations on livestock grazing based on clearly defined and measurable recovery objectives.
30. Unless recommended otherwise by an interdisciplinary team, livestock are to be excluded from vegetation treatment and disturbed areas for the entire first year after the disturbance, through the second growing season, or until monitoring results show that recovery objectives have been met.
31. Recovery objectives may include those related to: biological soil crusts, species composition, seed production, soil stability, ground cover, and shrub establishment.
32. When implementing vegetation treatments, retain diverse age and size classes appropriate for the BpS.

Objective V4

Provide products when compatible with plan resource objectives and that result from managing for healthy forest systems. Provide sufficient forage for cattle and wildlife.

Management Actions

1. Allow the use of forest products on all forest lands (including juniper) in the plan area, except lands designated as Wilderness or WSA and lands managed to protect wilderness characteristics.
2. Allow the use of forest products for incidental use (i.e., campfire wood) if the material is dead and on the ground.
3. Reduce or maintain densities of forest species, juniper, and shrubs to meet BpS characteristics.
4. Restore native bunchgrass communities on areas dominated by noxious weeds or non-native annual grasses through treatment and reseedling.
5. Use wildland fire to increase palatability and production of herbaceous forage.

6. Allow commercial and non-commercial collection of forest and juniper products as identified to meet resource objectives and within sustainable limits. These products will be harvested by permit only within specifically designated areas and management will be guided by site-specific NEPA guidance and permit collection regulations. Products include: commercial timber, salvage timber, post and poles, firewood, juniper boughs, bio-fuels, and cones.
7. Lands available for forest product production will not provide an assigned allowable sale quantity but rather a Probable Sale Quantity (PSQ) of commercial or noncommercial timber volume that will fluctuate annually depending on the amount of land to be treated that contains forest products.
 - a. Probable Sale Quantity can be estimated, but depends on the size of material and number of acres treated. Therefore, the PSQ will vary from year-to-year, but a yearly average could be sustained over the long term. Commercial products include sawlogs, poles, posts, firewood, and other wood fiber biomass.
8. It is anticipated that an average of approximately 1,000 acres will be treated annually. This will generate an average PSQ of approximately 2.54 mmbf (million board feet).
9. Create a 5- to 10-year forest health treatment strategy.
 - a. Include specific types and amounts of products that will be made available from the forest health strategy.
10. Create a map of forest health treatment stands that have sufficient access and are close enough to a town to provide biomass or firewood opportunities.

Guidelines

1. If resource objectives can be met and there is sufficient demand for wood products, then mechanical restoration treatments will take priority over prescribed fire treatments.
2. Salvage of killed and damaged trees from wildland fire, windthrow, insects, disease, and other causes will be consistent with snag and down wood retention guidelines and other resource objectives.
3. When salvage is appropriate, high priority will be given to rapid action to minimize loss of timber value.
4. Restrict cone collection within regeneration units or areas where natural regeneration is desired until satisfactory seedling establishment.
5. Firewood and post and pole collection will be limited to material on the ground unless an area is designated as open to cutting of standing trees.
6. Manage stocking rates and fuel loadings to allow stands to be resilient to endemic levels of fire, insects, and disease by using the appropriate response tool: mechanical thinning or wildland fire.
7. In areas outside of ARV, objectives, and vegetation Best Management Practices for seedling, sapling and pole densities (especially for shade-tolerant species and juniper):
 - a. Use commercial or precommercial thinning to reduce competition stress to older or larger trees when there is economic demand.
 - b. Consider the use of prescribed fire to reduce stocking, seed reserves, and ladder fuels when economic demand and crown fire potential are low or as a follow-up treatment after mechanical thinning.
8. Forest treatments will generally favor leaving the larger trees in a given stand. However, treatments will be based on site-specific resource decisions and could remove trees of any diameter if necessary to attain forest health objectives and move a forest stand towards ARV. Large trees are described in each of the applicable BpS descriptions (on file with the Prineville District BLM). Examples where removal of large trees may be appropriate include:
 - a. Stocking densities are such that the stand is susceptible to bark beetle, mountain pine beetle, or root rot mortality.
 - b. Where dwarf mistletoe in overstory trees will inhibit development of the understory and risk stand loss (Beatty 1997).
 - c. Species composition adjustments are necessary to achieve ARV objectives.
 - d. An interdisciplinary team identifies a need to create spatial and structural diversity within the stand.

9. Harvest may be accomplished by a variety of manual and mechanized techniques including feller-bunchers, harvesters, skidders, portable chippers, chainsaws, pick-up trucks, and other wheeled or tracked equipment.

Fuels and Fire

The decision incorporates the Healthy Forests Restoration Act of 2003, A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: A 10-Year Comprehensive Strategy (USDA et al. 2001), and the National Fire Plan (USDA et al. 2000). These emphasize the need to reduce hazardous fuels that pose a risk to Communities at Risk from the undesired effects of wildland fire. The fire management guidance directs that fuel conditions adjacent to Communities at Risk be managed to allow for safe operations during fire suppression. These guidelines also provide that protecting human life (firefighter and public safety) is the highest priority during a wildland fire. Once firefighters have been assigned to a fire, their safety becomes the highest value to be protected. Property and natural and cultural resources are lower priorities.

Wildland fire management decisions are based on approved fire management and activity level plans, this RMP, and the best available science. The policy further emphasizes that for natural ignitions (i.e., lightning caused), a manager must have the ability to choose from the full spectrum of fire management actions - from prompt suppression to allowing fire to function in its natural ecological role.

Objective F1

Provide for the safety of firefighters and the public from the effects of wildland fire. Restore and maintain the integrity of ecosystems.

Management Actions

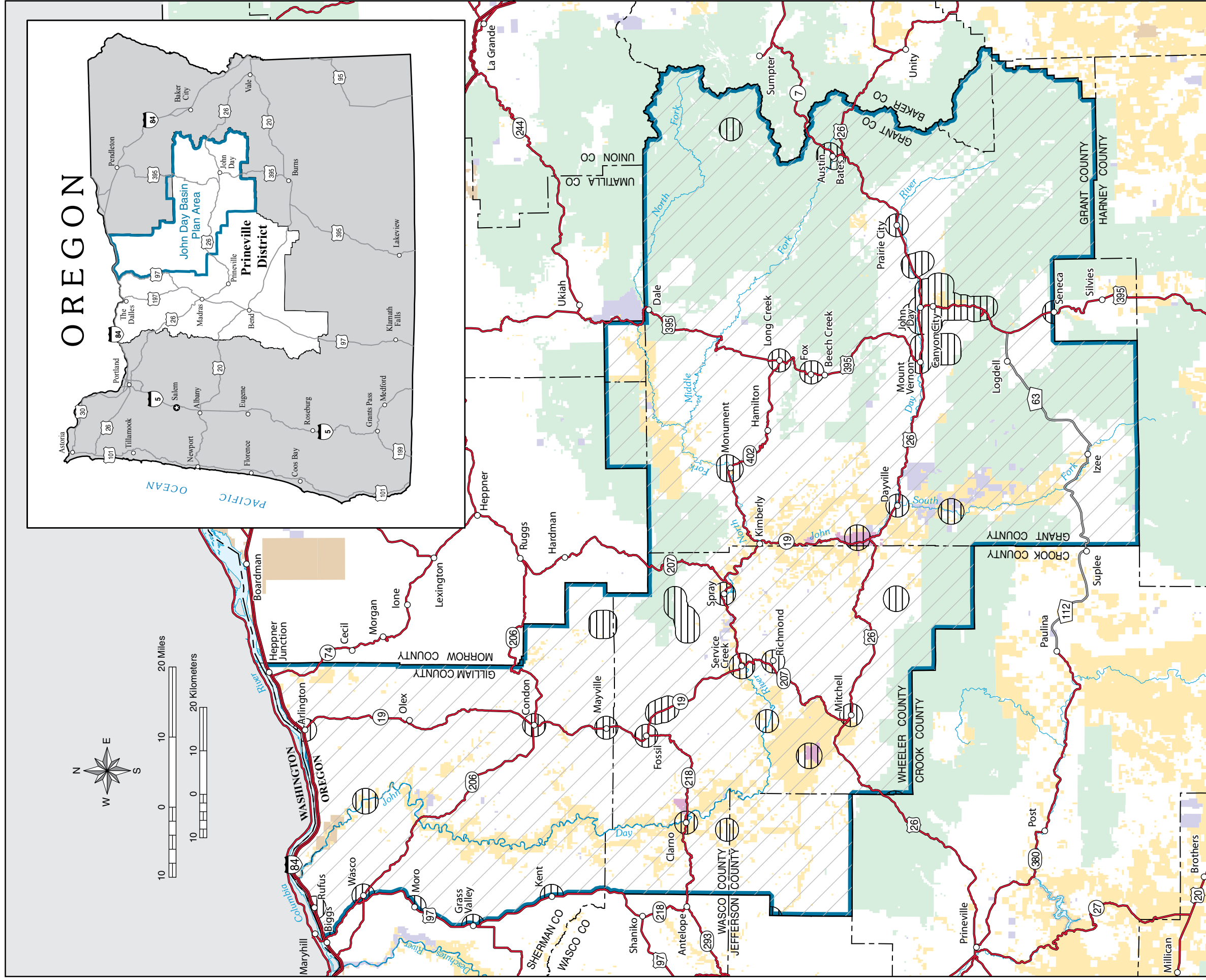
1. Accomplish prescribed burns in accordance with approved fire management plans (see glossary), prescribed fire plans (see glossary), and the State of Oregon smoke management plan (ODEQ 2006a; ODEQ 2006b).
2. Conduct fire suppression activities under the guidelines of the Interagency Standards for Fire and Fire Aviation Operations ("The Red Book"). These standards require safe fire suppression operations and provide the local line officer and incident commander with direction on current federal fire policy.

Objective F2

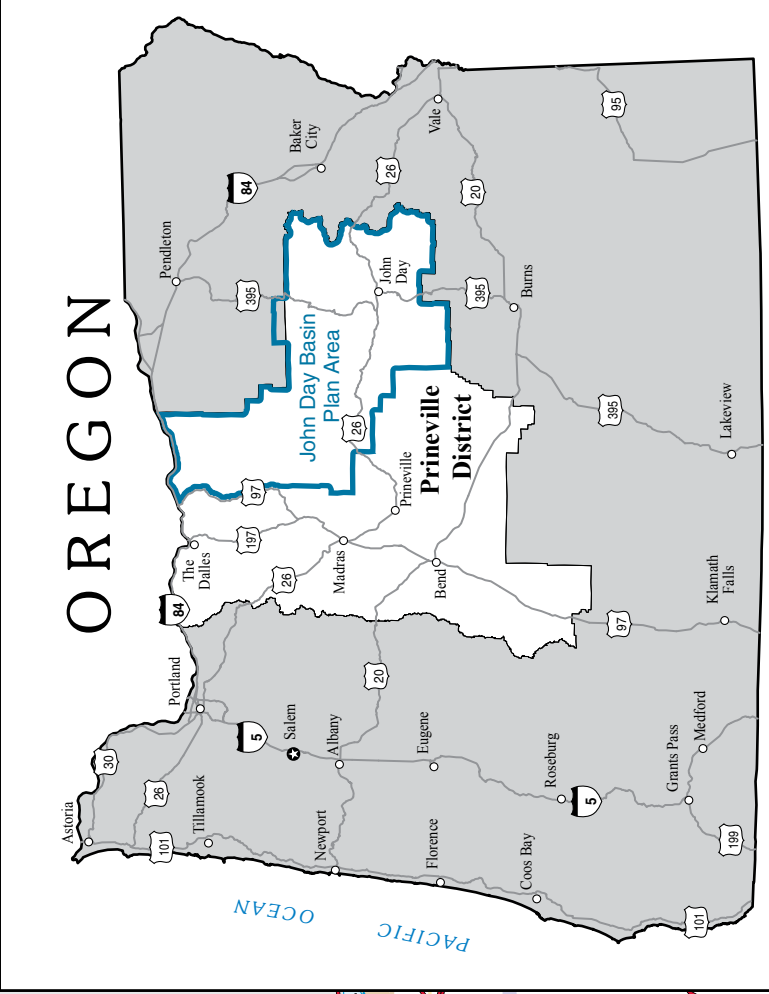
Wildland Urban Interfaces (WUI) that are surrounded by live and dead vegetation will be managed so that a wildland fire will burn with fire behavior conducive to safe and successful suppression efforts under hot, dry summer weather conditions. See glossary for a definition of the WUI and WUI Zones.

Management Actions

1. Reduce three-dimensional fuel profiles (continuous vertical and horizontal vegetation distribution) and reduce the risk of crown fire or uncontrollable surface fire. (See the Vegetation section for estimated amounts of vegetation treatments.)
2. Design fuels and vegetation treatments to provide for human safety during a wildfire while considering recreation opportunities, wildlife habitat and corridors, visual quality, air and water quality, and public access, including ingress and egress during emergencies.





OREGON




LEGEND


Fire Response Zones

-  Full Suppression
-  Appropriate Response Consistent with Responsible Agency Direction

Plan Area Boundary

-  Bureau of Land Management

Administered Land

-  Bureau of Land Management
-  Forest Service
-  John Day Fossil Beds National Monument
-  Other Federal
-  State
-  Private or Other

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management



PRINEVILLE DISTRICT John Day Basin Resource Management Plan Record of Decision

2015

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Map 2: Fire Response Zones

Guidelines

1. Meet hazardous fuels reduction objectives through single or multiple fuels treatments including thinning, mowing, pruning, piling, prescribed fire, grazing, or other activities.
2. For planning treatments, forested vegetation within the Suppression WUI Zone (see Map 2) will be subdivided into three bands with treatments designed to give desired fire behavior given 90th percentile (high) summer weather conditions (see glossary). The actual width of these three bands and treatment prescriptions will vary according to site-specific conditions such as vegetation (fuel) type, density, structure, proximity of homes to property boundaries, prevailing winds, topography, and other natural fuel breaks.
 - a. The first band (nearest to homes, private property, and along ingress and egress routes) will be managed for conditions that are not expected to support crown fire, and are expected to result in surface fires with flame lengths of less than 2 feet under 90th percentile weather conditions.
 - b. Treatments in the second band will be designed to reduce the probability of crown fire initiation and spread, and to keep surface fuel flame lengths below 3 to 4 feet under 90th percentile summer weather conditions.
 - c. Treatments in the third band (farthest away from homes, private property, and ingress and egress routes) will be designed to reduce the occurrence, size, and severity of crown fires by breaking up fuel continuities and limiting ladder fuels. Most wildfires will be limited to surface fires with less than 4-foot flame lengths under average weather conditions, with opportunities for limited passive crown fire (occasional ignition and torching of individual or small groups of overstory trees). Stand replacement fires will be a rare occurrence. Crown fire approaching this zone will fall from the tree canopy to the forest floor in this area due to lack of horizontal and vertical fuel continuity. Treatment objectives in the third band will place a higher emphasis on ecological needs as long as fuel continuities and ladder fuels are reduced on at least 50 percent of the band area.
 - d. Prescribed fire in forested habitats within suppression zones will be used only for burning piles or broadcast burning in smaller areas where smoke and risk to property can be managed at acceptable levels. Larger underburns will be considered in the third treatment band.
 - e. Based on expected forest vegetation re-growth rates, re-treatment is expected to occur approximately every 15 to 20 years for tree thinning and every 5 to 10 years for brush cutting/mowing within all three bands. Mechanical treatment will generally precede prescribed fire.
3. Within rangeland or woodland vegetation (including juniper woodlands) in the Suppression WUI Zone, vegetation will be managed differently than in forested lands; they will have only two treatment bands with different prescriptions. As in forested areas, the actual width and treatment prescriptions of the two treatment bands will vary according to site-specific conditions.
 - a. The first band (nearest to homes, private property, and along ingress and egress routes) may be up to 600 feet wide. Approximately 50 to 70 percent of the area within this band will be treated to reduce the potential for crown fires and keep surface fuel flame lengths within 3 to 4 feet under 90th percentile conditions, where direct initial attack can still be effective.
 - i. Brush treatments will be initiated when shrub canopy cover exceeds 50 percent or is greater than 2 feet in height.
 - ii. Thinning in this area will favor leaving older juniper trees (greater than 150 years old) while removing younger trees.
 - iii. All naturally occurring juniper snags will be left within this band. An exception to this is snags less than 6 inches diameter at breast-height (dbh) in fire-killed juniper stands. In these cases, dead trees will be reduced to a density of 5 to 7 trees per acre.
 - iv. Remove identified hazard trees that pose a threat to property, roads or other facilities.
 - b. The second band will extend from the outer edge of the first band to 1.5 miles. Treatments will be designed to reduce the occurrence, size, and intensity of wild fires by breaking up fuel continuities and limiting ladder fuels.

- i. Under 90th percentile summer weather conditions, fire behavior will be limited to surface fires with flame lengths of 3 to 4 feet.
 - ii. Crown fires will not be expected to occur under 90th percentile summer weather conditions. There may be an occasional ignition of individual or small groups of juniper trees under extremely windy conditions.
 - iii. Juniper trees less than 150 years old will be retained in small clumps where needed for hiding cover but not managed for retention elsewhere.
 - iv. All old-growth juniper will be retained, except those that provide a risk of fire spread to a structure or make control efforts unsafe.
 - v. Treatment objectives will place a higher emphasis on ecological objectives than fuels objectives as long as fuel continuity and ladder fuels are reduced to minimize hazardous fuels. Mosaic patterns of old-growth juniper, shrub, and grass types will be emphasized.
 - vi. Additional consideration of risks, technical difficulty, and potential consequences will be used when conducting prescribed fire.
- c. Based on expected rangeland and woodland re-growth rates, re-treatment is expected to occur approximately every 15 to 20 years.
4. Fuels treatments will have priority on BLM-administered lands adjacent to WUI communities that have the following characteristics:
- a. The community is physically close to BLM-administered lands, with structures or other improvements within one mile.
 - b. The community is actively involved in hazardous fuels reduction, matches federal efforts on private lands, coordinates fuels reduction or suppression capability improvements with protection agencies (e.g., Oregon Department of Forestry, city or rural fire districts), and takes steps to improve the resistance of their community to damage or destruction by wildfire. The community strives for a firewise designation or equivalent.
 - c. A Community Wildfire Protection Plan has been completed for the community.
 - d. Adjacent BLM-administered lands exhibit heavy fuel loading and high potential for crown fire or fast moving surface fire under average weather conditions, especially if those fuels are “upwind” given the dominant summer wind directions.
 - e. Adjacent BLM-administered lands provide opportunities to meet multiple objectives through fuel treatment activities, including improvement of wildlife habitat, enhancement of recreation or visual quality, restoration of ecosystem integrity, reduction of social conflicts, or outputs of marketable products or energy from the removal of hazardous fuels treatments.
5. Where WUI zones intersect other specially designated areas such as WSA, WSR corridors, ACECs, or Research Natural Areas (RNAs), fuels treatments will be designed in a manner that retains or enhances the overlapping special management objectives to the extent practical without compromising firefighter safety or improvements.

Objective F3

Within the Appropriate Response Zone (see glossary and Map 2), manage vegetation and live and dead fuel loads, distribution, and vertical continuity to trend toward Fire Regime Condition Class 1 (FRCC 1) and to be within the Acceptable Range of Variability for the BpS (see Vegetation section, Management Objective V3). Effects of disturbance will be consistent with those characteristic of the BpS fire in which they occur. Fuels management within the Appropriate Response Zone will have the same objectives and actions for vegetation management as described in the Vegetation section of this ROD (Management Objective V3).

Management Actions

1. Utilize prescribed fire, thinning, and other mechanical, biological, chemical or other appropriate tools to meet fuel load objectives.
2. Implement post-disturbance grazing rest requirements as described in the Vegetation section.

3. Desired fuel loadings (tons/acre) are identified in Table 2 in the Vegetation section.

Guidelines

1. Priorities for treatment will be Fire Regime Condition Classes 2 and 3, or treatments that will allow a greater range of management response to wildfires.
2. Select treatments that can meet objectives with the least environmental impacts and shortest recovery times as long as other resource objectives are met.
3. Reduce crown bulk densities and increase crown base heights to a range that will limit fire behavior to appropriate amounts of crown loss based on the characteristic or desired fire regime and tree species. This will facilitate management to achieve resource objectives in the future.
4. Projects will be monitored according to the Central Oregon Fire Management Service (COFMS) fuels monitoring strategy.

Objective F4

WUI Suppression Zones: protect life, property and identified resources (e.g., municipal watersheds) when wildfire occurs.

Appropriate Response Zone: implement appropriate response actions upon discovery of a wildfire. Maintain or increase wildlife habitat diversity and improve ecosystem integrity through development of structurally diverse plant communities, multiple seral stages, and increased plant and animal species richness. Reduce fuel levels to decrease the chance of extreme habitat loss through stand-replacing wildfire .

Management Actions

1. Provide perimeter control, at a minimum in the Suppression Zones (see Map 2).
2. Response to planned and unplanned ignitions will be consistent with federal Wildland Fire Policy (USDI BLM et al. 2001).
3. Throughout the analysis area, allow unburned patches to remain whenever consistent with protecting life and property in order to meet vegetation and wildlife objectives.
4. Implement strategies on unplanned ignitions that are consistent with federal Wildland Fire Policy.
5. Add implementation direction to the Fire Management Plan (see glossary) before managing a fire to meet resource objectives.

Guidelines

1. Base strategy for suppressing unplanned ignitions on considerations for safety, environmental, social, economic, political, and resource management objectives. The goal will be to minimize cost and maximize resource benefit.
2. Management of unplanned fires can take the form of four general strategies:
 - a. Monitoring - Watching or checking fire behavior, fire spread, and fire effects at periodic intervals without taking any significant suppression actions. Conduct monitoring via personnel at the site, aerially, or from a fixed point such as a lookout tower.
 - b. Point Control - Controlling unplanned ignitions only at those points of the fire perimeter that threaten to cause unacceptable damage or loss to a specific resource or facility. This will be the preferred method of fire suppression throughout most of the plan area.
 - c. Perimeter Control - Constructing a fireline around the fire perimeter and mopping-up to a specified distance from the perimeter.
 - d. Full Control - Constructing a fireline around the fire perimeter and completely extinguishing the fire (suppression). Full control and perimeter control will be the most common method of fire suppression in WUI areas.

3. Potential areas where unplanned ignitions may be managed to achieve multiple objectives include: Sutton Mountain, Pat's Cabin, Spring Basin (in conjunction with Pine Creek Ranch), North Fork of the John Day (in conjunction with the Umatilla National Forest), and the South Fork of the John Day (in conjunction with the Ochoco and Malheur National Forests). Other areas may be added over time.
4. Identify areas needing prior treatment to increase the probability that the management of unplanned ignitions will meet management objectives.

Objective F5

Protect life, property, and ecological components at risk of further degradation as identified by an interdisciplinary team following wildland fire.

Management Action

1. Implement post-fire rehabilitation as described in the Vegetation section and the BLM Burned Area Emergency Stabilization and Rehabilitation Handbook (H-1742-1).

Aquatics

The BLM is directed by FLPMA, Executive orders, legislative acts, and other regulations and policies to manage public lands for fish and wildlife habitat and to protect the quality of water resources. Appendix A of the FEIS lists these planning and implementation authorities. Below are examples of how major law and policy influenced development of the RMP aquatics section:

The Endangered Species Act of 1973 (ESA) provides for the protection of listed and potentially listed species and their habitats. The RMP protects fish, wildlife, and game species by allocating land and water as Riparian Management Areas (RMAs) and identifies management actions to conserve and restore listed and potentially listed species and their habitat. Subsequent to the ESA, the "Sikes Act" of 1974 is a congressional mandate for the BLM to "plan, develop, maintain, and coordinate programs for the conservation and rehabilitation of wildlife, fish, and game." In conformance, the RMP provides the Aquatic Conservation Strategy (ACS) and specifically directs BLM to contribute to cooperative efforts for the restoration of ESA listed fish populations. Under the ACS (Objectives AQ2-AQ12), streams listed as critical habitat and/or providing significant spawning, rearing and/or migration habitat for listed fish species will be managed in a manner that protects the species and improves habitat.

The BLM's major role in the management of fish and other aquatic species is to provide habitat that supports desired aquatic plants and animals. In concert, Oregon Department of Fish and Wildlife (ODFW) protects and enhances Oregon's fish and wildlife and their habitats. The RMP was developed in coordination with ODFW, draws on state comprehensive wildlife conservation strategies, and contains direction that is consistent with state rules and regulations for fish and wildlife management.

The "Federal Water Pollution Control Act" (commonly known as the "Clean Water Act" [CWA]) of 1977, as amended), requires the restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters. Mandates of the CWA establish the Environmental Protection Agency (EPA) as administrator and the states (Oregon) as implementers of the Act. The BLM is responsible to manage the requirements of the Act on land they administer, but primacy in implementing the Act is retained by Oregon. The BLM is required to maintain water quality where it presently meets EPA-approved Oregon State water quality standards and to improve water quality on public land where it does not meet standards. State developed total maximum daily loads (TMDLs) and state-approved water quality management plans are required for water bodies in sub-basins and watersheds where water quality is not meeting the state standards.

The RMP contains management actions, allocations and other direction necessary to restore water quality to state standards and follows the joint USFS and BLM protocol for CWA section 303(d) listed waters. RMP management direction will feed the BLM's portion of the state's water quality management plan, as detailed in BLM's subsequent water quality restoration plans.

The BLM's Land Use Planning Handbook (H-1601-1, as revised 03/11/05 [Handbook]) provides supplemental guidance for developing land use plans. Handbook Appendix C prescribes plan level decisions to be made in land use plans, including existing uses, authorization of uses, special designations, and allocation of land for specific uses and limitations on various uses. The Aquatic section of the RMP provides the decisions specified by the Handbook Appendix C sections about water, vegetation, special status species, and fish and wildlife resources.

The ACS replaces PACFISH and INFISH on BLM lands within the John Day River Basin. Previous management direction for the BLM in the John Day River Basin was the Interim Strategies for Managing Anadromous Fish-Producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California (PACFISH) (USDA FS and USDI BLM 1995a) PACFISH and INFISH (for those watersheds inhabited by bull trout). These interim strategies were to be in effect until long-term, area-specific management strategies were developed.

A set of three documents (USDA FS and USDI BLM 2003, Regional Deputy Team August 2008, and BLM September 2008) guided how BLM replaced PACFISH during RMP development. As a result, the ACS includes the six key aquatic components required by the 2008 guidance: riparian conservation areas, strong hold areas, multi-scale analysis, restoration priorities, management direction, and monitoring.

Objective AQ1

In river corridors (see Map 1), improve water quality by complying with water quality criteria specifically listed by ODEQ in OAR340-042. Provide habitat for native special status fish species. Protect and enhance instream flows to protect and enhance Outstandingly Remarkable Values.

- Provide habitat to meet ODFW objectives in the Wild and Scenic River (WSR) segments.
- Manage lands adjacent to the rivers to meet state water quality requirements, satisfy obligations of the Clean Water Act, and protect and enhance Outstandingly Remarkable Values.

Management Actions

1. Continue to encourage and participate in independent and cooperative efforts to achieve aquatic objectives.
2. Adopt recommended flows identified in the John Day River Scenic Waterway Flow Assessment (see Appendix E –Stream Channel Objectives) as provisional instream flow goals. Use a variety of tools, authorities, and strategies to achieve interim instream flow levels. These tools include:
 - a. Leasing (in the short term) and transferring existing BLM consumptive use rights to instream uses (in the long term).
 - b. Entering into cooperative agreements with the State of Oregon and other agencies for the purchase of water rights from willing sellers for transfer to instream uses.
 - c. The BLM will quantify and assert BLM's federally reserved water right in accordance with the purpose for which they were reserved. The water federally reserved for Wild and Scenic Rivers is one example of a federally reserved water right. The designation of a river as a wild, scenic or recreational river under the Wild and Scenic Rivers Act of October 2, 1968 explicitly reserves sufficient unappropriated water to fulfill the purposes of the Act. The amount of water BLM will reserve is the amount necessary to protect the particular aesthetic, recreational, scientific, biotic or historic features ("values") that led to the river's designation. The amount of flow reserved will vary on a case-by-case basis. Segments of the John Day River system were designated by Congress in 1988. The BLM will identify more quantitative instream flow goals prior to BLM's assertion of federally reserved water rights during adjudication or any similar water allocation process.
3. The BLM will continue to encourage and participate in independent and cooperative efforts by doing the following:
 - a. Establish instream water rights under state appropriative or federal law.
 - b. Enter into water-sharing agreements between private landowners, Oregon Water Resources Department (OWRD), and ODFW.

- c. Improve irrigation systems to enhance river values by removing pushup dams, installing fish screens, and implementing irrigation efficiency projects (such as infiltration galleries) for the protection and enhancement of Outstandingly Remarkable Values.
- d. Develop and enhance native vegetation to protect and enhance watershed conditions.
4. The agencies will continue their present individual and cooperative efforts to improve instream flows. The John Day River “Core Team” (BLM, Confederated Tribes of the Warm Springs Reservation of Oregon [CTWSRO], State of Oregon, and local counties) will coordinate to identify, prioritize, and facilitate actions to help achieve interim instream flow goals. To achieve interim instream flow goals, the BLM and its planning partners will:
 - a. Develop basin-wide priorities and recommendations for water quantity and quality improvement projects and practices.
 - b. Provide guidance and technical assistance to cooperative individuals and groups, such as Watershed Councils.
 - c. Coordinate funding sources to assist in implementing identified priorities.
 - d. Modify management practices based on results of monitoring, new information, or meaningful changes in conditions.
5. Conduct coordinated review of any proposed ground disturbing activities within river corridors with the ODFW; Oregon Division of State Lands; and the Oregon Parks and Recreation Department, State Scenic Waterways Division. Future proposed projects will be subject to public review and appropriate federal, state and tribal consultation.
6. Direct fisheries habitat restoration actions to follow guidance identified under the Aquatics Conservation Strategy (Objectives AQ2 thru AQ12) and also be subject to public review and appropriate federal, state, and tribal consultation. Formal and informal consultation with the U.S. Fish and Wildlife Service or National Marine Fisheries Service will be initiated on any proposed actions that may affect federally listed threatened or endangered species. No activities will be permitted in threatened, endangered, or sensitive species habitat that will jeopardize the continued existence of such species. The habitat of threatened, endangered and special status species will continue to be monitored, maintained, and improved.
7. The BLM will follow ODEQ established Total Maximum Daily Loads (TMDLs). The BLM will develop and implement water quality restoration plans to guide restoration actions, meet BLM’s portion of the TMDLs, fit into a multi-jurisdictional water quality management plan, and restore water quality in the plan area.

Guidelines

1. Work cooperatively with other land holders (private, state and other federal) within the basin to take actions that reduce the introduction of pollutants and improve river flows and temperature.

Aquatic Conservation Strategy



The Aquatic Conservation Strategy

The following Aquatic Objectives (AQ2 - AQ12) constitute the Aquatic Conservation Strategy (ACS) and combine the following management direction for fish, riparian habitat, and water quantity and quality into one set of objectives, actions, guidelines, and Best Management Practices (Appendix A).

ACS vision:

- People encounter clean water, limited erosion, and lush native vegetation along streams. People observe ribbons of perennial stream flows throughout the year. Diverse riparian vegetation covers streambanks and dominates valley bottoms. Floodplains contain layers of shrubs, trees and grasses.
- Fish and wildlife are vigorous and abundant. Pools and riffles, woody debris, water, and riparian vegetation provide adequate and complex habitat. Fish do not contain unsafe levels of contaminants. Stream channels and riparian vegetation provide aquatic habitat of high ecological status.
- Livestock and crops have consistently available water and food. Deep-rooted riparian species stabilize streambanks and facilitate access and crossing for livestock. Vigorous vegetation provides high nutrient forage. Floodplains replenish groundwater for late season release, and crops have water at the peak of the growing season.

Most objectives start with the statement “Conserve and restore, within existing site potential and natural disturbance regimes,” which provides flexibility necessary to adapt conservation and restoration efforts to landscape variations in the plan area.

Objective AQ2

Maintain and restore the health of watersheds and aquatic ecosystems.

Management Actions

1. Minimum widths of Riparian Management Areas (see glossary) include the flood-prone areas and extend the following distances from the flood-prone area:
 - a. 300-foot slope distance on both sides of the flood-prone area for perennial and intermittent stream channels.
 - b. 300-foot slope distance from edge of wetland vegetation for lentic areas.
 - c. 25-foot slope distance on both sides of ephemeral draws where average annual precipitation is less than 14 inches.
 - d. 50-foot slope distance on both sides of ephemeral draws where average annual precipitation is greater than 14 inches.
2. Manage Riparian Management Areas for attainment of the aquatic objectives. Other uses are allowed in Riparian Management Areas as long as they do not retard attainment of aquatic objectives.
 - a. Appropriateness of other uses will be site-specifically assessed by a BLM interdisciplinary team. Interdisciplinary teams will consider relevant information from stream surveys, PFC assessments, multi-scale analysis (NPCC 2005), and other sources.
 - b. Throughout the life of the plan an interdisciplinary team will review all new actions and ongoing actions (e.g., grazing, roads, and mining operations) in Riparian Management Areas.
3. An interdisciplinary team will also assess the appropriateness (using the process described above) of projects outside of stream channels, floodplains, and lentic Riparian Management Areas for any ground disturbance activity greater than one acre, vegetation alteration more than 20 acres, and new construction or maintenance of roads, landings or other structures.
4. Incorporate updates of the BMPs through plan maintenance.

Guidelines

1. Interdisciplinary teams recommending activities appropriate for Riparian Management Areas will consist of at least three specialists experienced in quantitative measurements and analysis of soils, vegetation, and hydrology. When discussing activities appropriate for Riparian Management Areas on fish-bearing streams, at least one member of the interdisciplinary team will be a fish biologist. Specialists conducting PFC assessments will be trained and experienced in the quantitative measurements behind the qualitative techniques of Proper Functioning Condition.
2. Identify aquatic strongholds and conduct multi-scale analysis. Identify priority restoration areas as listed below. All 5th field hydrologic units (up to 250,000 acres) in the plan area are considered for their potential as population strongholds for aquatic species. For example, the population of steelhead in the North Fork subbasin is identified in the Mid Columbia Steelhead Recovery Plan (NMFS 2009) as one with high genetic integrity, connectivity, a strong relationship of the subpopulation to the species as a whole, and restoration and population expansion potential into adjoining watersheds. However, funding priorities for aquatic restoration will be based on the watershed assessments provided by the Subbasin Assessment, Mid-Columbia Steelhead Recovery Plan, and as follows:
 - a. First priority – Source water protection areas for drinking water, such as the Dixie and Canyon Creek Watersheds.
 - b. Second priority – ESA-listed species/critical habitat and water quality limited stream channels – specifically priority watersheds, essential fish habitat, and strongholds identified in recovery planning and future efforts.
 - c. Third priority – Fish-bearing streams with locally important fish species or riparian areas lacking wildlife habitat.
 - d. Fourth priority – Stream channels with special designations, or high recreational or other values.

Objective AQ3

Conserve and restore (at near natural rates of recovery and within existing site potential and natural disturbance regimes) the physical function and habitat values of perennial and intermittent streams. Stream channel objectives for fisheries habitat are listed in Appendix E.

Management Actions

1. Contribute to cooperative efforts to restore ESA-listed fish populations, achieve TMDL load allocations, and meet state water quality standards.
2. Use natural channel-altering processes to restore stream channels and floodplains. If natural recovery processes take longer than the life of this plan, active restoration would be considered.
 - a. Active restoration of most nonfunctional systems should be reserved for those situations where the riparian area has reached a point where recovery is possible, when efforts are not at the expense of at-risk systems, or when unique opportunities exist.
3. Restore limiting factors identified in the 2005 Bonneville Power Administration's John Day Subbasin Plan and subsequent studies. Limiting factors vary by watershed and include the following examples: habitat quality, predation, entrainment, and others.
4. Restore sediment in spawning incubation areas to be less than 10 percent fines in gravel and less than or equal to 12 percent surface fines (pers. comm. John Morris, BLM, May 2007).
5. When erosion rates are elevated to a level that could degrade fish habitat, target Phase III juniper areas for treatment.
6. Increase and maintain pools in all perennial, perennial interrupted, and intermittent streams.
7. Restore large wood to stream channels and floodplain habitat appropriate to the BpS (see Vegetation section) by: 1) managing forest lands within one site potential tree height of stream channels (150 feet) and floodplains to maintain a source of large wood; 2) re-introducing large wood to stream channels and floodplains; and 3) retaining large wood in stream channels.

8. Locate and manage water-drafting sites to minimize adverse effects on stream channel stability, sedimentation, and in-stream flows needed to maintain riparian resources, channel conditions, and fish habitat.
9. Screen pumps at drafting sites to prevent entrainment of fish and use one-way valves to prevent back-flow into streams.

Guidelines

1. Physical function will be determined based on existing site potential and the ability of BLM to direct conditions to an upward trend. Conduct assessments for Proper Functioning Condition (BLM Technical References 1737-15), using an interdisciplinary team that includes at least three specialists representing soils, vegetation, and hydrology resources. A fish biologist will be included in the interdisciplinary team when fish-bearing streams are being assessed. Specialists will be trained and experienced in the quantitative measurements associated with the qualitative technique of Proper Functioning Condition.
2. In 3rd order streams lacking large wood, achieve a 50 percent increase in the number of pools.

Objective AQ4

Conserve and restore, within existing site potential and natural disturbance regimes, water quality to provide for beneficial uses and stable and productive riparian and aquatic ecosystems, and to meet state anti-degradation policy.

Management Actions

1. Design water quality restoration to complement and allow natural channel altering processes to restore channels and floodplains.
2. Restore water quality for all 303(d) listed streams in the plan area. Utilize adaptive management and refine Best Management Practices in watersheds where BLM administers at least 20 percent of impaired stream miles. Focus research, intensive monitoring, and new science to restore water quality in these watersheds. Priority will be given to the Bridge Creek and Wall Creek watersheds. Actions to restore water quality will consider water temperature, relative humidity, air temperature, and stream flow.
3. Address dissolved oxygen, pH, biocriteria (see glossary), bacteria, temperature, and sediment through total maximum daily loads (TMDLs). A number of 303(d) listed streams flow through lands administered by other entities. The TMDL strategy provides the opportunity for source assessment to appropriately assign load allocations and better inform restoration actions and causes of impairment.
4. Meet state water quality standards and utilize state pollution control standards (Appendix E).
5. Develop and implement water quality restoration plans to guide restoration actions, meet BLM's portion of the TMDLs, fit into a multi-jurisdictional water quality restoration plans, and restore water quality in the plan area.
6. Participate in joint restoration efforts that will contribute to achievement of "excellent" water quality condition according to the Oregon Water Quality Index, or that will maintain an improving trend (<http://www.deq.state.or.us/lab/wqm/wqimain.htm>).
7. Use riparian plantings, gentle stream channel restoration, and riparian-oriented management to restore shade and natural channel geometry.
8. Use fire and fire rehabilitation actions to restore water quality. Use fire to prevent stand replacement events that could degrade water quality and impact it beyond acceptable short-term impacts. Develop vegetation treatments in riparian areas to release desirable riparian species.
9. Apply herbicides, pesticides, and other chemicals approved for use by BLM to restore watershed function, while using Best Management Practices to ensure non-impairment of water quality, soil productivity, or locally important fish. Participate in Oregon State Department of Environmental Quality Pesticide Stewardship Partnerships (a voluntary, collaborative approach to identify problems and improve water quality associated with pesticide use at the local level).
10. Outside of existing Transportation and Utility Corridors, prohibit biomass plants, solar, wind, geothermal and related transmission systems within 0.25 mile of streams, flood-prone areas, lentic areas, ponding or

playas unless a site-specific review by an interdisciplinary team finds that attainment of aquatic objectives will not be retarded or may be mitigated.

Guidelines

1. Support regional data management systems that account for the state and condition of BLM administered lands and waters.
2. Avoid introduction or use of chemical retardants, foam or additives within a distance that would result in delivery of harmful compounds to surface waters over the life of the plan.
3. Prohibit storage of fuels and other toxicants where unanticipated releases could impair water quality.

Objective AQ5

Conserve and restore, within existing site potential and natural disturbance regimes, stream channel integrity, channel processes, and sediment regimes (including the timing, volume, and character of sediment input and transport).

Management Actions

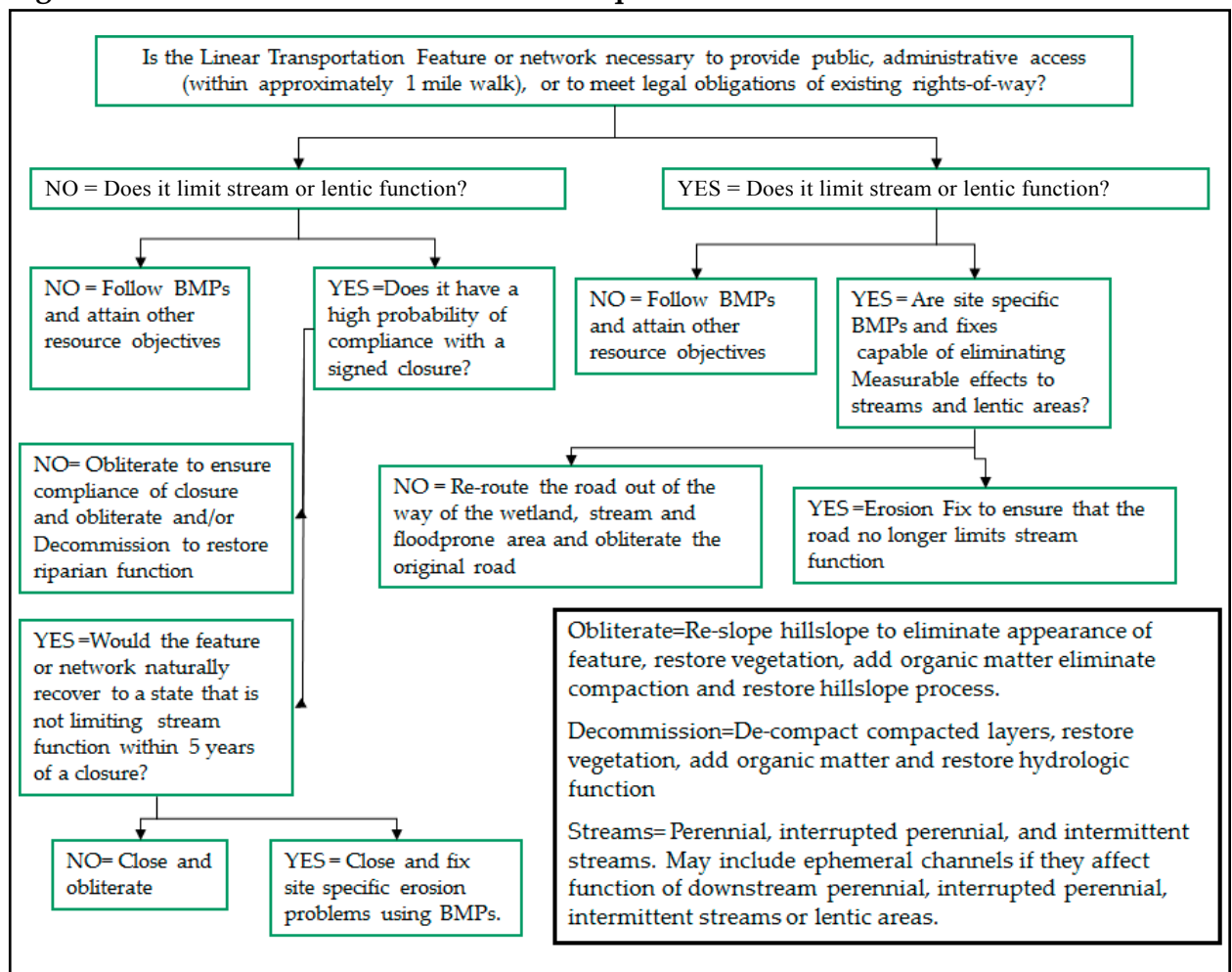
1. Where peak flows or erosion has incised stream channels, restore riparian vegetation and in-channel structure (e.g., large wood, vegetating point bars, etc.) appropriate to the biophysical setting (BpS; see Vegetation section). Across the watershed, correct conditions (e.g., roads, culverts, and lack of ground cover) that contribute excess sedimentation or elevated peak flows to these reaches.
2. Maintain vegetation in ephemeral draws appropriate to the ecology of the site. Apply Best Management Practices (Appendix A) to ephemeral drainages as necessary to attain objectives on downstream intermittent and perennial streams.
3. Adjust management to restore vertical channel stability and stabilize headcuts. If passive restoration is not successful, actively restore vertical channel integrity by reducing stream power/energy. Evaluate whether active restoration will introduce less risk to resources than allowing the headcut to persist. Active restoration of headcuts might include (in order of preference) riparian revegetation, grade control, recontouring channel margins, channel re-design (including meandering), or hardening.
4. Actively restore lateral channel integrity by stabilizing streambanks with a diversity of plants with strong, deep root systems. The amount of streambank stabilized will allow natural erosion rates of the channel type. Restoration will focus on reducing erosion where it is out of balance with the landscape.
5. Restore stream channel integrity, channel processes, and the sediment regime where infrastructure (e.g., roads, trails, and structures) cross stream channels and floodplains.
6. Avoid new road construction within Riparian Management Areas.
7. Avoid construction of new structures in the bankfull width of streams. Exceptions will be made for road improvements, culvert replacements, and other actions prescribed to meet ACS objectives.
8. Use cable systems capable of full suspension over streams and riparian areas, aerial systems, or more protective logging techniques when harvesting timber within Riparian Management Areas.
9. Locate skid trails parallel to Riparian Management Areas.
10. Avoid locating skid trails within Riparian Management Areas (see interdisciplinary team requirement under Management Objective AQ2).
11. Maintain and secure instream flows for values of channel function, floodplain function, aquatic habitat, and water quality. Identify and coordinate with federal, tribal, state, and local governments and non-governmental organizations to secure instream flows.
12. Use active restoration to reduce width to depth ratios by an average of 5 to 25 percent on BLM-managed segments of the South Fork, North Fork, and main stem John Day Rivers.
13. Where linear transportation features are, or may be limiting perennial and intermittent stream channels or wetland function, use the decision tree shown in Figure 1 to evaluate the cause and potential solution for mitigating impacts.

14. Plans of operations and reclamation bonds are required for mineral operations in Riparian Management Areas.

Guidelines

1. Prohibit activities that would degrade the sediment regime of perennial, perennial interrupted and intermittent stream channels. Allow activities if the long-term intent of an activity is to restore stream physical function (e.g., juniper removal and thinning of conifer expansion). Use BMPs to minimize sediment delivery to stream channels.
2. Within each 6th field sub-watershed, vegetation treatments will be limited to less than 10 percent of the total riparian vegetation within any one-year period. As an exception, low intensity burns backing into riparian vegetation will not exceed 50 percent of riparian vegetation in 6th field watersheds.
3. The combination of BLM actions to restore upland watershed conditions and other landowner activities will not risk (a modeled 1 percent chance per year) degrading sediment and flow regimes longer than 3 years.
4. Ensure that removal of vegetation or ground-disturbing activities do not exacerbate headcutting. Avoid activities that would remove more than 50 percent of the watershed cover and exacerbate headcutting by increasing runoff. If more than 50 percent of the watershed cover is removed, apply watershed mitigations to attenuate peak flows associated with increased runoff. Apply mitigation measures such as buffers, hydro-seeding, headcut stabilization, and wattles prior to fall precipitation (usually in October).
5. In streams where the channel bank stability is degraded beyond a condition that natural erosion would create (e.g., cut-banks exist on straight riffle segments), redirect sources of disturbance (e.g., recreation,

Figure 1. Linear Feature Decision Tree for Aquatics.



- bedding, watering, trailing, and other disturbances) away from unstable stream banks or change management.
6. For existing and planned linear features, landings, and temporary or permanent operating areas, ensure that operation and maintenance do not adversely affect streams.
 7. Avoid sediment delivery to streams by outsloping the road surface or by routing drainage away from the stream channel. In-slope roads that have low traffic volume where the road footprint or underlying soil formation is very rocky, but not erodible or subject to failure.
 8. Avoid disruption of the hydrologic flow path when constructing facilities, roads, and trails; and during mining and other activities.
 9. Renovate existing structures within the flood-prone width (see glossary) if they will not pass the 100-year flood and debris without degrading channel function. Prohibit new structures within the bankfull width of streams, except for new crossings and the renovation of old structures or crossings. All crossings and structures within the flood-prone width must meet stream standards, be removed, or be renovated to meet these stream standards:
 - a. Minimize stream channel and floodplain crossings by utilizing existing or by-pass routes.
 - b. Design or adjust to accommodate 100-year floods, sediment and movement of large wood with a natural geometry, slope, and bed stability.
 - c. Match bed gradation and D84 (see glossary) to the stream gradient according to the most recent stream simulation science (such as “Designing for Aquatic Organism Passage at Road-Stream Crossings” 2005 course by San Dimas Technology Center).
 - d. Ensure that designs provide a stable stream bed both up and downstream of the site.
 - e. Construct and maintain to prevent diversion of flow out of the channel and down the road in the event of a crossing failure.
 - f. Use ramped or low water fords at debris flow susceptible streams or any stream not requiring a culvert or bridge.
 - g. Water velocities and depths, cover and resting areas will be similar to the rest of the natural channel.
 - h. Structures must be transparent to aquatic species. Structures include but are not limited to dams, poles, buildings, landings, houses, and docks.
 - i. Use natural stream simulation techniques to maintain the channel and floodplain continuity. Streambed diversity and material will be similar to the natural channel.
 10. Use vegetative buffer strips to prevent sediment associated with recreation sites and linear features (see glossary) from entering the stream channel or floodplain. Ensure that a vegetated buffer strip is sufficiently wide (14 feet minimum) and dense to filter sediment and slow water velocity.
 11. Consider using a bridge for new stream crossings where stream bankfull width exceeds 20 feet, slope exceeds 6 percent, or where the movement of large debris is frequent.
 12. Along the 400 feet of road on either side of a road or stream crossing, construct road crossing approaches with flat cut slopes (less than 1:2 slope) unless the cutslope is determined by a professional geotechnical engineer to be stable and not susceptible to erosion. Roads with steep side slopes usually have more soil accumulating in the road ditches than roads with less steep side slopes (Oregon Watershed Assessment Manual 1999).
 13. Prohibit construction of new facilities (e.g., roads, trails, pipelines, and utility corridors) in riparian management areas, except at minimal crossings. Exceptions may be granted if it is proven that a facility would not retard attainment of Aquatic objectives.
 14. Utilities will use existing crossings at stream channels, floodplains, and lentic areas (see Table 8).
 15. At mineral lease sites, prohibit surface occupancy within perennial, interrupted perennial, intermittent, and ephemeral stream channels. Review and update plans of operation to eliminate impacts to stream channel integrity, natural sediment, and natural flow regimes on a five-year cycle.
 16. Prohibit new sand, gravel and recreational mining and extraction within the flood-prone area (two times bankfull depth) and manage existing sites consistent with this objective of the ACS. As an exception,

allow recreational mining at Dixie Creek and Standard Creek areas in compliance with state regulations. Recreational mining sites must be spaced at least 100 feet apart, cannot use mechanized equipment, and must not disturb an area larger than the channel width squared. Sluice boxes are prohibited, as is removing bank material.

Objective AQ6

Conserve and restore, within existing site potential and natural disturbance regimes, surface to groundwater interactions that support healthy riparian and wetland areas, aquatic habitats, and physical function of stream channels.

Management Actions

1. Use seeding, juniper removal, wildland fire, weed removal, and other vegetation treatments designed to restore watershed cover and root structure that will facilitate capture, storage, and release of water into downstream areas of the watershed. Target Phases II and III juniper areas for treatment (see Vegetation section, Management Objective V3, for area covered and the glossary [old-growth juniper] for definitions of Phase II and Phase III juniper).
2. In low energy (i.e., Rosgen C and E type; see glossary) channels, construct side channels, restore riparian vegetation, fence, remove berms, enhance flows, and develop other projects to restore off-channel habitat. Restoration will avoid capturing the main flows and reducing stream energy short of its potential.
3. Use projects such as back-sloping, riparian planting, berm removal, and large wood introduction to restore floodplain connectivity and ensure natural channels will be in equilibrium with the water and sediment supplied by the watershed. Prohibit or re-direct uses that are in conflict with maintenance of wetlands, floodplains, and off channel habitats. Restore flows necessary to maintain wetland and riparian function.
4. Use native woody riparian plantings and weed treatment to ensure that riparian vegetation provides food and cover for existing and expanding beaver colonies. Re-establish cottonwood, aspen, and other woody riparian species with out-plantings, and secure genetic material at the Clarno nursery.
5. Manage woody riparian species for unconstrained (released and un-arrested) growth forms.
6. Promote activities that allow beavers to colonize in riparian areas. Reinforce the purpose and necessity for various restoration actions through public outreach and education.
7. Where stream characteristics limit sediment supply, rely on passive restoration unless cost-effective active restoration techniques are available. In-stream channels that have adequate sediment supply, use both active and passive restoration (e.g., mechanized construction, riparian plantings, plant removal, and other restoration) to recover the system.
8. Conduct restoration work to reduce bankfull widths on BLM-managed segments of the South Fork, North Fork, and mainstem John Day Rivers by an average of 5 percent of the existing width.
9. Restore compacted wet (hydric) soils. Conduct restoration when soils are not saturated.
10. Use riparian planting, seeding, and mulching to facilitate re-vegetation of hydric soils. Use facultative (see glossary) upland species where needed around the boundary of riparian plantings and seedings. (Facultative, upland, and obligate species are defined by the 1998 USFWS Wetland Plants list for each region.)
11. Conduct prescribed burns, cut vegetation, and use stump applications of herbicide to remove undesirable species that delay or prevent attainment of ACS objectives.
12. Perform watershed treatments for both short- and long-term recovery of sediment and flow regimes.
13. Restore variable ranges in forest cover to maintain natural peak flows (see Vegetation section).
14. New livestock handling, livestock management, or livestock watering facilities will be located outside of Riparian Management Areas, except for those that inherently must be located in an Riparian Management Area and those needed for resource protection.
15. Consider removal of existing livestock handling or management facilities from Riparian Management Areas.

16. Avoid livestock trailing, bedding, loading, and other handling activities in Riparian Management Areas.
17. Locate troughs associated with spring developments and off-channel water on ground with a slope, vegetated buffer, and distance away from Riparian Management Areas to ensure that management of the area does not contribute sediment to or remove vegetation from hydric soils, riparian or wetland areas. Fence developed spring areas to exclude livestock. Use an automatic shut-off or efficiently return overflow to the source in a short-return interval.

Guideline

1. Over the course of two years, forest cover treatments should not result in more than 80 percent loss of forest cover in areas of less than 15 to 18 inches annual precipitation zone. This 80 percent change applies to cumulative activities across all ownerships of a watershed Hydrologic UNit Code (HUC 5). Phased treatments are preferred.
2. During forest and juniper watershed treatments lop and scatter limbs or similar material (see Table 2 in the Vegetation section), where peak flows exceed natural values (e.g., Harris and Hubbard, 1993).

Objective AQ7

Maintain water rights needed to meet BLM management purposes and maintain beneficial uses.

Management Actions

1. Water rights on BLM-administered lands are held in, or transferred to, the name of the United States, Department of Interior, BLM. To maintain all valid water rights, the BLM will inventory and catalog Public Water Reserve (PWR) 107 water rights for livestock and domestic water use and document existing water rights over the life of the plan and beyond.
2. Compile the history of use on BLM water rights and points of diversion. Voluntary relinquishment of mining water rights that are no longer valid will contribute to meeting instream flow goals. To maintain beneficial use of water rights, complete a change-of-use to instream use for each water right not used for their original purpose.
3. Require rights-of-way to convey surface or ground water across BLM land, with the exception of off-channel water for livestock and wildlife beneficial uses that improve watershed condition and attain ACS objectives.
4. Increase instream flows through cooperative efforts to lease water rights instream and improve irrigation efficiency. Apply Land and Water Conservation Funds to restore instream flows that support ecological and recreational resource values during periods of peak demand.
5. For the North Fork John Day subbasin, acquire and maintain instream and other water rights necessary to support recreational activities including fishing, canoeing, hiking, kayaking, swimming, white water rafting, big game hunting, obligate diverse wildlife assemblage, and anadromous fish and bull trout habitat throughout pertinent life cycles.
6. Limit withdrawals of water from stream systems to those that do not contribute to degradation of fish and aquatic life. Cease water withdrawal from stream channels when stream flows drop below 10 cubic feet per second at Bridge Creek (USGS gauge 14046778), after August 15th on the Mainstem John Day River, and at similar in-stream flow goals for fish, recreation and pollution abatement in the plan area. These goals include ODFW minimum instream flow goals, State Scenic Waterway, or future BLM instream flow goals identified by the BLM. Withdrawals include, but are not limited to: irrigation of agricultural land for cultivation of agricultural crops, permanent conversions (see glossary), or wildlife food and cover plots; mining operations; and rangeland restoration.
 - a. Water may be withdrawn beyond the shut-off limits to restore perennial vegetation in floodplains when it is determined that the long-term benefit to water quality and fish habitat restoration outweighs the short-term impacts and is consistent with the Endangered Species Act and Clean Water Act. Allowable uses include the establishment of perennial vegetation (see Vegetation objectives) that will not require irrigation after establishment for the purposes of restoring riparian habitats and growing hardwood riparian stock for out-planting.

- b. Withdrawals from Bridge Creek to irrigate for permanent conversion of agricultural fields will cease at six cubic feet per second.

Objective AQ8

Conserve and restore (within existing site potential and natural disturbance regimes) the wetlands, lentic areas, and hydric soils.

- These areas have the soil and water to support facultative, facultative wetland, and obligate wetland species as defined by the 1998 USFWS Wetlands Plant list for each region.

Management Actions

1. To achieve “near natural rates of recovery” appropriate for the ecoregion, vary management of lentic areas by physical function as shown in Table 3.
2. Relocate or close facilities that contribute to non-attainment of lentic Proper Functioning Condition (Technical Reference 1737-16).
3. Use decision tree (Figure 1) for management of linear features.
4. Restore over bank or seepage flows necessary to maintain lentic function.
5. Maintain expected pH, based on local geology.
6. If the integrity of reservoirs or other structures near lentic areas is compromised or presents a resource or safety concern, include the site in the maintenance schedule.
7. New dam or wier construction projects will be designed by a licensed professional engineer if the features exceed a height of 10 feet, 9.2 acre-feet, or state standards

Guidelines

1. Locate ground-disturbing activities and facilities away from hydric soils and wetlands. Ground-altering activities will not degrade conditions beyond which five or more years are necessary to recover soil compaction and restore the local native vegetation and sediment regime.
2. New structures, facilities, roads, trails, and leasable and salable mineral sites will be kept at a minimum in areas surrounding or characterized by hydric soils and otherwise will be prohibited in wetlands. New permits, rights-of-way, and easements will result in no net loss of lentic areas and avoid negative effects to hydric soils.
3. Prohibit actions that compact hydric or wetland soils, reduce site potential vegetation and temperature moderation, and alter hydrology (e.g., infiltration, moisture regime, and other factors). Use plantings and manage for obligate, facultative, or wetland species on degraded sites.
4. Redirect activities away from reservoirs, wetlands, lentic areas, and hydric soils when they degrade surface or subsurface flow patterns or hydric soils. Remove trespass livestock or change BLM grazing management that is causing facultative, wetland and obligate (see glossary) species in wetland/hydric soils to have unnatural growth forms.
5. Avoid brushing along stream channels and floodplains. Brushing may be unavoidable if it is necessary for human safety or to avoid threats to structural stability. If the stream channel is within 14 feet measured horizontally from the edge of road (driven surface), then restrict brushing width to 4 feet of the edge of the drivable road surface. Turn-out should be treated the same as the edge of the road, but not used to determine brushing width for other portions of the road.
6. Minimize expansion of the road prism within Riparian Management Areas by maintaining designed roadway width. Expansion into Riparian Management Areas will be limited to that needed for public safety or to meet aquatic objectives.
7. Design roads for minimum lanes (preferably single lanes) with turnouts; utilize slower speed limits; place turnouts away from riparian management areas; end haul excess material; avoid side casting; and utilize Best Management Practices.

Objective AQ9

Conserve and restore (within existing site potential and natural disturbance regimes) the diversity and productivity of native riparian and aquatic plant communities.

Management Actions

1. Encourage native and desirable non-native plants in riparian zones for the long-term purpose of recovering native riparian and aquatic plant communities. See Vegetation section for related restoration actions.
2. Actively restore a maximum cross-sectional area (width x height) of woody riparian vegetation. Focus active restoration of woody vegetation in lower gradient streams where the PFC inventory indicates that the riparian vegetation has not achieved its potential extent (PFC Question #4; USDI BLM, Technical Reference 1737-15 and 11) and/or the stream lacks diverse age-class distribution of riparian/wetland species (PFC Question #7). Where utilizing passive management, achieve a potential cross-sectional area of woody species by managing all riparian shrubs and trees for uninterrupted or released growth forms (Keigley and Frisina 1998).
3. Restore diversity and productivity of native riparian and aquatic plant communities by thinning conifers that are expanding into riparian areas. Replant native hardwood riparian species appropriate to the site. Mechanical or other treatment of riparian vegetation will not reduce shade below a point where stream water temperature prohibits attainment of the beneficial uses for a stream reach. Use nomographs or similar tools to correlate shade to topography and tree species. Retain large wood on-site to meet objectives for large wood management (Appendix E – Stream Channel Objectives), down wood (see Vegetation section, Table 2), and pool conditions (Appendix E – Stream Channel Objectives). If the plant community's pipeline of standing and in-channel large wood, down wood, and pool depth/frequency is adequate to meet these objectives, wood may be made available for other uses (e.g., forest products and biomass generation).
4. In cooperation with County weed boards and Soil and Water Conservation Districts, target riparian areas for noxious vegetation treatment. Specifically address Russian olive, tamarisk, yellow star thistle, invasive thistles, and Dalmatian toadflax.
5. Remove juniper where it has expanded into stream channels, floodplains, and wetlands and where treatment by-products can be used for conversion to biofuels and contribute to commodity production.
6. Plant cottonwood and aspen (*Populus* spp.) where current conditions are not meeting site potentials for these species.
7. Manage activities, such as livestock grazing, to ensure that woody riparian species are not arrested or retrogressed in form. Change management of woody riparian species to correct for arrested and/or retrogressed growth forms and restore their potential stature.

Objective AQ10

Conserve and restore (within existing site potential and natural disturbance regimes) riparian vegetation to provide the amount and distribution of large wood characteristic of aquatic and riparian ecosystems; provide adequate summer and winter thermal cover for riparian and aquatic zones; and achieve rates of surface erosion, streambed and stream bank stability, and channel migration characteristic of historic conditions.

Management Actions

1. Where large wood is lacking (generally in second growth or burned-over stands), replant large wood source trees within the distance of one site potential tree height of riparian areas (150 feet).
2. Fall hazard trees within the distance of one site potential tree height (150 feet) from the flood-prone area of perennial, perennial intermittent, and ephemeral streams. Retain trees on-site for restoration.
3. Plant riparian trees along streams with the potential for riparian vegetation to provide large wood. On larger meandering streams, replant cottonwoods on point bars and in alder stands to improve structural integrity of individuals on these sites. On smaller streams, where in-channel large wood is present,

restore pool frequency in a manner that controls the progression of large wood through the stream network.

4. Design stream crossings to pass large wood.
5. Where point bars are not re-vegetating with riparian vegetation, restore flow, sediment regimes, and hydraulic connectivity that limit re-vegetation. Use active restoration such as re-shaping and re-planting of point bars and floodplains to achieve potential riparian vegetation.
6. Manage woody riparian species to achieve natural growth forms and stature.
7. To achieve recovery appropriate for the ecoregion, vary management of riparian areas by physical function as shown in Table 3.

Table 3. Management Direction for Riparian Management Areas (RMAs) by Function Rating

Function Rating	Management of resource uses (grazing, recreation, energy, etc.)
Properly Functioning Condition or at Potential Natural Condition	Continue management that will allow development of potential or late-seral plant communities. Implement restoration actions to move site toward potential ARV by BpS (see Vegetation section.)
Functioning-At-Risk with an upward trend	Limit use and implement management that maintains upward trend in streambank and channel characteristics.
Functioning-At-Risk with a static or downward trend	Change management contributing to static or downward trend by limiting season, duration, frequency and intensity of resource use (e.g., livestock grazing and recreation). Allow complete recovery of stabilizing vegetation before Fall rains begin to increase stream flow (approx. October 1). Consider complete rest from activity for a time specified by interdisciplinary team.
Non-Functioning	Eliminate management activities contributing to the Non-Functioning Rating.

Objective AQ11

Conserve and restore (within existing site potential and natural disturbance regimes) the habitat and connectivity to support the resilience of riparian-dependent biotic communities.

- Stream channel crossings shall generate velocities and sediment transport rates that are stable and safely pass all life stages of native aquatic organisms (including, but not limited to, existing or restorable listed fish species); and meet the state and federal fish passage requirements.

Management Actions

1. Maintain and restore corridors of riparian vegetation and re-connect flow in reaches with decreased stream flow.
2. Restore vegetation necessary to support biotic communities that occur in the BpS (see Vegetation section).
3. Restore BLM-managed perennial, perennial interrupted, and intermittent stream channel crossings in combination with the crossings of other landowners such that 90 percent of stream routes in each 5th field hydrologic unit (HUC; up to 250,000 acres) have crossings that accommodate the 100-year floods and that route sediment and large wood with a natural geometry, slope, and natural bed stability of the channel.
4. Prohibit wind power and transmission systems within 0.25 mile of flood-prone areas, lentic areas, ponding or playas. Exceptions may be made if aquatic objectives would still be met. No surface occupancy (NSO) may be required if mitigation is not sufficient to achieve ACS objectives.

Guidelines

1. Retain 20 percent of the upland perimeter of lentic areas in vegetative species and structure needed for hiding cover, life cycle completion, and corridors of the site's riparian-dependent biotic community. This may translate into leaving areas untreated for fuels or other activities. The final delineation will be recommended by an interdisciplinary team.

2. Do not allow stream crossings to create or maintain scour, headcuts, or deposition at levels not appropriate to the adjacent stream reaches.

Objective AQ12

Conserve and restore (within existing site potential and natural disturbance regimes) the high quality waters that serve as domestic water supplies.

Management Actions

1. Target treatment of Phases II and III juniper areas to improve infiltration for groundwater that supplies public and private domestic water use.
2. Remove legacy mine sites and prohibit new mining in source water protection areas such as the Dixie Creek watershed (see Table 8).
3. Prohibit storage of toxics in Source Water Protection areas.
4. Do not apply fire retardant, herbicides, or other toxics near domestic use water points of diversion or delivery systems. (Apply more than 100 feet away.)

Guidelines

1. Use Oregon source water assessments to inform decisions about source water protection. Participate in and provide resources for plan area source water protection plans at the local level.
2. Do not allow the introduction of volatile organic compounds into domestic waters supplies.
3. In drinking water protection areas, do not facilitate high risk uses (e.g., septic, sewage, highways, streets, high-density housing, agriculture, and intense silviculture).
4. Prohibit use or storage of insecticides, pesticides and other toxicants within 500 feet of domestic water points-of-diversion and wells and in areas prone to flooding. Always follow label requirements.
 - a. Consider effects to community health when weighing risks associated with using retardant, pesticides, herbicides and other toxicants within 0.25 mile of private or community domestic water points-of-diversion and wells.

Wildlife

See Map 3 for wildlife habitats.

Objective W1

Improve and maintain vegetative condition to benefit wildlife.

Management Actions

1. Manage upland habitat for diversity to provide for a variety of wildlife.
2. Maintain or improve habitat for threatened and endangered species.
3. Maintain or improve winter range for deer and elk.

Guidelines

1. Design vegetation manipulation and revegetation projects in areas determined to be crucial to supporting federally listed, BLM sensitive, and locally important species' populations to meet species' needs and to create an overall mosaic of vegetation structures and conditions.
2. Public land use by undesirable non-native animals and/or feral livestock will not be authorized, and the BLM will support removal of these species by the use of BLM regulations and/or cooperation and coordination with the Oregon Department of Agriculture, ODFW, and private landowners.

3. All new fences will be built to standard BLM wildlife specifications to allow wildlife passage, with the exception of fences built specifically to keep wild ungulates out of an area or fences built to meet specific public safety or other administrative purposes. Existing fences not meeting standard BLM wildlife specifications will be modified to meet the standard when major reconstruction is done or as funding allows.

Objective W2

Maintain or improve habitats to support healthy, productive, and diverse populations and communities of native plants and animals (including special status species, migratory bird Species of Concern, and species of local importance) appropriate to soil, climate, and landform. Where consistent with habitat capabilities, meet ODFW management objective numbers for deer, elk, and antelope.

Maintenance or improvement of habitats will consider habitat patch size, disturbance, quality and connectivity of habitats required to sustain wildlife. Provide effective wildlife habitat for individual species, groups of species, or habitats.

Management Actions

1. Manage vegetation to provide habitats for the appropriate associated wildlife species within the limits of ARV as defined in Vegetation, Management Objective V3.
2. Maintain or improve habitats using a variety of techniques, such as mowing vegetation, wildland fire, livestock grazing, commercial timber harvest, non-commercial tree cutting, planting, seeding, and water developments.
3. Incorporate patch size and connectivity into project design as appropriate for the Biophysical Settings.
4. Maintain or establish connectivity of sagebrush habitats at mid and fine scales to maintain, increase, or decrease the overstory as needed.
5. Increase desirable big game browse species where appropriate.
6. Reduce western juniper and shrubs on rangeland sites where their expansion threatens Washington ground squirrel or sage-grouse habitats or populations.
7. Establish green strips to diminish the chances for further loss of quality grassland or sagebrush habitats to wildland fire. This will especially be applicable to quality habitats that adjoin fire-prone, annual grass-dominated areas (e.g., cheatgrass).
8. Retain current BLM administration of public lands within special status, migratory bird Species of Concern, or locally important species habitats in federal ownership, unless an exchange will be more beneficial to special status wildlife and/ or locally important species (also see Lands and Realty, Management Objective LR4).
9. Management of **habitat** for migratory bird Species of Concern will emphasize avoidance or minimizing of negative impacts and restoring and enhancing of habitat quality. Through the permitting process for all land use authorizations, promote the maintenance and improvement of habitat quantity and quality.
10. Install and maintain wildlife escape devices in water troughs.

Guidelines

General

1. Wildlife populations will be allowed to expand naturally or through transplants in coordination with ODFW.
2. The BLM will coordinate with the ODFW to meet future big game habitat demands during any change to game animal management objectives identified through ODFW's management objective setting process.
3. Place high priority on activities that increase browse species in critical winter range.

4. All practices and projects will avoid or minimize the possibility of unintentional take of migratory birds. If the proposed project or action could potentially impact migratory bird species populations identified as occurring within the project or action area, evaluate options to mitigate the project to minimize or eliminate the identified impacts during periods of concentrated nesting activity.
5. Avoid, reduce, or mitigate adverse impacts on the habitats of migratory bird Species of Concern to the extent feasible.
6. To promote the maintenance and improvement of habitats for migratory bird Species of Concern, utilize applicable conservation actions and strategies consistent with regional or statewide bird conservation priorities where possible.

Habitat Modification

1. Areas disturbed during project activities will be seeded as directed in the Vegetation section.
2. Consider elk satisfactory cover, marginal cover (see glossary), and forage needs within geographically distinct winter or summer ranges when assessing spatial arrangements of treatments to meet ARV objectives.
 - a. Utilize topographic relief when designing vegetative treatments to provide cover from open roads or trails.
 - b. Prioritize cover retention between 100 and 550 yards of open roads and within 200 yards of forage or riparian areas, and gentle topography associated with calving areas.
 - c. Retain cover blocks in irregular shapes, 200 to 400 yards wide, with blocks of 250 acres or larger provided throughout forested winter and summer ranges.

Structural Developments

1. In suitable habitats where important nesting structures are absent, consider installing nesting platforms, nest boxes, and other structures to improve habitat conditions for snag-dependent species.
2. Where natural springs exist and are developed, water troughs will be designed to accommodate use by wildlife and livestock. Additional requirements are addressed in the Aquatic Conservation Strategy (Management Objective AQ8).
3. Where pipelines are developed to deliver water more than two miles from an existing water source, the water system will be designed to provide water for wildlife between July and October.
4. Guzzlers (structures that collect, store, and distribute rain water) will be installed only where they facilitate distribution of wildlife. Maintenance of existing guzzlers will receive priority over development of new guzzlers, except when managing for special status species.
5. To the maximum extent feasible, new guzzlers will be located away from existing designated trails to avoid the potential for seasonal trail closures or rerouting of trails.

Disturbance Actions

1. Utilize existing road and skid trail systems when not prohibitive by cost, access, or other RMP objectives.
2. Close roads and skid trails where open road densities exceed those described in the Access and Transportation section.
3. Items to consider when prioritizing roads to select for closure include, but are not limited to: roads adjacent to special habitat features, habitat security areas (> 2/3 mi. from an open route), cover blocks, riparian areas (especially those at Proper Functioning Condition), and connectivity areas. Increase the spatial distribution of areas > 2/3 mi. from a road across the landscape.
4. Limit new and reconstruction of roads or skid trails in or adjacent to the highest security habitat (graduated band distances from open roads as described in Rowland 2005) available within one mile of a project. Additional avoidance considerations include those listed above for prioritization of road closure.

5. During development of management facilities (e.g., mineral sites and access roads) or infrastructure (e.g., trails), emphasize maintenance of relatively large unfragmented habitat patches. The term “relatively large unfragmented habitat patches” means the size of the patch in relation to the size of the BLM parcels in the area; the goal is to minimize the amount of human disturbance to wildlife and the human influence on the physical condition of the habitat.
6. Rehabilitate big game winter range habitat degraded by wildland fire through seeding, alteration of livestock grazing, or other methods as needed. (See Vegetation, Management Objective V3.) Manage important wildlife habitats to minimize human disturbance by maintaining seasonal closures throughout the sensitive period. (See Table 4 for a list of species that may require seasonal restrictions, the restriction dates, and distance buffers.)
7. For nest or breeding sites, seasonal closures may be ended early if monitoring shows that the site is unoccupied. However, the closure period must include dates that allow late nesting birds. Prior to disturbing activities, conduct surveys to determine presence/absence of special status species; allow the action to proceed if a field exam indicates that the nest is inactive.
8. Continue seasonal wildlife closures in the Murderers’ Creek Cooperative Travel Management Area and adjust seasonal dates to include bow hunting season.

Table 4. General Guidelines for Seasonal Restriction and Distance Buffers

Species	Habitat	Spatial buffer	Restriction dates
Bald eagle	Nest	0.25 mile non-line of sight, 0.5 mile line of sight, 1 mile for blasting	January 1 - August 31
	Winter roosts and Corridors	0.25 mile	October 1 - April 30
Golden eagle	Nest	0.25 to 0.5 mile	February 1 - August 31
Northern goshawk	Nest	0.25 mile	March 1 - August 31
Peregrine falcon	Nest	1 mile	January 1 - August 15
Prairie falcon	Nest	0.25 to 0.5 mile	March 15 - August 15
Ferruginous hawk	Nest	0.5 mile direct line of sight, 0.25 mile with visual buffer	March 1 - August 31
Swainson’s hawk	Nest	0.25 to 0.5 mile	April 1 - August 31
Flammulated owl	Nest	0.25 mile	April 1 - September 30
Burrowing owl	Nest	0.25 mile	March 1 - August 31
Great gray owl	Nest	0.25 mile	March 1 - July 31
Sage grouse	Lek (breeding)	0.6 mile	March 1 - May 15
	Brooding and rearing	0.5 mile	April 1 - July 31
	Nest	0.25 mile	
	Winter habitat	N/A	November 15 - March 15
Mule deer	Winter range	N/A	December 1 - April 15
Rocky mountain elk	Winter range	N/A	December 1 - April 15
	Calving	N/A	May 15- June 30
Antelope	Winter range	N/A	December 1 - April 15
Bighorn sheep	Occupied habitat	N/A	Yearlong
Long billed curlew	Nesting	N/A	March 15 - May 30
Spotted bat	Roosting cliffs	0.25 mile	May 1 - August 31
Cave-dwelling bats (Townsend’s big-eared, Pallid, fringed myotis)	Hibernaculum	N/A	November 1 - April 15
	Nursery	N/A	April 15- October 31

These general guidelines are only examples of typical restrictions. Specific dates and distances may vary depending on the type of action proposed and the local breeding chronology of species or local weather patterns.

Objective W3

Provide security habitat (see glossary) that benefits deer, elk, antelope, and bighorn sheep during sensitive periods (winter, calving/fawning, and hunting seasons). Wildlife habitat is a primary management consideration in these specific times of the year.

Management Actions

1. Apply seasonal area closures for motorized use to protect wintering animals in elk winter crucial, mule deer winter concentration, bighorn yearlong, and antelope winter ranges. The dates applied will be from December 1 to April 15, unless adjusted site specifically to meet coordinated resource management. These closures will be applied to all secondary and primitive roads under BLM jurisdiction within the seasonal closure area. Closure will generally not apply to county, state or other non-BLM federally designated routes. Roads with seasonal closures are designated as Open Road Seasonally on Maps 9-14 (see map packet and the Access and Travel Management section of this RMP).

Guidelines

1. Maintenance or improvement of existing security areas (> 2/3 mi. from any open road) will be considered during planning for any management action.
2. Special use permits may include restrictions in some areas or during certain times of the year important to protecting the habitat or life cycles of bighorn sheep.
3. Roads and driveways that access private land and are not needed for general public access may be gated to limit use only to landowners. Consider building roads and driveways to the minimum standard necessary that allows reasonable access and has the least impact on wildlife resources as possible.

Objective W4

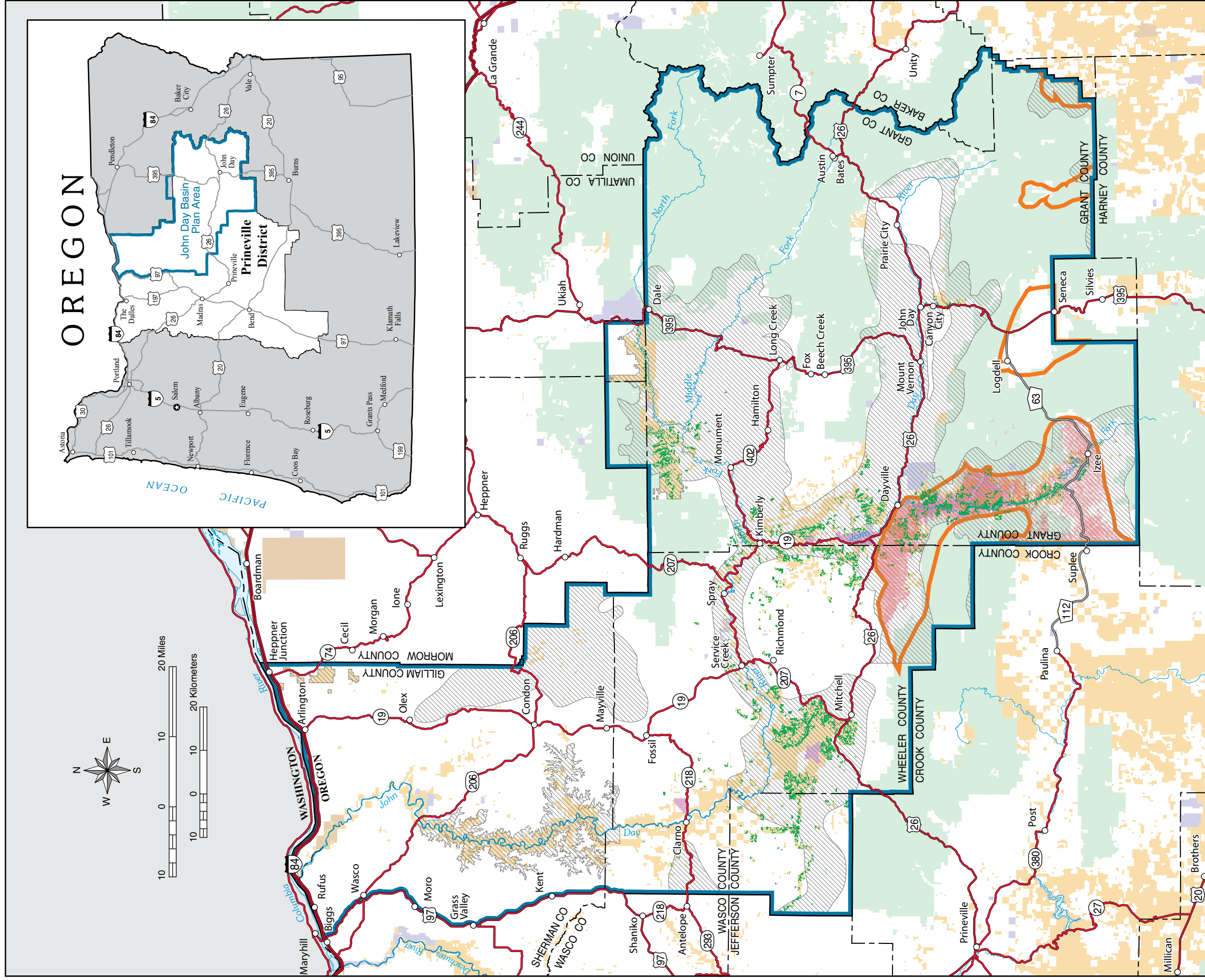
Facilitate the maintenance, restoration, and enhancement of bighorn sheep populations and habitat on public land.

Management Actions






1. Pursue management in accordance with the 2003 *Oregon's Bighorn Sheep and Rocky Mountain Goat Management Plan* (ODFW 2003) in a manner consistent with the principles of multiple use management.
2. Improve poor quality habitat in identified historic range where needed to meet recovery or reintroduction objectives.
3. If ODFW determines that excess animals are available, transplants out of the herds will be authorized.
4. To protect California Bighorn Sheep, applications to change the kind of livestock to sheep or goat (domestic or non-native) on any existing or future allotments will be denied and any domestic sheep grazing allotments where preference is relinquished will be converted to cattle or horse grazing allotments.
5. Non-renewable leases for sheep or goats will be allowed to achieve resource objectives when the risk of disease transmission is mitigated by the distance to occupied habitat, season of use, or other reasonable mitigating conditions as specified in the Western Association of Fish and Wildlife Agencies' "Recommendations for Domestic Sheep and Goat Management in Wild Sheep Habitat" (WAFWA 2012) or the best available science.







Guidelines

1. Coordinate with ODFW on population management of bighorn sheep. Transplants, reintroductions, and natural expansion of bighorn sheep will be allowed. Plan bighorn sheep occupancy outside of domestic sheep use areas to avoid conflicts associated with disease transmission.
2. Manage juniper density on occupied bighorn sheep range to maintain suitable habitat.



LEGEND

-  Plan Area Boundary
-  Winter Range and Seasonal Motor Vehicle Restrictions on BLM Administered Land Only
-  Greater Sage-grouse Distribution
-  Sagebrush Potential Within Greater Sage-grouse Distribution
-  Potential for Old Growth Juniper

-  Bureau of Land Management
-  Forest Service
-  John Day Fossil Beds National Monument
-  Other Federal
-  State
-  Private or Other

- Administered Land**
- Bureau of Land Management
- Forest Service
- John Day Fossil Beds National Monument
- Other Federal
- State
- Private or Other

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PRINEVILLE DISTRICT
John Day Basin
Resource Management Plan
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Objective W5

Conserve federally listed species and the ecosystems on which they depend (BLM Manual 6840, p.0.1). Ensure that actions requiring authorization or approval by the BLM are consistent with the conservation needs of special status species and do not contribute to the need to list any special status species under provisions of the ESA, or to designate additional special status species under provisions of BLM Manual 6840.

Management Actions

1. Continue to identify special status species according to BLM Manual 6840 and BLM OR/WA 6840 policy and criteria in IM-OR-2007-072 or subsequent Instruction Memorandum (IM) updates.
2. Design and implement management activities to be consistent with the BLM National Sage Grouse Habitat Conservation Strategy and Guidance for the Management of Sagebrush Plant Communities for Sage Grouse Conservation, November 2004 (USDI 2004). The BLM hereby adopts certain portions of the Greater Sage-Grouse Conservation Assessment and Strategy for Oregon: April 2011 (Hagen 2011) as management direction (see Appendix F of this RMP).
3. Management activities in the habitat of federally listed, candidate threatened or endangered species will maintain or improve habitat conditions and/or not prevent or retard attainment of future desirable habitat conditions.
4. Evaluate all projects for their effects to special status species and their habitats when authorizing activities. Conduct an assessment of the wildlife resources. The assessment will be commensurate to the level of anticipated impacts and include consideration of:
 - a. Species and/or habitat presence.
 - i. Review wildlife observations databases, available vegetation data sets, and/or conduct field surveys during appropriate seasons. In situations where data are insufficient to make an assessment of proposed actions, surveys of potential habitats will be completed prior to action being taken, or presence will be assumed.
 - b. Determination of project effects including discussion of consistency with applicable recovery plans, conservation assessments and strategies, and other appropriate documents.
 - c. Necessary mitigation measures and habitat enhancement opportunities.
5. As appropriate, adjust clearances and mitigation requirements on all ongoing or planned projects when new information becomes available for populations, habitats, or special status listing.
 - a. Include the following or a similar contract specification: "The Government may direct the Contractor to discontinue all operations in the event that listed or proposed threatened or endangered plants or animals protected under the Endangered Species Act of 1973, as amended, or Federal candidate, sensitive or state listed species, identified under BLM Manual 6840, are discovered to be present in or adjacent to the project area. Actions taken under this paragraph shall be subject to the Suspension of Work clause in Section I, FAR 52.242-14."
6. Initiate formal and informal consultation with the U.S. Fish and Wildlife Service, as provided by regulation, on all proposed actions that may affect any federally listed species or species proposed as candidate threatened or endangered. No activities will be permitted in threatened, endangered, or sensitive species habitat that would jeopardize the continued existence of such species.
7. In coordination with the USFWS and ODFW, determine whether habitat conditions exist to allow the successful reintroduction of locally or regionally extirpated species such as Columbian sharp-tailed grouse. Determine whether habitat improvements, if any, are needed to create suitable habitat for reintroductions.
8. Enhance health of roost and nest trees by reducing competing vegetation.
9. Enhance conditions for future large perch/nest trees.

Guidelines

1. Determine the distribution, abundance, and management needs of special status species occurring on BLM-administered lands.

- a. Document observations of special status species.
- b. Survey for special status bat species, assess habitat potential within all caves, and identify which caves (if any) contain potentially suitable habitat for bats (especially Townsend's big-eared bat).
2. Conduct periodic surveys of potential raptor habitats, and monitor active and historic sites to determine occupancy and management consistency.
3. Design or redesign travel routes to contribute to the long-term conservation of special status species.
4. Balance the need for restorative actions to address long-term threats to special status species with the short-term need to protect special status species and their habitats.
5. Individual species requirements will be included in management prescriptions but not to an extent that over-emphasizes the value of any one habitat.
6. Develop a Site Management Plan (see glossary) when programmatic direction is insufficient to protect an individual site or population.
7. Protect special status species and habitats through activity buffers and seasonal restrictions including those described in Objective W2 and Table 4.
8. Management to meet long-billed curlew and Washington ground squirrel habitat needs in the Horn Butte ACEC will include the following:
 - a. Utilize grazing, prescribed fire, or mechanical means (excluding heavy machinery) to manage grass stubble heights at < 3.94 inches tall in or adjacent to identified long-billed curlew nesting habitat during the reproductive season (March 15 through May 30).
 - b. Seasonally restrict grazing within the Hi Meadow (#2644) and Horn Butte (#2571) allotments between April 15 and August 15.
 - c. Manage sagebrush densities within or adjacent to identified long-billed curlew nesting habitat at < 10 percent canopy cover.
 - d. Avoid ground-compacting activities, especially in drainages and the Fourmile area.

Objective W6

Protect and restore special habitat features. These special habitat features include caves, cliffs, playas, riparian areas and wetlands, foraging areas, snags, and down wood.

- Special habitat features are often limited across the landscape, and therefore are more important to those species that depend on those features for some portion of their life cycle than more abundant features of the landscape. The special habitat features listed above were identified as critical to the long-term conservation of a variety of species in Source Habitats for Terrestrial Vertebrates of Focus in the Interior Columbia Basin (USDA & USDI 2000a), the Assessment of Ecosystem Components (USDA & USDI 1997, p. 64, modified, and the BLM Learning Network).

Management Actions

1. Maintain and/or recruit adequate numbers, species and sizes of snags, and also levels of downed wood to contribute meaningfully to the needs of wildlife, invertebrates, fungi, bryophytes, saprophytes, lichens, and other organisms; long-term soil productivity; nutrient cycling; carbon cycles; and other ecosystem processes. (See also the Vegetation section.)
2. Also see specific management direction in the Caves section.
3. Allow dead tree removal for safety reasons or after fire if snag and down log requirements listed in Table 2 and Table 5 are met.
4. Maintain, enhance, or create special habitat features by: digging or blasting ponds; developing springs; gating cave entrances; mowing or burning playas; closing or rerouting roads or trails ; placing down wood; and creating snags.

Guidelines

1. Avoid special habitat features (e.g., nests and cavities) when authorizing activities. If avoidance is not possible, provide reasonable mitigation by reducing, restoring or compensating for important special habitats that are altered by management actions such as mineral material mining and road construction. See Table 4 and associated guidelines for distance buffers and seasonal restrictions.
2. Except where public safety is a concern, retain an adequate number of snags and large down wood in treatment areas based on forest type and seral stage.
 - a. Retain all soft snags.
 - b. Retain scattered hard snags and large live trees, and where available leave in clumps. Avoid leaving snags within 300 feet of open roads, and within one tree length of skid trails, skyline corridors, and improvements.
 - c. Trees retained for current and future snags and as “legacy trees” will be chosen from the largest trees available. Species that remain standing longer are priority for retention in the following order: ponderosa pine, Douglas fir, Western larch, white/grand fir, and lodgepole pine as appropriate for the site potential and BpS.
 - d. Minimum snag density retention amounts in treatment areas are shown in Table 5 (Johnson and O’Neil 2001, Chapter 24, p. 596, Tables 1, 2 and 3). Large snag requirements are included in total snag requirements. Minimum snag densities and large snag requirements may be revised with updated science.
 - e. Snags of all decay classes count toward the minimum density standards; however, > 50 percent will be in decay class 1 and 2 (Johnson and O’Neil 2001, Chapter 24, p. 580, Figure 3).
 - f. Appendix D provides guidelines for determining the amount of area to exclude from salvage logging after high severity disturbance to meet snag retention objectives. Snag densities in Table 5 will be retained on salvaged acres.
 - g. Where snag densities are below the established desired range, initiate management activities to increase snag levels (USDA-FS and USDI-BLM 2000a, p. 48).
 - h. To the extent compatible with reforestation objectives, fire hazard reduction standards, and public safety/trail use, retain large down wood in amounts appropriate for the plant community (see Table 1 in the Vegetation section).
 - i. Large down wood will be left in place across treatment areas rather than piled and burned, unless precluded for safety reasons (see the Fire and Fuels sections).
3. Mineral material mining may be allowed on cliffs or talus slopes not occupied by special status species, provided that special habitat features are available in appropriate amounts and arrangements across the landscape to support species needs.
4. Minimize activities that could adversely influence wildlife use of special habitat features by using one or more techniques appropriate to the species’ needs and status. These techniques may include: seasonal restrictions, distance buffers, signs, closures, and relocation of disturbances (i.e., moving trails).

Table 5. Minimum Snag¹ Densities for Managed Stands.

Forest Type	Middle-Successional Stage		Late-Successional Stage	
	Total Snags/Acre	Large Snags/Acre ²	Total Snags/Acre	Large Snags/Acre
Western juniper	0.6	0.2	0.3	0.1
Ponderosa pine	2.0	1.1	2.1	0.6
Mixed conifer	8.7	1.7	8.4	3.2
Lodgepole pine	11.2	0.9	8.0	0.5

¹ Snags are ≥ 10 inches dbh and ≥ 6.6 feet tall

² Large snags ≥ 19.7 inches dbh and ≥ 6.6 feet tall

Wild Horses

Objective HB1

Manage the Murderer's Creek wild horse herd as a self-sustaining population of healthy animals in balance with other uses and the productive capacity of their habitat.

Management Actions

1. Continue to manage the Murderer's Creek wild horse herd jointly with the Malheur National Forest under the guidance of the Murderer's Creek Wild Horse Territory/Horse Management Area (HMA) Management Plan (October 2007 or current version). Approximately 75 percent of the HMA is National Forest land, and the remaining 25 percent is managed by BLM.
2. Continue to manage for a herd size or Appropriate Management Level (AML) of 50-140 horses.

Guidelines

1. Use the following criteria when considering adjustments in herd size:
 - a. Extraordinary circumstances such as wildland fire, extreme drought, disease, or circumstances warranting quarantine may require removal of animals to maintain animal health or an ecological balance with the available habitat.
 - b. Excess animals may require removal to comply with court orders.
 - c. If wild horses stray outside of their designated boundaries (the herd management area) and the landowner requests their removal, remove them as required by law.
 - d. When concentrations of horses result in unacceptable impacts on resources, such as riparian areas, remove small groups of horses.
 - e. When population levels surpass the upper end of the AML, schedule gather activities and remove excess horses. The number of horses removed will be those necessary to bring the population down to the lower end of the AML range.
 - f. Fertility control measures, such as the use of the drug *porcine zona pellucida* or others approved for use, can be used to slow the rate of population increase.
 - g. Gelding or adjusting sex ratios to favor males or other population control measures that reduce population growth rates and extend the gather cycle during gather or herd management area planning for wild horse herds will be considered.
2. Gather and remove excess horses as described in the Murderer's Creek Wild Horse Territory/HMA Management Plan (October 2007 or current version) using approved techniques such as helicopter drive trapping, horseback herding to a trap, roping, bait trapping, chemical capture, or net gun capture.
3. Determine herd health, habitat condition, and herd size through habitat monitoring and pre- and post-gather censuses.
4. Coordinate with local, state, federal, and private organizations to maintain ecological values.

Wilderness Characteristics

Land Use Allocation

See Map 4.

Objective WC1

Protect wilderness characteristics (roadlessness; naturalness; opportunities for solitude and primitive unconfined recreation; and identified supplemental values) on 19,442 acres of BLM-administered land identified for such protection. See Map 4 (Wilderness Characteristics).

Management Actions

1. Lands managed to protect wilderness characteristics will be:
 - a. Designated as Z-1.
 - b. Designated as VRM Class II.
 - c. Closed to construction of new buildings and new temporary or permanent roads.
 - d. Managed as locatable mineral avoidance areas. If avoidance is not possible, areas will be available with standard stipulations plus subject to a site-specific analysis and protection of the wilderness characteristics of the area.
 - e. Managed as avoidance areas for leasable and geothermal energy. If avoidance is not possible, areas will be available with standard stipulations plus subject to a site-specific analysis and protection of wilderness characteristics and managed under no-surface-occupancy (NSO) requirements.
 - f. Closed to salable, renewable energy, communication sites, facilities, and rights-of-way.
 - g. Closed to certain commercial permits (e.g., forest products).
 - h. Designated OHV Closed or Limited to designated routes as shown in the Recreation Opportunities section, Objective R4.
 - i. Subject to a requirement that proposed projects and uses such as fuels treatments, noxious weed management, riparian or wildlife habitat improvements, wild horse management, and livestock improvements be evaluated on a case-by-case basis to ensure that any reductions in wilderness characteristics are temporary, and wilderness characteristics are protected over the long term.
2. For lands identified for protection of wilderness characteristics where the BLM lands rely on adjoining federal lands being managed to protect the same values to meet the size criteria (BLM Manual 6310) and the agency managing the adjoining lands revises its land use plan to no longer protect wilderness characteristics, the BLM lands will no longer meet the minimum size criteria and thus will no longer possess wilderness characteristics.
 - a. Wilderness characteristics will no longer be protected on these areas and the accompanying land use plan allocations (right-of-way exclusion, VRM II, etc.) applied specifically to protect the wilderness characteristics will automatically be dropped as part of plan maintenance.
 - b. These lands will then be managed in a compatible manner with the surrounding BLM lands.

Objective WC2

Protect wilderness characteristics on 19,442 acres of BLM-managed lands found to have wilderness characteristics, as shown on Map 4 (Wilderness Characteristics).

Management Actions

1. Allow mechanical vegetation treatment consistent with VRM II on up to 40 percent of the areas possessing wilderness characteristics for the purpose of maintaining or restoring ecological condition and long-term wilderness characteristics (see Map 4).

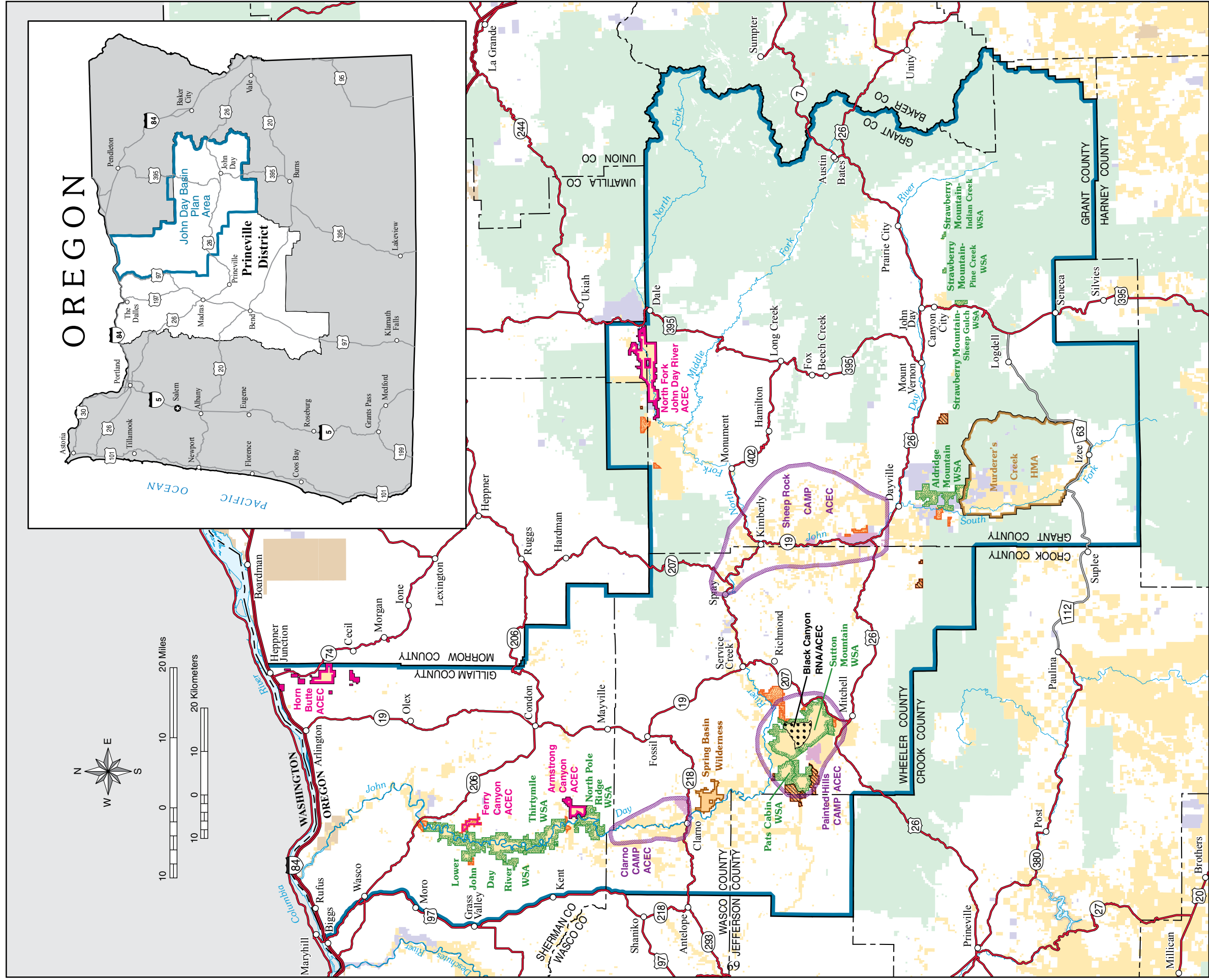
Cave Resources

Objective CR1

Retain the natural condition of significant caves. Protect cave resource values including those contributing to significance, as well as others including biological deposits (e.g., middens and skeletal remains) and threatened, endangered, and/or sensitive plants or animals. For nonsignificant caves, karsts, and other special habitat features see Objective W6.

Management Actions

1. Permit recreational and other human activities consistent with protecting cave resource values.
2. Complete a site-specific Cave Management Plan for all significant caves. Until a Cave Management Plan is written, preclude all administrative actions that would cause changes to the micro climate, visibility, physical structure, or amount of recreational use of the cave area within 0.25 mile of any opening or entrance.
3. Within 350 feet of significant caves, design vegetation treatments to provide seclusion, shading, and other resource benefits associated with the cave.
4. Do not allow mineral material development, locatable mineral development, and surface occupancy for fluid mineral leasing within 0.5 mile from the entrance and 0.5 mile on each side of the centerline along the length of any significant cave (see Table 8).
5. Prohibit new rights-of-way within 0.5 mile of entrances to any significant cave unless no other reasonable alternative routes are available. Where a new right-of-way cannot be reasonably accommodated outside of the 0.5-mile buffer, consider locating first along existing utility corridors, county roads, or BLM system roads.
6. Implement seasonal restrictions and use buffers specified in Table 4 until a survey confirms that the cave is not being used by bats as a hibernaculum (see glossary) or nursery.
7. Restrict access in significant or nominated caves to foot travel only.
8. Group and commercial use of caves will follow direction from the Recreation section.
9. Prohibit the following actions in significant caves, and in caves where significance has not yet been determined:
 - a. Willfully defacing, removing, or destroying plants or their parts, soils, rocks, minerals, or other cave resources.
 - b. Drawing, painting, or otherwise adding any graphic elements to any cave surface.
 - c. Smoking.
 - d. Possessing, discharging, or using any kind of fireworks or other pyrotechnic devices.
 - e. Possessing a domestic animal.
 - f. Depositing or disposing of human waste.
 - g. Digging, excavation, or displacement of natural and/or cultural features.
 - h. Building, maintaining, tending, or using any fire, campfire, or stove.
 - i. Camping or overnight use.
 - j. Mountain bike, horse, or motor vehicle use.
 - k. Use of chalk or hand-drying agents for climbing which are not naturally appearing.
 - l. Geocaching.
 - m. Possession and use of alcoholic beverages as defined by state law.
 - n. Use of glass containers.
 - o. Possession and use of paintball guns.
 - p. Firearm discharge.



LEGEND

- Wilderness Study Area (WSA)
- Spring Basin Wilderness
- Herd Management Area (HMA)
- Area to be Managed to Protect Wilderness Characteristics
- Mechanical Vegetation Treatment Need Identified in Area to be Managed to Protect Wilderness Characteristics
- Area of Critical Environmental Concern (ACEC)
 - Black Canyon Research Natural Area (RNA) - ACEC
 - Cooperative Area for the Management of Paleontology (CAMP) of Paleontology - ACEC

- Plan Area Boundary
- Administered Land**
 - Bureau of Land Management
 - Forest Service
 - John Day Fossil Beds National Monument
 - Other Federal
 - State
 - Private or Other

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Map 4: Special Management Areas and Wilderness Characteristics

Guidelines

1. Existing guidance outside the scope of this plan includes the Federal Cave Resources Protection Act of 1988 (P.L. 100-691; 16 U.S.C. 4301), which directs federal agencies to inventory reported cave locations, prepare and maintain a list of significant caves, and protect cave resources determined to be significant. Procedures for determining the significance of caves are in 43 CFR Part 37. Significance is determined based on criteria for biotic, cultural, geologic, mineralogical, hydrologic, recreational, educational, or scientific values, features, or characteristics as defined in 36 CFR, Part 290.3 (c) and (d).
2. Conduct appropriate surveys to determine significance of all newly identified caves.

Visual Resources

Land Use Allocation

See Map 5.

Objective VR1

Maintain the scenic quality of river canyons, open space landscapes, cultural landscapes, and other areas having high quality visual resources. Manage visual resource values in accordance with Visual Resource Management (VRM) objectives:

- Preserve the existing character of VRM Class I landscapes (Wilderness and Wilderness Study Areas). This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and should not attract attention.
- Retain the existing character (low change) of VRM Class II landscapes (WSR segments, most non-designated segments of the river, and portions of some tributaries). Management activities in VRM Class II may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.
- Partially retain the existing character of VRM Class III landscapes (moderate level of change). VRM Class III allows management activities that may attract attention, but their results should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.
- VRM Class IV allows management activities that may require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. Management activities may dominate the view and be the major focus of viewer attention. However, attempts should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements of the landscape.

Management Actions

1. Before initiating or permitting any major surface-disturbing activities on public land, the BLM will complete an analysis using the Visual Contrast Rating Process to determine adverse effects on visual qualities.
2. Do not permit activities that would result in significant, long-term, adverse effects on the visual resources of the John Day River Canyons in areas normally seen from these rivers.
3. All BLM resource uses, management activities, and other implementation decisions will meet VRM objectives and be consistent with VRM classifications. Use visual resource design techniques and Best Management Practices to mitigate short-term and long-term impacts within VRM Class objectives [43 U.S.C. 1701, Section 102 (a) (8)].
4. Generally maintain the existing “footprint” of cultural landscapes (facilities, projects, and improvements) [43 U.S.C. 4321, Section 101 (b)].

5. The existing level of road maintenance may be continued, but any road improvements or realignments will conform to the VRM classification.
6. Manage existing recreation developments in Wild and Scenic River segments with a VRM Class II designation as VRM Class III "islands." New recreational development under this plan will be required to meet VRM Class III standards.
7. Manage land according to VRM classifications shown on Map 5 and in Table 1, with the following exception:

The area within a designated utility or transportation corridor (as identified in Objective LR2-Actions of this document) will be managed to VRM IV. Project design elements must minimize the long-term visual impacts to public land users. Manage for VRM Class I in the Spring Basin Wilderness Area, and the following Wilderness Study Areas (WSAs): Aldrich Mountain, Strawberry Mountain, North Pole Ridge, Thirtymile, Lower John Day, Sutton Mountain, and Pat's Cabin.
8. Manage Fourmile Canyon tract as VRM Class II consistent with the provisions of the Oregon Trail Management Plan: Prineville District (1993).
9. Manage the North Fork John Day WSR; the North Fork John Day River, Armstrong Canyon, and Ferry Canyon ACECs; most of JV Ranch, and lands managed to protect wilderness characteristics as VRM Class II (see Map 5).
10. In the event the existing WSAs are released from Wilderness Study by Congress, the VRM classification associated with these lands will be changed from VRM Class I to Class II.

Special Management Designations

Wild and Scenic Rivers

Land Use Allocation

See Map 1.

Objective WSR1

Protect and enhance the free flowing nature and Outstandingly Remarkable Values (ORV) of designated Wild and Scenic Rivers (Map 1). Also protect and enhance values on rivers suitable for WSR designation, regardless of final outcome on designation.

- The National Wild and Scenic Rivers System was created by Congress in 1968 with the passage of the Wild and Scenic Rivers Act (PL 90-542). It requires WSRs be managed to "protect and enhance" the "outstandingly remarkable and significant values" that Congress lists. Congress also encourages managing agencies to assess the designated river segment to identify any additional outstandingly remarkable and/or significant values. While Congress gives ORVs a higher status than significant values, there is little management distinction between them on the river. Both are to be protected and enhanced.
- The designated WSR segments in the plan area include 148 miles of the John Day River (main stem, Tumwater Falls to Service Creek) and 47 miles of the South Fork John Day River (entire fork). The values on the main stem John Day River are: Scenery, Recreational Opportunities and Fish (Congressionally identified ORVs); Geological, Paleontological, Archaeological and Historical (Congressional significant values and BLM ORVs); Wildlife (BLM ORV); and Botanical and Ecological (BLM significant values). The identified values for the South Fork John Day River are: Scenery, Recreational Opportunities (Congressional ORVs); Fish, Wildlife and Botanical (BLM ORVs); Geological, Prehistoric and Traditional uses (BLM significant values). These two segments of river were added to the WSR system by the 1988 Oregon Omnibus Wild & Scenic Rivers Act, which amended the 1969 WSR Act.
- In 2005 the BLM contracted an inventory of potential WSR (in addition to those already designated) across the plan area (Final Report in Appendix I-1, JDB PRMP/FEIS), and determined that one river segment, 36.24 miles of the north fork of the John Day River, was eligible for WSR designation

(Documentation of WSR Eligibility, Appendix I-2, JDB PRMP/FEIS). This segment is 36.24 miles long, passing through 25.55 miles of public land, from River Mile 55 (Camas Creek) to River Mile 20.4 (roughly three miles northeast of Monument). The BLM completed a WSR Suitability Study (Appendix G) and has determined that the segment is suitable for inclusion in the National WSR System for the ORVs of Scenery, Recreational Opportunities and Fish. Suitability takes into account the characteristics of the river, other current and future uses and rights in the area, public interest, and administrative costs.

Management Actions

1. Direction in this RMP will serve as the river plans for the WSR segments of the main stem and South Fork of the John Day River (as listed above), and as the river plan for the “suitable” segment of the North Fork of the John Day River if it is so designated by Congress (see Map 1).
2. Manage 148 miles of the Lower John Day and 47 miles of the South Fork John Day WSRs according to management direction carried forward (actions below) from the 2001 John Day River Plan, which was developed with interagency partners.
3. Disseminate information through information boards at major access points, responses to written and telephone information requests, outfitter and guide meetings, and visitor contact with BLM employees and volunteers stationed in the office, on public lands, and on the river. Presentations to schools and interest groups will be conducted by request.
4. Continue to install information boards at public access points; make on-site contacts with visitors; and create new user brochures, detailed land ownership maps, and interpretive signs. The BLM will also increase cooperative efforts with state agencies, counties, local businesses, and others to provide river users with consistent information. Construct an information kiosk on the South Fork John Day Back Country Byway to educate the public about wildlife, riparian, wilderness, and weed management programs. Where trespass is a problem, install ownership identification markers between BLM, state, and private lands to clearly identify land ownership and reduce trespass potential.
5. Seek additional funding and improve coordination with state and local agencies by organizing a work group comprised of representatives of agencies providing law enforcement and emergency services along the John Day River. The BLM will encourage joint emergency training exercises for agencies, fire districts, outfitters, and private individuals.
6. Continue to use a Limits of Acceptable Change (LAC) study process to determine appropriate use levels in all areas where visitor use has potential to adversely impact the desired future condition of resource values, protect and enhance the Outstandingly Remarkable values, and/or the quality of visitor experience. Design implementation-level actions to be consistent with the findings of LAC studies.
7. Implement a limited entry permit system for all river segments where LAC studies indicate boater use needs to be controlled in order to meet desired future condition of resource values and/or the quality of visitor experience. One option for adjusting use levels is through a mandatory, limited-entry permit system, such as the one implemented in 2011 on Segments 2 and 3 of the John Day River:
 - a. Trip permits would be allocated through a first-come, first-serve common pool reservation system to all users in the same manner.
 - b. The applicable use fee would be due in advance to hold a reservation.
 - c. Any canceled trip permits would again become available for reservation.
8. Base management decisions on resource conditions, social preferences, and maintaining the desired future condition of these river segments. Resource indicators, standards, and management actions will be developed through an environmental assessment process (see Appendix B - Monitoring). Continue to monitor LAC in future years to track resource changes over time, provide feedback on the effectiveness of the management actions employed, alert managers to the need to consider further management actions. The Confederated Tribes of Warm Springs have indicated an interest in being involved in the LAC study. Other planning partners will also be invited to participate, as will private and commercial recreation users and other interested publics.
9. Existing state regulations will continue to prohibit the use of personal watercraft upstream of Tumwater Falls.

10. Existing state regulations will continue to seasonally close Segment 1 to motorized boating from May 1 to October 1.
11. Segment 3 will be closed to motorized boating between May 1 and October 1, except use of one small electric motor (40 pounds thrust or less) per boat will be permitted during this period.
12. Segments 2, 10 and 11 will be closed to motorized boating year-round.
13. To protect riparian resources, dispersed use will be managed in areas that can best sustain impacts of camping.
14. Future actions (not described in this document) designed to protect dispersed river campsites will be based on recommendations of a LAC study.
15. Identify preferred dispersed camping areas in Segments 10 and 11, and install signs and parking barriers to protect riparian vegetation.
16. Regulate vehicle traffic by installing signs and vehicle barriers, and provide an area suitable for camping on the west bank of the river near Clarno.
17. Actions to protect resources, such as campsite rehabilitation or closure, may be taken in any segment at any time, if necessary.
18. Prior to placement of vehicle barriers, the ODFW will be requested to provide input on appropriate locations.
19. Improve or upgrade existing facilities, where needed, or to replace those that are permanently closed (but do not develop additional recreation sites) to better meet the needs of the recreational user. Included in this direction:
 - a. *Segment 1:* The BLM will: (1) maintain Cottonwood and Rock Creek recreation sites, improve parking facilities, add a primitive boat ramp, and add a boater registration station at Rock Creek; (2) add picnic tables, plant shade trees, and provide water for a dump station at Cottonwood; and (3) re-establish a Cooperative Management Agreement (CMA) with the Sherman County Historical Society to manage and maintain the Oregon Trail interpretive site and John Day Crossing (west side), develop a small parking area, install access signing, and implement regular maintenance at this interpretive site.
 - b. The BLM will periodically evaluate use patterns along the South Fork and, if necessary to protect resources, develop a campground near Ellingson Mill including a vault toilet, tables, information board, signs, and parking barriers. Prior to developing a campground near Ellingson Mill, the appropriate level of NEPA analysis will be completed and necessary permits obtained.
20. Prior to implementing site-specific implementation actions, the BLM will coordinate with Oregon Parks and Recreation Department (OPRD) to ensure that proposed projects are consistent with State Scenic Waterway regulations, where applicable (see Appendix H). Further coordination with OPRD will take place prior to implementation of actions on state land (Clarno and Cottonwood). Coordination will also take place with ODFW, Division of State Lands, Army Corp of Engineers, Confederated Tribes of Warm Springs, affected counties, and others depending on permit requirements and interest.
21. Maintain public access at existing levels, except as noted below:
 - a. Grade, surface, or widen roads as needed, including the BLM road on the west bank from Clarno to Clarno Homestead, and the road to Priest Hole.
 - b. Improve ditches and culverts, and apply gravel to surface of the South Fork Road.
 - c. Seasonally close the BLM road north of Clarno Homestead during the first 10 days of pheasant season.
 - d. The BLM will coordinate with local governments and landowners to clarify legal public access to the Oregon Trail interpretive site (west side) and McDonald Crossing prior to developing parking areas and signing legal access routes to these sites.
22. Continue to consolidate public land ownership patterns through purchase or exchange, acquisition of easements, and through partnership agreements with willing landowners to resolve public access issues and provide access to high value recreation opportunities. Seek to acquire a river access point on public land at Twickenham from a willing seller, to replace the current private access.

23. The BLM will consult with the Oregon Department of Fish and Wildlife about road maintenance procedures and the placement of ditches and culverts along the South Fork Road, prior to beginning this work.
24. To protect and enhance river values and to provide safe reliable service to the outfitted public, the BLM established the following criteria for awarding commercial permits. When determining whether to accept new commercial permit applications, the BLM will continue to adhere to Bureau policy that considers the following:
 - a. Type of public service to be provided by the permittee or applicant, and consistency with management goals and objectives.
 - b. Ability of permittee/applicant to provide the service and make a business profit.
 - c. Safety of commercial customers.
 - d. The BLM workload in administering and monitoring permits.
25. Additional measures to be taken by the BLM in administering John Day River permits are listed below:
 - a. New and transfer applicants will pay a non-refundable application fee to cover the cost of verifying that application requirements are met.
 - b. The BLM will conduct independent random audits of permit records.
 - c. The BLM will issue new permits at the discretion of the Authorized Officer, if a needs assessment identifies a need for a particular service. Permits will be issued by competitive prospectus among those applicants meeting specific criteria identified by the needs assessment.
 - d. Permit transfers will be processed in accordance with BLM transfer policies.
26. Concession permits will be considered based on the results of a needs assessment.
27. Contact the Confederated Tribes of Warm Springs regarding their interest to provide input into the needs assessment process.
28. Implement and enforce "Rules of Conduct for Designated and Suitable River Corridors" (see Appendix I of this RMP).
29. The BLM developed water quality restoration plans consistent with the ACS objectives and actions identified in this RMP to guide restoration actions, meet BLM's portion of the TMDLs, fit into a multi-jurisdictional water quality management plan, and restore water quality in the plan area. The water quality management plan will be used to direct priorities, to identify site specific projects, and is incorporated by reference as part of this River Plan.
30. WSR recommended flows are identified in Appendix E - Instream Flow Reservations.
31. Recommend for designation by Congress the 37-mile segment of the North Fork John Day River determined suitable as WSR with a Scenic classification and ORVs of fishery, scenery, and recreation. The suitability determination will apply to lands within 0.25 mile of both sides of the 37-mile segment.
 - a. Upon formal designation or release by Congress, review the management direction to ensure compatibility with future Congressional direction. If Congress releases the segment of river determined to be suitable and does not provide additional management direction, this segment and surrounding lands will continue to be managed consistent with direction in this Record of Decision and Approved Resource Management Plan for the John Day Basin, which was designed to address Congress's management objectives identified in the Oregon Land Exchange Act of 2000.

Wilderness and Wilderness Study Areas

The BLM Manual 6340 (Management of Designated Wilderness Areas) provides national guidance on wilderness management. The BLM incorporated this guidance into the Spring Basin Interim Wilderness Management Plan (see Appendix J in this RMP). Managing Spring Basin Wilderness Area in accordance with the interim management plan in the short-term will assure that the area's wilderness values are protected until a management plan can be completed for long-term protection.

Wilderness Study Areas are managed according to BLM Manual 6330 - Management of Wilderness Study Areas (2012). Managing the seven WSAs within the plan area according to BLM Manual 6330 will ensure that WSAs remain unimpaired and suitable for preservation as Wilderness by Congress.

Objective WN1

Manage Spring Basin Wilderness Area (see Map 4) in accordance with standard goals for BLM wilderness management as directed in BLM Manual 6340.

Management Actions

1. Until a management plan is completed for the Spring Basin Wilderness Area, manage the area in accordance with the Spring Basin Wilderness Interim Management Plan in Appendix J of this RMP.

Objective WN2

Preserve the wilderness values within Wilderness Study Areas (WSAs) so as not to impair their suitability for preservation as Wilderness.

Management Actions

1. Manage Wilderness Study Areas according to BLM Manual 6330 - Management of Wilderness Study Areas (2012) or subsequent revisions. The following Wilderness Study Areas are within the plan area: Aldrich Mountain, Strawberry Mountain, North Pole Ridge, Thirtymile, Lower John Day, Sutton Mountain, and Pat's Cabin (see Map 4.)
2. Monitor each Wilderness Study Area to prevent, detect, and mitigate unauthorized activities and to properly supervise authorized uses and facilities. See Appendix B for required monitoring direction.
3. To stop unauthorized activities and to protect wilderness suitability in Sutton Mountain WSA, a short spur route in Meyer's Canyon where use has extended beyond the authorized area will be closed.
4. Immediately reclaim impacts caused by any unauthorized action to a level as close as possible to the original condition, or at least to a condition that is substantially unnoticeable.
5. Reduce the frequency of WSA violations by implementing actions from the following list in WSAs where violations are occurring:
 - a. Improve access to public information about WSAs: what they are, where they are located, how they are managed differently from non-WSA lands, and what is expected of the WSA visitor or neighbor. Provide this information on the BLM website and in brochures and maps distributed to adjacent landowners, permittees and lessees, and local communities; and posted at WSA portals and BLM offices.
 - b. Since operators often change over time, notify holders of existing rights who operate within WSAs about requirements on a regular and continuing basis. Insert relevant requirements of BLM Manual 6330 (Management of Wilderness Study Areas) into grazing lease agreements and special recreation permits where the area of use includes WSA lands.
 - c. Through the media, notify the public about WSA violations when they occur, seek volunteer help to reclaim impacts, and offer tips on how to care for WSAs (such as "Leave No Trace" outdoor skills).
6. The above actions will be taken as soon as possible within budgetary and other priority constraints.

Guidelines

1. Obtain from public land users their voluntary compliance with BLM Manual 6330 - Management of Wilderness Study Areas (2012). Where such actions fail, promptly initiate additional appropriate action to achieve immediate compliance with BLM Manual 6330.

Objective WN3

Provide management direction for Wilderness Study Areas released by Congress from consideration of Wilderness designation.

Management Actions

1. If a Wilderness Study Area is released by Congress for other uses, BLM Manual 6330 - Management of Wilderness Study Areas (2012) will no longer apply to these lands and the released lands will be automatically reallocated, to the extent consistent with specific release legislation, as follows:
 - a. Lands within the existing North Pole Ridge, Thirtymile, and Lower John Day WSAs will be designated as the Lower John Day ACEC (see the ACEC section).
 - b. Lands within the existing Sutton Mountain WSA overlap the John Day Paleontology ACEC and are designated in this RMP as part of that ACEC will retain the ACEC designation (see Management Action AC5). Manage these lands under no-surface-occupancy requirements for fluid mineral development and close them to wind energy development.
 - c. Lands within the existing Pat's Cabin WSA and Aldrich Mountain WSA will be managed under no-surface-occupancy requirements for fluid mineral development and closed to wind energy development to protect scenic values. The lands will continue to be managed to protect opportunities for solitude and primitive recreation and to protect highly erosive soils.
 - d. If existing WSAs (Sutton Mountain, Pat's Cabin, Aldrich Mountain, North Pole Ridge, Thirtymile, and Lower John Day) are released from wilderness study by Congress, they will then be designated OHV Limited, with the exception of Black Canyon RNA which is designated as OHV Closed. Roads legally available for public use at the time of WSA release will be designated as interim routes until a Final Travel Management Plan (TMP) is written. The Final TMP will utilize decision criteria specified in the Access and Travel Management section of this RMP, ACEC direction in this RMP, and a prescribed road density (upper limit) that will be applied based on location of the released lands relative to the appropriate Travel Management Area (TMA): 0.96 mile per square mile for Sutton Mountain TMA, 1.17 mile per square mile for Lower John Day TMA, and 1.65 mile per square mile for South Fork John Day TMA.
 - e. Continue the OHV Closed to motorized vehicle use designation, except for administrative use, on lands within the existing Strawberry Mountain WSA to reduce the potential for motorized incursions into the adjacent USFS Strawberry Mountain Wilderness Area. These lands will continue to be unavailable to livestock grazing until they are released from WSA status, at which time livestock grazing will be considered. Continue to consult with the Malheur National Forest to identify ways to more efficiently manage this area.
 - f. If existing WSAs are released from wilderness study by Congress, the VRM Class for these lands will automatically be changed as part of plan maintenance from VRM Class I to VRM Class II (see Visual Resource Management section).

Areas of Critical Environmental Concern

Under the 1976 FLMPA, the Secretary of the Interior and the BLM were directed to designate ACECs within the public lands 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. Further guidance and evaluation criteria are found at 43 CFR Part 1610.7-2.

Land Use Allocation

Carry forward designation of the Horn Butte ACEC, expanding it by 1,153 acres, and designate five new ACECs: Armstrong Canyon, Black Canyon, Ferry Canyon, John Day Paleontological, and North Fork John Day River. Designate an additional ACEC (Lower John Day River ACEC) comprised of the John Day North Pole Ridge and Thirtymile WSAs if Congress drops them from consideration as Wilderness. See Map 4 for ACEC designations. These areas meet the relevance and importance criteria for ACEC designation (BLM Manual 1613), and they require special management attention to protect their values.

Drop designation from Spanish Gulch ACEC (shown on Map 9 in the JDB FEIS, 2012). The area meets some relevance and importance criteria, but does not need special management attention to protect its values, therefore it no longer qualifies for ACEC designation. Adequate protection is already in place due to the site's eligibility as a National Register site and lack of public access. Manage Spanish Gulch to meet other plan objectives and match land allocations of similar adjacent landscapes.

Objective AC1

Manage ACECs to protect the values for which they were designated.

Management Actions

1. Allow management actions and resource uses within ACECs to meet objectives, provided these actions and uses are compatible with the values for which the ACEC was designated.
2. Do not allow management actions or uses if specifically prohibited within the ACEC (see area-specific actions under Objectives AC2, AC3, AC4 and AC5, below).
3. Continue livestock grazing if consistent with ACEC objectives and other objectives in this RMP.
4. Limit OHV use and other mechanized vehicles (e.g., mountain bikes) to designated routes unless such use can be allowed while still protecting ACEC values.
5. Rights-of-way needed to for roads or utilities to private land will be restricted to existing roads or rights-of-way unless ACEC values would still be protected, or no practical alternative is available.
6. Do not allow new construction if it would adversely impact the values for which the ACEC is designated.
7. Allow personal rockhounding but only if using non-motorized equipment and meeting objectives for the ACEC. Prohibit all recreational rockhounding in the John Day Paleontological ACEC.
8. Allow all forms of vegetation and habitat management, when consistent with ACEC objectives, including prescribed fire, mechanical treatment and seeding. Design such projects to maintain or enhance the ACEC values and as an integral part of ACEC management. Emphasize restoration or improvement of native plant communities and habitat for raptors, fish, neotropical birds, and threatened, endangered or other special status plants and animals. Design long-term vegetation maintenance to emulate natural processes.
9. Allow all forms of noxious weed management, including mechanical control, the use of herbicides and hand pulling, consistent with the objectives for this ACEC. Allow insect control consistent with ACEC objectives.
10. Refer to additional direction in the Energy and Minerals sections.

Guidelines

1. Increase the availability of public information concerning ACECs (e.g., boundaries, management guidelines, and reasons for designation) to provide for better public support of these areas. This could include field trips, perimeter signing, and the publication and dissemination of interpretive brochures.
2. Prepare an implementation schedule for each ACEC. The schedule will identify the priority, sequence, and costs of implementing activities associated with protection of the ACEC resources or values, including monitoring activities (BLM Manual 1613 - Areas of Critical Environmental Concern).
3. Provide educational material concerning ACEC designations in the plan area, proposed projects, opportunities for public involvement, and other pertinent information in an ACEC section on the District's website.
4. Identify all ACEC boundaries on the ground.
5. Pursue opportunities for education and interpretation of the special values within the ACEC.
6. See Appendix B for monitoring guidelines.

Objective AC2

In the Horn Butte ACEC, maintain viable populations of long-billed curlew and Washington ground squirrel. Preserve and protect the qualities of the Fourmile Canyon segment of the Oregon Trail that passes through the Horn Butte ACEC. Provide quality nesting and brood-rearing habitat (shrub canopy cover of less than 10 percent) for the long-billed curlew. Minimize disturbance during nesting. Improve the riparian area along Eightmile Canyon.

The Washington ground squirrel habitat within the Horn Butte area has more than local importance and will therefore be protected while allowing compatible uses. The Fourmile Canyon tract contains additional Washington ground squirrel habitat of more than local importance and traces of the Oregon Trail, which is of national historic significance (see Oregon Trail Management Plan: Prineville District 1993).

Management Actions

1. Manage 7,152 acres as the Horn Butte ACEC. Acquire additional habitat through exchange or acquisition from willing private landowners in adjacent Sections 13, 15 and 16.
2. Close Horn Butte ACEC to off-highway vehicles from March 15 through May 30 annually.
3. Develop an additional water source for livestock and wildlife.
4. Use integrated weed management to eliminate yellow star thistle.
5. Continue to maintain the Fourmile Canyon interpretive site.
6. Do not allow mechanical noxious weed management in the Fourmile Canyon segment.
7. Do not allow new rights-of-way in the Fourmile Canyon segment. Co-use of existing rights-of-way may be permitted as long as features and viewshed of the Oregon Trail are protected.
8. Avoid vegetation management actions that would impair the visual and scenic qualities of the Oregon Trail in the Fourmile Canyon segment.
9. Refer to additional direction in the Wildlife section.

Objective AC3

Protect visual quality in the Armstrong Canyon ACEC, Ferry Canyon ACEC, and the North Fork John Day River ACEC (essentially within the viewshed of the river from Camas Creek to Wrightman Canyon).

Protect visual quality in three additional areas that are currently Wilderness Study Areas (WSA) if Congress releases these areas from Wilderness consideration: John Day, North Pole Ridge, and Thirtymile WSAs.

Management Actions

1. Manage 3,885 acres as the Armstrong Canyon ACEC, 2,364 acres as the Ferry Canyon ACEC, and 16,837 acres as the North Fork John Day River ACEC.
2. If the John Day, North Pole Ridge, or Thirtymile WSAs lose WSA status, they will collectively become the Lower John Day River ACEC. If this occurs, Armstrong and Ferry Canyon ACECs would also be added to the Lower John Day River ACEC.
3. Existing disturbances, maintenance, and all authorized activities associated with the Pacific Gas Transmission line (Pine Hollow and Thirtymile areas) will continue as needed, consistent with other resource objectives. These areas will be included within the ACEC, whereas under Wilderness Study Area status they created the boundaries.

Objective AC4

Protect and provide educational and research opportunities to study specific native plant communities and a state-listed threatened plant species arrowleaf thelypody in the Black Canyon ACEC. Emphasize natural processes. This ACEC will also be managed as a Research Natural Area (RNA).

- The Black Canyon ACEC/RNA contains a representative of seven plant community cells that will be included in the statewide RNA system. One of the cells is not represented elsewhere (big sagebrush/Thurber needlegrass). Additionally, the area contains a high density of endemic plant species.

Management Actions

1. Manage 6,639 acres as the Black Canyon ACEC/RNA. The area is within the center of, and overlays, the Painted Hills Cooperative Area for the Management of Paleontology (CAMP) which is a portion of the John Day Paleontological ACEC (see Objective AC5), and is within the existing Sutton Mountain WSA.
2. Exclude off road vehicle use, including both motorized and non-motorized vehicles.
3. Do not authorize rights-of-way.
4. In the long term, exclude livestock grazing using natural topographic barriers and/or changes in management.

Guidelines

1. See Appendix B for monitoring guidelines.
2. Generally do not allow vegetation and habitat management, including prescribed fire, mechanical treatment and seeding. However, make evaluations of the need for vegetation management on a site- and species-specific basis, weighing the need for management with the emphasis on natural processes and the values for which the ACEC/RNA was designated.
3. Generally do not allow noxious weed management, consistent with the objectives for this ACEC/RNA. Make evaluations of the need for control on a site- and species-specific basis, weighing the need for weed control with protection and maintenance of the values for which the ACEC/RNA was designated.
4. Make the area available for non-destructive research. Prepare a guidebook summarizing the values of the area and the research opportunities available.

Objective AC5

Preserve/protect paleontological resources while allowing for their extraction, research and other scientific and educational uses in the John Day Paleontology ACEC. These resources are of more than local significance and are currently co-managed under agreement with the National Park Service, John Day Fossil Beds National Monument (No. IA9325-8-0001, as amended). This ACEC contains Sutton Mountain, which has visual qualities of more than local importance. Due to the sensitive nature of the specific ACEC locations, three Cooperative Areas for the Management of Paleontology (CAMPs) - Sheep Rock, Painted Hills and Clarno (Map 4) - have been created for geographic reference only. The management actions for these CAMPs refer to BLM lands only and do not encumber any private, state or other agency lands contained therein.

Management Actions

1. Manage 38,168 acres as the John Day Paleontology ACEC.
2. Within the Painted Hills CAMP is a parcel currently designated as the Sutton Mountain WSA. Manage lands within the WSA (28,894 acres) according to BLM Manual 6330 - Management of Wilderness Study Areas (2012) until designated as wilderness or released from wilderness review by Congress.
3. Close the ACEC to rockhounding.
4. Onsite development of energy sources, such as oil, gas, wind and geothermal may be authorized except on lands within the Sutton Mountain WSA. If released from wilderness review, manage the Sutton Mountain WSA block under no-surface occupancy requirements for fluid, salable, leasable and locatable mineral development and close to renewable energy development and communication sites.
5. Within the Sutton Mountain WSA, continue to implement the site specific livestock grazing decisions identified in the Sutton Mountain CRMP.
6. Limit motorized vehicle use to designated routes except for administrative use, unless otherwise designated as "Open" within this RMP.

Guidelines

1. Do not make available to the general public the exact locations of paleontological resources within the ACEC, but encourage research.
2. All actions within the WSA will be consistent with BLM Manual 6330 - Management of Wilderness Study Areas (2012) and guidance provided in BLM Manual 8270 - Paleontological Resource Management and Handbook 8270-1: General Procedural Guidance for Paleontological Resource Management.
3. The Black Canyon ACEC/RNA is located within and overlaid by the John Day Paleontology ACEC. Follow specific management direction specified in Objective AC4.
4. Continue to encourage partnerships with local entities such as the John Day Fossil Beds National Monument, Hancock Field Station, Oregon Museum of Science and Industry (OMSI), Oregon Paleo Lands Institute, and Monument High School. The BLM already maintains memorandums of understanding with the National Park Service and OMSI.
5. Within the Sutton Mountain WSA, manage vegetation, noxious weeds, pests, and wildlife habitat consistent with guidance in BLM Manual 6330 - Management of Wilderness Study Areas (2012). If the WSA is released from wilderness review, ACEC management guidance will apply.
6. Pursue objectives within the ACEC that are important for increasing scientific understanding. These will include, but not be restricted to: mapping the stratigraphy of the individual ACEC units; obtaining low level aerial photography (3,000 feet) for each individual ACEC unit for the purpose of locating specimens recovered for science; securing permanent access to isolated ACEC units; and placing "No Collecting" signs at each ACEC unit.

Back Country Byways

Land Use Allocation

See Map 6.

Objective B1

Identify safe motorized routes for scenic viewing of areas of high scenic, natural and interpretive quality in partnership with state, county, National Park Service, and other partners.

Management Actions

1. Continue to manage the South Fork John Day River Back Country Byway. This 50-mile byway parallels the South Fork of the John Day River through a scenic canyon between Dayville and the Ochoco National Forest boundary.
2. Maintain road surface suitable for passenger vehicles during spring, summer, and fall seasons.
3. Designate roads around Sutton Mountain as a BLM Back Country Byway or support a State Scenic Byway designation. This byway will consist of about 41 miles of federal, state, and county routes that circle the Sutton Mountain Wilderness Study Area. The byway will provide opportunities to discover the geological, paleontological, ecological, and historic resources of the area; view narrow canyons, seasonal waterfalls, and the John Day Wild and Scenic River; glimpse wildlife such as deer, bobcat, elk, and mountain lion in their natural habitat; observe sustainable farming and ranching operations; and access the Painted Hills portion of the John Day Fossil Beds National Monument.
4. Coordinate with the State Department of Transportation, Wheeler County Road Department, the town of Mitchell, and the National Park Service to develop interagency agreements (per BLM Byway Hand Book 8357-1) to provide roadside viewing opportunities along the designated route.

Native American Uses

Under the RMP, the Native American uses will be protected on BLM managed lands within the plan area by following the legal authorities identified in:

- *Native American Graves Protection and Repatriation Act of 1990*, 25 U.S.C. 3001
- *Treaty with the Tribes of Middle Oregon signed June 25, 1855*, ratified March 8, 1859 (14 STAT. 751)

- *Treaty with the Walla Walla, Cayuse, Etc., signed June 9, 1855, ratified March 8, 1859 (12 STAT. 945)*
- *American Indian Religious Freedom Act of 1978, 42 U.S.C. 1996*
- *Executive Order 13007 of 1996 (Indian Sacred Sites), (61 FR 104)*
- *Executive Order 13175 of 2000 (Consultation and Coordination with Indian Tribal Governments)*
- *Secretarial Order 3206 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act)*
- *Memorandums of Understanding (MOU) between the Oregon/Washington BLM and a) the Confederated Tribes of the Umatilla Indian Reservation, b) the Confederated Tribes of the Warm Springs Reservation of Oregon, and c) the Burns Paiute Tribe address the appropriate level and timing for consultation, as well as other coordination issues between these tribes and the BLM.*

Objective N1

Honor trust responsibility to Native American Indian tribes.

1. This responsibility derives from the historical relationship between the federal government and Native American Indian tribes as expressed in treaties and other components of federal Indian law. The trust responsibility requires the BLM to conduct its activities consistent with the obligations set forth in treaties, federal court decisions, federal legislation, and in various secretarial and executive orders.
2. Documents defining the relationship between the BLM and Native American Indian tribes in the context of Native American Indian uses are included in Appendix A (Planning and Implementation Authorities) of the John Day Basin PRMP/FEIS (March 2012).

Management Actions

1. Continue existing management.
2. Emphasize improving relations and understanding between the BLM and the tribes at all levels.

Paleontological Resources

Under the RMP, Paleontological Resources will be protected on BLM managed lands within the plan area by following the legal authorities identified in:

- The Paleontological Resources Preservation Act of 2009 (Section 6301-6312 of the Omnibus Public Lands Act of 2009, 16 USC 470aaa)
- Federal Land Policy and Management Act of 1976 (P.L. 94-579)
- National Environmental Policy Act of 1969 (P.O. 91-190)
- Additional regulations addressing the casual collection of invertebrate and plant fossils (43 CFR 8365.1-5[b]), and the free use collection of petrified wood (43 CFR 3622[a])

Objective P1

Paleontological resources are preserved, protected and made available for recreation, education and research purposes, as appropriate.

Management Actions

1. Conduct reactive inventory, recording, and evaluation on a project-specific level.
2. Maintain files and maps.
3. Conduct periodic public outreach and education efforts.

4. Consult with the National Park Service at the John Day Fossil Beds National Monument on all proposed actions that might affect fossil resources.
5. In coordination with the National Park Service, conduct inventory and systematic collecting at all potential fossil localities.
6. Coordinate with the National Park Service and other outside entities to conduct appropriate scientific research on identified localities.
7. Pursue development of partnerships with external entities to accomplish any or all of the above.

Guidelines

1. The management of fossil resources on public lands in the John Day Basin is directed by existing laws, regulations, and agreements. Example direction:
 - a. Vertebrates may be collected only by bona fide scientific researchers and institutions under permit authority.
 - b. Commercial collection of any fossils (including vertebrates) without a permit constitutes unauthorized use.
 - c. Common invertebrates and most botanical fossils may be collected for noncommercial purposes without a permit, unless within Wilderness or a Wilderness Study Area, where permits are required.
 - d. Limited quantities of petrified wood may be collected for noncommercial purposes under terms and conditions consistent with the preservation of significant deposits as a public recreational resource.
 - e. A permit for collection of petrified wood is required for single specimens over 250 pounds, for removal of more than 25 pounds per day per person, and for removal of more than 250 pounds per year.
 - f. A special permit must be obtained for collection of petrified wood for sale.

Cultural Resources

Under the RMP, Native American religious freedom and graves will be protected on BLM managed public lands within the plan area by following the legal authorities identified in:

- *Antiquities Act of 1906*, 16 U.S.C. 431-433
- *National Historic Preservation Act (NHPA)* of 1966, as amended, 16 U.S.C. 470
- *Archaeological Resources Protection Act of 1979 (ARPA)* 16 USC 470

Objective C1

The integrity of cultural resources (both historic and pre-contact) are preserved, protected, and made available for cultural, educational, and/or research purposes, as appropriate.

Management Actions

1. Attempt to directly involve tribal groups, where practicable, in on-the-ground management actions.
2. Re-record known sites.
3. Evaluate sites for appropriate BLM use categories/National Register eligibility.
4. Conduct intensive and complete inventory in areas of high probability and/or potential high use not previously inventoried and which are not necessarily associated with specific projects.
5. Conduct limited site testing/salvage excavation where appropriate.
6. Apply appropriate rehabilitation/stabilization techniques to sites as needed.
7. Develop and implement appropriate interpretive/public outreach/educational techniques.
8. Pursue development of a more active role for tribal involvement, where practicable, in any or all of the above (e.g., participating in the rehabilitation of a damaged site).

9. Pursue development of partnerships with various internal and external entities (e.g., Indian tribes, nongovernment organizations, amateur groups, volunteer work groups) to accomplish any or all of the above.

Guidelines

1. The BLM's management of cultural resources consists of applying protection and preservation measures in accordance with treaty trust responsibilities, federal law, and BLM policy (see Appendix A of the John Day Basin PRMP/FEIS, March 2012). There are specific laws that deal with Native American religious freedom and graves protection. Measures to meet the legal authorities include:
 - a. Develop partnerships to gather information about or protect key resources, general or site-specific interpretation, and public outreach/education efforts.
 - b. Conduct reactive inventory, recording and evaluation on a project-specific level.
 - c. Maintain files and maps.
 - d. Periodically monitor for site conditions and violations of the Archaeological Resources Protection Act (ARPA).
 - e. Conduct periodic outreach and education efforts.

Livestock Grazing

Objective L1

Meet the Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington (USDI BLM 1997); herein referred to as Standards and Guidelines. The application of Standards & Guidelines are directed by 43 CFR Subpart 4180.2, Instruction Memorandum (IM) No. WO-98-91 and IM-OR-2009-007, Instruction Bulletin (IB) No. OR-98-315, and BLM Manuals 4180 and 4180-1.

Management Actions

1. One or more of the following adjustments can be made to address Standards & Guidelines that are not being met where current livestock grazing is a significant factor; or to meet other resource objectives in the John Day Basin RMP: Modify grazing system, season of use, stocking density, class or type of livestock, or activity plans (including existing allotment management plans, agreements, decisions and/or terms and conditions of grazing use authorizations) (43 CFR § 4110.3, § 4120.2, § 4130.3, § 4180.2); or modify existing or install new range developments (§ 4120.3).
2. When considering appropriate changes to grazing management following a failure of Standards and Guidelines for Rangeland Health that result from current grazing practices, a no grazing alternative will be considered.
3. The BLM can select a no grazing alternative and decide to make an area unavailable for grazing or temporarily defer preference-based livestock grazing on part of or all of an allotment or pasture where BLM determines that such action is necessary or desirable to address a failure to meet the Standards & Guidelines or to address another site-specific multiple use conflict. Such action is hereby expressly contemplated and allowed under the JDBRMP and may be accomplished without any further RMP amendment.

Objective L2

Maintain forage production and livestock use at levels sufficient to provide a sustained flow of local economic benefits and to protect non-market values.

Management Actions

1. Allow permitted/leased livestock grazing at the use levels (i.e., AUM) described in Appendix K - Grazing, except where specifically noted in other sections of this Record of Decision and subject to future change to address resource conditions and RMP provisions. Public lands not included in an allotment listed in Appendix K are not available for livestock grazing except as identified in Objective L2 #3.

2. Make forage available on a temporary basis to qualified applicants through temporary nonrenewable grazing authorization, when consistent with RMP goals and objectives (i.e., to facilitate rangeland restoration and recovery on a landscape scale).
3. Allow prescribed livestock grazing to control weeds, reduce fire danger, or accomplish other management objectives, regardless of parcel status (including vacant allotments, areas of discontinued grazing, or outside of grazing allotments).
4. Manage livestock grazing during and after drought in accordance with IM 2003-074, or superseding direction, to maintain soil and vegetation health and productivity.
5. Carry forward decisions regarding season of use from previous plans (see Appendix K).
 - a. For example, in the John Day River and major tributaries, continue to manage grazing to protect and enhance Outstandingly Remarkable Values. Season of use will primarily be late winter and early spring, not to exceed two months. Within these corridors, spring grazing will not be authorized in pastures with riparian areas when flows drop below 2,000 cubic feet per second to aid in protection of riparian vegetation. In winter-grazed areas, the 2,000 cubic feet per second restriction is an interim measure. Establish compliance, utilization, and trend standards for continued grazing. If the grazed riparian areas within a designated corridor are not improving at the same rate as similar ungrazed areas within 10-15 years, exclude grazing permanently.
 - b. Any campsite in the Wild and Scenic River closed to recreation use for recovery will also be unavailable for grazing.

Objective L3

Meet multiple use objectives as stated in the John Day Basin RMP, while considering resource conflicts, potential for allotment improvement, and agency funding constraints.

Management Actions

Actions 3 and 4 apply only to the lands acquired in the Oregon Land Exchange Act of 2000.

1. If base property is owned or managed by a local, state, or federal agency or tribe, the BLM will coordinate and collaborate on development of objectives and management of the associated allotments with said agency or tribe [43 CFR § 4110.4-2(b)]. These objectives will be used to determine future grazing practices in the allotment, including whether livestock grazing will be allowed if the grazing preference is relinquished or the purchaser of the base property is not a qualified applicant. Unless ownership patterns or other conditions change, subsequent application for a grazing permit/lease on all or a portion of the allotment could be denied unless livestock grazing is in harmony with the management objectives.
2. In the event of a grazing preference relinquishment, allocate resources according to the Grazing Decision Tree.

Grazing Decision Tree

1. The BLM is contacted about possible relinquishment of all or a portion of the grazing preference to an existing lease.
 - 1a. The BLM discusses options and consequences with the lease holder.
 - 1a1. Lessee can retain preference and lease the base property to a qualified applicant.
 - 1a2. Lessee can relinquish portions of the preference.
 - 1a3. If the preference is relinquished, the BLM will consider allocating all or a portion of the available forage to another applicant.
 - 1a4. Pursuant to state law, if the allotment lies in an open range area, the relinquishing lessee will be assuming the responsibility for fencing out another's livestock from their private land.

Grazing Decision Tree

- 1b. The BLM will not be bound by any provisions that purport to make a relinquishment conditional on specific actions by the BLM.
2. Lease holder continues to pursue preference relinquishment.
 - 2a. The BLM helps lease holder prepare a Letter of Relinquishment that details the portion of the preference and interest in associated range improvements to be relinquished.
 - 2b. The BLM verifies concurrence of any base property lien holders by receiving written consent of the relinquishment.
 - 2c. If preference for a portion of the grazing use authorized by the lease is relinquished, the BLM will modify the relevant lease to authorize livestock use commensurate to the retained grazing use with appropriate NEPA analysis and proposed decision. If preference for all of the grazing use authorized by the lease is relinquished, the lease will be automatically terminated without further notice.
 - 2d. If range improvement projects have been identified for removal as a result of the relinquishment process, the BLM will conduct appropriate NEPA analysis and issue a proposed decision relevant to the range improvements.
3. In the event a qualified applicant (see 3a) makes application for all or a portion of the forage allocation made available by the relinquished preference, the BLM will examine and document whether livestock would have access to any campsites or the river within the boundaries of the John Day Wild and Scenic River in Segments 1, 2, or 3 (JDWSR).
 - 3a. A qualified applicant must meet the mandatory qualifications as defined in 43 CFR Section 4110.1, have legal access to the public lands applied for, and in 'closed range' (i.e., livestock district) must control livestock from trespassing onto nearby private lands.
 - 3b. If livestock have access to any campsite within Segments 1, 2, or 3 of the John Day Mainstem Wild and Scenic River (JDMWSR) boundaries:
 - 3b1. The BLM will determine on what portions of the allotment livestock have access to campsites within JDMWSR boundaries.
 - 3b2. The BLM will consider authorizing fence construction to eliminate livestock access to any campsite within JDMWSR boundaries. If this option is chosen, proceed to #4.
 - 3b3. The BLM will discontinue the authorization of livestock grazing, for the life of the JDBRMP or until conditions change, on that part of the allotment where livestock have access to any campsite within JDMWSR boundaries.
 - 3c. If livestock do not have access to a campsite within JDMWSR boundaries, proceed to #4.
4. In the event a qualified applicant (see 3a) makes application for all or a portion of the forage allocation made available by the relinquished preference, the BLM will examine and document whether livestock would have access to any occupied habitat of a species federally listed as threatened or endangered, a species proposed for federal listing, or a candidate species for which a biological evaluation has not determined livestock grazing has 'no effect' (currently the mid-Columbia steelhead, bull trout, greater sage grouse, and Washington ground squirrel).
 - 4a. If livestock have access to any occupied habitat for species federally listed as threatened or endangered, a species proposed for federal listing, or a candidate species:
 - 4a1. The BLM will determine on what portions of the allotment livestock have access to occupied habitat of such species for which a biologist has made a determination that livestock grazing will have anything other than a "no effect" determination.
 - 4a2. The BLM will consider (in an appropriate NEPA analysis) authorizing fence construction to eliminate livestock access to any occupied habitat of such species for which a biologist has made a determination that livestock grazing will have anything other than a "no effect" determination. If this option is chosen, proceed to 5.
 - 4a3. The BLM will discontinue the authorization of livestock grazing, for the life of the JDBRMP or until conditions change, on that part of the allotment where livestock have access to any

Grazing Decision Tree

occupied habitat of such species for which a biologist has made a determination that livestock grazing will have anything other than a "no effect" determination.

- 4b. If livestock do not have access to occupied habitat of such species or a biologist has made a determination that livestock grazing will have a "no effect" determination, proceed to #5.
 5. The BLM will examine and document whether continued livestock use of all or part of the forage allocation made available by the relinquished preference meets Standards & Guidelines.
 - 5a. If not done previously, assess, evaluate, and document in an Evaluation Report whether land health standards are, or are not, achieved.
 - 5b. If a Standards & Guidelines determination has been done, review any management changes previously made to allow the allotment to move toward meeting Standards & Guidelines and any monitoring completed following the Standards & Guidelines determination.
 - 5c. If Standards & Guidelines are being met, proceed to #6.
 - 5d. If Standards & Guidelines are not being met and current livestock management is a significant factor:
 - 5d1. Determine which portions of the allotment are not capable of making significant progress towards meeting Standards & Guidelines in spite of administrative actions (e.g., changes in livestock numbers and/or season of use, or combining the allotment with an adjacent allotment) or construction of range improvements. Allow forage from those areas to be allocated to other uses.
 - 5d2. Determine which portions of the allotment are capable of making significant progress towards meeting Standards & Guidelines through administrative actions (e.g. changes in livestock numbers and/or season of use, or combining the allotment with an adjacent allotment) or construction of range improvements; and proceed to #6.
 6. The BLM will consider re-allocating all or a part of the forage allocation made available by the relinquished preference according to the priorities described below in 6a through 6e, prepare an allotment management plan if administrative actions or range improvements were identified above, and modify the relevant lease(s).
 - 6a. Other lessees with grazing preference for the allotment.
 - 6b. Other lessees with adjacent allotments where resource objectives are not being met to reduce the overall grazing pressures by all classes of large ungulates.
 - 6c. Other lessees with adjacent allotments where resource objectives are being met.
 - 6d. Other lessees on a non-renewable basis.
 - 6e. Other resource uses.
 7. In the event an application is received for all or part of an allotment that has been allocated to other resource uses, the BLM may review the decision process that led to the allotment being unavailable to livestock use. In the event of a change in conditions or management opportunities, the BLM may re-allocate all or a part of the relinquished lease to livestock grazing and issue a proposed decision.
-
3. Portions of the Boneyard and Scaffold Creek allotments will be available for use on a temporary non-renewable basis, assuming that a buffer measuring 0.125 mile on each side of currently occupied anadromous fish streams on acquired lands of the North Fork of John Day River will be excluded from livestock grazing. Actual implementation may vary due to use of existing fences, season of use, herding, natural barriers, or adjustments in allotment boundaries to exclude occupied anadromous fish streams. Grazing preference for vacant allotments will be made available to applicants based on existing grazing regulations, with priority given to adjacent landowners, adjacent Forest Service lease holders, and applicants who have grazed within the allotments in the past.
 4. The William Healy, Wall Creek, Umatilla, Potamus, Doherty, Mud Springs, and Jericho Creek grazing allotments will remain unavailable to grazing except to control weeds, reduce fire danger, or accomplish other management objectives. Limited portions of the lands acquired under the Oregon Land Exchange

Act of 2000 that are topographically connected to private or State lands will be allowed to be fenced separately from the rest of the acquired lands and grazed through minor adjustments in allotment boundaries on the Potamus, William Healy, Mud Springs, and Umatilla allotments. This is expected to affect less than 600 acres of the acquired lands. Due to the interspersed nature of private lands, public lands leased for grazing, and recently acquired public lands, the acquired lands in the North Fork allotment (approximately 640 acres) will be available for grazing.

Recreation Opportunities

BLM guidance requires application of an Outcome Focused Management protocol which is similar to Benefits-Based Recreation (BBR) that involves identification of the Recreation Niche, Appropriate Marketing Strategy, Management Objectives, Setting, and Actions. Table 6 summarizes BBR Attributes and Settings, and the distribution of Settings across the plan area. The purpose of BBR management is to provide a variety of quality non-motorized and motorized recreation opportunities and experiences within specific areas of public lands referred to as Special or Extensive Recreation Management Areas (SRMA or ERMA). The SRMAs are areas where BLM will focus and invest time, management, funding and facilities. In some cases SERMAs have been subdivided into Recreation Management Zones (RMZs) to recognize specific recreational opportunities within the broader SRMA. The ERMA management is limited to protecting resource values and minimizing user conflicts.

Land Use Allocations

For SRMAs and ERMAs, see Map 6.

For RMZs, see Map 7.

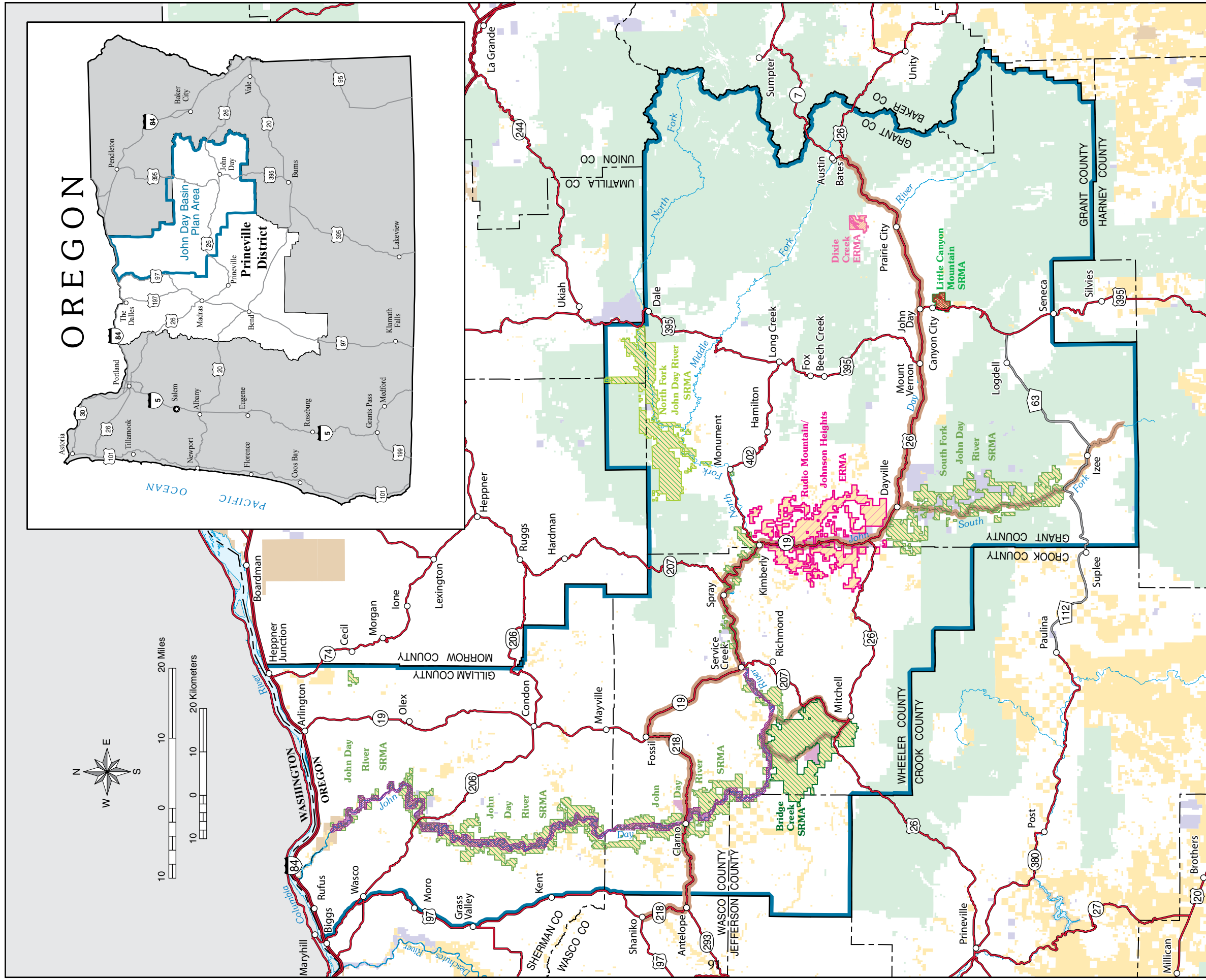
For OHV designations, see Map 8.

Objective R1

Provide diverse opportunities for dispersed motorized, non-motorized, and water-based recreation activities in Special and Extensive Recreation Management Areas (see glossary), and contribute to meeting recreational demand and quality visitor experiences. SRMA desired condition descriptions are provided in Appendix L.

Management Actions

1. Modify the existing John Day River SRMA boundary to include selected contiguous lands outside of the Wild and Scenic River boundary.
2. Designate the following new Special Recreation Management Areas:
 - a. North Fork John Day River SRMA: This SRMA consists of public lands acquired as a result of the Oregon Land Exchange Act of 2000 and BLM-managed lands north of Monument and west of Highway 395.
 - b. Bridge Creek SRMA: This SRMA consists of public lands south of the John Day River SRMA, west of State Route 207, north of Highway 26, and west to just beyond the Jefferson/Wheeler county line.
 - c. Little Canyon Mountain SRMA: This SRMA is near Canyon City.
 - d. South Fork John Day River SRMA: This SRMA consists of public lands on both sides of the river, south of Highway 26.
3. Manage ERMAs as a recreation niche for the undeveloped recreation-tourism market to provide opportunities for local residents and visitors to pursue land-based activities in an unconfined natural setting, with an emphasis on hunting and back country recreation, while providing some opportunities for motorized Class I, II and III (ATV, vehicle, and motorcycle) trail riding.
4. Ensure directional signing is posted to and within ERMAs for public safety and service and to promote better understanding of the safety hazards and risks associated with recreation activities (e.g., big game hunting in the Rudio Mountain/Johnson Heights ERMA, and potential hazards associated with mining in the Dixie Creek area).



LEGEND

- Special Recreation Management Area (SRMA)
- Extensive Recreation Management Area (ERMA)
- John Day Basin: All BLM Lands without a Recreation Management Area Designation
- No Shooting Unless Legally Hunting between May 1 and August 31
- No Shooting Unless Legally Hunting

- Back Country Byway
- Plan Area Boundary
- Administered Land**
- Bureau of Land Management
- Forest Service
- John Day Fossil Beds National Monument
- Other Federal
- State
- Private or Other

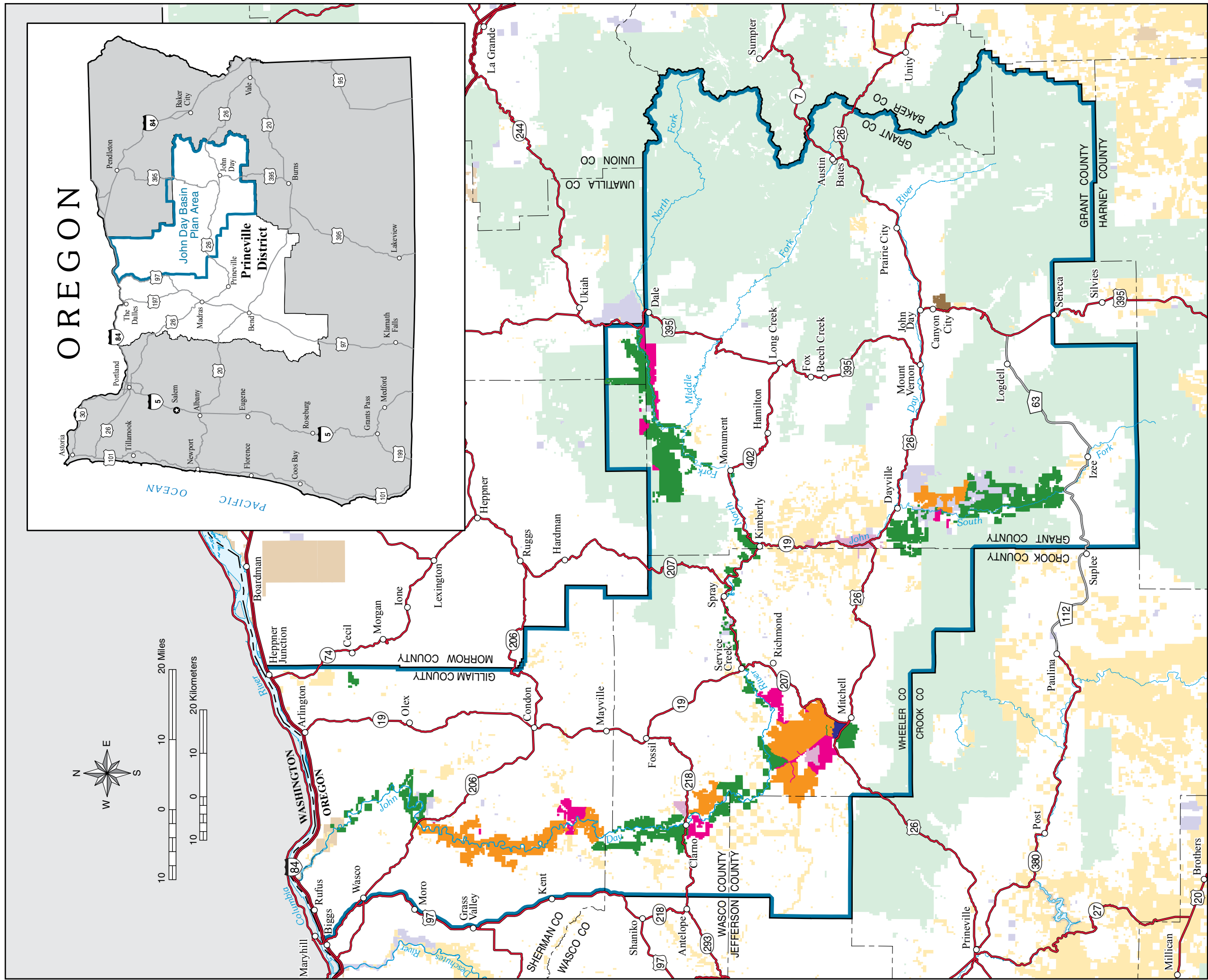
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John Day Basin
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Map 6: Special Recreation Management Areas, Back Country Byways, and Public Health and Safety

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LEGEND

- Recreation Management Zone on BLM Administered Land**
- Primitive
 - Back Country
 - Middle Country
 - Front Country
 - Rural

- Administered Land**
- Bureau of Land Management
 - Forest Service
 - John Day Fossil Beds National Monument
 - Other Federal
 - State
 - Private or Other

Plan Area Boundary

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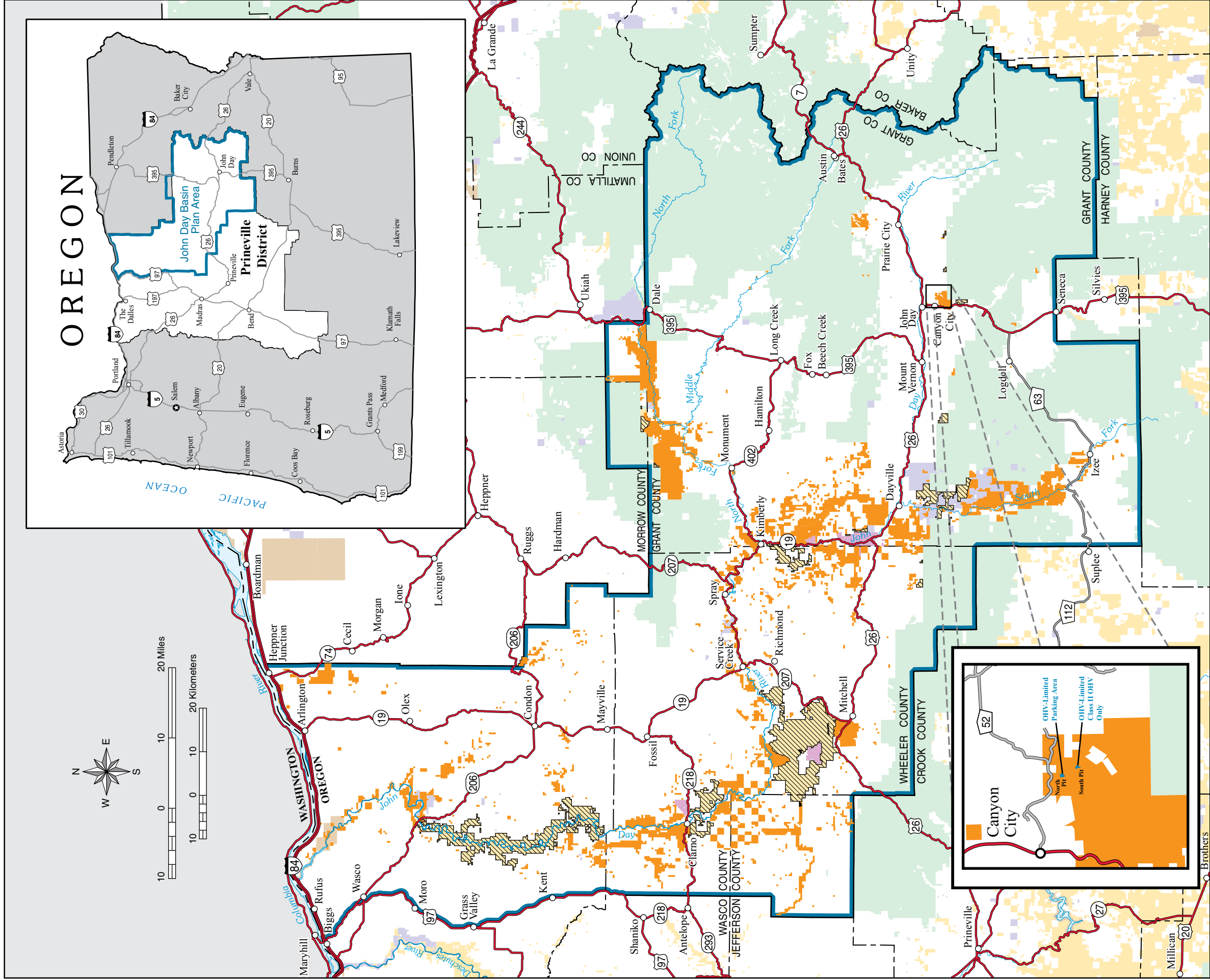


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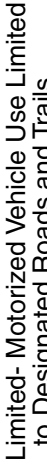
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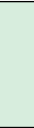



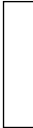
Map 7: Recreation Management Zones

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LEGEND

-  Off Highway Vehicle Designation on BLM Administered Land
-  Closed- Motorized Vehicle Use Off Roads Prohibited
-  Limited- Motorized Vehicle Use Limited to Designated Roads and Trails, Seasonally, or to Type of Vehicle

-  Plan Area Boundary
- Administered Land**
 -  Bureau of Land Management
 -  Forest Service
 -  John Day Fossil Beds National Monument
 -  Other Federal
 -  State
 -  Private or Other

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Map 8: Off Highway Vehicles

5. Ensure that public land boundaries are clearly signed to reduce trespass onto private lands, particularly where there has been a history of trespass.
 - a. Work with adjacent private landowners in the Rudio Mountain/ Johnson Heights and the Dixie Creek ERMAs to identify public and private land boundaries.
6. Provide recreation sites and facilities that promote resource value protection, public safety and health, quality visitor experiences, management efficiency, and value-based returns.
7. In river corridors, improve or upgrade existing recreation facilities, where needed to protect resources. New sites in addition to the Ellingson, School House, and Skull Canyon areas may be developed to replace sites closed for resource protection.
8. Ensure all recreation site and access development conforms with and does not change the Recreation Setting (see definition in Table 6).
9. Prohibit motorized vehicle operation, including parking or camping, in closed areas.
10. In Wilderness Study Areas, allow parking only in areas signed as available for parking and/or car camping.
11. Manage areas designated as Closed for non-motorized uses.
12. Maintain all recreation facilities and recreation use areas for public safety and aesthetics.
13. Manage the designated Wild and Scenic River segments on the John Day River, the John Day River between Kimberly and Service Creek, and the North Fork John Day River between Monument and Kimberly as a Special Recreation Management Area (SRMA).
14. Develop campgrounds on the North Fork John Day River at School House and Skull Canyon, to be available seasonally from April 15 through November 30.
15. Continue the policy of discouraging media coverage and public outreach that is intended to increase boater use on the John Day River above limits identified in this RMP or in the WSR direction.
16. Lower John Day River management:
 - a. Improve or upgrade existing developed recreation facilities when needed to protect resources.
 - b. At the Oregon Trail interpretive site (west side), clarify and mark public access routes, improve parking, and pursue a Cooperative Management Agreement with the Sherman County Historical Society to manage and maintain this site.
 - c. Near McDonald Crossing (east side), clarify and mark public access routes.
 - d. Near Clarno, improve the BLM road on the west bank of the river from Clarno to a point approximately 3 miles north, seasonally close this road to vehicle traffic north of this improved section during the first 10 days of pheasant season, and identify a designated area on the west bank for dispersed camping.
 - e. On the South Fork John Day River, identify preferred camping areas and install signs and parking barriers to protect vegetation. Re-evaluate the need for a campground near Ellingson Mill with toilet, tables, information board, signs, and parking barriers.
 - f. Use Limits of Acceptable Change to identify areas where dispersed recreation is contributing to non-attainment of RMP resource objectives or recreation experience, or both. Actions to protect resources, such as campsite hardening, rehabilitation, or closure may be taken at any time if necessary.

Guidelines

1. When designing developed sites, use Universal Design Standards to the extent practicable while maintaining the character of the site.
2. Evaluate partnership opportunities with the Oregon Division of State Lands to potentially enhance Class II rock-crawling opportunities in the plan area.

Table 6. Benefits-based Recreation Setting Criteria.

Attribute	Setting					
	Primitive (P)	Back-Country (BC)	Middle Country (MC)	Front Country (FC)	Rural (R)	Urban (U)
Examples in JDB plan area	Sutton Mountain WSA, + WSAs in the lower John Day River	Unroaded areas around Sutton Mountain	North + South Forks of the John Day River + Rudio Mtn/ Johnson Heights areas	Dixie Creek area + Golden Triangle area north of Mitchell	Little Canyon Mountain area near John Day + Canyon City	This class does not currently exist on BLM managed public land in the plan area.
Physical Character	Natural environment of fairly large size	Generally natural or natural appearing environment of moderate-large size	Generally natural or natural appearing environment of moderate-large size	Generally natural appearing environment with moderate human evidence (sights and sounds)	Substantially modified natural environment; sights + sounds of humans clearly evident	Substantially urbanized environment; sights and sounds of humans on-site are common.
Vegetation	Undisturbed natural landscape	Naturally appearing landscapes having modifications not readily noticeable	Naturally-appearing landscape except for obvious primitive roads	Landscape partially modified by roads, utility lines, etc., but none overpower natural landscape features	Natural landscape substantially modified by development	Urbanized developments dominate this landscape
Remoteness	Some portions of primitive areas are 3 miles from any road.	No open roads. Access to perimeter via primitive native surface routes	Primitive motor vehicle routes may occur within perimeter but at least 0.5 mile from all improved roads	On or near improved country roads, but most of area is 0.5 mile from highway	On or near primary highways, but still within a rural area	On or near primary highways, municipal streets, and roads within towns or cities
Access Routes	May have trails	Constructed or user trails	Primitive native surface routes; may be bladed	Bladed native or gravel surfaced passenger car routes	Paved roads	Paved highways

Attribute	Setting					
	Primitive (P)	Back-Country (BC)	Middle Country (MC)	Front Country (FC)	Rural (R)	Urban (U)
Facilities	Rustic bridges, rustic signs	Rustic bridges, rustic signs, primitive sanitary facilities	Maintained and marked trails, simple trailhead developments, improved signs; may have small, primitive campgrounds with vault toilets	Facilities such as camp grounds, rest rooms, trails, and interpretative signs common. Trailhead developments.	Modern facilities such as camp-grounds, group shelters, boat launches, and occasional exhibits	Elaborate full-service facilities such as laundry, groceries, and book stores
Group Size	< or = 3 people	4 - 6 people	7 - 12 people	13 - 25 people	26 - 50 people	> 50 people
Contacts (encounters/day)	< 6	7-15	Less than 30 on travel routes	30+ on travel routes	People can be seen everywhere, but contact is still intermittent.	Other people consistently in view
Evidence of Use	Footprints may be observed, occasional trampling of vegetation (single imprints). Possible trampling at popular campsites	Footprints plus slight vegetation trampling at campsites and travel routes; infrequent litter	Vehicle tracks, occasional litter, and soil erosion in road cuts; vegetation becoming worn	Well-worn soils and vegetation, but often gravel surfaced for erosion control; litter may be frequent.	Paved routes protect soils and vegetation, but noise, litter, and facility impacts are pervasive.	A busy place with what seems like constant noise; unavoidable litter
Mechanized Use	None	Mountain bikes and perhaps other mechanized use, but all is non-motorized	4WD, ATV, dirt bikes, or snowmobiles in addition to non-motorized mechanized use	2WD vehicles predominant, but also 4WD and non-motorized mechanized use	Ordinary highway auto and truck traffic is characteristic	Wide variety of street vehicle and highway traffic is ever present
Overall Administrative Characteristics	Restrictions and controls in place to protect primitive character; motorized use not permitted	Restrictions and controls in place to protect Back-Country character; motorized use not permitted	Minimum on-site controls; restrictions present but subtle; motorized use is allowed.	Conventional motorized use provided for in construction standards and design of facilities	Considerable number of facilities designed for use by large number of people; facilities for parking provided.	Facilities for highly intensified motor use and parking available with forms of mass transit to carry people through site

Attribute	Setting					
	Primitive (P)	Back-Country (BC)	Middle Country (MC)	Front Country (FC)	Rural (R)	Urban (U)
Visitor Services	None available	Basic maps, but area personnel seldom available	Area brochures and maps; personnel occasionally available	Information describes areas and activities; personnel periodically available	Many opportunities for facilitated discovery; personnel do on-site education	Same as Rural, plus regularly scheduled on-site outdoor skills clinics, demos
Management Controls	Trailhead kiosks; occasional signing; enforcement presence very rare	Signs/kiosks at key access points; rare enforcement presence	Occasional regulatory signing; motorized and mechanized use restrictions posted; random enforcement presence	Rules clearly posted on signs and at information kiosks; periodic enforcement presence	Regulations prominent; routine enforcement presence	Continuous enforcement to reduce user conflicts, hazards, resource damage

Objective R2

Provide opportunities for commercial, competitive, educational, and organized group recreational activities.

Management Actions

1. BLM will consider applications for special recreation permits that are submitted at least 180 days in advance of the proposed use to be considered, except applications for guiding sheep hunts must be submitted at least 30 days in advance of the proposed use. Shorter time frames may be allowed upon request and approval. Applications will be considered and decisions made on a case-by-case basis.
2. River-based commercial recreation permits will be managed consistent with WSR Objective 1 and management actions under that objective.
3. Issue new upland-based Special Recreation Permits (SRP) as appropriate for commercial, competitive, and special events on a first come basis subject to BLM policy. The decision to issue new upland-based recreation permits will depend on the BLM's ability to complete required NEPA analyses and to administer and monitor existing and new permit proposals. Analyze proposals for new permits for compatibility with recreation zones and travel plans, use allocations, resource protection, health and safety of visitors, social conflict management, and the public need for services. Priority for consideration of recreation permit applications will be for environmental education activities and backlogged permit applications consistent with recreation objectives.
4. If the number of available permits is less than the number of qualified applicants for an activity or use area, permits will be issued by competitive prospectus.
5. Within WSAs, group size is limited to 12 persons except within the Wild and Scenic River boundary (16-person limit for boating parties).
6. Outside WSAs, groups of more than 16 persons for overnight use or more than 20 persons for day use are required to obtain permits.

Objective R3

Protect and enhance recreation opportunities through acquisition of lands or public access easements.

Management Actions

1. Identify public lands where no legal public access exists yet there are important recreational opportunities. When opportunities arise, consider acquisition to provide access and/or create blocks of public lands. (See criteria for access easements and lands suitable for acquisition [Z-1] under the Lands and Realty section.)

Objective R4

Provide OHV management direction to manage recreational demand for diversity of users while protecting natural resources.

Land Use Allocations

Designate OHV areas as shown on Map 8 and described below in Management Actions.

Management Actions

1. Designate 317,639 acres as Limited to designated routes and trails or other restrictions as specified below:
 - a. Designate up to 280 acres technical Class II rock crawling routes within two areas in the vicinity of Kimberly and Spray.
 - b. Designate 3,971 acres in the Rudio Plateau area as Limited with off-road motorized vehicle use allowed between April 16 and November 30. Between December 1 and April 15, motorized use will be restricted to routes classified as open year round.
 - i. Respond to specific concerns of cooperators and ensure protection of natural resource values and public safety by using adaptive management to allow continuance of cross-country OHV use unless specified ecological or social thresholds are reached. This area is usually "closed" by snow to all vehicles except snowmobiles during the winter. The 3,971-acre Rudio Plateau area will remain open to cross-country motorized use (April 16 through Nov. 30) unless one or more of the following triggers are exceeded, at which point the area would be closed to off-route travel and limited to designated routes (as displayed in Alternative 5 of the John Day Basin FEIS). The triggers for limiting all use to designated routes are:
 - When unmitigated motorized use for > 1 year will cause sensitive species to become listed as threatened or endangered, currently listed threatened or endangered species to be "taken," or streams to become listed as 303d listed for not providing water quality for beneficial uses.
 - When the BLM or its partners cannot afford to protect public safety or resource objectives, or cannot resolve most conflicts with users or adjacent lands (see BMPs in Appendix A).
 - When detrimental soil disturbance exceeds 15 percent of the Rudio Mountain OHV area.
 - When, for three consecutive years, the number of elk damage complaints verified by ODFW increases and/or there is an undesirable distribution change in the wintering elk herd. The ODFW will verify if damage from elk on adjacent property is associated with the identified wintering population. An "undesirable" distribution change will be present if typical winter use patterns are not observed within 0.5 mile of the area where off route travel is allowed. The intention of the consecutive 3-year threshold is to help rule out changes in elk behavior due to effects of short-term climatic events.
 - If the BLM or its partners are no longer monitoring motorized use, special status species, soil disturbance, or other relevant resource values in this area.
 - c. Designate the Little Canyon Mountain SRMA as Limited to designated routes with the following allowances and restrictions:
 - i. Only Class II OHVs will be allowed in the 2-acre South Pit area (see Map 8).

- ii. The North Pit area will be used only as a trailhead and parking area (see Map 8).
 - iii. Motorized use will be limited to the hours between 9 a.m. and dusk daily in the North and South pits and all designated OHV routes.
 - iv. OHVs will not exceed 96 decibels (measured consistent with State of Oregon standards) in the North and South pits and the entire length of all designated OHV routes emanating from these pits.
 - v. As part of any planned OHV route development, take measures to minimize the propagation of OHV sounds toward private residences.
 - vi. Convene local citizens, stakeholders, and BLM to review management of OHV use 3 years from signing of the ROD for this RMP.
 - vii. If the BLM believes there is sufficient conflict, citizens and stakeholders will be asked to help develop mitigation and triggers for moving the South Pit to Limited to designated routes if said mitigation is unsuccessful and triggers are met.
2. Designate 138,732 acres as Closed.
 - a. All motorized use will be limited to designated roads and trails except as allowed for in Objective T3 Action 16.
 3. Interim routes will be considered shared use trails for both motorized and non-motorized use until a full transportation management plan can be prepared to address site-specific routes.
 4. Where the BLM Authorized Officer determines that off-highway vehicles are causing considerable adverse effects on soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the affected areas will be immediately closed to the types of vehicles causing the adverse effects until the adverse effects are eliminated and measures implemented to prevent recurrence.

Guidelines

1. Utilize one or more of the following sound reduction techniques to limit noise from trails and pits at private residences: 1) natural topography and constructed berms to buffer OHV sounds, 2) preclusion of "hill climbs" that follow the fall line directly up slopes, and 3) location of the steepest trail grades as far as possible from private residences.

Public Health and Safety

Objective PHS1

Management direction will minimize risk of errant firearm discharge to users of public lands and neighbors, and provide safe and compatible recreation opportunities. To meet these objectives, some public lands will be closed to all firearm discharge or firearm discharge unless legally hunting now or in the future. Decisions concerning future area closures will be based on one or more of the criteria below with the objectives of protecting resource values at risk; preserving public health, safety, and welfare; minimizing user conflicts; and maintaining consistency and cooperation.

Firearm used below is defined as: "A weapon, by whatever name known, which is designed to expel a projectile by the action of powder and is readily capable of use as a weapon."

Hunting is defined as "To take or attempt to take any wildlife by means involving the use of a weapon or with the assistance of any mammal or bird [ORS 496.004 (10)]."

Management Actions

1. Designate the Little Canyon Mountain Special Recreation Management Area as closed to firearm discharge unless legally hunting.
2. Designate the John Day Wild and Scenic River corridor from Service Creek to Tumwater Falls as closed

to firearm discharge from May 1 through August 31, unless legally hunting, or at any time within a developed recreation site or area.

3. Future firearm discharge area restrictions will be based on the following criteria and must specify if the restriction applies to hunting or not:
 - a. High Density Use Areas - Lands may be closed to firearm discharge based on an evaluation of the present and future intensity of recreational use and other relevant factors including but not limited to: Incidences of dangerous firearm discharge (e.g., BLM firearm discharge citations and reports of individuals being hit or nearly hit by firearm discharge), type of recreational activity, compatibility of activities, type and size of recreational groups, geography, topography, presence of facilities (parking lots, bathrooms, roads, trails, interpretive signs, and exhibits), land status of surrounding properties, and ease of closure enforcement.
 - b. Compatible Recreation Opportunities - Areas with a non-motorized exclusive recreation emphasis may be closed to all firearm discharge, or firearm discharge unless legally hunting.
 - c. Natural Resource Protection - BLM-administered lands with reoccurring firearm discharge problems, or with developed facilities, or lands containing important natural and cultural resources (including but not limited to unique natural resources, sensitive species, geologic features, and historical and archaeological remains) may be closed to all firearm discharge or firearm discharge unless legally hunting.
 - d. Intergovernmental Cooperation - Cooperative closures will be considered where city, county, state or federal agencies that own, manage, or have legal jurisdiction over adjacent lands have established similar closures. These types of closures will include but are not limited to closures adjacent to residential areas with similar city or county-wide closures, state or county parks, or areas within urban growth boundaries. Exact area and conditions of these closures will be determined through site-specific analysis, considering factors such as the ease of boundary identification and local conditions, but would generally be between 150 yards and one mile in depth.
4. Exemptions to these rules will apply to BLM and cooperating agency personnel for administrative purposes, including but not limited to: monitoring, research, law enforcement, search and rescue, and fire-fighting operations. The BLM may also allow exemptions on a case-by-case basis.

Access and Travel Management

The interim transportation network is derived from the Prineville District Geographic Information System (GIS) data base; published maps showing state, county, and Forest Service roads; and local knowledge of route conditions, source (e.g., power line, fence line, and pipe line), and level of use.

The final transportation network (Travel Management Plan or TMP) will assess present and future access needs, and evaluate existing trails, primitive roads, roads, and other routes regardless of interim status.

Land Use Allocations

Seasonal motorized closure areas, see Map 3.

Route density prescriptions, see Map 15.

Interim Travel Management decisions are displayed by Travel Management Areas (TMAs) which are displayed on Map 15; individual TMAs are displayed on Maps 9-14 (Map Packet):

- Map 9 - Lower John Day TMA
- Map 10 - Sutton Mountain TMA
- Map 11 - Rudio Mountain/Johnson Heights TMA
- Map 12 - South Fork John Day TMA
- Map 13 - Upper John Day River TMA
- Map 14 - North Fork John Day TMA

Objective T1

Manage the travel and transportation system to support accomplishment of wildlife management objectives.

Management Actions

1. Use existing road systems and limit new permanent road entries to protect wildlife habitat.
2. Manage:
 - a. Designated aggregate surfaced roads.
 - b. Designated improved natural surface roads with graded surfaces and drainage features.
3. All routes with active legal encumbrances will remain part of the designated transportation system and will continue to be managed according to those agreements. Some of these routes may be restricted to administrative access only, based on the legal restriction in those encumbrances.
4. Seasonal motorized use restrictions may be adjusted to protect site-specific resource needs.

Objective T2

Maintain public access while protecting and enhancing river values.

Management Actions

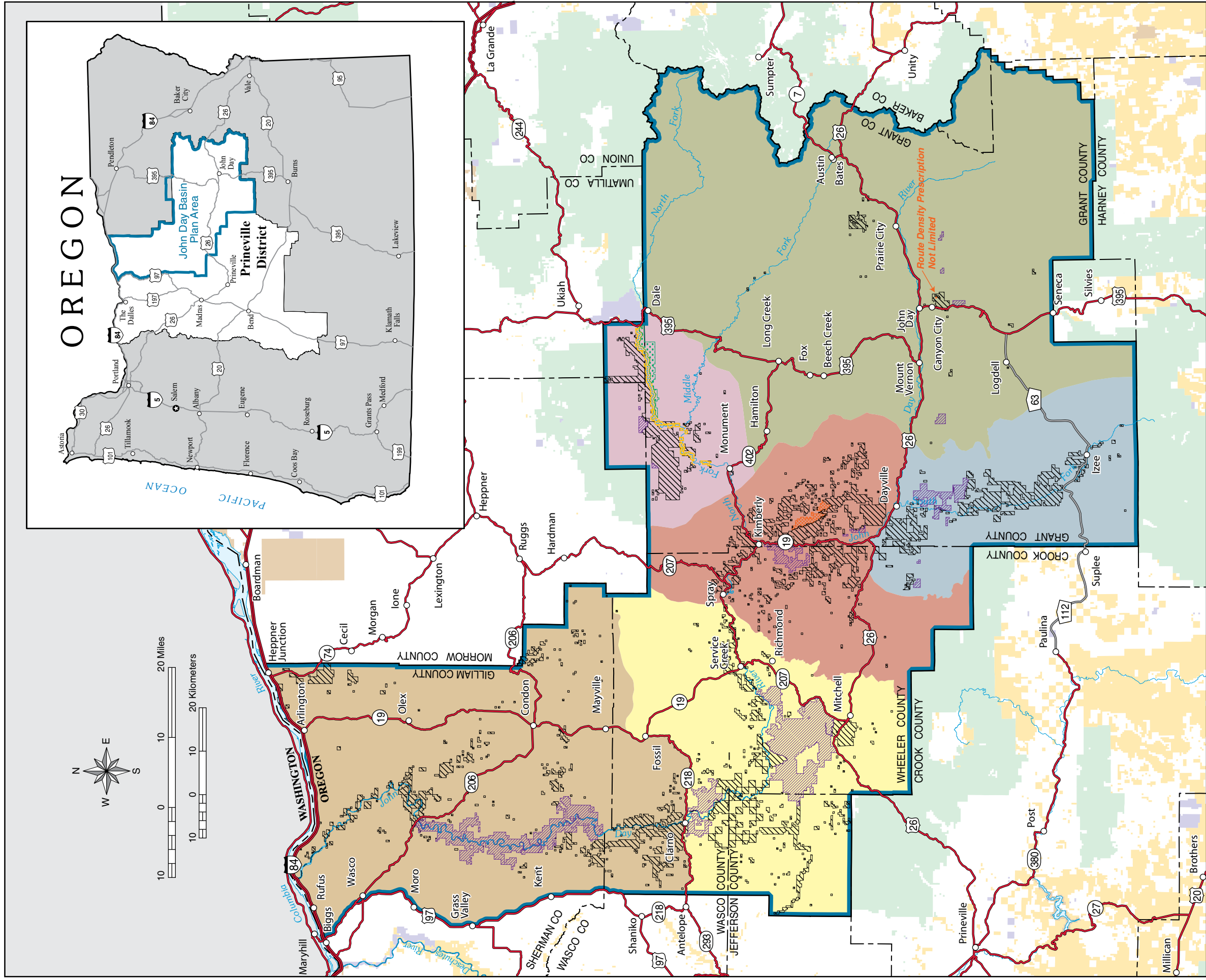
1. Grade, surface, or widen roads as needed, including the BLM Road #7570- Clarno Homestead Road, and BLM Road # 7559 - the Priest Hole Road.
2. Continue to consolidate public land ownership patterns through purchase or exchange, acquisition of easements, and through partnership agreements with willing landowners to resolve public access issues and provide access to high value recreation opportunities. Acquire a river access point from a willing seller to replace the current private access at Twickenham.
3. Coordinate with Oregon Parks and Recreation Department to ensure that road and access improvements are consistent with State Scenic Waterway regulations, where applicable.
4. Continue to improve the ditches and culverts on the South Fork John Day Road as needed.

Objective T3

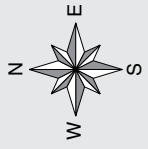
Provide a public and administrative transportation network access in a manner that attains resource objectives and supports the agency's mission.

Management Actions

1. Designate an interim travel management system containing:
 - a. Manage as open for public use approximately 333 miles of routes, as shown on Maps 9-14.
 - i. Maintain as open year-round 86 miles of gravel surfaced and natural improved surface roads.
 - ii. Maintain as open seasonally 138 miles of primitive roads.
 - b. Manage as closed for public OHV use approximately 409 miles of routes, as shown on Maps 9- 14.
 - c. Prescribed route density prescriptions (Averaged limits by TMA) are shown in Table 7.
2. Identify the following aggregate surfaced roads and main collector roads as part of the permanent transportation system: North Fork John Day, South Fork John Day, Franks Creek, Holmes Creek, Sunflower Creek, Deer Creek, Indian Creek, and Priest Hole.
3. Develop a Travel Management Plan within five years after signing of this Record of Decision for the John Day Basin RMP. The Travel Management Plan will describe the final transportation system and guidelines for managing, monitoring, and maintaining the system.
 - a. Collect additional data to field verify actual ground condition of existing routes with GIS data and published maps.



OREGON



LEGEND

Route Density Prescription on BLM Administered Land (Allowable up to)

- Zero Miles per Square Mile
- One and One Tenth Miles per Square Mile
- One and One Half Miles per Square Mile
- Two Miles per Square Mile
- Not Limited

Plan Area Boundary



Travel Management Area

- Lower John Day
- Sutton Mountain
- Rudio Mountain
- North Fork
- South Fork
- Upper John Day

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management



PRINEVILLE DISTRICT

**John Day Basin
Resource Management Plan
Record of Decision**

2015

Map 15: Route Density Prescription and Travel Management Areas

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Table 7. Prescribed Route Density Standards.

Travel Management Area	Interim Route Density (mile/square mile) ¹	Average Allowable Route Density (mile/square mile) ²
Lower John Day	0.4	1.17
Sutton Mountain	0.7	0.96
Rudio Mountain	0.4	1.81
South Fork John Day	0.6	1.65
Upper John Day	1.5	1.48
North Fork John Day	0.8	1.77

¹Interim routes are identified on Maps 9-14. Interim route densities in this table are not an objective or standard, but rather a way to represent the amount of roads and trails selected as interim.

²Prescribed route densities are displayed on Maps 9-14. Average allowable route density is an average across the analysis area based on prescribed route density standards (0 miles per square mile to 2 miles per square mile), and depicts the average if all lands are managed at the maximum allowable density. Analysis for prescribed route density standards was applied to BLM lands only.

- b. Develop a sign plan meeting the requirements of the BLM Sign Manual 9130 and the BLM Sign Guidebook.
 - c. Develop education/public information and enforcement plans after the Travel Management Plan is signed.
4. Criteria for prioritizing areas to be analyzed first:
 - a. Areas with large blocks of public lands with legal public access.
 - b. Areas with high public demand.
 - c. Areas not attaining resource objectives. (For example, interim route densities are currently higher than those prescribed for the final transportation system in the Upper John Day Travel Management Area [Table 7]. This area currently has the highest concentration of rights-of-way for mining and private access.)
5. Each route and its management objective will be assessed, and one or more of the following determinations will be made:
 - a. Keep the route.
 - b. Rehabilitate (see glossary) all or parts of the route.
 - c. Obliterate (see glossary) all or parts of the route.
 - d. Fully decommission (see glossary) all or parts of the route.
 - e. Close the route.
 - f. Place seasonal restrictions on the route.
 - g. Change the use classification of the route (e.g., road, primitive road, fly-in access, and trail).
 - h. Set maintenance intensity that is reflective of management objective.
6. If a road is changed to a trail, the trail will further be classified for a specific type of use (e.g., pedestrian, equestrian and other pack animals, mountain bike, OHV classification).
7. When determining which routes will be part of a transportation network, balance impacts to resources (e.g., aquatics, soil erosion, and wildlife habitat) with the need to provide access for public use, grazing allotments, fire suppression activities, recreation opportunities, timber hauling, site-specific right-of-way actions, etc.. Criteria used to make these determinations include:
 - a. Apply the Aquatic Conservation Strategy decision tree (see the Aquatics section).
 - b. Provide motorized and non-motorized loop opportunities with opportunities for non-repeated use.
 - c. Provide access to recreation sites, trail heads, and river access points.

- d. Provide a range of difficulties and experiences for motorized and non-motorized users.
 - e. Provide for public access to large tracts of public lands, including opportunities to link with other agencies' roads (e.g., USFS, county, state).
 - f. Keep routes with existing rights-of-way or easements, and rehabilitate as needed.
 - g. Provide for emergency ingress and egress needs.
 - h. Select routes with the best existing or potential visual screening (topographic, vegetative, or other screening) when within 0.25 mi. of streams, springs, and rivers.
 - i. Keep access to tribal resource sites, including usual and accustomed fishing locations, plant gathering areas and religious sites, where known.
 - j. Keep historic use sites.
 - k. Close routes where there is an opportunity to expand wildlife habitat security areas.
 - l. Close routes that conflict with wildlife connectivity areas (see glossary or Wildlife section).
 - m. Close routes adjacent to sensitive plants.
 - n. Close routes adjacent to key wildlife habitat (caves, cliffs, and nests).
 - o. Close duplicate routes that service the same areas.
 - p. Look for opportunities to improve visual resources.
 - q. Be consistent with special management area goals.
 - r. Keep routes needed to maintain facilities and range improvements.
 - s. Consider future proposed management actions.
 - t. Utilize road density standards (see Table 7) and identify high road density "hot spots."
 - u. Avoid known cultural/paleontological sites.
 - v. Apply the Water Erosion Prediction Project (WEPP) model to filter areas with high erosion probability, and close or mitigate roads with active erosion.
 - w. Close or mitigate roads in sensitive soil areas.
8. When creating Travel Management Plans for areas or assessing individual routes, the following criteria will be used to decide if a route should be a shared use or single use:
 - a. Consistency with the "Social Qualities" from the Recreation Setting Matrix for the Recreation Setting.
 - b. Increasing amount or reports of unacceptable conflict (e.g., accidents, close calls, disgruntled users, and traffic counts) that cannot be mitigated.
 - c. User displacement from either a shared use or single use designation.
 - d. Consistency with connecting public routes managed by other agencies.
 9. To provide direction for the future Travel Management Plan, prescribed road densities are identified by Travel Management Area based on the need to minimize impacts to key wildlife habitats and provide access consistent with recreation management objectives. Average prescribed road densities (miles of road per square mile) by Travel Management Area are displayed in Table 7. (Note: Within the Travel Management Area, specific areas such as key wildlife habitats may have road densities of 0.00, and other areas within the Travel Management Area or an area containing several roads that intersect may have a road density much greater than the average road density for the Travel Management Area.)
 - a. Average road densities that result from the interim transportation system (Maps 9-14) are displayed in Table 7. Within these areas, the road density can be higher or lower, but the BLM-administered land within the prescribed area will average at or below the prescribed maximum. In Wildernesses and Wilderness Study Areas, the average prescribed route density (0 miles per square mile) applies only to motorized and mechanized routes.
 10. Provide routes for administrative uses.
 11. The Travel Management Plan is not intended to provide evidence bearing on or addressing the validity of any Revised Statute (R.S.) 2477 assertions. The R.S. 2477 rights are adjudicated through a separate judicial and administrative processes that are entirely independent of the BLM's planning process. Consequently, travel management planning will not take into consideration R.S. 2477 assertions or evidence.

12. Travel management planning will be founded on an independently determined purpose and need based on resource uses and associated access to public lands and waters. At such time as a decision is made on R.S. 2477 assertions, the BLM will adjust its travel routes accordingly.
13. Use Best Management Practices for road construction and maintenance (see Appendix A).
14. Develop a user map for each Extensive Recreation Management Area, with numbered routes to help visitors avoid trespass on private lands.
15. In the Dixie Creek area, designate roads and trails for shared use and non-motorized trails, particularly mountain bike trails if conflicts with private lands occur, or if demand for recreation opportunities increases.
16. Vehicles may travel up to 100 feet from roads in areas closed to off-road use or limited to designated roads to park or camp, except as follows:
 - a. If ground conditions are such that driving off the road would create ruts in the landscape.
 - b. In Wilderness Study Areas, designated parking and camping areas will be signed.
 - c. Within the WSR corridor, off-road vehicle travel is limited to 50 feet from roads.
 - d. Off-road vehicle use is prohibited in live water of reservoirs, streams, ponds, and wetlands and will avoid riparian areas.
 - e. Wilderness - No off-road use.
 - f. No motorized or mechanized travel is allowed within the boundaries of Spring Basin Wilderness.
17. Within the Open and Limited designated areas, the interim routes will be shared by both motorized and non-motorized use, unless otherwise posted, until a final Travel Management Plan can be prepared to designate site-specific routes. Road and trail placement in the final travel plan for specific areas will take into account the concerns of landowners living adjacent to the area.
18. Consistent with 43 CFR 8342.1, new routes will be located or designed to minimize adverse effects on soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources. Where off-highway vehicles are causing or will cause considerable adverse effects, the affected areas will be immediately closed to the types of vehicles causing the adverse impacts until the adverse effects are eliminated and measures implemented to prevent recurrence.
19. Snowmobiles and aircraft are motorized vehicles and will be required to abide by the area designations and other restrictions governing motorized vehicles.
20. The landing of aircraft on BLM-administered lands, other than designated routes, is prohibited without prior BLM authorization.
21. Where critical wildlife ranges bisect individual roads, creating a split designation (seasonally open/open), locations of seasonal motorized use restrictions may be necessary to facilitate vehicle turn-arounds and make sensible route identification.
 - a. Route density standards (Table 7) include all roads and trails across BLM-administered lands regardless of route jurisdiction (e.g., BLM, State, County). For purposes of calculating route density, an open route includes all designated non-motorized trails and all motorized routes, designated or not, that receive more than one trip per month or are determined to be in a condition where there are no physical barriers that would preclude motorized use, regardless of seasonal closures; with the exception that only motorized routes will be considered for calculation purposes within areas with a 0 mi/mi² designation.
 - b. Where actual route densities are lower than the route density standards for an area, the BLM has the flexibility to designate additional routes providing that final Travel Management Plan decision criteria are applied to the process.
 - c. Where existing route densities exceed the prescribed route density limits, the BLM may only add new or temporary roads providing that a travel plan is completed for the project area and this plan moves toward the prescribed route density limit. To move toward the prescribed route limit, more roads must be closed, decommissioned, or obliterated than added to the transportation system. The project area for this purpose will be defined as the contiguous block of land managed by the BLM for which the proposed new or temporary road is located within.

Guidelines

1. Closed roads that are not part of the interim or final transportation system may be used administratively by the United States of America and its assigns to conduct official business if the road is determined to be suitable for the proposed use. An assign includes but is not limited to government contractors, grazing lessees, right-of-way permittees, timber sale purchasers, and mining claimants. Administrative use by persons other than federal employees will require a limited use entry permit to be issued by the BLM. These limited use entry permits are for the United States of America's assigns to conduct official business only. This does not guarantee that an assign will have unlimited access rights on routes otherwise closed to the general public.

Energy and Mineral Resources

The *Mineral Leasing Act* of 1920, as amended; the *Geothermal Steam Act* of 1970, as amended; and the *Mining and Mineral Policy Act* of 1970 declare that it is the continuing policy of the federal government to foster and encourage private enterprise in the development of domestic mineral resources. Section 102 of the *Federal Land Policy and Management Act* of 1969 directs the public land to be managed in a manner that recognizes the nation's need for domestic sources of mineral and other resources and also recognizes provisions in the 1872 Mining Law, as amended. The BLM mineral policy (1984), states that 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.

More recently, the 2001 President's National Energy Policy states the measures that will increase and diversify our nation's sources of both traditional and alternative energy resources, improve our energy transportation network, and ensure sound environmental management. This policy was emphasized by Executive Order 13212, which states that BLM must "...take appropriate actions, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission or conservation of energy." Executive Order 13212 provides the decisions made by BLM to take into account the adverse impacts on the President's National Energy policy. Section 102 of FLPMA also states that public land will be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water and archaeological values.

Objective EM1

Provide opportunity for salable minerals exploration, development, and production subject to regulations, standard requirements, and stipulations to protect the environment. Respond to the needs of local, state, and federal agencies, and the public for salable mineral materials.

- Where necessary to protect important lands and resources, mineral exploration and development will be subject to additional terms, conditions, and special considerations that could include no disposal of mineral materials; no surface occupancy; no ground disturbance; non-impairment standard as described in BLM Manual 6330 - Management of Wilderness Study Areas (2012); special design requirements requiring preparation of a plan of operations; and seasonal or other restrictions.

Management Actions

1. The salable mineral program involves several quarries where state and county road departments obtain rock for road surfacing material. New quarry sites may be developed on a case-by-case basis if requested by the public, either commercial or non-commercial use, by state, counties, or other governmental entities. In all cases, new sites will be approved only if they are consistent with the RMP objectives and as identified in Table 8.
2. Where BLM owns only the subsurface mineral management, the BLM will defer to the land management plan of the surface manager. If the surface manager's land management plan does not address BLM's planning criteria as identified in Appendix A of the John Day Basin PRMP/FEIS (USDI BLM 2012), the BLM will require within legal limits the resource protection provided for similar lands in this approved JDBRMP.

The following apply to Table 8:

- Restrictions include (see glossary for expanded definitions):
 - Available (open with standard stipulation)
 - Closed (currently withdrawn or proposed for withdrawal)
 - Avoid (special stipulations, terms, conditions and consideration)
 - No Surface Occupancy (NSO)
- Where overlapping direction is given, the most stringent applies (i.e., closed will be applied over an avoidance area).
- Renewable energy includes but is not limited to wind and solar power and is generally associated with a right-of-way.
- Required Stipulations, Terms and Conditions are listed in this table, by specific resource/resource use direction in this ROD, and as described in Appendix A - Best Management Practices for Activity Categories: Mining and/or Mining and Energy Exploration and Development.
- All area closures to locatable access require a formal Withdrawal, unless other legislation supersedes.
- All areas closed to non-energy leaseables (hardrock minerals) will be proposed for withdrawal.
- Existing rights will be renegotiated, where possible, to protect identified values.

Table 8. Areas Subject to Restrictions of Minerals, Rights-of-Way, Energy, Communication Sites, and Facilities.

Areas Subject to Restrictions	Salable/Locatable	Leasable/Geothermal	Renewable Energy, Communication Sites, Facilities, and Rights-of-Way
Developed recreation sites in SRMAs and boat launches (existing and proposed).	Closed. Also includes Administrative sites.	No Surface Occupancy.	Available. Subject to standard stipulations, terms, and conditions.
BLM lands providing bighorn sheep habitat in the vicinity of Aldrich Mountain.	Available. Subject to standard stipulations, terms, and conditions.	Available. Subject to standard stipulations, terms, and conditions.	Avoid. If avoidance is not possible available with terms and conditions.
BLM lands within the Phillip W. Schneider Wildlife Management Area.	Available. Subject to standard stipulations, terms, and conditions.	Available. Subject to standard stipulations, terms, and conditions.	Avoid. If avoidance is not possible available with standard stipulations.
Areas within 0.25 mile of Bridge, Bear, Gable, and Nelson Creeks.	Available. Subject to standard stipulations, terms, and conditions.	No Surface Occupancy. Avoid. If extraction of the mineral is not considered feasible under these conditions, the area will not be available.	Available. Subject to standard stipulations, terms, and conditions.
South Fork of the John Day River Canyon, from Deer Creek to the junction of the South Fork road with Grant County Road no. 42.	Available. Subject to standard stipulations, terms, and conditions.	Available. Subject to standard stipulations, terms, and conditions.	Avoid. If avoidance is not possible available with terms and conditions.
Wilderness	Closed. Existing rights may continue, but must be conducted according to guidance in the Wilderness Act.	Closed. Existing rights may continue, but must be conducted according to guidance in the Wilderness Act.	Closed
WSAs	Closed. Use BLM Manual 6330 – Mgmt of WSAs (2012). (See Wilderness Study Area section). Conduct site-specific analysis and protect values of WSA on areas with existing rights. Section 202 WSAs are available for Locatable minerals use.	Closed. Use BLM Manual 6330 – Mgmt of WSAs (2012) (see Wilderness Study Area section). Conduct site-specific analysis and protect values of WSA on areas with existing rights.	Closed. Conduct site-specific analysis for protection of values of WSA on areas with existing rights. Use BLM Manual 6330 – Mgmt of WSAs (2012).
PWR 107 water sources	Withdrawn. Maintain water right for public, livestock, and domestic use as specified in original withdrawal order.	Withdrawn. Maintain water right for public, livestock, and domestic use as specified in original withdrawal order.	Withdrawn. Maintain water right for public, livestock, and domestic use as specified in original withdrawal order.

Areas Subject to Restrictions	Salable/Locatable	Leasable/Geothermal	Renewable Energy, Communication Sites, Facilities, and Rights-of-Way
<p>Areas visible from the John Day River from the Columbia through Picture Gorge in Sherman, Gilliam, Jefferson, Wheeler, and Wasco Counties.</p> <p>Includes future acquisitions.</p>	<p>Salable - Closed to new sites. When they expire, existing permits will be either renegotiated or not renewed. Phase out activity on acquired lands as soon as legally possible.</p> <p>Locatable – Avoid – Sites may be permitted if they do not attract attention or do not leave long-term visual changes on the land and are not visible from areas normally seen from the John Day River.</p>	<p>No Surface Occupancy. NSO will be required upon renewal of existing leases and permits. All activities will use existing roads to the extent possible. Activities visible from the John Day River will not be permitted.</p>	<p>Closed to new sites. Must use existing utility and right-of-way corridors.</p>
<p>River Corridors (see glossary).</p> <p>(See Map 1.)</p> <p>Includes future acquisitions.</p>	<p>Salable - Closed to new sites. When they expire, existing permits will be either renegotiated or not renewed. Phase out activity on acquired lands as soon as legally possible.</p> <p>Locatable - Avoid. Permitted sites will not be normally visible from the John Day River. Within 0.25 mile of river manage consistent with State Scenic Waterway Rules as published in Appendix H or requirements of the federal restrictions, whichever is more stringent. Plan of Operations, Terms, conditions and special considerations must:</p> <ul style="list-style-type: none"> • Protect water quality, native vegetation and ORVs of WSRs. • Prevent sediment from entering river or tributaries, protect riparian vegetation, prevent noxious weed establishment and spread, and protect recreation facilities. 	<p>No Surface Occupancy. NSO will be required upon renewal of existing leases and permits. All activities will use existing roads to the extent possible. Activities visible from the John Day River will not be permitted.</p>	<p>Closed to new sites. Must use existing utility and right-of-way corridors. Protect and enhance the most sensitive of visual, recreational, fish, wildlife and Outstandingly Remarkable Values. Protect and enhance free-flowing nature of rivers and streams.</p>
<p>Suitable Wild and Scenic River – North Fork John Day</p>	<p>See management of River Corridors above.</p>		
<p>Developed recreation sites in the North Fork SRMA and two campgrounds.</p>	<p>Closed. Also includes Administrative sites.</p>	<p>No Surface Occupancy.</p>	<p>Available. Subject to standard stipulations, terms, & conditions.</p>

Areas Subject to Restrictions	Salable/Locatable	Leasable/Geothermal	Renewable Energy, Communication Sites, Facilities, and Rights-of-Way
0.5 mile from entrance and 0.5 mile on each side of centerline along length of any significant cave	Avoid. If avoidance is not possible, available with standard stipulations and specific BMPs (see Appendix A).	No Surface Occupancy. Avoid. If avoidance is not possible, available with special stipulations.	Avoid. If avoidance is not possible, first consider locating along existing utility corridors, county roads, or BLM system roads. Prohibit new uses within 0.5 mile of entrances to any cave unless no reasonable alternative routes are available. Where a new right-of-way cannot be reasonably accommodated outside of the 0.5-mile buffer, first consider locating along existing utility corridors, county roads, or BLM system roads.
Wildlife security areas (areas greater than 2/3 mile from existing roads and facilities)	Avoid. If avoidance is not possible, available with standard stipulations plus: Designate uses on existing routes; obliterate existing linear disturbances to mitigate road densities; avoid areas with good habitat security.		
Areas within 200 yards of known sensitive plant populations	Avoid. If avoidance is not possible, available with standard stipulations and specific BMPs (see Appendix A).	No Surface Occupancy. Avoid. If avoidance is not possible, available with special stipulations.	Avoid. If avoidance is not possible, available with standard stipulations and specific BMPs (see Appendix A).
Old growth forest or juniper woodland	Avoid. If avoidance is not possible, available with standard stipulations and specific BMPs (see Appendix A) plus: No permanent structures. Avoid loss of old-growth trees; mitigation may include permanent protection of other unprotected old-growth areas.	Avoid. If avoidance is not possible, available with standard stipulations plus: No permanent structures. Avoid loss of old-growth trees; mitigation may include permanent protection of other unprotected old-growth areas.	Avoid. If avoidance is not possible, available with standard stipulations plus: No permanent structures. Avoid loss of old-growth trees; mitigation may include permanent protection of other unprotected old-growth areas.
Areas within 1 tree length from identified snag patches	Avoid. If avoidance is not possible, available with standard stipulations and specific BMPs (see Appendix A).		
BLM lands with occupied bighorn sheep habitat.	Avoid. If avoidance is not possible, available with standard stipulations and specific BMPs (see Appendix A).	Available. Subject to standard stipulations, terms, and conditions.	Avoid. If avoidance is not possible, available with standard stipulations, terms and conditions.
Areas within 3 miles of sage-grouse lek	Avoid. If avoidance is not possible, available with a full Plan of Operations that sets standard stipulations and specific BMPs (see Appendix A). Limit construction of features (i.e., perches) that create habitat for sage-grouse predators.	No Surface Occupancy. Avoid. If avoidance is not possible, available with standard stipulations plus: Follow BMPs (see Appendix A). Limit construction of features (i.e., perches) that create habitat for sage-grouse predators.	Avoid. If avoidance is not possible, available with standard stipulations and specific BMPs (see Appendix A). Limit construction of features (i.e., perches) that create habitat for sage-grouse predators.
Sensitive Soils	Avoid. If avoidance is not possible, available with standard stipulations and specific BMPs (see Appendix A). When developing or approving new facilities, trade expansion of soil disturbance area with proportional restoration, rehabilitation, decommissioning, or obliteration of pre-existing disturbed areas. Require 2 years of follow-up monitoring of erosion control measures and re-vegetation success. Irrigation and more mature plant sizes may be required to improve probability of planting success. Bonded reclamation plans are required.		

Areas Subject to Restrictions	Salable/Locatable	Leasable/Geothermal	Renewable Energy, Communication Sites, Facilities, and Rights-of-Way
Domestic Water Sources (within 500 feet)	Avoid. If avoidance is not possible, available with standard stipulations and specific BMPs (see Appendix A). Prohibit introduction of contaminants to or disruption of source ground water during the interception of precipitation, infiltration of surface water, and transport or storage of ground water.		
Source Water Protection Areas (SWPAs)	Avoid. If avoidance is not possible, available with standard stipulations and specific BMPs (see Appendix A), plus: Mineral operations are not allowed if they use mercury, cyanide, or other toxics. Mineral operations cannot facilitate high risk uses in Source Water Protection Areas. High risk uses include but are not limited to: high density housing, and mining with toxic chemicals.	Avoid. Available with standard stipulations plus, use BMPs (see Appendix A). High risk uses in Source Water Protection Areas are not allowed. High risk uses include but are not limited to high density housing and use of toxic chemicals.	Avoid. If avoidance is not possible, available with standard stipulations and BMPs (see Appendix A). Prohibit introduction of contaminants to or disruption of source ground water during the interception of precipitation, infiltration of surface water, and transport or storage of ground water. The right-of-way cannot facilitate high risk uses in Source Water Protection Areas. High risk uses include but are not limited to: high density housing and mining with toxic chemicals.
Areas within RMAs.	<p>Salable - No Surface Occupancy. Prohibit extraction in flood-prone area. Avoid salable mineral use in surrounding RMAs; if NSO is not possible, activities must not retard attainment of Aquatic objectives. Survey for cultural resources prior to action; cease work and/or mitigate effects if cultural resources are found.</p> <p>Locatable - Avoid. If avoidance is not possible, available with standard stipulations plus: interdisciplinary team review and BMPs are required (see Appendix A). Mineral activities must not retard attainment of Aquatic Objectives. Exclude mineral use within flood-prone areas.</p>	No Surface Occupancy.	Avoid. No Surface Occupancy for renewable energy and communication sites. BMPs are mandatory (see Appendix A). Rights-of-way that interact with stream channels, floodplains and lentic areas will be managed to not prohibit attainment of ACS objectives. Cultural clearance of the area is required for initial approval, and subsequently encountered cultural resources would require cessation and mitigation for affected cultural resources. A narrower site-specific avoidance area could be identified and reviewed by an interdisciplinary team if all resources objectives are measurably achieved.
Recreational Mining site near Dixie and Standard Creeks	Closed. Allow only recreational gold mining as follows: Seasonal and disturbance area restrictions may be applied to protect Bull Trout and Salmonid habitat. No dredging. Gold panning must be in compliance with state regulations and is further limited to recreational non-mechanized gold panning use. Disturbance areas limited to one cubic yard per 100 feet of stream length.		Available with standard stipulations, terms and conditions.
John Day Paleontology ACEC	Avoid. If avoidance is not possible, available with standard stipulations and specific BMPs (see Appendix A) plus: Inventory proposed action area to mitigate loss of paleontological resources. A plan of operations is required prior to any BLM authorizations.	No Surface Occupancy. Avoid. If avoidance is not possible, available with standard stipulations plus: Inventory proposed action area to mitigate loss of paleontological resources.	Avoid. If avoidance is not possible, conduct paleontological inventories of proposed action area to mitigate for loss of paleontological resources due to site disturbance at construction or during subsequent use.

Areas Subject to Restrictions	Salable/Locatable	Leasable/Geothermal	Renewable Energy, Communication Sites, Facilities, and Rights-of-Way
Horn Butte ACEC	Closed. Existing rights will be negotiated to protect ACEC values. Limit vehicle travel to existing roads and trails.	No Surface Occupancy. Avoid. If avoidance is not possible, available if consistent with ACEC values with Stipulations to protect Washington ground squirrel and long-billed curlew.	Closed
Black Canyon ACEC/RNA	Closed	No Surface Occupancy. Avoid. If avoidance is not possible, available with standard stipulations plus: Do not disturb natural processes and conditions of vegetative community for current and future research needs.	Closed
North Fork John Day ACEC	Closed	No Surface Occupancy. Avoid. If avoidance is not possible, available with standard stipulations plus: Protect or enhance the most sensitive of visual, recreational, fish, and wildlife values. Protect or enhance free-flowing nature of rivers and streams.	Closed
Armstrong Canyon (except existing pipeline right-of-way), Ferry Canyon, and Horn Butte Fourmile ACECs additions	Closed	No Surface Occupancy. Generally Closed. Available if consistent with ACEC values.	Closed. Manage under BLM Manual 6330 – Mgmt of WSAs (2012) until all or part of the underlying WSA lands are dropped from consideration for wilderness by Congress.
Lower John Day ACEC (excepting existing pipeline right-of-way). Contingent on underlying WSA lands being dropped from consideration for Wilderness by Congress.	Closed	No Surface Occupancy. Avoid. If avoidance is not possible, available with standard stipulations plus: Manage under BLM Manual 6330 – Mgmt of WSAs (2012) unless all or part of the underlying WSA lands are dropped from consideration for wilderness by Congress, and require a plan of operations.	Closed. Manage under BLM Manual 6330 – Mgmt of WSAs (2012) until all or part of the underlying WSA lands are dropped from consideration for wilderness by Congress.
Lands identified for protection of wilderness characteristics	Salable - Closed Locatable - Avoid. If avoidance is not possible, available with standard stipulations plus: Conduct site-specific analysis and protect wilderness characteristic of the specific area. Surface disturbance (exploration, ingress, egress, and development) cannot affect wilderness character. Existing permits will be renegotiated.	No Surface Occupancy. Avoid. If avoidance is not possible, available with standard stipulations plus: Conduct site-specific analysis and protect wilderness characteristic of specific area. A plan of operations is required prior to any authorization by the BLM.	Closed. Conduct site-specific analysis for protection of wilderness characteristic of specific area.

3. All exploration and development will require bonded reclamation plans and approval of 'Notices of Intent' or 'Plans of Operations' respectively to meet plan objectives.
4. Continue to make available permitted salable minerals, including common varieties of sand, gravel, and stone, on BLM-managed lands within the John Day Basin plan area where their development is consistent with protection of other resource values and while attaining other RMP objectives. Areas requiring protection are listed in Table 8 and described below.
5. **Areas Closed to salable mineral use of all levels or recommended for such withdrawal include:**
 - a. Wilderness Areas. Existing rights may continue, but must be conducted according to guidance in the Wilderness Act.
 - b. Wilderness Study Areas; see the Wilderness Study Area section. Conduct site-specific analysis and protect values of WSA.
 - c. Public Water Reserve 107s.
 - d. Areas visible from the John Day River between the Columbia and Picture Gorge in Sherman, Gilliam, Jefferson, Wheeler, and Wasco counties.
 - e. All the river corridors (see glossary) of the John Day Rivers (Segments 1-11, see Map 1) will be closed to new sites. When they expire, existing permits will either be renegotiated or not renewed:
 - i. Within 0.25 mile of rivers, adopt State Scenic Waterway rules where mining will be subject to stipulations to protect river values, or the federal restrictions, whichever is more stringent.
 - f. Ongoing salable mineral activity on lands acquired in the future will be phased out as soon as legally possible.
 - g. Developed recreation sites in SRMAs and facilities such as established campgrounds and boat launches (existing and proposed).
6. **Areas excluded from salable mineral use and recommended for withdrawal from the salable material use include:**
 - a. Segments of the North Fork John Day River determined to be Suitable for designation as a Wild and Scenic River. (This direction continues existing management.)
 - b. Proposed developed recreation sites in Special Recreation Management Areas, including but not limited to the two along the North Fork John Day River and one site on South Fork John Day River.
 - c. The recreational mining site to be developed near Dixie and Standard Creeks. Allow only recreational gold mining as follows: Seasonal and disturbance area restrictions may be applied to protect bull trout and salmonid habitat. No dredging. Gold panning must be in compliance with state regulations and is further limited to recreational, non-mechanized gold panning use. Disturbance area is limited to one cubic yard per 100 feet of stream length.
 - d. Horn Butte ACEC - Existing rights will be renegotiated to protect ACEC values.
 - e. Black Canyon ACEC/RNA, North Fork John Day ACEC, Armstrong Canyon (except existing Portland General Electric pipeline right-of-way). Ferry Canyon and Horn Butte ACECs.
 - f. Lands managed to protect wilderness characteristics will be protected by conducting site-specific analysis and identifying necessary protection for the wilderness characteristics. Existing permits will be renegotiated.
 - g. Lower John Day ACEC (excepting existing pipeline right-of-way). Contingent on underlying WSA lands being dropped from consideration for Wilderness by Congress.
 - h. John Day Paleontological ACEC within the Sutton Mountain Wilderness Study Area. Exclude the area from salable mineral use if Congress drops it from consideration for Wilderness.
7. **A No Surface Occupancy (NSO) stipulation will be applied to exploration and development on the following lands:**
 - a. Exclude mineral use within flood-prone areas. Avoid surrounding Riparian Management Areas. If NSO is not possible, activities must not retard attainment of Aquatic objectives. Survey for cultural resources prior to action and cease work and/or mitigate effects if cultural resources are found.

8. **Areas where salable mineral use will be avoided or, if avoidance is not possible, available with special terms, conditions, considerations, and BMPs (see Appendix A) include:**
- a. Areas within 0.50 mile from the entrance and 0.50 mile on each side of centerline along the length of any significant cave.
 - b. Wildlife security areas (more than two-thirds mile from existing roads and facilities). Designate uses on existing routes and obliterate existing linear disturbances to mitigate road densities. Avoid areas with good habitat security.
 - c. Areas within 200 yards of known sensitive plant populations. Follow BMPs (see Appendix A).
 - d. Old-growth forest or juniper woodland. Avoid loss of old-growth trees. No permanent structures. Mitigation may include permanent protection of other unprotected old-growth areas.
 - e. Areas within one tree length from identified snag patches.
 - f. BLM lands with occupied bighorn sheep habitat.
 - g. Areas within 3 miles of sage-grouse leks. Limit construction of features that create habitat for sage-grouse predators (e.g., perches).
 - h. Sensitive Soils. When developing or approving new facilities, trade expansion of soil disturbance area with proportional restoration, rehabilitation, decommissioning, or obliteration of pre-existing disturbed areas. Require 2 years of follow-up monitoring of erosion control measures and re-vegetation success. Irrigation and more mature plant sizes may be required to improve probability of planting success. Bonded reclamation plans are required.
 - i. Source Water Protections Areas: Activities that use mercury, cyanide, or other toxics are not allowed. Do not facilitate high risk uses in Source Water Areas. High risk uses include but are not limited to high density housing and mining with toxic chemicals.
 - j. Domestic Water Sources (all domestic water sources not covered under the Source Water Protection Avoidance Area). Use Best Management Practices (see Appendix A). Prohibit introduction of contaminants to or disruption of source ground water during the interception of precipitation, infiltration of surface water, and transport or storage of ground water.
 - k. John Day Paleontology ACEC. Inventory proposed action area to mitigate loss of paleontological resources. A plan of operations is required prior to any BLM authorizations.

Objective EM2

Provide leasing opportunity for leasable minerals (such as oil, gas, geothermal energy, and solid minerals), subject to standard lease requirements and standard stipulations to protect the environment.

Management Actions

1. Provide opportunities for carbon storage at depleted oil and gas wells connecting to geologic formations that are compatible with carbon capture. Areas available for carbon storage are the same as those areas identified available for oil and gas development, subject to stipulations to attain aquatic, wildlife, air quality, vegetation, and soils objectives.
2. All exploration and development will require bonded reclamation plans and approval of plans of operations to meet plan objectives.
3. Areas requiring protection are listed in Table 8 and as follows:
4. **Areas Closed to leasable mineral use of all levels or recommended for withdrawal (hardrock) include:**
 - a. Wilderness Areas. Existing rights may continue, but must be conducted according to guidance in the Wilderness Act.
 - b. Wilderness Study Areas; see BLM Manual 6330 - Management of Wilderness Study Areas and the Wilderness Study Area section. Conduct site-specific analysis and protect values of WSAs.
 - c. Public Water Reserve 107s.
 - d. Lands identified as nationally significant or visually sensitive.

- e. Areas visible from the John Day River between its confluence with the Columbia River through Picture Gorge; use is not permitted if it will attract attention or leave long-term visual changes on the land.
 - f. For all river corridors (see glossary) of the John Day Rivers (Segments 1-11, see Map 1), including future acquisitions.
 - g. Developed recreation sites in SRMAs and boat launches (existing and proposed). Areas within 0.25 mile of Bridge, Bear, Gable, and Nelson Creeks. If mineral extraction is not considered feasible under these conditions, the area will not be available.
 - h. The recreational mining site to be developed near Dixie and Standard Creeks.
 - i. Allow only recreational gold mining as follows: Seasonal and disturbance area restrictions may be applied to protect bull trout and salmonid habitat. No dredging. Gold panning must be in compliance with state regulations and is further limited to recreational, non-mechanized gold panning use. Disturbance area is limited to one cubic yard per 100 feet of stream length.
5. **A No Surface Occupancy stipulation will be applied to exploration and development of leasable minerals on the following lands:**
- a. Areas within 200 yards of known sensitive plant populations.
 - b. Areas within three miles of sage-grouse leks. Limit construction of features that create habitat for sage-grouse predators (e.g., perches).
 - c. Proposed developed recreation sites in Special Recreation Management Areas, including but not limited to the two along the North Fork John Day River (School House and Skull Canyon).
 - d. Areas within 0.50 mile from the entrance and 0.50 mile on each side of centerline along the length of any significant cave.
 - e. Areas within Riparian Management Areas. The interdisciplinary team review and Best Management Practices are required (see Appendix A). Activities must not retard attainment of Aquatic objectives. Exclude use within flood-prone areas. Survey for cultural resources prior to action; cease work and/or mitigate effects if resources are found.
 - f. In the John Day Paleontology ACEC. Inventory proposed action area to mitigate loss of paleontological resources.
 - g. Horn Butte ACEC outside the Fourmile tract. If avoidance is not possible, available if consistent with ACEC values and stipulations to protect Washington ground squirrel and curlew.
 - h. Black Canyon ACEC/RNA. If avoidance is not possible, do not disturb natural processes and conditions of vegetative community for current and future research needs.
 - i. Armstrong Canyon, Ferry Canyon, North Fork, and Horn Butte Fourmile ACECs.
 - j. Lower John Day ACEC (excepting existing pipeline right-of-way). Contingent on underlying WSA lands being dropped from consideration for Wilderness by Congress.
 - k. Lands identified for protection of wilderness characteristics will be protected by conducting site-specific analysis and identifying necessary protection for the wilderness characteristics. Existing permits will be renegotiated.
6. **Areas where leasing will be avoided or available with special stipulations include:**
- a. Wildlife security areas (more than 2/3 mile from existing roads and facilities). Designate uses on existing routes and obliterate existing linear disturbances to mitigate road densities. Avoid areas with good habitat security.
 - b. Old-growth forest or juniper woodland. Avoid loss of old-growth trees; mitigation may include permanent protection of other unprotected old-growth areas.
 - c. Areas within one tree length from identified snag patches.
 - d. Sensitive Soils. When developing or approving new facilities, trade expansion of soil disturbance area with proportional restoration, rehabilitation, decommissioning, or obliteration of pre-existing

disturbed areas. Require 2 years of follow-up monitoring of erosion control measures and re-vegetation success. Irrigation and more mature plant sizes may be required to improve probability of planting success.

- e. Source Water Protection Areas. Mineral operations that use mercury, cyanide, or other toxics are not allowed. Mineral operations cannot facilitate high risk uses in Source Water Areas. High risk uses include, but are not limited to high density housing and mining with toxic chemicals.
- f. Domestic Water Sources (all domestic water sources not covered under the Source Water Protection Avoidance Area). Use Best Management Practices (see Appendix A). Prohibit introduction of contaminants to or disruption of source ground water during the interception of precipitation, infiltration of surface water, and transport or storage of ground water.

Objective EM3

Provide opportunity for the exploration, location, development, and production of locatable minerals while protecting the environment. Eliminate and rehabilitate abandoned mine hazards (locatable minerals).

Management Actions

1. Areas not specifically withdrawn from mineral entry under the Mining Law of 1872, as amended, will continue to be open under the mining laws to help meet the demand for minerals. (See Appendix M - Withdrawals).
2. All exploration and development will require bonded reclamation plans and approval of 'notices of intent to disturb' or 'plans of operations' respectively, to meet plan objectives.
3. Mineral exploration and development on public land is regulated under 43 CFR 3809 to prevent unnecessary or undue land degradation. Areas requiring protection are listed in Table 8 and as follows:
4. **Areas Closed to locatable mineral use of all levels include:**
 - a. Public Water Reserve 107s are withdrawn to maintain water for public livestock and domestic use as specified in original withdrawal order.
 - b. Wilderness Areas are withdrawn from mineral entry. Valid existing rights may continue, but must be conducted according to guidance in the Wilderness Act.
 - c. Wilderness Study Areas will be managed according to BLM Manual 6330 - Management of Wilderness Study Areas (2012). Conduct site-specific analysis and protect values of WSAs.
 - d. Developed recreation sites in SRMAs and facilities such as established campgrounds and boat launches (existing and proposed).
 - e. Within all river corridors of the John Day Rivers (Segments 1-11), all current existing power site withdrawals, riparian plant cultivation areas, campgrounds, and day use and boat ramp areas will be withdrawn from locatable mineral entry under the Mining Law of 1872 for locatable minerals.
5. **Areas proposed for withdrawal (closed) from locatable mineral use include:**
 - a. Recreation sites proposed for development in Special Recreation Management Areas, including but not limited to, the two along the North Fork John Day River (School House and Skull Canyon).
 - b. Horn Butte ACEC outside the Fourmile tract. Existing rights will be negotiated to protect ACEC values. Limit vehicle travel to existing roads and trails.
 - c. Black Canyon ACEC/RNA.
 - d. North Fork John Day ACEC.
 - e. Armstrong Canyon, Ferry Canyon, and Horn Butte Fourmile ACECs.
 - f. Lower John Day ACEC, contingent on Congress dropping the underlying WSA lands from consideration for Wilderness.
 - g. The recreational mining site to be developed near Dixie and Standard Creeks. Allow only recreational gold mining as follows: Seasonal and disturbance area restrictions may be applied to protect bull trout and salmonid habitat. No dredging. Gold panning must be in compliance with state regulations and is

further limited to recreational, non-mechanized gold panning use. Disturbance area is limited to one cubic yard per 100 feet of stream length.

6. **Resources that will be protected by avoidance and special stipulations are listed in Table 8 and are as follows:** For all river corridors of the John Day Rivers (Segments 1-11, see Map 1):
 - a. Locatable mineral activity shall conform to the State Scenic Waterway requirements (see Appendix H) or the regulations of the federal government, whichever requirements are more stringent. Locatable mineral entry shall be subject to stipulations that protect water quality and native vegetation. Stipulations include, but are not limited to those for screening and road building restrictions and others in the State Scenic Waterways (see Appendix H). All lands in the river corridors are subject to a Plan of Operations under the regulations at 43 CFR 3809.
 - b. In areas visible from the John Day River between its confluence with the Columbia River through Picture Gorge use is not permitted if it will attract attention or leave long-term visual changes on the land.
 - c. Navigability for the John Day River from Tumwater Falls, upriver to Kimberly, was determined in 2005 and upheld in court. Outcomes from State land ownership of the bed and banks of this river are currently unknown. This plan recognizes State navigability, but due to the uncertainty does not attempt to predict potential actions approved by the State of Oregon that could enhance or degrade river values, or alter BLM management. The BLM will continue to work proactively with State agencies to manage this river corridor consistent with Federal and State regulations.
7. **Areas where locatable mineral extraction will be avoided or available with special stipulations include:**
 - a. Areas within 0.50 mile from the entrance and 0.50 mile on each side of centerline along the length of any significant cave.
 - b. Land with occupied bighorn sheep habitat.
 - c. Wildlife security areas (more than 2/3 mile from existing roads and facilities). Designate uses on existing routes and obliterate existing linear disturbances to mitigate road densities. Avoid areas with good habitat security.
 - d. Areas within 200 yards of known sensitive plant populations.
 - e. Old-growth forest or juniper woodland. Avoid loss of old-growth trees. Mitigation may include permanent protection of other unprotected old-growth areas.
 - f. Areas within one tree length from identified snag patches.
 - g. Areas within 3 miles of sage grouse leks. Limit construction of features (e.g., perches) that create habitat for sage grouse predators.
 - h. Sensitive Soils. When developing or approving new facilities, trade expansion of soil disturbance area with proportional restoration, rehabilitation, decommissioning, or obliteration of pre-existing disturbed areas. Require 2 years of follow-up monitoring of erosion control measures and re-vegetation success. Irrigation and more mature plant sizes may be required to improve probability of planting success.
 - i. Areas within Riparian Management Areas. The interdisciplinary team review and Best Management Practices are required (see Appendix A). Activities must not retard attainment of Aquatic objectives. Exclude use within flood-prone areas. Survey for cultural resources prior to action; cease work and/or mitigate effects if resources are found.
 - j. Source Water Protection Areas. Mineral operations that use mercury, cyanide, or other toxics are not allowed. Mineral operations cannot facilitate high risk uses in Source Water Areas. High risk uses include, but are not limited to high density housing and mining with toxic chemicals.
 - k. Domestic Water Sources (all domestic water sources not covered under the Source Water Protection Avoidance Area). Use Best Management Practices (see Appendix A). Prohibit introduction of contaminants to or disruption of source ground water during the interception of precipitation, infiltration of surface water, and transport or storage of ground water.
 - l. John Day Paleontology ACEC. Inventory proposed action area to mitigate loss of paleontological resources. A plan of operations is required prior to any BLM authorizations.

m. Lands where wilderness character will be protected. If avoidance is not possible, conduct site-specific analysis and protect wilderness characteristic of specific wilderness character area. Surface disturbance (exploration, ingress, egress, and development) cannot impair wilderness character. A plan of operations is required prior to any authorization by the BLM.

Objective EM4

In an environmentally sound manner, create a recreational mining area where the general public can pan for gold with a reasonable prospect of success.

Management Actions

1. Identify a 20-acre area where the public can visit and recreationally pan for gold. One area that could potentially offer such an experience is along Standard and Dixie Creeks. Once identified on the ground, recommend the area for closure and withdrawal from the general mining laws and implement a site-specific plan for the area.

Lands and Realty

Land Tenure Zones and Energy Corridors

See Map 16.

Objective LR1

Create a land base that facilitates attainment of resource and resource use objectives.

Management Actions

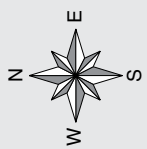
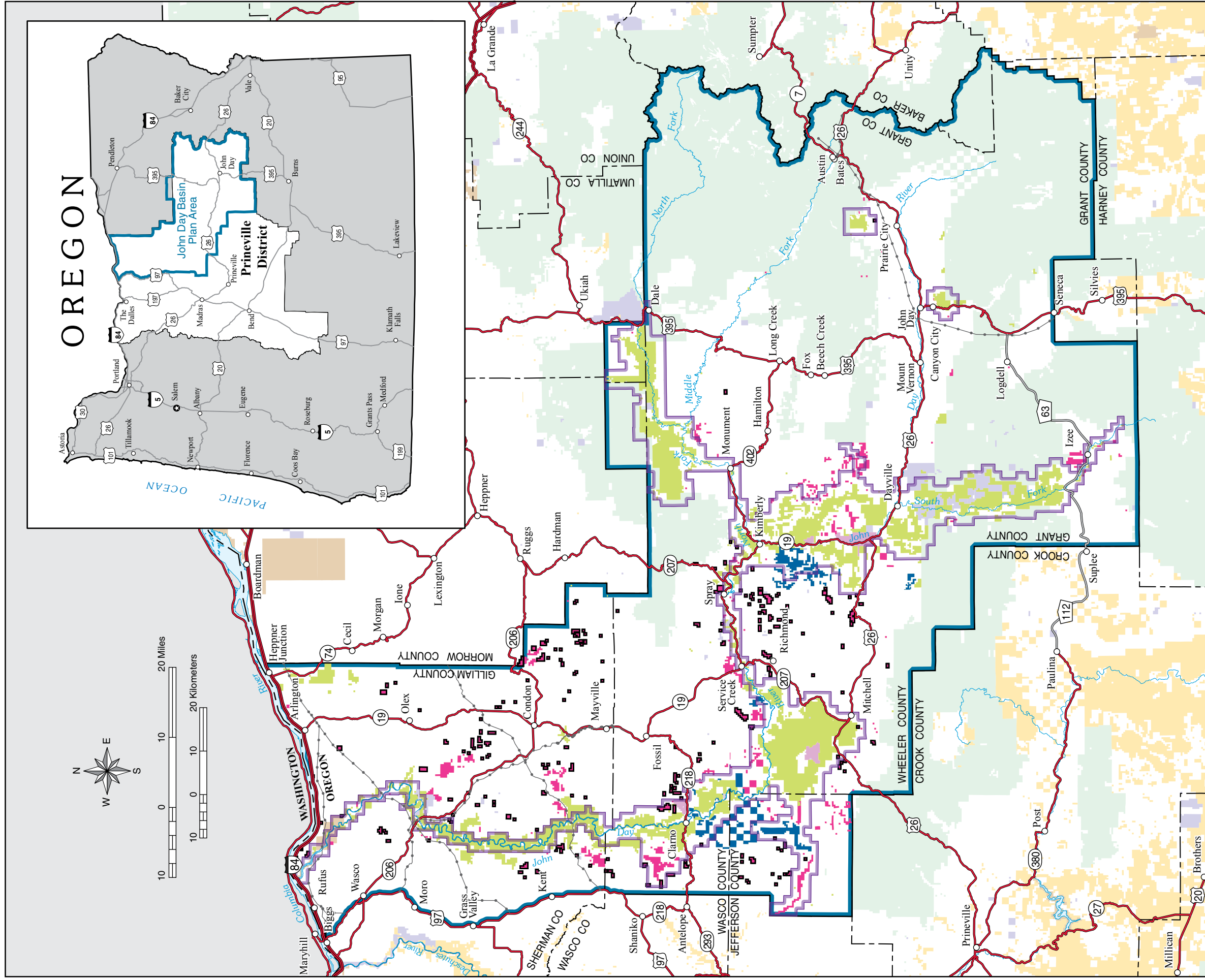
1. Classify land as Zone 1 (Z-1), Zone 2 (Z-2), or Zone 3 (Z-3) (see glossary).
 - a. Z-1 applies to lands with high public values. Retain Z-1 lands in public ownership.
 - b. Z-2 lands are not as valuable as Z-1 and can be retained or exchanged for lands with higher public value. Lands in Z-2 will be available for exchange to enhance public resource values, improve management capabilities, or reduce the potential for land use conflict; or where the public expressed specific interest for land exchanges (e.g., Rudio Mountain, Johnson Heights, and Muddy Creek).
 - c. Z-3 lands have low public value, or are small or isolated. Dispose of Z-3 lands (sell or exchange them for lands with higher public value). Small and isolated parcels that do not serve the national interest will be available for disposal [FLPMA Section 102(a) (1)]. Disposal requires site-specific analysis based on the criteria identified for each zone.
 - d. Lands identified for disposal (Z-3) in a BLM land use plan prior to July 25, 2000, and still identified as Z-3 in current plan, will be available for disposal under the Federal Land Transaction Facilitation Act of 2000 (FLTFA). This allows a portion of the receipts from sale of the land or interests in the land to be retained by BLM.
 - e. All lands determined to be eligible under the Recreation and Public Purposes Act (R&PP) are available for R&PP sale and lease applications. Individual applications for R&PP sales and leases will be considered on a site-specific basis. Authorizations require compliance with all land use plan objectives.
2. The BLM-administered lands within Wild and Scenic Rivers are withdrawn from disposal via sale. Public lands within the Wild and Scenic Rivers may be exchanged for private lands of equal or greater value that are within the boundaries of the Wild and Scenic River. Table 9 summarizes some land suitable for acquisition.
3. Within the Wild and Scenic River corridors, the following parcels are currently identified for disposal: RM 112; T8S, R19E, Section 4, SE ¼ (15.3 acres) and RM 119; T8S, R19E, Section 25, NW ¼ (10.3 acres).

Objective LR2

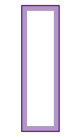







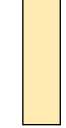


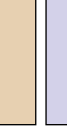
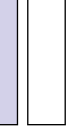

Assure legal and physical access to public lands with important resource values. Maintain the availability of public lands for utility and transportation corridors and local rights-of-way. Maintain the availability of public lands for use, occupancy, and development while sustaining resource values. Provide for testing, production, transmission and conservation of energy while maintaining safety, public health, and environmental protections.

Management Actions

1. The entire plan area will be available for locating renewable energy facilities, rights-of-way, communication sites, and other uses, subject to site-specific consideration of resource objectives and unless specifically withdrawn or listed as an exclusion area (see Table 8).
2. Properly authorize all uses of BLM public lands within the plan area where BLM concurs that such use should occur.
3. Avoid the proliferation of separate rights-of-way.
4. Existing rights-of-way are shown in Appendix L of the John Day Basin PRMP/FEIS (USDI BLM 2012).
5. Review applications on an individual basis for conformance with the RMP objectives to minimize conflicts with other resources or users. Public lands will continue to be available for local rights-of-way, including multiple use and single use utility/transportation corridors, following existing routes, communication sites, and roads, except as limited in Table 8.
6. Leases and/or patents will continue to be available under the Recreation and Public Purposes Act. Other permits or leases for development of public lands will also continue. Applications for these activities will be reviewed for conformance with other resource or use objectives and minimal conflict.
7. All major utility construction projects must co-locate within the existing utility corridors. [See Map 16. Also, for a list of the six utility and transportation corridors in the plan area, see the John Day Basin PRMP/FEIS (March 2012), Lands and Realty, Rights-of-way and Easements.] Corridor widths may be up to 2,000 feet, with 1,000 feet on either side of existing right-of-way centerline. If only one side is limited by a Wilderness Study Area, Wilderness, Wild and Scenic River, or ACEC, the overall width remains 2,000 feet with the increase on the opposite side. For utility corridors, the 2,000-foot width could be expanded to accommodate safety concerns.
8. Major transportation corridors consist of State Highways 19, 206, 207, 218, 395, and 402; U.S. Highway 26 and 97; and Interstate Highway 84. Corridor widths vary, but are considered to be within existing rights-of-way.
9. Rights-of-way, including but not limited to those for road or wind energy generation, will follow existing corridors and avoid proliferation of separate rights-of-way. All right-of-way applications will be reviewed using the criteria of following existing corridors and rights-of-way wherever practical and avoiding proliferation of separate rights-of-way.
10. Applicants will be encouraged to locate new facilities (including communication sites) adjacent to existing facilities to the extent possible.
11. Activities that would result in significant, long-term adverse effects on the lands visible from the John Day River, from the Columbia through Picture Gorge, will not be permitted outside designated utility and transportation corridors.
12. There will be no new crossings of Wild and Scenic Rivers or other BLM-managed portions of the river corridors (see Map 16) outside of designated utility and transportation corridors. Avoidance areas may be available with stipulations, terms and conditions (see Table 8).
13. Use right-of-way requests to acquire access to public lands in the area through reciprocal agreements.
14. Rights-of-way, renewable energy projects, and other permits and leases will include the following terms and conditions, in addition to those identified on a site-specific basis, as necessary to attain RMP objectives:
 - a. Build according to the BLM standards. Right-of-way, permit, or lease holders are required to maintain the roads and facilities to BLM standards and achieve resource objectives.
 - b. Best Management Practices (Appendix A) are mandatory, but are selected during site-specific right-of-way review.



LEGEND

-  Zoning Acquisition
-  Utility Corridor
-  Land Tenure on BLM Administered Land
 -  Zone 1: Classified for Retention
 -  Zone 2: Classified for Retention with Option to Exchange
 -  Zone 3: Classified for Disposal
-  Eligible for sale under legislation similar to Federal Lands Transaction Facilitation Act
-  Plan Area Boundary
- Administered Land Management**
 -  Bureau of Land Management
 -  Forest Service
 -  John Day Fossil Beds National Monument
 -  Other Federal
 -  State
 -  Private or Other

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management



PRINEVILLE DISTRICT
John Day Basin
Resource Management Plan
Record of Decision

2015

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Map 16: Land Tenure Zones and Energy Corridors

Table 9. Lands Suitable for Acquisition (carried forward from John Day River Plan)

Location	Est. Acres	Comment
T 9S R 23 E Section 18, SE ¼ NE ¼	5.83	Acquire Service Creek launch site from the Oregon Department of Transportation as agreed.
T 9S R 22E Section 28, Portions of E ½ SW ¼ South of JDR Section 32, SW ¼ NE ¼ NW ¼ SE ¼ E ½ NW ¼ NE ¼ SW ¼	248	Consolidate public lands.
T 9S R 22E Section 23, SW ¼ NW ¼	40	Consolidate public lands.
T 9S R 22E Section 32, SE ¼ SW ¼	40	Consolidate public lands.
T 9S R 22E Section 13, portions of NE ¼ SW ¼ NW ¼ SE ¼	80	Consolidate public lands; recreation site potential.
T9S R22E Section 23, NE ¼ SW ¼	40	Consolidate public lands; acquire for campsites.
T9S R22E Section 22, S ½ SW ¼ Section 27, NW ¼ NW ¼ Section 28, N ½ NE ¼	200	Consolidate public lands; acquire for campsites.
T 10S R 22E Section 6, NW ¼	60	Acquire for campsites.
T 1S R 19E Section 14, S ½ SW ¼ NW ¼ SW ¼ Section 15, NW ¼ NE ¼ NE ¼ SE ¼ Section 22 S ½ NE ¼ SE ¼ NW ¼ Section 23, W ½ NW ¼ NE ¼ NW ¼	440	Consolidate public lands.
T 1S R 19E Section 4, SW ¼ Section 9, NW ¼ N ½ SW ¼ Section 16, NW ¼ NE ¼	440	Acquire access.
T 1S R 20E Section 6, SW ¼ SW ¼ SE ¼ Section 7, E ½ NW ¼ W ½ NE ¼ NE ¼ NE ¼ Section 8, N ½ SE ¼ SW ¼ NE ¼ SE ¼ NW ¼ NW ¼ NW ¼	600	Acquire access.
T 1N R 19E Section 3, S ½ S ½	160	Acquire Oregon Trail Segment
T 10S R22E Section5, NW ¼ NE ¼	40	Consolidate public land.
T 9S R21E Section 32, Portions of N ½ NW 1/4 , north of the river	15	Consolidate public lands; acquire for campsites.
T9S R21E Section 32, N ½ NE ¼ Section 33. NW ¼ NW ¼ All north of JDR	31	Consolidate public lands; acquire for campsites.
T9S R21E Section 28 SE ¼ SW ¼ north of the JDR	6	Consolidate public land.
T 75 R 19E Section 32, SW ¼ NE ¼	1.86	Acquire Clarno Launch/Landing from OPRD as agreed.
T 1S R 19E SE ¼ SW ¼	1	Acquire small sliver of private land between BLM and OPRD.
T 1S R 19E Section 17, SE ¼ SW ¼	7.12	Acquire cottonwood launch/landing from OPRD as agreed.
T 1N R 19E Section 11, NW ¼	20	Provide additional parking and boat launch.
T 4S R 18 E Section 11 W ½ SW ¼ SW ¼ NW ¼ Section 14, NW ¼ NW ¼	160	Consolidate public land in Wilderness study area.
T 3S R 18E Section 35, S 1.2 SW ¼	160	Consolidate public land in Wilderness study area.
T 4S R 18E Section 2, NW ½ NW ¼		
T 3S R 18E Section 14, N ½ SE ¼ NE ¼ SW ¼ SW ¼ NE ¼	160	Consolidate public land in Wilderness study area.

Location	Est. Acres	Comment
T 2S R 18E Section 13, SW ¼ SW ¼ Section 24, W ½ NW ¼ NW ¼ SW ¼ SE ¼ NW ¼ S ½ NE ¼ NE ¼ SE ¼	320	Consolidate public land in Wilderness study area.
T 8S R 19E Section 36, NW ¼ NW ¼	40	Acquire poor condition land for rehabilitation and campsite potential.
T 5S R 19 E Section 30, NE ¼ SE ¼	40	Consolidate public land in wilderness study area.
T 1S R 19E Section 19, lot 7,8 and 12 Section 30, NW ¼ NE ¼ SW ¼ NE ¼ NW ¼ SE ¼ lot 1 and 7	320	
T 1S R 19E Section 32, SW ¼ NW ¼	40	
T 1S R 19E Section 32, SW ¼ NE ¼ SE ¼ NW ¼ E ½ SW ¼ W ½ SE ¼	240	
Cherry Creek		Preserve undeveloped character of the area.
Total Acres (Approximate)	4,036	

- c. Pursue exclusive easements where they increase public access to public land. Request administrative access if no easement is acquired.
 - d. Areas with weed populations will be treated for a minimum of two years and as needed through the duration of the right-of-way, permit or lease to avoid allowing the area to function as a vector for weeds.
 - e. Road berms and any disturbance areas associated with construction will be reseeded according to seeding guidelines in the vegetation section.
 - f. Steep disturbed areas will be revegetated to the structure and composition characteristic of the surrounding landscape.
 - g. Re-route routes to mitigate and minimize for fragmentation of wildlife habitat.
 - h. Seasonal access limitations mirror the area-specific restrictions identified in the Access and Travel Management section.
 - i. Bonded reclamation plans are required for non-permanent projects.
 - j. When developing or approving new facilities, trade expansion of soil disturbance area with proportional restoration, rehabilitation, decommissioning, or obliteration of pre-existing disturbed areas (see Soils for full description).
 - k. Additional stipulations and conditions will be applied at application using RMP objectives, Best Management Practices (Appendix A), the Implementation of Wind Energy Development Program and Associated Land Use Plan Amendments ROD, December, 2005, and similar plans.
15. **Renewable energy testing and development, rights-of-way, communication sites, and/or other facilities will not be allowed in the following exclusion areas:**
- a. Wilderness Areas
 - b. Wilderness Study Areas (WSAs)
 - c. Areas of Critical Environmental Concern (ACECs)
 - i. Black Canyon ACEC/RNA, North Fork ACEC, Ferry Canyon ACEC, Armstrong Canyon ACEC, and Horn Butte ACEC.
 - ii. Lower John Day ACEC (excepting existing pipeline right-of-way). Contingent on Congress dropping the underlying WSA lands from consideration for Wilderness.
 - d. Public Water Reserve 107s (see Appendix M - Withdrawals).

- e. In areas visible from the John Day River between its confluence with the Columbia through Picture Gorge, use is not permitted if it will attract attention or leave long-term visual changes on the land.
 - f. For all river corridors (see glossary) of the John Day River (Segments 1-11, see Map 1), including future acquisitions.
 - g. Lands managed to protect wilderness characteristics.
16. **The following areas will be avoided when locating renewable energy testing and development, facilities, rights-of-way, or corridor routes:**
- a. South Fork of the John Day River Canyon, from Deer Creek to the junction of the South Fork Road with Grant County Road No. 42.
 - b. BLM lands providing bighorn sheep habitat in the vicinity of Aldrich Mountain.
 - c. BLM lands within the Phillip W. Schneider Wildlife Management Area.
 - d. Riparian Management Areas (with the exception of renewable energy and communication sites which are NSO).
 - e. Areas within 0.50 miles from the entrance and 0.50 miles on each side of the centerline along the length of any significant cave.
 - f. Wildlife security areas (more than 2/3 mile from existing roads and facilities). Designate uses on existing routes and obliterate existing linear disturbances to mitigate road densities. Avoid areas with good habitat security.
 - g. Areas within 200 yards of known sensitive plant populations.
 - h. Old-growth forest or juniper woodland. Avoid loss of old-growth trees. Mitigation may include permanent protection of other unprotected old-growth areas.
 - i. Areas within one tree length form identified snag patches.
 - j. Areas within three miles of sage-grouse leks. Limit construction of features (e.g., perches) that create habitat for sage-grouse predators.
 - k. Sensitive soils. When developing or approving new facilities, trade expansion of soil disturbance area with proportional restoration, rehabilitation, decommissioning, or obliteration of pre-existing disturbed areas. Require two years of follow-up monitoring of erosion control measures and revegetation success. Irrigation and more mature plant sizes may be required to improve probability of planting success.
 - l. Occupied bighorn sheep habitat.
 - m. John Day Paleontology ACEC.
 - n. Activities that use mercury, cyanide, or other toxics are not allowed. Do not facilitate high risk uses in Source Water Areas. High risk uses include, but are not limited to, high density housing and mining with toxic chemicals.
 - o. Domestic Water Sources (all domestic water sources not covered under the Source Water Protection Avoidance Area). Use Best Management Practices (Appendix A). Prohibit introduction of contaminants to or disruption of source ground water during the interception of precipitation, infiltration of surface water, and transport or storage of ground water.
17. **A No Surface Occupancy (NSO) for renewable energy and communication sites applies to the following areas:**
- a. Riparian Management Areas (see Objective LR2.16.d for corridor routes, access roads, etc.).

Objective LR3

Protect lands that have important resource values or substantial levels of investment by withdrawing them, where necessary, from the implementation of nondiscretionary public land and mineral laws.

Management Actions

1. Proposed withdrawal areas (Table 8), including existing withdrawals to be continued, modified or revoked are included in Appendix M. The table also indicates how lands are to be managed if the withdrawals are relinquished and an opening order issued (see 43 CFR 2300).
2. Certain springs and water holes in the plan area may qualify as a Public Water Reserve No. 107. For these qualifying springs and waterholes, an amount of water necessary to fulfill the primary purposes of the reservation (livestock watering and human consumption) was reserved and entry into these locations is restricted. A partial list is provided in Appendix M - Withdrawals, but identification and quantification of these withdrawals is an ongoing process. The BLM will maintain an up-to-date inventory of Public Water Reserve 107s and submit their claims in any adjudication processes.

Objective LR4

Increase the percentage of public land with public access by 10 percent over the life of the plan. Table 1 summarizes the amount of the plan area by land tenure zone. Map 16 displays land tenure zones and areas where lands suitable for acquisition are likely to be located.

Management Actions

1. The BLM will process withdrawals, revocations, disposals, and acquisitions for BLM and on behalf of other federal agencies.
2. Place lands in Zone 1 based on the following criteria:
 - a. Access is an important consideration, but access alone is not sufficient. Land must provide access to values.
 - i. Currently there is access, or
 - ii. No access now, but it is possible to get, and the public desires access.
 - b. Social and economic community uses and values: Contribution to community character, R&PP potential, transportation corridors, grazing, timber, energy, minerals, and other use compatibilities; and utility corridors.
 - c. Cultural, historic, archeological, or tribal values.
 - d. Open space and visual quality.
 - e. Recreation use.
 - f. Critical habitat for sensitive, threatened, or endangered species.
 - g. Important wildlife habitat or ACEC quality.
 - h. Contribution to vegetation objectives.
 - i. Water quality, riparian function, or protection and enhancement of Wild & Scenic Rivers.
 - j. Wilderness and Wilderness Study Areas.
 - k. National Landscape Conservation System designated lands.
 - l. Research Natural Areas.
 - m. Purchase or ensure that subsurface ownership does not conflict with management of surface.
 - n. All lands blocked up in the Land Exchange Act of 2000 in the North Fork area will become classified Z-1, except as noted below.
 - i. In the North Fork area (T.6 S., R. 30 E., Sec. 35), a parcel approximately two acres in size that is adjacent to private land will be classified Z-3 to facilitate the sale of the parcel that is difficult to manage. (Due to the small size of this parcel, it is not displayed on Map 16.)

3. When considering private lands that may be suitable to acquire from willing sellers (Map 16) and place in public ownership, prioritize lands that meet one or more of the following criteria:
 - a. Are 640 +/- acres or result in public land blocks of approximately 640 acres or more (smaller block with high public value may be considered).
 - b. Provide access to major rivers and streams.
 - c. Possess criteria listed above for placement in Z-1.
 - d. Areas within 0.25 mile of the mainstem John Day River, North Fork John Day River, or South Fork John Day River. This excludes portions of the mainstem John Day River upstream of Dayville.
 - e. Are within the Blue Mountains Ecoregion (south of Butte Creek).
 - f. Are within a Wilderness Study Area, ACEC, or lands managed to protect wilderness character.
 - g. Connect areas with similar uses, including but not limited to Sutton Mountain/Pine Creek areas (fish and recreation use), or Rudio Mountain/western portion of Malheur National Forest (OHV uses).
 - h. Total lands acquired, excepting exchanges, may not exceed 2 percent of the plan area.
4. The BLM will seek to acquire subsurface mineral rights for lands managed by the BLM that do not now include subsurface mineral rights. If mineral rights are acquired for lands meeting the 'Closed' criteria identified in Table 8, they will be recommended for withdrawal.

Management of Newly Acquired Lands

Objective AL1

Over the life of the plan, lands may come under BLM administration through exchange, donation, purchase, revocation, or withdrawals involving other federal agencies, or through relinquishment of Recreation and Public Purposes Act leases. Management of acquired lands must meet RMP objectives and the national ambient air quality standards as described in the Clean Air Act.

Guidelines:

1. Newly acquired lands will be managed for the highest potential purpose for which they were acquired. For example, lands acquired within special management areas with specific Congressional mandates (i.e., Wild and Scenic Rivers) will be managed in conformance with established guidelines for those areas.
2. For lands within John Day River corridors (Segments 1-11, see Map 1), ongoing salable mineral activity on lands acquired in the future will be phased out as soon as legally possible. No new sites will be permitted. A no surface occupancy stipulation (NSO) will be required on all river corridors and lands visible from the John Day River from its confluence with the Columbia River through Picture Gorge in Sherman, Gilliam, Jefferson, Wheeler, and Wasco counties. The NSO stipulation will also be applied to river corridors in Grant and Umatilla counties.
3. If lands with unique or fragile resource values are acquired, those values will be protected and managed on an interim basis until the next plan amendment or revision is completed.
4. Manage newly acquired lands for the purposes for which they are acquired, or in a manner that is consistent with management objectives for adjacent BLM-administered lands.
5. Net adjustments in the livestock grazing program will be reported to the public in periodic Rangeland Program Summary Updates, RMP evaluations, or progress reports.
6. Manage newly acquired lands contiguous to special management areas, consistent with the direction for those special management areas.
7. Public access will be provided within BLM legal and administrative potential. However, public access may be either motorized and/or non-motorized, as provided in the Access and Travel Management section.

8. Lands acquired without identified special values or management goals will be managed in a manner consistent with management objectives for adjacent or similar BLM-administered lands. Accordingly, the following uses may be possible, depending on site-specific conditions:
 - a. Typical livestock grazing.
 - b. Recreation management.
 - c. Timber harvest opportunities.
 - d. Vegetation treatments.
 - e. Management of the mineral estate.
 - f. Standard operating procedures.
 - g. Pre-committed mitigation measures.

Agricultural Land Management

Objective AG1

Within all segments of the John Day River corridor segments (see Map 1), protect and enhance river values by managing agricultural lands with emphasis on wildlife habitat, cottonwood stock for reintroduction of hardwood riparian areas, and restoration of perennial vegetation (see Vegetation objectives).

Management Actions

1. Restore all agricultural lands to perennial vegetation, with the exception of acres that may be used for hardwood stock or wildlife food and cover plots (see glossary).
 - a. Harvest of wildlife food and cover plots is allowable if the harvested crop is utilized within the John Day River Wild and Scenic River corridor.
2. In order to restore agricultural lands not utilized for hardwood stock or wildlife food and cover:
 - a. Phase-out agricultural use on BLM agricultural lands along river corridors as soon as restoration can be completed, with the exception of lands identified for disposal.
 - b. Irrigate agricultural lands as needed to establish perennial vegetation. Reduce the number of acres irrigated through time, as lands are successfully converted (see glossary for 'permanent conversion') to perennial vegetation. During conversion, native species are preferred over non-native species.
 - c. As tracts are restored and irrigation is no longer required for vegetation establishment, transfer associated water rights to temporary in-stream use in cooperation with Oregon Water Resources Department. Maintain beneficial use of water rights associated with agricultural lands. Cooperate with John Day Wild and Scenic River planning partners (on file at the Prineville District Office) to return water not needed for managing agricultural lands to in-stream uses.
3. Irrigation must follow Oregon State Scenic Waterway rules (see Appendix H).
4. Dispose of 26 acres of agricultural land, through the land exchange process, for lands of equal or greater value within the designated Wild and Scenic River boundary (see Table 1 and lands zoned Z-3 in the Lands and Realty section).
5. Convert small portions of agricultural lands at John Day River Mile 101.5 and River Mile 137 to perennial vegetation to open sites for dispersed recreation and to increase recreation opportunities. Protect river values by identifying preferred dispersed camping areas that can best handle human use and install signs and parking barriers to protect riparian vegetation. The Oregon Department of Fish and Wildlife will be requested to participate in locating vehicle barriers.

Objective AG2

Provide opportunities for local agriculture and public recreation (e.g., camping, bank fishing, swimming access, and hunting of upland game birds and large game); increase riparian areas and John Day Basin wildlife habitat; and reduce pollution. See Table 1 for a distribution of management direction for agricultural lands.

Management Actions

1. Maintain zero to 400 acres of agricultural land as plots for: wildlife food and cover (see definitions in glossary), agricultural use, or both. These areas may or may not be irrigated.
2. Of these zero to 400 acres, no more than 100 acres will be available for wildlife food and cover plots within the Wild and Scenic River Corridor, and only 60 of those 100 acres will be irrigated per water year. Up to 1.5 cubic feet per second (cfs) of water may be diverted to irrigate those 60 acres of wildlife food/cover crop.
3. Restore agricultural lands not in agricultural use through propagation of hardwoods for riparian recovery or conversion to wildlife food and cover or permanent conversion (see glossary) to perennial vegetation (see Vegetation objectives and actions).
4. Grow hardwood riparian stock for out-planting along agricultural lands, streams and lentic (see glossary) areas.
5. Use portions of agricultural lands to create off-channel habitat and slow water refugia for aquatic species and migratory fish. Remove berms to allow more natural point bar development.
6. Address riparian degradation and recreation pressure along lowland agricultural lands outside of actively managed wildlife food and cover plots using one or more of the following tools:
 - a. Creating dispersed recreation areas.
 - b. Enhancing or creating developed recreation areas.
 - c. Creating trails, barriers (mostly natural) and other opportunities away from flood-prone and cultivated areas.
7. Manage the Priest Hole agricultural land (RM 137) and related recreation area by allocating land for uses of:
 - a. Wildlife food and cover plots.
 - b. Perennial vegetation restoration and berm removal.
8. Maintain all unused agricultural land water rights in in-stream leases to attain instream flow goals (see Aquatics and Wild and Scenic Rivers sections).
9. Maintain a filter strip between all agricultural lands and active floodplains. The minimum width will be 14 feet beginning from the upper edge of the terrace/cut bank, outside of the active floodplain. This will be subject to appropriate noxious weed management treatments that may include tilling to establish desirable vegetation.
10. Maintain agricultural lands in vegetation such that they are not prone to weed invasion or excess erosion.
11. Specify all livestock grazing treatments of leased agricultural lands in the Special Use Permit.
12. For the entire first year and through the second consecutive growing season following seedings and plantings, do not allow uses likely to threaten seeding success. (See Vegetation section for specific limitations on uses such as livestock grazing.) Uses that meet Objective AG1 above, such as grazing, can be authorized if the seedings and plantings are sufficient.
13. Irrigation of agricultural fields will comply with the water withdrawal stipulations (see Aquatics). Parcels identified for disposal are not subject to irrigation shut-off stipulations.

Guidelines

1. When significant conflicts occur, resource values on public lands will immediately be protected and agricultural use will be cancelled within one year.
2. For new proposals for partnerships, leases, or other uses of agricultural lands, the project will include a bond or agreement for the user to return the area to desired perennial species free of weeds and to remove structures.
3. Minimize use of fertilizers and use riparian vegetation buffers to prevent fertilizer from entering streams and rivers.

Hazardous Materials Management

Objective HM1

All incidences of hazardous materials on public land are handled as outlined in the Prineville District's contingency plan of October 2010.

Management Actions

1. Conduct internal and external (if appropriate) review of all actions related to land or minerals for compliance with federal and state regulations.
2. Develop special stipulations as part of the permit or lease to safeguard human health, prevent environmental damage, and limit BLM liability.

Glossary and References



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Glossary

100-year flood - Based on statistical averages, the size of flood that has a 1 in 100 chance of occurring during any year. For the plan area, the 100-year flood is approximated by the area inundated at a depth of two times bankfull width.

Abiotic - pertaining to the non-living parts of an ecosystem, such as soil, rock, air, and water.

Acceptable Range of Variability (ARV) - Management actions are within the ARV when they direct vegetative communities and characteristics toward the types and amounts of seral structural communities and conditions identified as appropriate for a given BPS. Each BPS has an identified range of vegetative conditions and distributions that occurred based on site potential or Biophysical setting (elevation, aspect, precipitation, etc.) and “pre-European” disturbance regimes. While this does not mean replicating exact conditions from a selected date in the past, this approach manages the ecosystem for a range in, and combination of patterns, patch sizes, species distribution, and seral / structural stages that are consistent with the site’s potential and the expected fire frequency, intensity, and distribution. The ARV is often broad enough to encompass social as well as ecological goals.

Access - ability of public land visitors to reach the areas they wish to visit.

Acre - a unit of area used in land measurement, equal to 43,560 square feet. There are 640 acres in one square mile.

Active restoration – restoration that requires human expenditure of energy. An example would be cutting down a tree and placing it in a stream channel. Active restoration includes, but is not limited to, riparian plantings, re-introduction of large wood, floodplain development, and projects to improve watershed function (e.g., sediment routing, conveying peak and base flow).

Advisory Council on Historic Preservation - established by the National Historic Preservation Act of 1966 to play a key role in the evaluation, nomination, and treatment of National Register properties.

Agricultural land – portions of the landscape that are capable of cultivating crops and irrigated pasture. These lands frequently occupy irrigable floodplains along rivers and streams.

Agricultural use – production and harvest of crops through farming.

Airshed - a subset of air basin, the term denotes a geographical area that shares the same air because of topography, meteorology, and climate.

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 Management Plan - a BLM document that directs management of livestock grazing on a specific area of public land.

Allowable Sale Quantity (ASQ) - quantity of timber that may be sold from an area covered by a forest management plan during a time period specified by the plan. ASQ is usually expressed as an average annual quantity.

Analysis of the Management Situation (AMS) - step 4 of the BLM’s land use planning project; a comprehensive documentation of the present conditions of the resources, current management guidance, and opportunities for change.

Animal Unit Month (AUM) - amount of forage required to sustain one cow and calf for one month.

Anthropogenic - resulting from the influence of human beings on nature.

Appropriate (Fire) Response - specific actions taken in response to a wildfire to implement protection and fire management objectives.

Area of Critical Environmental Concern (ACEC) - a type of special land use designation specified within the Federal Land Policy and Management Act (FLPMA) used to protect areas with important resource values in need of special management.

Area of Traditional Cultural Significance - for the purposes of this plan, those locations used by Indian people to maintain their values, beliefs, and cultural identity, including, but not limited to, traditional plant collecting areas, fishing stations, or places for practicing traditional religious beliefs.

Ash - volcanic material consisting of rock, volcanic glass, and mineral fragments less than 2 mm in diameter.

Available - (in reference to energy, minerals, rights-of-way, communication sites, and renewable energy projects): These areas are available for the specified use, consistent with RMP goals and objectives and in concert with the protection of natural resources within the plan area through terms, conditions and stipulations.

Avoid or Avoidance area - generally, these areas are available for locatable-leasable-salable minerals, rights-of-way, facilities, geothermal development, and renewable energy projects with stipulations, terms and conditions, as follows:

- For locatable minerals: terms, conditions or other special considerations are needed to protect other resource values while conducting activities under the operation of the mining laws.
- For salable minerals: terms conditions or other special considerations are needed to protect resource values while operating under the minerals materials regulations.
- For leasable minerals: areas are open to leasing, but subject to moderate constraints such as seasonal and controlled surface use restrictions. Mitigation may also be required to meet resource objectives established in the RMP.

Bankfull stage – elevation of the floodplain adjacent to the active stream channel.

Bankfull width - width of the stream channel at bankfull stage. Bankfull channel indicators included breaks in slope, the tops of point bars, and changes in vegetation.

Basalt - a dark-colored volcanic rock with less than 52% silicon dioxide by weight.

Benefits Based Recreation (BBR) - BBR is managing recreation resources for positive or beneficial experiences and outcomes by participating in recreational activities, rather than just managing for a recreation activities by itself. BBR also provides positive outcomes that benefit individuals, communities, economies and the environment by focusing on experiences and outcomes that result from recreation activities.

http://www.blm.gov/wo/st/en/prog/Recreation/national_recreation/recreation_planning.html

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 evaluations and represent the most effective and practical means to achieve management goals and objectives for a given site.

Biocriteria – biological criteria that describe qualities that must be present to support a desired condition in a waterbody. They serve as the standard against which ecological assessment results are compared. The presence, condition and numbers of types of fish, insects, algae, plants, and other organisms are data that together provide direct, accurate information about the health of specific bodies of water.

Biodiversity (Biological diversity) – variety and variability among living organisms and the ecological complexes in which they occur (ICBEMP 2000).

Biological Control Agent – the use of non-native agents, including invertebrate parasites and predators (usually insects, mites, and nematodes) and plant pathogens, to reduce populations of non-native, invasive plants.

Biomass - dry weight of organic matter in plants and animals in an ecosystem, both above and below ground.

Biophysical settings (BpS) - represent the vegetation that may have been dominant on the landscape prior to Euro-American settlement and are based on both the current biophysical environment and an approximation of the historical disturbance regime. The LANDFIRE BpS models describe vegetation, geography, biophysical characteristics, succession stages, and disturbance regimes for each BpS and some of the major disturbance types affecting these ecosystems prior to significant alterations by European settlers.

Biotic - living.

Board foot - amount of wood contained in an unfinished board one inch thick, 12 inches long, and 12 inches wide, commonly abbreviated BF; MBF = one thousand board feet; MMBF = one million board feet.

Broadcast burning - burning natural fuels as they are, with no piling or windrowing.

Broadcast spraying - an imprecise, active treatment method for dispensing a pesticide that is prone to pesticide drift and residue.

Broad scale - a large, regional area, such as a river basin, and typically a multi-state area.

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

Bureau sensitive species - species eligible as federally listed or candidate status, state listed or candidate (plant) status, or on List 1 in the Oregon Natural Heritage Database, or otherwise approved for this category by the State Director.

Candidate species - plants and animals that have been studied and the Service has concluded that they should be proposed for addition to the federal endangered and threatened species list. These species have formerly been referred to as category 1 candidate species. From the February 28, 1996 Federal Register, page 7597: “those species for which the Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list but issuance of the proposed rule is precluded.”

Capability – highest ecological status an area can attain given political, social, or economic constraints.

Cell - unique ecosystem type used by the Oregon Natural Heritage Plan to inventory, classify, and evaluate natural areas. Cells contain one or more ecosystem elements, which are assemblages of integrated organisms plus the environment supporting them.

CCF - 100 cubic feet of solid wood.

Cinder - a frothy form of basalt formed by expanding gases during an eruption.

Clear-cut - a section of forest or woodlands where all trees have been cut down.

Climax - culminating stage of plant succession for a given environment; the vegetation conceived as having reached a highly stable condition.

Closed (in reference to motorized vehicle use): Under 43 CFR 8340, a closed area means an area where off-road vehicle use is prohibited. Use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer.

Closed (in reference to energy, minerals, rights-of-way, communication sites, and renewable energy projects): These are areas where it is determined that other land uses or resource values cannot be adequately protected with even the most restrictive stipulations. Generally, the specified use is not allowed or, in the case of Wilderness Study Areas, must comply with BLM Manual 6330. Closed areas must be petitioned for withdrawal. Where appropriate, validity of existing claims may be contested as part of the withdrawal process. These areas are not available for locatable-leasable-salable minerals/energy, rights-of-way, facilities, geothermal development and renewable energy projects, as follows:

- For locatable minerals: these areas are recommended for withdrawal from the mining laws for locatable exploration or development. Some withdrawals may already exist.
- For salable minerals: these areas are closed to mineral material disposal.
- For leasable minerals: these areas are closed to leasing and are recommended for withdrawal (hardrock).

Collaboration - a formalized process of identifying and involving interactive participants in different parts of the analysis process. Collaboration is expected to result in some level of informed consent by all participants concerning the issues and range of alternatives. For the purposes of this plan, that is intended to include members both exempt from and subject to the Federal Advisory Committee Act.

Communication site - (1) a hilltop or favorable signal receiving and transmitting location where a collection of facilities are sited; (2) a facility consisting of a small building and tower used for transmission or reception of radio, television, telephone or other electronic signals.

Connectivity (of habitats) - linkage of similar but spatially separated vegetative stands (such as mature forests) by patches, corridors, or "stepping stones" of like vegetation across the landscape; also, the degree to which similar landscapes are so linked (PNW GTR-328, 1994).

Consultation - formal and informal consultation as defined by laws such as the National Historic Preservation and Endangered Species Acts. Also, any input formally requested for analysis purposes from any internal or external source.

Cooperators – tribal, local, state, or federal agencies with special expertise related to plan issues or that have legal jurisdiction within the planning area.

Critical habitat - BLM Manual 6840 defines critical habitat as an area designated as such and listed in 50 CFR Parts 17 and 226 and is any air, land, or water area (exclusive of those existing manmade structures or settlements which are not necessary to the survival and recovery of a listed species) and constituent elements thereof, the loss of which would appreciably decrease the likelihood of the survival and recovery of a listed species or a distinct segment of its population. The constituent elements of critical habitat include, but are not limited to: physical structure and topography, biota, climate, human activity, and the quality and chemical content of land, water, and air. critical habitat may represent any portion of the present habitat of a listed species and may include additional areas for reasonable population expansion. The federal definition of critical habitat is: (i) the specific areas within the geographic area occupied by the species, at the time it is listed ...on which are found those physical and biological features (a) essential to the conservation of the species and (b) which may require special management considerations or protections; (ii) specific areas outside of the geographical area occupied by the species, at the time it is listed ... upon a determination of the Secretary that such areas are essential for the conservation of the species; and (iii) Except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species (ESA Section 3).

D84 and D50 - different stream channels that transport different sizes and amounts of sediment. D_x denotes the particle size for which X percent of the stream bed material is finer. For example, D_{50} indicates the median particle size in which 50% of the bed material is finer. If the D_{50} is 10 inches, then 50% of the sediment is smaller than 10 inches. The cumulative distribution of measured sediment particles is unique to each stream. However, measures like D_{50} and D_{84} standardize calculations.

Decommission (travel management) – De-compact compacted layers, restore vegetation, add organic matter and restore hydrologic function.

Detrimental soil impacts - impacts of a severity that impedes proper soil functioning to an extent that the soil is unable to recover and support viable populations of native perennial vegetative cover within 2 years following a use disturbance without applying restoration activities.

Disturbance - any event that alters the structure, composition, or function of terrestrial or aquatic habitats (PNW GTR-328, 1994).

Disturbance activities (in reference to wildlife) - include, but are not limited to, people walking; running; or riding a bike, horse, or motorized vehicle; creating loud noises (chain sawing, blasting). Whether activities actually disturb is a function of species, proximity, screening, and commonness of activity.

Disturbance regime – pattern of intervals between disturbance and severity of disturbance. For landscapes, this can be for a given disturbance, such as fire or for a complex of disturbances (Johnson and O’Neil 2001).

Dormant (season) – a state of, or time when there is, minimal metabolic activity with cessation of growth, either as a reaction to adverse conditions or as part of an organism’s normal annual rhythm.

Ecological integrity - in general, refers to the degree to which all ecological components and their interactions are represented and functioning; the quality of being complete; a sense of wholeness. Areas of high integrity would represent areas where ecological function and processes are better represented and functioning than areas rated as low integrity (ICBEMP 2000).

Ecological Site Inventory - basic inventory of present and potential vegetation of BLM rangelands. Ecological sites are differentiated on the basis of soil type and kind, proportion, or amount of plant species.

Ecology - science of the inter-relationships between organisms and their environment; from the Greek *Oikos* meaning “house” or “place to live.”

Ecoregions - variations in landform that provide conditions for development of varying combinations of plants and animals.

Ecosystem - a spatially explicit, relatively homogeneous unit of the earth that includes all interacting organisms and components of the abiotic environment within its boundaries. An ecosystem can be of any size (e.g., a log, pond, field, forest, or the earth’s biosphere).

Ecosystem health - a condition where the parts and functions of an ecosystem are sustained over time. The system’s capacity for self-repair is maintained such that goals for uses, values, and services of the ecosystem are met. Also includes forest health, rangeland health, and aquatic system health.

Ecosystem management - 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.

Ecotone - a boundary or zone of transition between adjacent communities or environments, such as the boundary between a forest and a meadow or the boundary of a clear cut next to a mature forest stand. Species present in an ecotone are intermixed subsets of the adjacent communities.

Edge effect - tendency for a transitional zone between communities (an ecotone) to contain a greater variety of species and more dense populations of species than either community surrounding it (Johnson and O'Neil 2001).

Eligibility - qualification of a river for inclusion into the NWSRS through determination that it is free-flowing and with its adjacent land area possesses at least one river-related value considered to be outstandingly remarkable.

Endangered species - any species defined under the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range. Listings are published in the Federal Register.

Endemic species - plants or animals that occur naturally in a certain region and whose distribution is relatively limited to a particular locality (ICBEMP 2000).

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

Environmental Impact Statement (EIS) - one type of document prepared by federal agencies in compliance with the NEPA that portrays the environmental consequences of proposed major Federal actions that are expected to have significant impacts on the human environment (see EA above).

Ephemeral stream - a stream that flows only in direct response to precipitation, and whose channel is at all times above the water table. On average, these streams flow continuously less than 30 days per year.

Erosion, accelerated - erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, e.g., fire that exposes the surface.

Erosion, excess soil - includes evidence of soil loss or sediment movement in concentrated flow paths such as rills or ruts deeper than 6 inches, equating to approximately 0.75 pounds per foot average annual erosion.

Exceedance - a measured level of an air pollutant higher than the national or state ambient air quality standards.

Extensive Recreation Management Area (ERMA) - locations where explicit recreation management, personnel and funding is not required to manage recreation resources. Minimal management actions are adequate to accomplish BLM's stewardship responsibilities. Significant recreation opportunities and problems are limited and management is not needed for specific recreation opportunities. Also see Special Recreation Management Areas and Recreation Management Zones.

Extirpated - having become extinct in a specific area while the species as a whole continues to exist elsewhere.

Facultative - capable of functioning under varying environmental conditions. An indicator status reflecting its frequency of occurrence in wetlands:

- 1) obligate (99%),
- 2) facultative wetland (67– 99%),
- 3) facultative (34–66%),
- 4) facultative upland (1–33%),
- 5) upland (1%).

Also see "obligate."

Federal Land Policy and Management Act of 1976 (FLPMA) - a law mandating that the Bureau of Land Management manage lands under its jurisdiction for multiple uses.

Final Transportation Management Plan - a network of roads and trails identified through a comprehensive travel management planning process (completed consistent with direction contained in the IM-OR-2009-050 - Travel Management Guidelines for Eastern Oregon & Washington and this RMP). These roads and trails will be identified as the BLM transportation network for the relevant planning area. Roads selected may or may not include those roads and trails identified in the interim transportation system.

Fine Scale - a single landscape, such as a watershed or sub watershed.

Fire cycle - average time between fires in a given area or a given plant community.

Fire frequency - return interval of fire.

Fire Management Plan – a plan to identify and integrate all wildland fire management guidance, direction and activities required to implement national fire policy and fire management direction. Direction is drawn from: a) Federal Wildland Fire Management Policy and Program Review (USDI et. al 2001), b) the Interagency Fire Management Plan Template, c) A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment, d) 10-Year Comprehensive Strategy Implementation Plan, e) Department of the Interior Manual, f) Bureau of Land Management Manual, and g) relevant Resource Management Plans. The BLM lands within the John Day Basin are covered within the Central Oregon Fire Management Service (COFMS) Fire Management Plan (current version is 2007).

Fire preparedness - activities that lead to a safe, efficient, and cost effective fire management program in support of land and resource management objectives through appropriate planning and coordination.

Fire regime - the frequency, predictability, intensity, seasonality, and extent characteristics of fires in an ecosystem.

Fire regime condition class (FRCC) – measure of the degree of departure of vegetative conditions from a reference condition known as the biophysical setting.

FRCC 1 represents ecosystems with low (<33 percent) departure and that are still within the estimated historical range of variability during a specifically defined reference period;

FRCC 2 indicates ecosystems with moderate (33 to 66 percent) departure; and

FRCC 3 indicates ecosystems with high (>66 percent) departure from reference conditions.

Floodplain - a relatively flat area that borders a stream that is composed of deposited materials from the stream and is subject to periodic flooding unless protected artificially.

Flood-prone area - area that is flooded when water depth equals two times the maximum bankfull depth of the stream channel. In the Pacific Northwest, the area flooded when the water depth equals two times the bankfull depth has been shown to approximate the 100-year floodplain.

Flow - volume of water in a river passing a given point in a given period of time, usually expressed in terms of cubic feet per second or cubic meters per second.

Forestland - land stocked with at least 10 percent live trees or land formerly having such tree cover and not currently developed for non-forest use.

Functional-at-risk - riparian-wetland areas that are in functional condition, but an existing soil, water, or vegetation attribute makes them susceptible to degradation.

Game species - wildlife species hunted for sport.

Green strip - a strip where fire spread and intensity are reduced through one or more of the following actions: removal of ladder fuels, decreasing the density, height, and/or spacing of shrub species, limiting or removing annual grass components, or planting species that meet fire spread and intensity objectives.

Ground cover - The percentage of material other than bare ground, covering the land surface. It may include live and standing dead vegetation, litter, cobble, gravel, stones and bedrock. Ground cover plus bare ground would total 100 percent.

Ground water - water filling all the unblocked pores of the material below the water table.

Guzzler – man-made structure that collects, stores, and dispenses water (from rain, snow, and sometimes condensation). The size and style of collection and dispensing apparatus dictates the number and type of wildlife that can utilize the water.

Habitat fragmentation - splitting or isolating of patches of similar habitat, typically forest cover (but could also apply to grass fields, shrub patches, and other habitats). Habitat can be fragmented from natural conditions, such as thin or variable soils, or from management activities or development such as clear-cut logging, agriculture, or residential development.

Habitat security areas - are areas where the level of human disturbance is limited and wildlife sensitive to human disturbance can carry out all or part of their life-cycle requirements. While there are differing levels of habitat security in each band, Rowland (2005) found that for elk, habitat use increased at 1,182 yards or more from roads.

Hibernaculum - a place where any animal hibernates. Two distinct habitats are recognized as critical for the persistence of a bat population - a winter hibernaculum and a summer roosting colony. A winter bat hibernaculum is a place, usually a cave or a mine, that provides a constant temperature and protection for winter hibernation.

Historic condition - as used in this text, the condition of lands and ecosystems prior to European settlement. In central Oregon, European settlement occurred during the period from approximately 1850s to 1900. An approximation of these conditions is drawn from written and photographic accounts from the period and is used to determine the range of variability for plant and animal species across a landscape (Ochoco NF Viable ecosystems Management Guide 1994).

Historic Range of Variability (HRV) - typical fluctuations of processes or functions, and the typical proportions of ecosystem elements in an area over a period of time when the ecosystem was not significantly affected by European settlement and management. HRV is the amplitude or minimum-maximum ranges of “natural” conditions.

Important habitat - a general term that includes seasonal habitats, such as winter ranges and breeding sites; habitat structure, such as snags and down logs; and unique features, such as cliffs and caves.

Impoundment - body of water formed by any man-made structure.

Initial attack - a planned response to a wildfire given the wildfire’s potential fire behavior. The objective of initial attack is to stop the fire and put it out in a manner consistent with firefighter and public safety and values to be protected.

Interdisciplinary - involving more than one discipline or resource management program.

Interim transportation system – a preliminary road and trail network identified to provide public access on BLM lands until a final transportation plan is completed.

Interior Columbia Basin Ecosystem Management Project (ICBEMP) - a project conducted during the 1990s and early 2000s 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.

Intermittent stream - a stream that flows only at certain times of the year when it receives water from springs or from some surface source such as melting snow in mountainous areas. On average, these streams flow continuously for 30 days per year.

Interrupted stream (flow) – streams where wet sections of stream channel are interrupted with dry sections of channel.

Issue - an opportunity, conflict, or problem about use or management of public land resources. The resolution of issues is the basis for preparing the resource management plan.

Key wildlife habitat - habitats where the spatial extent of potential or existing habitats have been refined beyond a general habitat description and mapped for locally important or special status species, including the following habitats: antelope year round, deer summer, deer winter crucial, elk summer, elk winter, elk winter critical, sage-grouse, Washington ground squirrel, peregrine nest potential, peregrine falcon, bald eagle winter roost potential, and bald eagle winter roosts.

Landscape - all the natural features that distinguish one part of the land from another. A spatially heterogeneous area with repeating patterns, similar climate, and landform, and the associated disturbance regimes.

Lands with Wilderness Characteristics (LWC) - lands that have been inventoried and found to contain wilderness characteristics as defined in Section 2(c) of the Wilderness Act of 1964.

Leasable minerals – minerals that may be leased to private interests by the federal government and includes oil, gas, geothermal, geophysical exploration, coal, and sodium compounds. Also applies to minerals leased under the mineral leasing acts and to hardrock minerals leasable under Reorganization Plan No. 3 of 1946.

Lek – an area used by sage-grouse for courtship and mating.

Lentic - lentic areas are occasionally or frequently inundated or saturated by standing surface or ground water. The vegetation capability is different than if the area was not inundated or saturated. Lentic areas are influenced by standing water, while lotic areas are influenced by running water.

Limited area - under 43 CFR 8340, a limited area means an area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following type of categories: numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions.

Linear features – manmade lines across the landscape, such as roads, trails, routes, ways, pipelines, ditches and other features.

Litter - dead remains of plants, usually lying on the soil surface.

Loam - a soil textural class composed of roughly equal amounts of sand, silt, and clay.

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.

Lotic - areas that are occasionally or frequently inundated or saturated by running water. The vegetation capability is different than if the area was not inundated or saturated. Lotic areas are influenced by running water, while lentic areas are influenced by standing water.

Mainstem - main channel of the river in a river basin, as opposed to the streams, forks and smaller rivers that feed into it. For the John Day Basin, the Mainstem John Day River flows 284 miles from its source in the Strawberry range to its mouth at River Mile 218 of the Columbia River.

Management concern - procedures or land-use allocations that do not constitute issues but, through the RMP/EIS preparation process, are recognized as needing to be modified or needing decisions made regarding management direction.

Management opportunities - a component of the analysis of the management situation; actions or management directions that could be taken to resolve issues or management concerns.

Marginal cover - a stand of coniferous trees 10 or more feet tall with an average canopy closure equal to or more than 40%.

Mesic - pertaining to sites or habitats characterized by intermediate moisture conditions, i.e., neither decidedly wet nor dry.

Microbiotic crusts - lichens, mosses, green algae, fungi, cyanobacteria, and bacteria growing on or just below the surface of soils.

Migratory bird species of concern - Those species listed in the periodic report, Birds of Conservation Concern, published by the Fish and Wildlife Service Division of Migratory Bird Management; priority migratory bird species documented in comprehensive bird conservation plans (North American Waterbird Conservation Plan, United States Shorebird Conservation Plan, Partners in Flight Bird Conservation Plan); species or populations of waterfowl that the North American Waterfowl Management Plan identifies as a high, or moderately high, continental priority; listed threatened and endangered bird species in 50 CFR 17.11; or MBTA-listed game birds below desired population sizes.

Mineral Estate - refers to the ownership of minerals at or beneath the surface of the land.

Mitigating measures - modifications of actions that (a) avoid impacts by not taking a certain action or parts of an action, (b) minimize impacts by limiting the degree or magnitude of the action and its implementation, (c) rectify impacts by repairing, rehabilitating, or restoring the affected environment, (d) reduce or eliminate impacts over time by preservation and maintenance operations during the life of the action, or (e) compensate for impacts by replacing or providing substitute resources or environments.

MMBF - Thousand thousand board feet or million board feet of timber.

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

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.

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

National Register of Historic Places - established by Congress with the passage of the National Historic Preservation Act of 1966; an ever increasing, formal list of sites that are culturally significant according to specific criteria.

Native road surface - surface of road with little to no mechanical improvement to gradient, slope, or surface. Roads are most often user created with no additional rock or gravel added to stabilize the surface.

90th percentile summer weather - refers to point where an index weighted toward fuel conditions exceeds at least 90% of observations ever recorded for an area. The implication of exceeding the 90th percentile is that if an ignition occurs in a wildland setting that fire behavior is likely to be extreme.

Non-functional - riparian-wetland areas that clearly are not providing adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows, and thus are not reducing erosion, improving water quality, etc.

Non-game species - wildlife species that are not hunted for sport.

No Surface Occupancy (NSO) - Generally, the specified use is not allowed to disturb or occupy the surface or, in the case of Wilderness Study Areas, must comply with BLM Manual 6330. This restriction applies to leasable-salable minerals/energy, rights-of-way, facilities, geothermal development and renewable energy projects, as follows:

- For salable minerals: these areas are closed to mineral material disposal unless the activity can occur without surface disturbance and/or occupation.
- For leasable minerals: these resources may be leases, as long as the testing and operations do not disturb and/or occupy the surface.

Noxious weed - a plant specified by law as being especially undesirable, troublesome, and difficult to control.

Obligate - able to exist or survive only in a particular environment or by assuming a particular role.

Obligate vegetation species – those that occur 99% of the time in wetlands.

Obliterate - re-slope hillslope to eliminate appearance of a human caused feature, restore vegetation, add organic matter, eliminate compaction and restore the hillslope process.

Occupancy - the taking, maintaining, or holding possession of a camp or residence on public land either by personal presence or leaving property at the location.

Off-Highway Vehicle (OHV) – in the state of Oregon, off-highway vehicles are divided into three types: Class I, II or III, as defined below:

OHV Class I

- Vehicles 50 inches wide or less, and
- Dry weight of 800 pounds or less.
- Have saddle or seat.
- Travels on three or more tires.

OHV Class II

- For vehicles more than 50 inches wide, or
- Dry weight of more than 800 pounds.

OHV Class III

- For vehicles riding on two tires, and
- Dry weight of less than 600 pounds.

OHV designations – definitions of allowed motorized use (also see OHV Open Area, OHV Limited Area, OHV Closed Area) are defined by BLM according to the Federal Code of Regulations; 43 CFR, Subparts 8341 and 8342.

OHV Open Area - area where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in 43 CFR subparts 8341 and 8342.

OHV Limited Area - area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following type of categories: Numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions.

OHV Closed Area - an area where off-road vehicle use is prohibited. Use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer.

Old-growth - old forest often containing several canopy layers, variety in tree sizes and species, decadent old trees, standing and down dead woody material (PNW GTR-328, 1994).

Old-growth forest - refers to a mature forest. A forest stand that contains many large mature trees scattered in clumps, patches or spread randomly throughout the stand in varying sizes, ages, and stocking levels. The stand may also contain large woody debris of varying decomposition levels, have tree fall gaps of varying sizes and ages, and have snags of varying numbers, sizes and ages of decomposition. High density understory trees or brush with multiple canopy layers of varying sizes and densities may be absent or may be present in randomly spaced clumps or patches. Typical low site ponderosa pine stands in the planning area may contain 10 to 13 large trees per acre greater than 21 inches DBH and 150 years in age as well as 2 to 3 trees/acre greater than 31 inches DBH and 200 years in age. Typical mixed conifer stands in the planning area may contain 8 to 10 or more large trees per acre greater than 21 inches DBH and 150 years in age (USDA FS Region 6, Interim Old Growth Definition, June 1993).

Old-growth juniper - old growth juniper typically exhibit the following characteristics: Flattened, rounded, or uneven top, dead branches, bark missing, covered by a light green lichen, thick fibrous bark with well-developed furrows, large branches near the base, and leader growth in the upper ¼ of the tree usually > 1 inch. Growth form and morphological characteristics vary across trees and stands so usually several characteristics are required to separate young and old trees (SageSTEP – treatment evaluation project, pg. 12).

Phase I, II, and III juniper stands—These phases have the following characteristics:

Characteristics (post-settlement stands)	Phase I (early)	Phase II (mid)	Phase III (late)
Tree canopy (% of maximum potential)	Open, actively expanding <10%	Actively expanding 10 to 30%	Expansion nearly stabilized >30%
Leader growth (dominant trees) (centimeter/year)	terminal >10 lateral >10	terminal >10 lateral 5 to >10	terminal >10 lateral <5
Crown lift (mortality of lower limbs of dominant trees)	Absent	Absent	Lower limbs dying or dead where tree canopy >40%
Potential berry production	Low	Moderate to high	Low to near absent
Tree recruitment	Active	Active	Limited
Leader growth (understory trees) (centimeter/year)	terminal >10 lateral >8	terminal 5 to >10 lateral 2 to >8	terminal <5 lateral <2
Shrub layer	Intact	Nearly intact to significant thinning	>75% dead

Source: Oregon State University, Technical Bulletin 152, Biology, Ecology, and Management of Western Juniper, June 2005.

Old-growth tree (forested species) or (non-juniper) - refers to mature tree. The tree would have a flattened crown, show signs of decay, have deeply furrowed or plated bark, some protruding dead limbs, large thick live limbs in crown, and long trunk free of live lower branches.

Open area - under 43 CFR 8340, an open area means an area where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards (CFR 8341 and 8342).

Overstory - upper canopy layer; the plants below comprise the understory.

Passive restoration - restoration that does not require human expenditure of energy. An example would be allowing trees to die and fall into a stream channels. Another example would be to prohibit cutting and removing a tree that would otherwise fall into a stream channel. Passive restoration involves adaptive management of grazing, recreation management, ground disturbance, logging, road construction, use of motorized vehicles and other uses proposed along stream channels and in floodplains and lentic areas.

Patch - an area of vegetation with homogeneous composition and structure.

Perennial stream - a stream that flows continuously during an average water year.

Permanent conversion - permanently converting agricultural land to perennial, preferably native, species that do not require irrigation after establishment. Vegetation may require temporary fencing for establishment. Match the vegetation prescriptions to the Biophysical Setting. Also use actions under ACS Objectives to conserve and restore, within existing site capability and natural disturbance regimes, diversity and productivity of native riparian and aquatic plant communities.

Physical function or Physical processes – expected actions that can be mathematically described by physics, including matter and energy.

Plan area – area containing all BLM administered public lands that will be managed under the JDBRMP.

Plant association - distinctive combination of trees, shrubs, grasses, and herbs occurring in a theoretical terminal or climax community or a series of communities (PNW GTR-328, 1994).

Potential natural condition - (in reference to streams and riparian areas) the highest ecological status a riparian-wetland area can attain given no political, social, or economic constraints.

Potential natural vegetation - an historical term originally defined by A.W. Kuchler as the stable vegetation community which could occupy a site under current climatic conditions without further influence by humans. Often used interchangeably with Potential Natural Community.

Potential plant community - one of several plant communities that may become established on an ecological site under the present environmental conditions, either with or without interference by humans.

Preferred alternative or Preferred plan - alternative plan that the agency has initially selected that best fulfills the agency's statutory mission and responsibilities and offers the most acceptable resolution of the planning issues and management concerns.

Prescribed fire - introduction of fire to an area under regulated conditions for specific management purposes (usually vegetation manipulation).

Prescribed fire plan – a site-specific implementation plan written to address implementation issues (objectives, safety, practices, etc.) of applying prescribed fire as a management tool in areas where appropriate NEPA has been completed.

Primitive road - a linear route managed for use by four-wheel drive or high clearance vehicles. These routes do not normally meet any BLM road design standards.

Probable Sale Quantity (PSQ) – An estimate of the likely level of sustainable harvest of forest products.

Properly Functioning Condition (PFC) – state of resiliency where physical processes are in place to allow a riparian-wetland area to hold together during natural disturbance events with a high degree of reliability (such as a 25-year flood). For lentic areas, PFC is the fundamental hydrological, chemical and physical processes that occur in a wetland that are linked to the biological productivity of the wetland.

Properly Functioning Condition assessment – a qualitative determination of condition. It includes a checklist of 17 hydrologic, vegetative, and erosional/depositional (soils) attributes and processes which indicate the condition of riparian and lentic areas.

Proper soil functioning condition - capacity of the soil to function at a level that: 1) sustains plant, animal and microbial biological activity, diversity, and productivity; 2) regulates and partitions water and solute flow; 3) filters, buffers, degrades, and detoxifies potential pollutants; and 4) stores and cycles nutrients. For any area, upland or riparian soil proper functioning condition is being met if 7 of the 10 "Soil/ Site Stability" indicators from technical reference "1734-6 - Interpreting Indicators of Rangeland Health" are achieving a less than moderate departure from reference condition.

Public land - any land or interest in land owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management.

Public participation - a process designed to inform and involve all people and organizations not otherwise involved in the planning effort through consultation, cooperation, or collaboration. Involvement includes opportunities to comment on preliminary and draft published materials, general public information or comment meetings, and periodic receipt of update material.

Pumice - a frothy, lightweight form of volcanic glass formed from expanding gases in a rhyolite magma.

Recreation and Public Purposes Act (R&PP Act) - an act passed by Congress that allows state and local governments and nonprofit organizations to lease and eventually acquire title to public lands for recreational or community expansion and other public purposes. The act was passed in recognition of the strong public need for a nationwide system of parks and historic preservation areas along with lands for other public purposes such as schools, fire houses, law enforcement facilities, municipal facilities, landfills, hospitals, and fairgrounds.

Recreation Management Zone (RMZ) - RMZs are smaller areas within SRMAs. Each RMZ within a SRMA has four defining characteristics: 1) serves a different recreation niche within the primary recreation market, 2) produces a different set of recreation opportunities and objectives to help facilitate recreationists obtaining different experiences and benefits, 3) has a distinct recreation setting character (e.g., river, mountain range, sand dune) and 4) requires a different set of management actions to meet the targeted primary recreation market demand. Also see Special Recreation Management Area.

Recreational river - a river or section of a river that is readily accessible by road or railroad, and that may have some development along its shorelines. A classification made pursuant to the Wild and Scenic Rivers Act.

Regional and statewide conservation actions, strategies, and priorities - are identified primarily within Oregon-Washington Partners in Flight Conservation Plans (Altman 2000, Altman and Holmes 2000) and the Oregon Conservation Strategy (ODFW 2006).

Rehabilitate (travel management) - heavy maintenance or reconstruction needed to bring a road back to standard design condition.

Research Natural Area (RNA) - an area of significant scientific interest that is designated to protect its resource values for scientific research and study. Under current BLM policy, these areas must meet the relevance and importance criteria of ACECs and are designated as ACECs.

Resilience – 1) the ability of a system to respond to disturbances. Resiliency is one of the properties that enable the system to persist in many different states or successional stages; 2) in human communities, refers to the ability of a community to respond to externally induced changes such as larger economic forces.

Resource Advisor - is primarily responsible for identifying and evaluating potential impacts and benefits of fire operations (wildfire or prescribed fire) on natural and cultural resources. The resource advisor anticipates impacts on resources as suppression or prescribed fire operations evolve; communicates requirements for resource protection to the Incident Commander or Incident Management Team; ensures that planned mitigation measures are carried out effectively; and provides input in the development of short- and long-term natural resource and cultural resource rehabilitation plans. The resource advisor is normally a person from the local unit who has knowledge of the local area where the fire is burning.

Resource area - the “on-the-ground” management unit of the BLM comprised of BLM administered public land within a specific geographic area.

Resource Management Plan (RMP) - land use plan developed by the BLM under the Federal Land Policy and Management Act. Provides long-term (up to 20 years) direction for the management of a particular area of land, usually corresponding to a BLM resource area and its resources.

Restoration - as used in this text, vegetative treatments used to modify an ecosystem and designed to return plant and animal communities toward a condition and level of functioning that existed prior to human disturbance or influence.

Rhyolite - a light colored volcanic rock with a silicon dioxide composition greater than 68% by weight. It commonly exhibits flow banding and its temperature when erupting ranges from 700 and 850o C.

Right-of-way - a grant that authorizes the use of public lands for specified purposes, such as pipelines, roads, telephone lines, electric lines, and reservoirs.

Riparian - a form of wetland transition between permanently saturated wetlands and upland areas. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water influence. Lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels are typical riparian areas. Excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil.

Riparian Management Area – areas managed for the attainment of aquatic objectives. Minimum widths of RMAs include the flood-prone areas and extend the following distances from the flood-prone area:

- 300-foot slope distance on both sides of the flood-prone area for perennial and intermittent stream channels.
- 300-foot slope distance from edge of wetland vegetation for lentic areas.
- 25-foot slope distance on both sides of ephemeral draws where average annual precipitation is less than 14 inches.
- 50-foot slope distance on both sides of ephemeral draws where average annual precipitation is greater than 14 inches.

River corridors – Wild and Scenic Rivers within the plan boundary and within 0.25 mile of the river segments of the Main Stem John Day River, North Fork John Day River, South Fork John Day River and Middle Fork John Day River (Record of Decision John Day River Management Plan, February 2001, page 1).

Road - a linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use.

Rosgen stream types - a stream classification system that groups streams by water surface slope, entrenchment, width/depth ratio, and sinuosity. For example, Rosgen A stream types are characterized by steep gradients (between 4 and 10%), with deeply incised channels. Rosgen B stream types are moderately steep (between 2 and 4%), with rapids and riffles common and scour pools irregularly spaced. Rosgen C stream types are lower gradient streams. Rosgen E stream types are low-gradient streams (<2%, but can reach 4%).

Sacred site - means any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site (Executive Order 13007, 1996:1).

Salable minerals - high volume, low value mineral resources including common varieties of rock, clay, decorative stone, sand, gravel, and cinder.

Satisfactory cover - a stand of coniferous trees 40 or more feet tall, with an average canopy closure equal to or more than 70%.

Satisfactory cover stand – stand of conifer trees meeting the satisfactory cover definition equal to or greater than 9 acres.

Savannah - in this RODRMP, non-forest (usually shrub-steppe) land where juniper occurs as widely scattered trees at less than 10% crown cover.

Scenic corridor - an area of special aesthetic values, including scenic vistas, unusual geologic or vegetative features, or other natural elements.

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. A classification made pursuant to the Wild and Scenic Rivers Act.

Scoping - 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.

Sensitive soil - Sensitive soils are soils that are more vulnerable to soil productivity loss with disturbance. Properties that make sensitive soils more susceptible to degradation are highly erodible soils on steep slopes, very shallow depth, high salinity or sodium, and/or low water holding capacity. Steep slopes increase the vulnerability to water erosion. Low available water capacity, shallow rooting depth, and excess salt or sodium can reduce plant diversity, resistance to stress, and seedling survival. The following table should be used to identify sensitive soils unless better science becomes available. Any soil with properties resulting in a “High” vulnerability to degradation in any category should be treated as sensitive soil.

Restrictive Feature	Properties	Low	Moderate	High
Steep Slopes – Water Erosion	Kw < 0.201,2 Kw 0.20 – 0.361,2 Kw >0.361,2	Slope (%) <20 <15 <10	Slope (%) 20 - 40 15 - 35 10 - 25	Slope (%) >40 >35 >25
Wind Hazard Erosion	Wind Erodibility Group (Surface Layer)	5, 6, 7, 8	3,4, 4L	1, 2
Droughty Soils	Available Water Capacity ² (Avg to 40 inches or limiting layer) (inches/inches)	>0.10	0.05 - 0.10	<0.05
Excess Salt	Salinity ² (mmhos/cm) (Surface Layer)	<8	8 - 16	>16
Excess Sodium	Sodium Adsorption Ratio ² (Surface Layer)	<8	8 - 12.9	>16
Rooting Depth	Depth to Bedrock/Cemented Pan ² (inches)	>20	10 - 20	<10

¹K Factor of surface layer adjusted for the effect of rock fragments (Kw).

²The representative value for the range in soil properties

Sensitive species – see Bureau Sensitive Species.

Seral stage - the rated departure of a plant community from a described potential natural community (PNC) for a specific ecological site. Early-seral stage is an existing plant community that is defined as 0-25% comparability to the defined PNC; Mid-seral stage is an existing plant community that has 26-50% comparability to the PNC; Late-seral stage is 51-75% comparable to the PNC; PNC is an existing plant community with 76-100% comparability to the defined PNC.

Silviculture - practice of manipulating the establishment, composition, structure, growth, and rate of succession of forests to accomplish specific objectives.

Site condition - the level of condition, or degree of function, used to express the current condition of a site in contrast to site potential.

Site management plan - address the management of an individual population or site, or a collection of sites with similar characteristics. The “site” or area to be managed is defined by the field unit personnel responsible for managing the particular population/individual site. Site management plans are typically developed for those species/habitats that require active management of the site in order to meet the desired goal for the species/habitat. The plans are usually very specific as to what management actions need to occur, where, and what the timeline is for each action.

Site potential - a measure of resource availability based on interactions among soils, climate, hydrology, and vegetation. Site potential represents the highest ecological status an area can attain given no political, social, or economic constraints. It defines the capability of an area, its potential, and how it functions (ICBEMP 2000).

Snag - a standing dead tree, usually larger than five feet tall and six inches in diameter at breast height. Snags are important as habitat for a variety of wildlife species and their prey.

Special Recreation Management Areas (SRMAs) - areas where BLM makes a commitment through management presence and/or facility design to ensure or allow for specific activity, experience, or benefit opportunities and/or outcomes. These areas require explicit recreation management to provide specific recreation opportunities and meet recreation objectives and require direct recreation funding and personnel to fulfill commitments made to provide specific recreation opportunities. Also see Extensive Recreation Management Area and Recreation Management Zone.

Special status species – a plant or animal species falling into any one of the following categories: Federally listed threatened or endangered species, species proposed for Federal listing as threatened or endangered, candidate species for Federal listing, State listed species, Bureau sensitive species (see separate definition for each).

Species diversity - the number, different kinds of, and relative abundances of species present in a given area.

Stand - a contiguous group of similar plants. For forest use, a contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality to be a distinguishable unit.

State listed species - any plant or animal species listed by the State of Oregon as threatened or endangered within the state under ORS 496.004, ORS 498.026, or ORS 564.040.

Structure - the physical organization and arrangement of vegetation; the size and arrangement (both vertical and horizontal) of vegetation.

Sub-basin review - an interagency, collaborative consideration of resources, resource management issues, and management recommendations for one or more sub-basins or watershed drainages approximately 800,000 to 1,000,000 acres in size.

Subsoiling - a restoration action for decompacting soil areas that have been compacted from multiple passes of heavy ground based mechanical equipment. Soil compaction under the right moisture conditions is fractured from below with minimal topsoil mixing.

Succession - gradual supplanting of one community of plants by another. The sequence of communities is called a sere or seral stage. A 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 establishment of the next stage. The different stages in succession are often referred to as seral stages.

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 (ICBEMP 2000).

Sustained yield - maintenance of an annual or regular periodic output of a renewable resource from public land consistent with the principles of multiple use. Also: The yield that a forest can produce continuously at a given intensity of management. Sustained yield management implies continuous production so planned as to achieve, at the earliest practical time, a balance between increment and cutting.

T factor - soil loss tolerance in tons per acre. It is defined as the maximum amount of erosion at which the quality of a soil as a medium for plant growth can be maintained. This quality includes maintaining (1) the surface soil as a seedbed for plants, (2) the atmosphere-soil interface to allow the entry of air and water into the soil and still protect the underlying soil from wind and water erosion, and (3) the total soil volume as a reservoir for water and plant nutrients, which is preserved by minimizing soil loss.

Take - to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb; in reference to species listed under ESA.

Terrestrial - pertaining to the land.

The Nature Conservancy - a private national organization dedicated to the preservation of biological diversity.

Thermal cover - cover used by animals to protect them against the weather.

Threatened species - any plant or animal species defined under the Endangered Species Act 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.

Timberland - forestland capable of continuously producing 20 cubic feet or more per acre of industrial wood.

Tolerance interval - the range of values that represent a specific proportion or percentage of some sample or population (such as a 30%, 50%, or 80% tolerance interval), at a given level of confidence such as 95% or 90% confidence.

Trail - a linear route managed for human-powered, stock, or off-highway vehicle forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles.

Underburn – a fire that consumes surface fuels but not the overstory canopy.

Understory - collectively, those plants that are beneath the overstory. See overstory.

Upland - the portion of the landscape above the valley floor or stream.

U.S. Department of Interior (USDI) - government department that oversees the Bureau of Land Management and many other agencies.

U.S. Fish and Wildlife Service (USFWS) - government agency responsible for managing fish and wildlife and their habitats.

Vegetative composition - the plant species present in a plant community.

Viability - in general, the ability of a population of a plant or animal species to persist for some specified time into the future. For planning purposes, a viable population is one that has the estimated numbers and distribution of reproductive individuals to ensure that its continued existence will be well distributed in the planning area (ICBEMP 2000).

Visual resources - aesthetic qualities of the landscape. This is determined by assessing the scenic quality of a site, the sensitivity of people to changes in the landscape, and the visibility of the landscape from major viewing routes and key observation points.

Watershed - the region draining into a river, river system, or body of water. A fifth-field hydrologic unit code of the U.S. Geologic Survey (USGS) comprising 50,000 to 100,000 acres.

Weed - a plant considered undesirable, unattractive, or troublesome, usually introduced and growing without intentional cultivation. See also Noxious Weed.

Wilderness - an area that is essentially natural in character that has been designated by Congressional action in order to preserve that naturalness.

Wilderness characteristics – these attributes include the area’s size, its apparent naturalness, and outstanding opportunities for solitude or a primitive and unconfined type of recreation. It may also include supplemental values.

Wilderness Study Area (WSA) - public land under the jurisdiction of the Bureau of Land Management that has been studied for wilderness character prior to 2003, and is currently in an interim management status awaiting wilderness designation or release from WSA status by Congress.

Wildfire - an unplanned ignition caused by lightning, volcanoes, unauthorized, and accidental human-caused actions and escaped prescribed fires.

Wildland fire - a general term describing any non-structure fire that occurs in the vegetation and/or natural fuels.

Wildland Fire Decision Support System - a decision-making process that evaluates alternative management strategies against selected safety, environmental, social, economic, political, and resource management objectives as selection criteria.

Wildland Urban Interface (WUI) - the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

Wildland Urban Interface zones - areas where inhabited lands are intermeshed with or adjacent to wildlands. These zones are currently mapped based on federal and state policies and are subject to change. Under the Healthy Forest Restoration Act (2003), communities are also given the flexibility to define their own WUI through the development of a Community Wildfire Protection Plan (CWPPs). CWPPs are intended to be collaborative efforts to address the core elements of community protection, provide communities with an opportunity to influence where and how federal agencies implement fuel reduction projects on federal lands, and to assist both local communities and federal partners in matching treatment priorities across jurisdictional boundaries so that treatments are more effective at controlling the spread of unwanted fires. Current WUI designations are based on existing or in-progress CWPPs and Oregon Department of Forestry WUI mapping.

Wildlife food and cover plots - cultivated plants that are specifically designed to provide food and/or cover for wildlife, especially upland and non-game birds. Plant species (such as alfalfa, wheat, sunflower, sorghum, milo, and millet) are commonly used for food and cover plots. These plots may require irrigation, but would not be monocultures of vegetation.

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. A classification made pursuant to the Wild and Scenic Rivers Act.

Woodland - a plant community in which, in contrast to a typical forest, the trees are often small or short-boled relative to their crown width or height. Collectively, the trees form an open canopy with the intervening area occupied by lower vegetation, commonly grass or shrub.

Xeric - pertaining to sites or habitats characterized by decidedly dry conditions.

Zones - BLM-administered lands are classified into four categories that establish guidance about their suitability for long-term ownership as follows:

- Zone 1 – lands with national or statewide significance (for wildlife, recreation, scenic or other values). Zone 1 lands are identified for retention in public ownership and are areas where management emphasis is being placed on increasing public land holdings through donations, exchange or sale.
- Zone 2 – lands with high resource values. Zone 2 lands are identified for retention or possible exchange for lands with higher resource values or transfer through the Recreation and Public Purposes Act.
- Zone 3 – lands that generally do not provide substantial resource, public, or tribal benefits; that may not be cost effective for BLM to manage; or that would represent a greater public benefit in other ownership. Zone 3 lands are potentially suitable for transfer, sale or other disposal, including lands identified as having potential land use benefits for local community expansion.
- Community Expansion (CE). Lands zoned CE are retained in public ownership until needed for specific community purposes.

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This section includes 13 appendices containing detailed information that supports the management direction in this Record of Decision. Other appendices from the JDBPRMP/FEIS are not reprinted in this document because they represent supporting information related to the environmental analyses. The appendices included in this section of the RMP are considered decisions in the ROD, with the exception of Appendices C, H, and L which are not decisions but rather desired future conditions or supporting information for decisions.

- Appendix A - Best Management Practices
- Appendix B - Monitoring
- Appendix C - Biophysical Setting Summary and Comparison of Current Vegetation Conditions to the Acceptable Range of Variability
- Appendix D - Snags and Salvage
- Appendix E - Stream Channel Objectives and Instream Flow Reservations
- Appendix F - Management Direction for Greater Sage-Grouse
- Appendix G - Wild and Scenic River Suitability Report for North Fork John Day River
- Appendix H - Oregon State Scenic Waterways
- Appendix I - Rules of Conduct for Designated and Suitable River Corridors
- Appendix J - Interim Wilderness Management Plan - Spring Basin Wilderness Area
- Appendix K - Grazing
- Appendix L - Special Recreation Management Areas
- Appendix M - Withdrawals

Appendix A: Best Management Practices

Activity	Any project or soil disturbing activity
Subactivity	General
Objective Number	Best Management Practices (BMPs)
AC1, AQ2, V4, VR1, WSR1	Special design and reclamation measures may be required to protect scenic and natural landscape values. This may include transplanting trees and shrubs, mulching and fertilizing disturbed areas, use of low profile permanent facilities, and painting to minimize visual contrasts. Surface-disturbing activities may be moved to avoid sensitive areas or to reduce the visual effects of the proposal.
AQ2, S1	Although allowable, minimize heavy equipment use on slopes between 20-35% and do not use heavy equipment on slopes over 35%.
A10, AG1, AQ7, V1, V4	All seed, hay, straw, mulch, or other vegetation material transported and used on public land weed-free zones for site stability, rehabilitation or project facilitation should be certified-by a qualified federal, state, or county officer as free of noxious weeds and noxious weed-seed. All baled feed, pelletized feed and grain transported into weed-free zones and used to feed livestock should also be certified as free of noxious weed seed.
A10, AQ7, V1, V4	It is recommended that all vehicles, including off-road and all-terrain, including contractors moving surface-disturbing equipment in or out of weed infested areas should clean their equipment before and after use on public land. Locate, create and use weed-free project staging areas. Avoid or minimize all types of travel through weed infested areas or restrict travel to periods when the spread of seed or propagules is least likely.
A10, AQ7,L1, V1, V4	Control weeds annually in areas frequently disturbed such as gravel pits, recreation sites, road sides, livestock concentration areas.
AC1, AQ2, EM1-8, LR1, S2, V4, WSR1	Decompact ditch line and pit or road base before back filling cut slopes. Shape and compact backfilled material to align with original topography. Roughen slope, replace topsoil, and reseeded as soon as possible after restoring topography.
AC1, AQ2, EM1-8, LR1, S2, V4, WSR1	Reclamation should be implemented concurrent with construction and site operations to the fullest extent possible. Final reclamation actions will be initiated within 6 months of the termination of operations unless otherwise approved in writing by the authorized officer.
AC1, AQ5, AQ6, AQ10, AQ11, AQ12, N1, V1, V2, V4, W2, W4	Minimize time in which heavy equipment is in stream channels, riparian areas, and wetlands. Operate heavy equipment in RMAs only when ID teams believe that such actions are the only reasonable alternative for implementation, or will result in less sediment in the stream channel or damage (short- or longterm) to the overall aquatic and riparian ecosystem relative to other alternatives. Prior to construction or use of heavy equipment in and around Riparian Management Areas, flag critical riparian vegetation areas, wetlands, and other sensitive sites to prevent ground disturbance in these areas.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
AC1, AQ6, AQ10, N1, V1, V2, V4, W2, W4	Prior to construction or use of heavy equipment in and around Riparian Management Areas, flag critical riparian vegetation areas, wetlands, and other sensitive sites to prevent ground disturbance in these areas.
AC1, WSR1, S1, VR1	Cutting areas will be shaped and designed to blend as closely as possible with natural terrain and landscape minimizing the effect on total forest vistas. Consideration will be given to future harvesting, impacts of road construction and other relevant factors.
AC5, AQ10, N1, V1, W2, W4	During restoration of disturbed sites, use current policy and guidance on the use of native species plant material. Use of non-natives may be appropriate when: A. Non-natives are more advantageous for quick soil stabilization; B. Provide more aggressive competition with invasive weeds; C. Significantly more cost-effective and result in greater area treated or suitable native species are not available; D. When natives are not capable of achieving objectives; E. Do not pose a risk to the natural biological diversity of the proposed management area. *A mixture of native and non-native species is preferable to using only non-natives if the desired natives are not available. *Drill seeding is the preferred method for planting most types of seed and can achieve better plant establishment. It provides better seed contact with the soil and seed can be applied at a calculated rate. *The USDA recommendation for broadcast or aerial seedings is at the rate of 60 to 80 seeds per square foot (approximately 1.5 to 2 times the drilled rate). *All seed must have a valid seed test, within one year of the acceptance date, from a seed analysis lab by a registered seed analyst (Association of Official Seed Analysts).
All	Require documentation that all on-site workers have been notified and are familiar with all terms, conditions, BMPs and stipulations related to the site.
AQ1, T1, W1	The size and capability of heavy equipment will be commensurate with the project.
AQ1, W1, T1	Upon project completion, remove project related waste.
AQ3, AQ9, AQ10, AQ12, W2, W4	Retain vegetation on cut-slopes unless it poses a safety hazard or restricts maintenance activities. Roadside brushing of vegetation should be done in a way that prevents disturbance to root systems and visual intrusions (such as avoid using excavators for brushing).
AQ3, AQ5	Include Pollution and Erosion Control Plans (PECP) and Spill Prevention Control and Containment Plans in contracts, agreements and project plans when activity proposed to occur within stream channels or RMAs or may result in: mobilization of fine sediment, pesticide/herbicide use, short-term riparian disturbance, or harassment of ESA-listed aquatic species. PECPs will include provisions for minimizing site preparation impacts, minimize heavy equipment impacts, and site restoration.
AQ3, AQ5, AQ6, AQ10, V2, W5	Contour and mulch all disturbed areas that will not be utilized for at least 30 days. Place sediment barriers prior to construction around sites where significant levels of erosion may enter the stream directly or through road ditches. Maintain barriers throughout construction or until site is revegetated. Straining or filtration mechanisms may also be employed for the removal of sediment from runoff.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
AQ3, AQ5, AQ6, AQ7, L1, S1, V4	Plan rehabilitation of all disturbed areas in a manner that results in similar or better than pre-work conditions through activities such as: spreading of stockpiled materials, seeding, and/or planting. Attempts to complete planting no later than spring of the year following end of disturbance. Short-term stabilization measures will be maintained until permanent erosion control measures are effective. Apply stabilization measures within three days of construction completion or disturbance, when possible. Apply and monitor effectiveness of treatments until success is achieved.
AQ3, AQ5, AQ6, S1, S2	Avoid rutting in the general project area by conducting operations when the soil is dry, or frozen, or with 18 or more inches of snow cover. Use heavy equipment on dry or frozen ground to minimize soil compaction and rutting. Monitor soil stabilizing practices throughout all stages of operations to ensure they are successful and remain functional.
AQ3, AQ5, AQ6, S1, S2	Conduct mechanical treatments along topographic contours to minimize runoff and erosion.
AQ3, AQ6	Fell hazard trees within riparian areas when they pose a safety risk. If possible, fell trees towards the stream. Keep felled trees on site when needed to meet coarse woody debris objectives.
AQ3, AQ6, AQ11, AQ12, W2, W4	Avoid placing temporary and permanent road crossings at potential listed fish spawning areas when possible.
AQ3, AQ6, AQ12, W4, W2	Establish staging areas (used for construction equipment storage, vehicle storage, fueling, servicing, hazardous material storage, etc.) beyond the 100-year floodplain in a location and manner that will preclude erosion into or contamination of the stream or floodplain and preferably outside of RMAs.
AQ3, AQ6, AQ12, W4, W2	Materials used for implementation of aquatic restoration categories (e.g., large wood, boulders, fencing material etc.) may be staged within the 100-year floodplain for short durations (Short duration is more than one field season and less than 2 years).
AQ3, S1, V2	Protect biological soil crusts and promote their recovery on range sites. Specifically, whenever possible, avoid disturbance of sandy soils during the summer or other extended dry periods. Also avoid disturbance of clay and silty soils during wet periods unless the ground is frozen during winter.
AQ3, W2	Locate fences so that they do not confine or concentrate livestock near the riparian zone.
AQ4, AQ6, AQ11	Projects will not significantly restrict the channel migration zone and ability of the channel to form and maintain habitat.
AQ5, AQ10, AQ11, AQ12	PECPs will include provisions for minimizing site preparation impacts, minimize heavy equipment impacts, and site restoration.
AQ5, AQ10, AQ11, AQ12	Spill Prevention Control and Countermeasures Plans and all implementation plans will: describe provisions to prevent or reduce impacts from potential spills (fuel, hydraulic fluid, etc), describe the hazardous materials that will be used, including inventory, storage, handling procedures; a description of quick response containment supplies that will be available on the site (e.g., a silt fence, straw bales, and an oil-absorbing, floating boom whenever surface water is present).

Subactivity	General
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Objective Number	Best Management Practices (BMPs)
AQ5, AQ6, AQ11	All equipment used instream will be cleaned and leaks repaired prior to entering the project area. Remove external oil and grease, along with dirt and mud prior to construction. Thereafter, inspect equipment daily for leaks or accumulations of grease, and fix any identified problems before entering streams or areas that drain directly to streams or wetlands. During instream heavy equipment work, consider deploying an oil-absorbing floating boom downstream. Equipment used for instream or riparian work will be fueled and serviced in an established staging area outside of riparian zone. When not in use, vehicles will be stored in the staging area.
AQ6, AQ9, AQ12, W2	Maintain adequate untreated peripheral zones around important moist-sites (i.e., wet sedge meadows, springs, riparian zones).
AQ6, WSR1	Instream operations must cease under high flow conditions that inundate the project area, except for efforts to avoid or minimize resource damage and for eminent safety concerns.
AQ9, AQ10, R1, V3, S1, W2, W4, W5, W6	For occupancy, all structures/trailers must be used for permitted purposes (must be reasonably incident to permitted activities) and should be covered by a notice or plan of operation.
AQ9, AQ10, W2, W4, W5	When necessary, loosen compacted areas, such as access roads, stream crossings, landings, staging, and stockpile areas at project completion.
AQ9, AQ10, W2, W4, W5	Changes in hydrology of a stream, spring, lake, or wetland should be for restoration purposes only.
AQ9, AQ10, W2, W4, W5	Commercial road use, including hauling/blading/snowplowing, will not contribute to siltation off the road into Columbia spotted frog habitat.
AQ9, AQ10, W2, W4, W5	Survey for the presence of nesting goshawks in suitable goshawk habitat for all major management actions (e.g., timber sales) prior to the implementation of management activities. Two years of surveys are recommended for all new timber sales.
AQ9, AQ10, W2, W4, W5	Timing of activities will be outside Columbia spotted frog egg laying/hatching for that area. If not known, restrict activities from March 1 to May 31.
F2, W1, W2, W3, W4, W5	Consider all aspects of wildlife habitat needs (e.g., feeding, shelter, etc.) when developing management strategies. Use site-specific conservation measures from approved biological evaluations for listed species/species of special concern.
L1, L3, W1	Range developments will be designed to achieve both wildlife and livestock grazing management objectives.
R1, W1	In areas open to cross country vehicle travel, allow no net increase in miles of fence.
V1, W2	Design projects so that important food sources for pollinators are treated in patches and vegetation treatments are timed to occur before these sources bloom. Projects should also consider when pollinators are most actively foraging. Use native seed (unless exceptions are necessary) or other seed mixes that maximizes blooming times when pollinators are most active and include native nectar and pollen-producing plants. Do not use seed toxic to pollinators.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
V1, W4	In forest and woodland management activities, retain a minimum of 10% of live trees per acre including dominants in regeneration harvest units, unless this conflicts with other wildlife or resource management objectives. The density, composition, condition, size classes and spatial distribution of the retained trees varies according to management objectives, stand and site conditions, and other constraints. These trees are not to be counted toward future snag recruitment.
V2	Pre-treat high risk sites for weed establishment and spread before implementing projects.
V2	Surface-disturbing activities (i.e. control lines, access routes, helipads, etc.) will be located outside special status plant habitat.
V2	Conduct botanical inventory for the presence/absence of special status plants prior to all project implementation. Inventory will be conducted during the season(s) appropriate for species identification, allowing for occupied plant habitat to be identified, flagged and protected as needed.
VR1	Avoid creating visual scars on the landscape. Disturbed areas should be contoured to blend with the natural topography. Blending is defined as reducing form, line, and color contrast associated with the surface disturbance. Disturbance in visually sensitive areas should be contoured to match the original topography, where matching is defined as reproducing the original topography and eliminating form, line, and color caused by the disturbance as much as possible.
W2, W4, W5	In bald eagle management areas and essential habitat, prescribed fire managers need to use smoke management forecasts in order to minimize smoke entering into suitable habitat and to ensure that dissipation will be adequate.
W2, W4, W5	Within the goshawk Post Fledging Family Area, forest health projects and timber sale activities should be designed to promote retention of late-successional stands where they exist. This may include the thinning of over-dense late seral stage stands (approximately 40-80 years) which may or may not have a late-successional component. In early and late seral stands, activities will be designed to promote forest health and the creation of late-successional conditions.
W2, W4, W5	Where bald eagle nests are blown from trees during storms or are otherwise destroyed by the elements, continue to protect the site in the absence of the nest for up to three complete breeding seasons.
W2, W4, W5	Retention of large woody material, and protection/ creation of the snag component (all conditions) is a standard practice to enhance and retain peregrine prey populations. The level of protection/retention within units is generally for the maximum amount achievable, per site condition for large woody material and snags.
W2, W4, W5	Project activities that have potential to disturb bald eagle winter roosts will be restricted within 400 m of the roosting area from November 1 to April 30th.
W2, W4, W5	In the circle of three air miles from active peregrine nests, consider potential effects to peregrines.
W2, W4, W5	In the circle of three air miles from active peregrine nests, fire suppression activities will closely follow draft or final site specific management plans.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
W2, W4, W5	For goshawk, ensure that the most recent version of the E-4 Special Provision issued May 10, 1996, in Instruction Memorandum No. OR-96-78 is included in all new sale contracts.
W2, W4, W5	In the 0.5 to 2 air mile circle around active peregrine nests, most recreation related activities are permitted during the nesting season. Exceptions may include hang gliding, trail blasting, large group gatherings.
W2, W4, W5	In the 0.5 to 2 air mile circle around active peregrine nests, harvest activity and habitat manipulation are to be designed to retain structure and function of the ecosystem in the immediate area of the nest cliff and surrounding habitat to augment production of prey for peregrine falcons. Silvicultural practices will use the best available information for protection and augmentation of avian prey populations, and will consider and create an action alternative which would benefit and support local biological diversity.
W2, W4, W5	In the 0.25 to 0.75 air mile circle around active peregrine nests, no new human habitat alteration activity will be planned (e.g., road or trail building, harvest, construction, recreation).
W2, W4, W5	In the 0.25 to 0.75 air mile circle around active peregrine nests, human activity (foot, vehicle, or aerial entry) is prohibited during the nest season, except for peregrine falcon monitoring and related activities, law enforcement, or to preserve human life in emergencies.
W2, W4, W5	In peregrine zones, retain hardwood components in clumps to aid avian productivity.
W2, W4, W5	Aircraft (special use permit or agency contacted/owned) are permitted outside of 1500 ft AGL (above ground level) "bubble" in the 1 – 2 mile zone from the peregrine nest except during the restricted period. Further, most aerial activity is permitted outside of 2 mile zone during the restriction period.
W2, W4, W5	In bald eagle management areas and essential habitat, fuel wood cutting and gathering will not be permitted, unless a site specific review shows that it is necessary to promote desired future habitat conditions for bald eagle and other desired wildlife species. If fuel wood cutting is deemed necessary to promote habitat conditions, then the following protective measures will be implemented: a) sign cut unit boundary prior to the fuel wood cutting season; b) down or standing fuel wood will not be cut and gathered within ¼ mile of the nest between January 1 and August 31 if a bald eagle nest is active; down woody material may be gathered outside of the nesting season; c) no standing dead tree greater than 16 inches dbh will be cut or removed within 500 meters (i.e., 0.31 mile) of the nest at any time of the year; and d) no standing dead trees greater than 16 inches dbh will be cut, unless it meets the long-term management objectives.
W2, W4, W5	A 400-acre Post Fledging Family Area will be designated around each active goshawk nest site and be comprised of the best available habitat. While harvesting activities can occur, a minimum of sixty percent (if it currently exists) of the Post Fledging Family Area will be managed as mature and old growth/old forest seral stages (approximately 80 years of age and older and hereafter referred to as late successional). Harvest of late-successional tree/stands may occur if based upon a risk assessment and a determination of imminent threat to the viability of the habitat. An example is be the creation of a fire break.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
W2, W4, W5	At a minimum, 30 acres of the most suitable goshawk nesting habitat surrounding the nest site will be deferred from harvest. The 30 acres should include known alternate nest sites and plucking posts and should be blocky or circular in shape. Biologists should use the best available professional knowledge of the birds' habitat use and of the available habitat. If operating under an existing management plan that specifies greater protection, then the more stringent management prescriptions will prevail.
W2, W4, W5	Do not approve human disturbance in excess of base levels (e.g., snowmobile, prescribed burning, automobile traffic, camping, hunting, firearm use, low level aircraft operation below 2,500 feet, recreational events) within 1/4 mile non line-of-sight or 1/2 mile line-of-sight (1.0 mile for blasting) of known bald eagle nests between January 1 and August 31. This condition may be waived in a particular year if nesting or reproductive success surveys reveal that bald eagles are non-nesting or that no young are present that year. Waivers are valid only until January 1 of the following year.
W2, W4, W5	If it is determined to be essential bald eagle habitat, protect it from adverse modification through curtailment of conflicting activities, modification of activities, seasonal restriction of activities, or avoidance of the area.
W2, W4, W5	In bald eagle habitat, a biological evaluation will be conducted or reviewed by a journey-level biologist to assess if the use of the area by eagles is incidental or essential.
W2, W4, W5	In bald eagle habitat, predator and rodent control using baited traps and/or poisons should not take place within 1 mile of an active bald eagle nest or ¼ mile of a known roost.
W2, W4, W5	In bald eagle management areas and essential habitat, all snags that are eagle perches within 500 meters (1650 feet) of nests or roosts should be preserved. In addition, all snags utilized for roosting or foraging within nesting territories or communal roosts should be protected. Generally, these are any live trees (Douglas-fir, ponderosa pine, etc.) or snags over 21" in diameter at breast height.
W2, W4, W5	In bald eagle management areas and essential habitat, all vegetation manipulations need to promote the development of large trees capable of supporting future bald eagle nesting, perching, and roosting regardless of other land allocations. While some timber harvest is allowable, it is only for the purpose of initiating long-term stand management to achieve bald eagle habitat objectives. Pre-commercial thinning is allowable to promote the development of large trees.
W2, W4, W5	In bald eagle management areas and essential habitat, development of new recreation facilities or expansion of existing facilities that will increase the amount, type, or area of use, such as campgrounds and resorts, is not compatible in these areas and will not be authorized.
W2, W4, W5	Gate or otherwise close excess roads within 2 miles of the peregrine nest.
W4, W5	Consult with ODFW prior to undertaking major construction, and/or surface disturbing activities in high value wildlife habitats.

Subactivity | **General**

Objective Number **Best Management Practices (BMPs)**

W5 In areas of important big game habitat, consultation with the wildlife biologist will be necessary to reduce impacts on wildlife, particularly in areas such as ridgelines, saddles, and upper drainage heads. Limit surface occupancy and use in spatial buffers identified for wildlife under Objective W2 of the RMP. Protect locally important wildlife and raptor nest sites during key seasons (such as winter range).

Subactivity | **Wildlife**

Objective Number **Best Management Practices (BMPs)**

AQ9, AQ10, W2, W4, W5 Retain or promote Columbia spotted frog overwintering, breeding and foraging habitat. This includes sloughs and other slow moving off channel areas that are relatively sunny and with low emergent and bankside vegetation.

W1, W2, W5, W6 Migratory Birds - Retain the integrity of breeding sites.

W2, W5, L1, L3 Migratory Birds - Minimize collisions with fences and meteorological towers on public lands through construction and marking stipulations.

Activity | **Energy Exploration and Development**

Subactivity | **Utilities**

Objective Number **Best Management Practices (BMPs)**

AQ7, W4, W5 In developing new transmission line or pipeline routes, use existing rights-of-way and utility corridors, to avoid impacting and further fragmenting undisturbed plant community habitats.

Subactivity | **Wildlife**

Objective Number **Best Management Practices (BMPs)**

EM2, W2, W5 Migratory Birds - Prevent bird entry into heater vents at oil and gas production facilities.

LR2, W2, W5 Migratory Birds - Avoid areas of raptor concentration when placing wind turbines.

Activity | **Lands and Realty**

Subactivity | **Agricultural Land Management**

Objective Number **Best Management Practices (BMPs)**

AQ1, AQ2, WSR1 Consider river recreation as part of the analysis before projects occur within 1/4 mile of all river segments shown on Map 1.

AQ1 , AQ12 Size of bypass structures should be big enough to pass kelt steelhead (steelhead that have spawned) & migratory bull trout back into the stream.

Subactivity	Agricultural Land Management
Objective Number	Best Management Practices (BMPs)
AQ11, AQ12	When making improvements to pressurized irrigation systems, install a totalizing flow meter capable of measuring rate and duty of water use. For non-pressurized systems, install a staff gage or other measuring device capable of measuring instantaneous rate of water flow.
AQ11, AQ12	Irrigation screening and replacement is for existing diversions only and is focused on installing, replacing, or upgrading off-channel screens to improve fish passage or prevent fish entrapment in irrigation canals. This action also includes the removal of non-needed existing diversions that are less than six feet high or impound less than 15 acre feet of water. Construction would involve use of heavy equipment, such as excavators, backhoes, front-end loaders, dump trucks, and bull dozers.
AQ3, AQ6, AQ11, AQ12, W2, W4	Screens, including screens installed in temporary and permanent pump intakes, must meet NMFS fish screen criteria (NMFS 1995). NMFS fish screen criteria applies to federally listed salmonid species under their jurisdiction as well as bull trout, and other species under USFWS jurisdiction.
AQ6, AQ11, AQ12	Abandoned ditches and other similar structures will be plugged or backfilled, as appropriate, to prevent fish from swimming or being trapped in them. Also follow BMPs under Watershed Restoration - Removal of Legacy Structures.
AQ8, W2, WSR1	Locate water drafting sites to avoid adverse effects to instream flows, and in a manner that does not retard or prevent attainment of aquatic objectives.

Subactivity	Land acquisition, exchange, retention, or disposal; rights-of-way, and utility corridors
Objective Number	Best Management Practices (BMPs)
AQ1, AQ2, WSR1	Consider river recreation as part of the analysis before projects occur within 1/4 mile of all river segments shown on Map 1.
AQ1, AQ3, AQ4, AQ5, AQ6, AQ7, AQ8, AQ9, AQ10	Adjust existing leases and permits, rights-of-way, and easements to eliminate effects that would retard or prevent attainment of the aquatic objectives. If adjustments are not effective, eliminate the activity. Where the authority to adjust was not retained, negotiate to make changes in existing leases, permits, rights of way, and easements to eliminate and mitigate effects that would prevent attainment of the aquatic objectives. Priority for modifying existing leases, permits, rights of way, and easements will be based on the current and potential to attain aquatic objectives.
AQ3, AQ10, AQ11, V2, W5	When categorizing public land for retention or disposal, and identifying acquisition priorities, consider the following criteria: Threatened or Endangered or sensitive species habitat; riparian areas; important habitat for game animals; key big game seasonal habitat; existing recreation use, public access through lands considered for disposal.
W5	Appropriate set-back distances (thresholds) regarding density (# of units per area), size (total area disturbed), and noise levels of energy developments need examination to determine what the effects are on sage-grouse. Until better information is available, managers should err on the side of the birds' biology and use the greatest set-back distance where feasible and necessary.

Activity Livestock Grazing, Wild Horses, Wild Ungulates

Subactivity Developments

Objective Number Best Management Practices (BMPs)

- AQ9, V2, W2 If necessary, install hardened crossings and water access points, or water gaps to direct livestock use to specific watering locations and reduce use over larger riparian wetland areas. Water gap or stream crossing should be no less than 10 feet and no more than 20 feet wide in the upstream-downstream direction (NRCS, 2001).
- AC1, VR1, W1, WSR1 Fence construction may involve use of all-terrain vehicles, flatbed trucks, and manual power tools. Use the minimum tool necessary when working in WSAs or other special management areas. When constructing new fencing or other developments, attempt to remove proportional fencing/developments no longer needed.
- AQ11 When possible, crossings and gaps should not be constructed within known or suspected spawning areas (e.g., pool tailouts where spawning may occur).
- AQ4, AQ5, AQ6, L1 Existing: If necessary at water gaps, the stream bank and approach lanes can be stabilized with native vegetation and/or angular rock to reduce chronic sedimentation. The stream crossing or water gap should be armored with up to cobble-size rock, and use angular rock if natural substrate is not of adequate size. Proposed: Livestock crossings or water gaps should not be located in areas where compaction or other damage may occur to sensitive soils and vegetation (e.g., wetlands) due to congregating livestock and should be located where stream banks are naturally low.
- AQ5, AQ11 When using pressure treated lumber for fence posts only, complete all cutting/drilling offsite or in a manner so that treated wood chips and debris do not enter water or flood prone areas.
- AQ6, AQ11 Fences at stream crossings and water gaps should not inhibit up or downstream movement of fish and or significantly impede bedload movement. Consider passage of large wood and other debris when constructing fence and water gaps. Fence placement should allow for lateral movement of a stream.
- AQ6, AQ7, L1, V4 Fence to delineate pastures associated to area specific management objective(s), or to establish permanent, temporary or seasonal exclusion from specific areas.
- AQ6, AQ7, L1, V4 Install water developments (i.e., spring developments, pipelines/troughs and reservoirs) to facilitate upland distribution and reduce concentration in riparian wetland areas of livestock, wildlife and wild horses.
- W2, W5, L1, L3 Practices such as fencing, herding, water development and the placement of salt and supplements (where authorized) are used where appropriate to : a) promote livestock distribution; b) encourage a uniform level of proper grazing use throughout the grazing unit; c) avoid unwanted or damaging concentrations of livestock on streambanks, in riparian areas and other sensitive areas such as sensitive soils, unique wildlife habitats and plant communities; and d) protect and restore water quality.

Subactivity	Grazing use
Objective Number	Best Management Practices (BMPs)
AC1, AQ10, V4, WSR1	Consider livestock or wild horse quarantine for a period no less than 2 days prior to moving cattle from an area with a known weed population to public lands that do not contain those species.
AQ1, AQ3, AQ4, L1, WSR1	Develop alternative sources of water to lessen the grazing pressure on the riparian habitat.
AQ1, AQ3, L1	Adjust wild horse and burro management to avoid impacts that prevent attainment of aquatic objectives.
AQ1, AQ3, L1	In order to meet aquatic objectives in developing wild horse management and livestock grazing systems and pasture designs, consider: a) Changing class of stock from cow/calf pairs to yearlings; either eliminating hot season grazing (i.e., grazing during the hottest part of summer) or scheduling hot season grazing on a rotational basis (e.g., only one year out of every three); b) Laying out pasture fences so that each pasture has as much riparian habitat as possible; c) Locating fences so that they do not confine or concentrate livestock near the riparian zone; d) Developing alternative sources of water to lessen the grazing pressure on the riparian habitat; and e) As a last resort, excluding livestock completely from riparian by protective fencing.
AQ1, AQ3, L1, V1	Upland vegetation treatment should be followed up with grazing management and other treatments that extend the life of the treatment and address the cause of the original treatment need.
AQ2, S1, V1	Do not feed on public lands, except for short duration feeding used to trap trespass livestock or wild or feral horses, or when using livestock grazing as a method of treating weeds.
AQ2, S1, V1-4, W1-6	The season, timing, frequency, duration and intensity of livestock grazing use should be based on the physical and biological characteristics of the site and management unit in order to: (a) protect or restore water quality; and (b) provide for the life cycle requirements, and maintain or restore the habitat elements of native and locally important species.
AQ3, AQ10, AQ11, V4, W2	Place salt or other supplements to distribute livestock throughout uplands and away from riparian areas.
AQ6, AQ7, L1, V4	To limit biological crusts from trampling by livestock, consider grazing when soil moisture conditions are moist (25 to 75 percent of field capacity) and crusts are pliable.
V2	Adjust livestock grazing season of use to accommodate special status plants.
V2	Concentrate livestock use/movement away from special status plant habitat; i.e., eliminate trailing, salting and/or watering sites that might affect special status plants.
Subactivity	Wildlife
Objective Number	Best Management Practices (BMPs)
HB1, W1,W2, W5, W6	Migratory Birds - Modify wild horse and burro gathering activities to minimize disturbance of migratory birds during the breeding season.

Subactivity | **Wildlife**

Objective Number | **Best Management Practices (BMPs)**

W2, W5, L1, L3 | Migratory Birds - Manage livestock to avoid impacts on nesting birds and to improve migratory bird habitat.

Activity | **Mining**

Subactivity | **Mineral development and use**

Objective Number | **Best Management Practices (BMPs)**

AQ1, AQ3, AQ11, T1, T3, V1, W2 | Reclamation will include, but will not be limited to (1) reshaping of disturbed areas (2) measures to control erosion, landslides, and water runoff (3) measures to remove toxic materials (4) revegetation of disturbed areas with native vegetation and life forms free of invasive species, and (5) rehabilitation of fisheries and wildlife habitat. Revegetation of disturbed areas is complete when irrigation is no longer required to maintain vegetation and invasive species levels are similar to or better than initial site conditions. Revegetation should be monitored for two years to determine successfulness. When reclamation of the disturbed area has been completed, the BLM must be notified so that inspection of the area can be made for approval.

AQ2, EM1, LR1, S1 | The excavation of the quarry floor should be designed with an outslope of approximately three percent in order to provide for adequate drainage of the floor.

AQ3, V2, V4, W6, W2 | Require the claimant to obtain all required state and federal operating permits. When activities will be in or near bodies of water, or sediment will be discharged, contact the ODEQ and US Army Corps of Engineers. It is the permittee, lease holder or operator's responsibility to obtain any needed suction dredging, streambed alteration, or water discharge permits required by federal or state agencies. Copies of such permits will be provided to the BLM prior the commencement of the activities.

AQ5, AQ6 | If possible, retain an undisturbed riparian buffer strip between mining operations and water courses to protect integrity of streambanks, provide for water temperature control, and for filtration of sediment from surface runoff.

AQ6, T1, T2, R1, W2 | After mining is completed, all new roads will be reclaimed, unless otherwise specified as needed by the BLM decisionmaker. High wall and cutbanks are to be knocked down or backfilled to blend with the surrounding landscape. Remove all culverts from drainage crossings and cutback the fill to the original channel. The roadbed should be ripped to a minimum depth of 12 inches to reduce compaction and provide a good seedbed. The road must then be reshaped to fit the surrounding landscape, fertilized (if needed) and revegetated. When necessary, water bars are to be used to provide drainage. When the BLM decisionmaker determines roads are necessary to provide continued public access, those roads will be restored to BLM road standards at the end of restoration and assigned to BLM.

Subactivity	Mineral development and use
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Objective Number	Best Management Practices (BMPs)
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C1	Include the following language for all Notices of Intent or Plans of Operations: Operators, Lessees, and other permittees will not knowingly alter, injure, or destroy any scientifically important paleontological (fossil) remains or any historical or archeological site, structure, or object on federal lands. If the operator makes such a discovery they will stop operations immediately and bring to the attention of the BLM, any paleontological (fossil) remains or any historical or archeological site, structure, or object that might be altered or destroyed by exploration or mining operations, and will leave such discovery intact until told to proceed by the resource area manager.
EM1, LR1, S1	When the operating area contains steep terrain, quarry developments will require a series of benches to effectively maximize the amount of mineral materials to be removed in a safe manner. Bench height should not exceed 40 feet, and if the bench will be used by bulldozers to access other parts of the quarry, the width of the bench should be at least 25 feet. If the bench is not used by equipment, then this width can be reduced to approximately 10 feet.
F1, V1	All internal combustion engines must be equipped with approved spark arresters. State and federal fire regulations must be followed, including a campfire permit or blasting permit if needed.
V3	Firewood may not be cut and sold or used from unpatented mining claims unless specifically permitted to claimant.

Activity	Mining and Energy Exploration and Development
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Subactivity	General
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Objective Number	Best Management Practices (BMPs)
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AQ6, R1, T1, T2, W2	For temporary and decommission roads, cutbanks are to be knocked down or backfilled to blend with the surrounding landscape. Remove all culverts from drainage crossings and cutback the fill to the original channel. The roadbed should be ripped to a minimum depth of 12 inches to reduce compaction and provide a good seedbed. The road must then be reshaped to fit the surrounding landscape, fertilized (if needed) and revegetated. When necessary, water bars are to be used to provide drainage. If needed, install structures necessary to restrict access during revegetation and beyond.
AC1, AQ1, AQ2, VR1, WSR1	Consider river recreation as part of the analysis before projects occur within 1/4 mile of all river segments shown on Map 1.
AC1, AQ6, AQ10, N1, V1, V2, V4, W2, W4, W6	Locate and maintain support structures, facilities, sanitation facilities and roads outside RMAs. When there is no alternative to locating inside RMAs, use the minimum necessary for approved activity and obliterate facilities and roads which have not been in use for a few years.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
AC1, R1, VR1, WSR1	To the extent possible, utilize colors and construction materials that blend with or complement the surrounding landscape or scenic backdrop that is visible from adjacent travel routes. Locate transmission lines so that they do not project above the skyline, project above the top of existing vegetation, and/or use topographic barriers to separate transmission lines from lines of sight on adjacent travel routes and river.
AQ1, AQ3, AQ11, T1, T3, V1, W2	Reclamation will include, but will not be limited to (1) reshaping or disturbed areas (2) measures to control erosion, landslides, and water runoff (3) measures to remove toxic materials (4) revegetation of disturbed areas with native vegetation and life forms free of invasive species, and (5) rehabilitation of fisheries and wildlife habitat.
AQ1, AQ3, AQ4, AQ5, AQ6, AQ7, AQ8, AQ9, AQ10	Adjust existing leases and permits, rights-of-way, and easements to eliminate effects that would retard or prevent attainment of the aquatic objectives. If adjustments are not effective, eliminate the activity. Where the authority to adjust was not retained, negotiate to make changes in existing leases, permits, rights of way, and easements to eliminate effects that would prevent attainment of the aquatic objectives. Priority for modifying existing leases, permits, rights of way, and easements will be based on the current and potential to attain aquatic objectives.
AQ11, AQ12	Water use must comply with state water law and protect water supply to springs and wetlands.
AQ1-13, W2	Locate, design, operate and maintain sediment settling ponds in conformance with Oregon Department of Environmental Quality guidelines. During reclamation, ponds should be allowed to dry out and the fines removed and spread with the topsoil, unless the fines and ponds contain toxic materials. If toxic materials become airborne, monitor air quality and design project to contain contaminants (enclose areas). If the ponds contain toxic materials, a plan will be developed to identify, dispose and mitigate effects of the toxic materials. If necessary, a monitoring plan will also be implemented. The ponds should then be backfilled and reclaimed.
AQ3, AQ11, S1	While in operation, and during periods of temporary shutdown, exposed ground surfaces susceptible to erosion will need to be protected. This can be accomplished with seeding, mulching installation of water diversions, and routine watering of dust producing surfaces. Minimize dust and emissions. Use abatement.
AQ3, AQ4, R1, W1	Reclaim the mining area and access roads and trails at the conclusion and at reasonable intervals to minimize disturbed areas not in use for a few years. All disturbed areas must be reclaimed.
AQ3, AQ6, AQ11, AQ12, W2, W4	A mine claimant or an energy lessee is entitled to access their operation consistent with the mining and energy statutes. However, the authorized officer may require an operator to use existing roads to minimize the number of access routes. This stipulation if portions of the area can be occupied without adversely affecting the resource values. Access, travel, and other site construction will be limited in area where motorized use is restricted. Areas classified as limited to existing roads and trails or designated roads and trails will limit access for energy related activities to roads that are open under the designation. The permittee/leasee/claimant must submit a plan from which BLM can determine that impacts from the proposed action are acceptable. The operator may construct and rehabilitate temporary roads to minimize total surface disturbance, consistent with intended use.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
AQ3, AQ6, AQ11, AQ12, W2, W4	Screens, including screens installed in temporary and permanent pump intakes, must meet NMFS fish screen criteria (NMFS 1995). NMFS fish screen criteria applies to federally listed salmonid species under their jurisdiction as well as bull trout, and other species under USFWS jurisdiction.
AQ3, R1, S1, T1, W2	Exploratory sites should be located near or adjacent to existing roads where possible without blocking public access. When new sites must be constructed, the size of the disturbance will be as small as possible in order to conduct the activities.
AQ3, V2, V4,W2	Require documentation that all on-site workers have been notified of all terms, conditions, BMPs and stipulations related to the site.
AQ3, V2, V4,W2	Develop inspection, monitoring, and reporting requirements for energy exploration and development. Evaluate and apply the results of inspection and monitoring to modify plans, leases, or permits as needed to eliminate impacts that prevent attainment of aquatic objectives.
AQ4, V2, W2	Application of fertilizer must be approved by the BLM prior to application for revegetation.
AQ5, AQ6	Construct a berm or trench between disturbed areas and water courses when needed to protect water quality. Settling ponds must be used to contain fines and any discharges into creeks or wetlands must meet the ODEQ standards.
AQ5, AQ6, AQ11	Adequate drainage of surface runoff will be necessary for roads that are constructed or reconstructed for vehicular access to the mining area. If roads are to be utilized during winter months (October 15 - April 15) surface the roads with rock.
AQ6,	Confine exploration, development, and operations to upland bench areas rather than allow encroachment into the RMA.
AQ6, WS	Appropriate set-back distances (thresholds) regarding density (# of units per area), size (total area disturbed), and noise levels of energy developments need examination to determine what the effects are on sage-grouse. Until better information is available, managers should err on the side of the birds' biology and use the greatest set-back distance where feasible and necessary.
AQ8, W2, WSR1	Locate water drafting sites to avoid adverse effects to instream flows, and in a manner that does not retard or prevent attainment of aquatic objectives.
AQ9, AQ10, S1, V3, W2, W4, W5, W6	At all excavations, productive topsoil (usually the first 6 inches) should be stripped and stockpiled for use in future reclamation. Stabilize stockpiled topsoil to prevent erosion and contamination of other resources in the area. This includes removal of topsoil before the establishment of waste dumps and tailings ponds.
C1	Operators, Lessees, and other permittees will not knowingly alter, injure, or destroy any scientifically important paleontological (fossil) remains or any historical or archeological site, structure, or object on federal lands. The operator will immediately bring to the attention of the BLM, any paleontological (fossil) remains or any historical or archeological site, structure, or object that might be altered or destroyed by exploration, development or operations, and will leave such discovery intact until told to proceed by the resource area manger. The resource BLM will take action to evaluate the structure or remove the resource, and allow operations to proceed within 60 working days.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
EM1, LR2, S1	Dispose of excavated or generated material away from RMAs and unstable areas to minimize the risk of material entering adjacent streams and waters.
F1, V1	All internal combustion engines must be equipped with approved spark arresters. State and federal fire regulations must be followed, including a campfire permit or blasting permit if needed.
R1, T1	The general public may not be excluded from energy development or unpatented mining claims. However, in the interest of safety, the general public can be restricted from specific dangerous areas (underground mines, open pits, or heavy equipment) by erecting fences, gates and warning signs. It is the operator's responsibility to protect the public from mining hazards. Gates or road blocks may be installed on existing or proposed roads only with the approval of the BLM decisionmaker.
S1, V1	Rehabilitation treatments on sensitive soil areas or areas difficult to reclaim will continue until restoration has been determined a success by the BLM.
V3	Remove only vegetation which is in the way of development activities. Merchantable timber must be marked by BLM prior to cutting and may not be used for firewood. Small trees (less than 6 inch diameter at breast height [dbh]) and shrubs should be lopped and scattered, or shredded for use as mulch. Trees over 12 inches dbh should be bucked and stacked in an accessible location unless they are needed for the mining operation.
V3	The permittee, lessee, or operator may not cut, use or sell firewood off of the energy exploration/development site.
VR1	Arrays and designs of turbines and other energy related structures will be integrated with the surrounding landscape. Design elements to be addressed include visual uniformity, use of tubular towers, nonreflective paints, prohibition of commercial messages, and proportion, size and color of structures.
VR1	Other site design elements will be integrated with the surrounding landscape. Elements to address include minimizing the profile of ancillary structures, burial of cables, prohibition of commercial symbols, and lighting. Regarding lighting, efforts will be made to minimize the need for and amount of lighting on ancillary structures.
VR1	The BLM will involve and inform the public about the visual site design elements of the proposed wind energy facilities. Possible approaches include conducting public forums for disseminating information, offering organized tours of operating wind developments, and using computer and visualization simulations in public presentations.

Subactivity	General
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Objective Number	Best Management Practices (BMPs)
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VR1	Visual resource management (VRM) considerations will take place early in the project planning phase in accordance with BLM VRM manual and handbooks. Operators will utilize digital terrain mapping tools at a landscape/viewshed scale for site planning and design, visual impact analysis, and visual impact mitigation planning and design. Visual mitigation planning and design will be performed through field assessments, applied GPS technology, photo documentation, use of computer-aided design and development software, and visual simulations to reflect a full range of visual resource BMPs. The digital terrain mapping tools will be at a resolution and contour interval suitable for site design and accurate placement of proposed developments into the digital viewshed. Visual simulations will be prepared and evaluated in accordance with BLM Handbook H-8432-1 or other agency requirements to create spatially accurate depictions of the appearance of proposed facilities. Simulations will depict proposed project facilities from Key observation Points and other visual resource sensitive locations.
W1	Plastic pipe is no longer allowed for site staking pursuant to state law. It is recommended that the existing plastic pipe monuments have all openings permanently closed to avoid trapping small wildlife. Upon loss or abandonment of the site, all plastic pipe must be removed from the public lands, and when old markers are replaced during normal claim/site maintenance, they are to be either wood posts or stone or earth mounds, consistent with state law.
W5	Manage administrative access to maintain the habitat effectiveness of security cover and key seasonal habitat (such as winter range) for deer and elk.

Activity	Monitoring and Other Activities
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Subactivity	Fish Handling
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Objective Number	Best Management Practices (BMPs)
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AQ10, AQ11, AQ12	Reduce risk of introduction of aquatic invasive species by sterilizing boats, vehicles and wading and sampling equipment.
AQ11, AQ12	Minnow traps - Traps will be left in place overnight and in conjunction with seining.
AQ11, AQ12	All fish capture, removal, and handling activities will be conducted by an experienced fisheries biologist or technician.
AQ6, AQ11, AQ12	Isolated capture - Install block nets at up and downstream locations and leave in a secured position to exclude fish from entering the project area. Leave nets secured to the stream channel bed and banks until fish capture and transport activities are complete. If block nets or traps remain in place more than one day, monitor the nets and or traps at least on a daily basis to ensure they are secured to the banks and free of organic accumulation and to minimize fish predation in the trap.
AQ6, AQ11, AQ12, W2	Do not dewater a channel in a way that halts water flow downstream beyond the project site. Gradually dewater and water project area to maintain downstream flow.

Subactivity | **Fish Handling**

Objective Number | **Best Management Practices (BMPs)**

AQ6, AQ11, AQ12, W2 | Electro fishing - Prior to dewatering, use electro fishing only where other means of fish capture may not be feasible or effective. If fish are observed spawning during the in-water work period, electro fishing will not be conducted in the vicinity of spawning adult fish or active redds. Only Direct Current (DC) or Pulsed Direct Current (PDC) will be used for electro fishing. If conductivity is <100, use voltage ranges from 900 to 1100. For conductivity from 100 to 300, use voltage ranges from 500 to 800. Conductivity greater than 300 then use voltage to 400. Begin electro fishing with minimum pulse width and recommended voltage and then gradually increase to the point where fish are immobilized and captured. Turn off current once fish are immobilized. Do not allow fish to come into contact with the electro fishing anode. Do not electro fish an area for an extended period of time. Remove fish immediately from water and handle as described below. Dark bands on the fish indicate injury, suggesting a reduction in voltage and pulse width and longer recovery time.

Subactivity | **Survey and Monitoring**

Objective Number | **Best Management Practices (BMPs)**

AQ1, N1, W1 | Coordinate with other local agencies to prevent redundant surveys.

AQ11 | Avoid impacts to fish redds. When possible, avoid sampling during spawning periods.

AQ11 | When monitoring requires the relocation of fish or work in fish habitat, use personnel trained in methods that prevent or minimize disturbance of fish.

AQ3, AQ4 | Projects may include but are not limited to surveys to document recreation use, resource values, aquatic and riparian attributes, cultural resources (including excavating test pits <1 square meter in size), and presence/absence surveys for listed terrestrial wildlife, bird, and plant species in the project area.

AQ5, AQ10, AQ11, AQ12 | Reduce risk of introduction of aquatic invasive species by sterilizing wading and sampling equipment.

AQ6 | Locate excavated material from cultural resource test pits away from stream channels.

AQ6, AQ7 | Replace all material in test pits when survey is completed and stabilize the surface.

Activity | **Recreation**

Subactivity | **General**

Objective Number | **Best Management Practices (BMPs)**

AQ1, AQ2, WSR1 | Consider river recreation as part of the analysis before projects occur within 1/4 mile of all river segments shown on Map 1.

AQ1, AQ3, AQ6 | Adjust dispersed and developed recreation practices that retard or prevent attainment of aquatic objectives. As a last resort, where adjustment measures such as education, use limitations, traffic control devices, increased maintenance, relocation of facilities, and/or specific site closures are not effective, prohibit the use.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
AQ1, AQ3, AQ6	For existing recreation facilities inside RMAs, assure that the facilities or use of the facilities will not prevent attainment of aquatic objectives. Relocate or close recreation facilities including trails and dispersed sites where aquatic objectives cannot be met. This could include removal of designated campgrounds, dispersed camp sites, and foot trails as well as treatments of off-road vehicle roads/trails in riparian areas.
AQ1, AQ3, AQ6	Before closing a dispersed campsite, consider the potential for initiation of use and impacts in adjacent locations. Where possible utilize the following mitigation measures: placement of rock, log or fence barriers to limit vehicle access and further site expansion to protect sensitive resources.
AQ3, AQ6, S1, VR1, W5, W2, WC1	Prohibit solid and sanitary waste facilities in RMAs.
AQ6, AQ10, AQ11, V4, W2	Place barriers (e.g., boulders, fences, gates) outside of the bankfull width along established OHV trails and traffic routes to prevent unauthorized motor vehicle access into and across streams and RMAs (except at designated crossings designed to meet Aquatic, Wildlife, Vegetation, and Soils objectives).
V2	Campgrounds, OHV play areas and other areas concentrating recreational uses will be developed far enough away from special status plant habitat to minimize impacts.

Subactivity	Wildlife
Objective Number	Best Management Practices (BMPs)
R2, W2, W5	Consider altering recreational activities and events if there are potential impacts to migratory bird breeding activities.

Activity **Roads, Trails and Landings (temporary and permanent)**

Subactivity	Culverts, bridges, stream crossings, and construction sites
Objective Number	Best Management Practices (BMPs)
AQ11	Pumps must have fish screens and be operated in accordance with state and federal fish screen criteria.
AQ11, AQ12	If diversion allows for downstream fish passage, (i.e., is not screened), place diversion outlet in a location to promote safe reentry of fish into the stream channel, preferably into pool habitat with cover.
AQ2, AQ4, AQ6, AQ10, V4, VR1, W2	Minimize disturbance of existing vegetation in ditches and at stream crossings. Design roads to minimize total disturbance, to conform with topography, and to minimize disruption of natural drainage patterns.
AQ3, AQ6, AQ11, AQ12, W2, W4	Restrict access to temporary crossings, to the minimal required.
AQ3, AQ6, AQ11, AQ12, W2, W4	When installing new culverts or replacing old ones, culverts should have a minimum diameter of 24 inches for permanent stream crossings and a minimum diameter of 18 inches for road crossdrains.

Subactivity	Culverts, bridges, stream crossings, and construction sites
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Objective Number	Best Management Practices (BMPs)
AQ3, AQ6, AQ11, AQ12, W2, W4	At temporary crossings, use ramped low water fords in debris flow susceptible streams (e.g., if the temporary crossing is a low water ford, access should be restricted to blocked residences, emergency vehicles, contractors, and BLM inspection personnel).
AQ3, AQ6, AQ11, AQ12, W2, W4	During construction projects, use temporary stream crossings to cross streams with any equipment or vehicles (including ATVs). Use washed rock/gravel in temporary low water ford crossings, where a non-fill structure is not possible.
AQ3, AQ6, T1	Projects should be reviewed by an engineer with design input from an experienced fisheries biologist and hydrologist. Such personnel will oversee or review the project during construction to ensure that BMPs are being properly implemented. A licensed engineer will provide design review for projects that result in structures that are greater than 20' in width.
AQ4, AQ11, AQ12	Flood relief culverts will be designed to restore and maintain access to off-channel holding areas for aquatic species (including fish). Therefore, existing floodplain channels should be the first priority for location of flood relief culverts. Flood relief culverts should be installed in a manner that match floodplain gradient and do not lead to scour at the outlet.
AQ5, AQ6, AQ11	When necessary, pump seepage water from the de-watered work area to a temporary storage and treatment site or into upland areas and filter water prior to reentering the stream channel.
AQ6	Use materials that will withstand 100-year flow events (e.g., concrete, well anchored concrete mats, etc.) on permanent low water ford crossings.
AQ6	Utilize natural bedrock geology to provide hardened and stable low water ford crossings. Where erosive soils exist, harden approaches with non-erodible materials on permanent crossings. Provide relief drainage on approaches; direct drainage away from streams.
AQ6, AQ10	Dissipate flow energy at the bypass outflow to prevent damage to riparian vegetation or stream channel.
AQ6, AQ10, AQ11, V4, W2	Limited cutting or removal of vegetation on the closed road-bed to the amount required to access the culvert site.
AQ6, AQ10, AQ11, V4, W2	Strip and stockpile topsoil ahead of construction of new roads, as necessary to reapply soil to cut and fill slopes prior to revegetation.
AQ6, AQ11	Use sediment control barriers immediately adjacent to the stream, between the disturbance areas and the stream as necessary to ensure no visible increase in stream turbidity occurs.
AQ6, AQ11, AQ12	Monitor structures after high flow events, which occur during the first fall/winter/spring after project completion. Assess the following parameters: headcutting below natural stream gradient, substrate embeddedness in the culvert, scour at the culvert outlet, and erosion from sites associated with project construction. Apply remedial actions to correct.

Subactivity	Culverts, bridges, stream crossings, and construction sites
Objective Number	Best Management Practices (BMPs)
AQ6, AQ11, AQ12	The use of riprap is permissible above bankfull height to protect the embankment. If the use of riprap is required for structure stability, then an additional analysis may be required to ensure that the structure is not undersized. Riprap may only be placed below bankfull height when necessary for protection of abutments and pilings for bridges. However, the amount and placement of riprap around the abutments and/or pilings should not constrict the bankfull flow.
AQ6, AQ11, AQ12	Removal or replacement of existing road-stream crossing structures (culverts, bridges, etc.) : Construction may involve use of heavy equipment, such as excavators, cranes, backhoes, front-end loaders, dump trucks, bull dozers, and on occasion pile-drivers and helicopters. Upstream of the isolated project area, coffer dams (diversions) constructed with non-erosive materials are typically used to divert stream flow with pumps or a by-pass culvert. Heavy equipment may only be used when BLM determines it will not retard attainment of Aquatic Objectives. Also follow BMPs under Watershed Restoration - Removal of Legacy Structures.
AQ6, AQ11, AQ12	If necessary to meet Aquatic Objectives, per an ID team review, isolate construction area and remove fish from project area (see BMPs under Monitoring and Other Activities).
AQ6, AQ11, AQ12	Grade control structures are permitted to prevent headcutting above or below the culvert or bridge. Grade control typically consists of boulder structures that are keyed into the banks, span the channel, and are buried in the substrate. The hydraulic impacts of grade control structures must be analyzed for effects on the stream crossing.
AQ6, AQ11, AQ12	Structures containing concrete must be cured or dried (approx 7 days) before they come into contact with stream flow.
AQ6, AQ11, AQ12, W2	Design temporary crossings to pass existing flow plus the 10 year event (probability) for 6 hr rainfall events to account for summer thunderstorms or 24 hour event for winter flows.
AQ6, AQ11, AQ12, W2	In cases of structure removal or replacement, restore the stream channel and reconnect the floodplain at the site. Also follow BMPs under Watershed Restoration - Removal of Legacy Structures.
AQ6, AQ11, AQ12, W2	Limit activities of mechanized equipment to streambank areas or temporary platforms when installing or removing structures, unless channel is dewatered.
AQ6, AQ11, AQ12, W2	Re-vegetate disturbed areas with vegetation of similar structure and composition to pre-existing vegetation and ground cover. Use native species. Conserve on site woody vegetation for rehabilitating disturbed areas (in channel structure, upland down wood, bank erosion control, etc). Flush cut or remove entire root wad. If wood is kept on site to meet upland down wood objectives, place away from area prone to firewood use. Large woody debris resulting from clearing activities may be placed in the downstream channel to meet aquatic objectives.
AQ6, AQ11, AQ12, W2	When dewatering is no longer required, slowly release water back into the channel. Prevent loss of surface water downstream as the construction site streambed absorbs water. Prevent a sudden increase in stream turbidity. Monitor downstream during this process to prevent stranding of aquatic organisms below the construction site.

Subactivity	Culverts, bridges, stream crossings, and construction sites
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Objective Number	Best Management Practices (BMPs)
AQ6, AQ11, AQ12, W2	When removing a culvert from a first or second order, second order, or non-fishing bearing stream, the BLM will determine if culvert removal should require dewatering, fish removal, or both. Culvert removal on fish bearing streams requires dewatering and fish removal as described under Monitoring and Other Activities.
AQ6, AQ11, AQ12, W2	If access is required through construction site, a temporary crossing will be constructed and removed within the same instream period and the disturbed ground will be rehabilitate to pre-existing conditions. Rehabilitation will include re-vegetating, re-contouring and controlling surface erosion through the following two years.
AQ6, AQ12	If a closed culvert is used, the bottom of the culvert will be buried into the streambed not less than 20% and not more than 50% of the culvert height. For open-bottomed arches and bridges, the footings or foundation will be designed to be stable at the largest anticipated scour depth. Skew culverts approximately 30 degrees toward the inflow to provide better inlet efficiency. Substrate and habitat patterns within the culvert should mimic stream patterns that naturally occur above and below the culvert. Coarser material may be incorporated to create velocity breaks during high flows, thereby improving fish passage, and to provide substrate stability.
AQ6, AQ9, AQ12, W1, W2, W4, W5, W6	Restore natural drainage patterns and when possible promote passage of all fish species and life stages present in the area. Evaluate channel incision risk and construct in-channel grade control structures when necessary.
AQ6, T1, T2, W2	Space drainage features used for storm-proofing and treatment projects to prevent road surface runoff from entering stream channels.

Subactivity	General
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Objective Number	Best Management Practices (BMPs)
AQ1, AQ2, WSR1	Consider river recreation as part of the analysis before projects occur within 1/4 mile of all river segments shown on Map 1.
AQ4	Conduct road, bridge, stream crossing, and log landing construction, maintenance or renovation activities when soil moisture levels are low to moderate (less than 75 percent of field capacity). If possible, do not construct roads when soils are frozen or when the soils become saturated (greater than 95 percent or more of field capacity) to a depth of three inches or greater. BLM-authorized activities should be limited or cease unless otherwise approved by the authorized officer.

Subactivity	Road and landing construction, maintenance, renovation, and improvements
Objective Number	Best Management Practices (BMPs)
AC1, AQ6, V4, VR1	Locate roads on stable terrain such as moderate sideslopes or ridge tops wherever possible and away from wet or marshy areas other wetlands, meadows, riparian areas and streambanks. Provide necessary drainage and streambank protection. When roads must cross potential unstable terrain, design the road to the extent necessary to prevent unacceptable damage. Where side casting of waste material during road excavation will cover the down slope soil with rock and subsoil incapable of supporting productive vegetation, consider end hauling waste material to stable areas of more moderate topography.
AC1, AQ6, V4, VR1, W2, W5	Roads should avoid being located through non-forest or non-commercial forest habitats with high wildlife values.
AC1, AQ6, V4, VR1	Roads should fit the topography so that a minimum alteration of natural features will be necessary.
AQ1, AQ3, AQ5, AQ6, T3	Re-establish vegetation and reshape the topography in areas where vegetation has been destroyed due to historic side casting.
AQ1, AQ3, AQ5, AQ6, T3	Provide dips, water bars, and cross-drainage on all temporary roads.
AQ1, AQ4, AQ6, AQ12, W2, W4, W5	Minimize dust impacts along roads to the extent possible.
AQ12	Design water crossing structures to provide for adequate fish passage minimum impact on water quality. Consider increases in water yield and peak flows resulting from vegetation removal when designing structures.
AQ3, AQ11	For culvert removal projects, restore natural drainage patterns and when possible promote passage of all fish species and life stages present in the area. Evaluate channel incision risk and construct in-channel grade control structures when necessary. Also follow BMPs under Watershed Restoration - Removal of Legacy Structures.
AQ3, AQ9, AQ10, AQ12, W2, W4	Avoid brushing along stream channels and floodplains. Brushing may be unavoidable if it is necessary for human safety or to avoid threats to structural stability where modifying structure design would not eliminate the need for brushing. If the stream channel is within 10 feet measured horizontally from the edge of road, then restrict brushing width to 4 feet of the edge of the drivable road surface. Turn-out should be treated the same as the edge of the road, but not used to determine brushing width for other portions of the road. Maintain riparian overstory to provide stream shade. Maintaining a minimum height of riparian vegetation by brushing once every three years instead of once every 5 years or when vegetation is horizontal with the road on the fill slope. Prune riparian vegetation rather than completely removing it. Preserve as much ground vegetation as possible, and brush only where necessary for human safety rather than for convenience. Roadside brushing of vegetation should be done in a way that prevents disturbance to root systems and visual intrusions (i.e., avoid using excavators for brushing). Retain vegetation on cut slopes unless it poses a safety hazard or restricts maintenance activities.
AQ3, AQ9, AQ10, AQ12, W2, W4	Retain adequate vegetation between roads and streams to filter runoff caused by roads.

Subactivity	Road and landing construction, maintenance, renovation, and improvements
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Objective Number	Best Management Practices (BMPs)
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AQ4, AQ5, S1, S2, T3	Perform maintenance to conserve existing surface material, retain the original crowned or out-sloped, self-draining cross section, prevent or remove rutting berms (except those designed for slope protection) and other irregularities that retard normal surface runoff. Do not waste loose ditch or surface material over the shoulder where it can cause stream sedimentation or weaken slump-prone areas. Avoid undercutting back slopes. Do not disturb the toe of cut slopes while pulling ditches or grading roads.
AQ4, AQ6, AQ12	Use drainage dips instead of culverts on roads where gradients will not present a safety issue. Locate drainage dips in such a way so water will not accumulate or where outside berms prevent drainage from the roadway. Locate and design drainage dips immediately upgrade of stream crossings and provide buffer areas and catchment basins to prevent sediment from entering the stream.
AQ4, AQ6, AQ12, W2, W4, W5	Road rehabilitation includes everything from simple closures to more complex road obliteration and removal, with an overall goal of restoring hydrologic functions. This includes the following: eliminate or reduce erosion and mass-wasting hazards associated with roads; eliminate or reduce human access and associated impacts to aquatic systems; enhancing natural hydrologic processes through reduction of drainage network. Actions such as bridge and culvert removal, removal of asphalt and gravel, installing drainage culverts, constructing road dips, subsoiling or ripping of road surfaces, outsloping, water barring, fill removal, sidecast pullback, re-vegetating with native species and placement of large wood and/or boulders are included. Roadway barricading to exclude vehicular traffic is covered only if the overall road remediation project substantively addresses restoration of hydrologic function. This category also includes storm-proofing roads intended to remain open, thereby hydrologically disconnecting such roads from watershed streams. For culvert removals on closed roads, limited cutting or removal of vegetation on the closed road-bed to access the culvert site may be required. Construction will involve use of heavy equipment, such as excavators, backhoes, front-end loaders, dump trucks, and bull dozers.
AQ4, AQ6, AQ12, W2, W4, W5	Reconstruct road and drainage features that: do not meet design criteria or operation and maintenance standards; have been shown to be less effective for controlling sediment delivery; prevent attainment of terrestrial, aquatic, or riparian objectives; or do not protect watersheds from increased sedimentation and peak flows. Prioritize reconstruction based on current and potential damage to terrestrial, aquatic, or riparian resources; ecological value of the resources affected; and feasibility of options such as helicopter logging and road relocation out of riparian conservation areas.
AQ4, AQ6, AQ7	Dispose of slide and waste material in stable sites out of the flood prone area (at an elevation two times max bankfull depth above the flood plain). Waste material other than hardened surface material (asphalt, treated timbers, metal objects, etc.) may be used to restore natural or near-natural contours.
AQ4, AQ6, W5	Decommission or obliterate roads no longer needed. Leave these roads in a condition that provides adequate drainage. Remove culverts.
AQ5, AQ6	Locate new roads to minimize the risk of material entering adjacent streams or other waters. Minimize excavation when constructing roads through the use of balanced earthwork, narrowing road widths, and end hauling where sideslopes are between 50 and 70 percent.

Subactivity	Road and landing construction, maintenance, renovation, and improvements
Objective Number	Best Management Practices (BMPs)
AQ5, AQ6	Consistent with good safety practices and intended use, design each road to the minimum-use standards adapted to the terrain and soil materials to minimize surface disturbance and damage to water quality. Locate roads to minimize cut bank disturbance. Design cut and fill slopes close to the normal angle of repose to be approximately 2(h): 1(v) or flatter when possible. Locate roads on stable ground. Avoid high, steeply sloping cut banks in highly-fractured bedrock. Avoid locating roads in potentially unstable areas including head walls, seepage areas, side slope locations in excess of 70 percent, old landslides, fragile soil designated areas and areas where the geologic bedding planes or weathering surfaces are inclined with the slope.
AQ5, AQ6	Provide drainage where groundwater causes slope instability.
AQ5, AQ6, AQ12, T1	Limit excavation to the essential amount needed to meet the necessary road standards. Plan for stabilization of exposed soil and for rehabilitation of other environmental damage during construction.
AQ5, AQ6, T1, VR1	Consistent with good safety practices and intended use, design each road to the minimum-use standards adapted to the terrain and soil materials to minimize surface disturbance and damage to water quality. Consider improving inadequately surfaced roads that are to be left open to public traffic during wet weather with gravel or pavement to minimize sediment production and maximize safety.
AQ5, AQ6, V4	Areas of vegetation should be left or established between roads and streams.
AQ6	Construct roads for surface drainage by using outslopes, crowns, grade changes, drain dips, waterbars and/or insloping to ditches as appropriate. Design roads to drain normally by out sloping and by grade changes whenever possible. Where out sloping is not feasible, use roadside ditches and culverts to drain roads onto ground with good groundcover and filtering capability, away from the drainage network. Sloping the road base to the outside edge for surface drainage is normally recommended for local spurs or minor collector roads where low volume traffic and lower traffic speeds are anticipated. This is also recommended in situations where long intervals between maintenance will occur and where minimum excavation is wanted. Out-sloping is not recommended on steep slopes. Sloping the road base to the inside edge is an acceptable practice on roads with steep sideslopes and where the underlying soil formation is very rocky and not subject to appreciable erosion or failure. Crown and ditching is recommended for arterial and collector roads where traffic volume, speed, intensity and user comfort are considerations.
	Recommended gradients range from 0 to 15 percent where crown and ditching may be applied, as long as adequate drainage away from the road surface and ditch lines is maintained. Consider improving inadequately surfaced roads that are to be left open to public traffic during wet weather with gravel or pavement to minimize sediment production and maximize safety.
AQ6	Place drainage diversions approximately 50 ft above stream crossings so that water either does not enter stream or is filtered through vegetative buffers before entering the stream.
AQ6	Haul all excess material removed by maintenance operations to safe disposal areas. Apply stabilization measures on disposal sites if necessary to assure that erosion and sedimentation do not occur.

Subactivity	Road and landing construction, maintenance, renovation, and improvements
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Objective Number	Best Management Practices (BMPs)
AQ6	Plan ditch gradients steep enough (generally greater than 2%) to prevent sediment deposition.
AQ6, AQ11	During maintenance or repair, place any woody debris from upstream of the road-crossing downstream of the road crossing.
AQ6, AQ11	Monitor stream crossing structures after high flow events. Assess the following parameters: headcutting below natural stream gradient, structural damage, substrate embeddedness in the culvert, debris collection, embankment erosion and scour at the structure outlet and footings. Apply remedial actions to correct. Also follow BMPs under Watershed Restoration - Removal of Legacy Structures.
AQ6, AQ7	Drainage features used for storm-proofing and treatment projects should be spaced as to hydrologically disconnect road surface runoff from stream channels.
AQ6, AQ7	For road removal projects within riparian areas, consider using sediment control barriers between the project and the stream, re-contour the affected area to mimic natural floodplain contours and gradient to the greatest degree possible.
AQ6, AQ7	Minimize water velocity, and minimize water travel time on roads, road cuts, road fills, in ditches and in other drainage features containing coarse or fine sediment.
AQ6, T1	Do not allow culvert out-flow to be discharged onto unprotected fill slopes. Install energy dissipaters at culvert outlets or in half rounds where needed.
AQ6, V4	Minimize the number of unimproved stream crossings. When a culvert or bridge is not feasible, locate drive-through (low water crossings) on stable rock portions of the drainage channel and ensure catastrophic flood events will transport overflow back into the stream channel instead of onto the road bed. Harden crossings with the addition of rock and gravel if necessary. Use angular rock if available. Reduce the number of existing stream crossings. Cross streams as close to a right angle to the main channel as possible. Locate stream crossings where the channel is well-defined, unobstructed, and straight.
AQ9, AQ10, W2, W4, W5	Locate new landings outside of Riparian Management Areas and wetlands or at least 300 ft from water bodies (whichever is greater) with low risk for landslides and avoid expanding existing landings in Riparian Management Areas and wetlands when sediment delivery to stream channels could occur. An ID team may identify a location within 300 feet that meets Aquatic and Wildlife Objectives.
W2, W4, W5, AQ9, AQ10	Close and stabilize or obliterate roads not needed for future management activities. Prioritize based on current and potential damage to terrestrial, aquatic, and riparian resources and ecological value of the resources affected.
W5	Avoid locating roads through crucial deer and elk winter range, when feasible.

Activity**Vegetation Management****Subactivity****General**

Objective Number	Best Management Practices (BMPs)
F3, V1	Avoid attracting bark beetles to forest and woodland areas where vegetation is being manipulated by removing the treatment residue or by burning or chipping it on site and by minimizing bark damage to residual trees. Chipping should be conducted in the fall to allow the chips to dry over the winter and before the spring bark beetle flight.
AC5, AQ10,N1, V1,W2, W4	<p>There are instances where the use of desirable non-natives will be considered and used following the BLM Manual 1745. Examples of when non-natives will be considered include but are not limited to the following.</p> <ol style="list-style-type: none"> 1. When natives are not currently available and seeding must proceed. Examples: Fire rehabilitation situations where liability or excessive resource damage may force the BLM to act quickly; or road cuts and fills where soil loss is excessive. 2. When the substrate has been so degraded that native species will not do well for a considerable length of time. Natives often don't do well when over half the A horizon in the soil has been removed. Examples: Road cuts where top soil is gone (natives able to prevent soil loss no longer adapted), or other areas where excessive soil erosion has occurred. 3. When natives will not meet the objectives for the site. Example: Weed prevention is important and natives won't compete well enough to make a project effective. Seeding can be effective at reducing weed infestations. 4. When the environment is already highly altered and will remain so. Examples: In parking lot areas or on irrigated areas; on sites where native species can't handle the use and non-natives can; in places where non-natives might add a desirable attribute to the site and not degrade other areas; or on road shoulders where continual disturbance is assured. 5. When the large size of the seeding requires use of commercially obtained native species that may not be adapted to the area; and may contaminate the gene pool of natives on the site.
AQ1, AQ3, L1, V1, V4	Upland vegetation treatment should be followed up with grazing management and other treatments that extend the life of the treatment and address the cause of the original treatment need.
LR1, V2	Where post treatment overuse/overgrazing by domestic or wild herbivores will threaten the survival of seeded or planted species, the ID team will identify appropriate actions including but not limited to: forgo treatment, fencing, tubing, electric or chemical deterrents.
LR1, V2	Where possible, do treatments on a pasture by pasture basis to facilitate grazing rest.
V1, V3	Limit fertilizer applications that favor annual grass growth in newly seeded areas where invasive annuals are becoming established.
V2	Mechanical vegetation treatments will be designed to not result in residual debris on special status plant sites or special habitats.
V2	Prescribed fire will be the preferred method of vegetation treatment in special status plant habitat.

Subactivity	General
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Objective Number Best Management Practices (BMPs)

W5 Maintain adequate thermal and security cover on deer and elk habitat, particularly within timber stands adjacent to primary winter foraging areas.

Subactivity	Pesticides, Herbicides, and Biological Controls
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Objective Number Best Management Practices (BMPs)

A1, V1-4 Minimize burning pesticide treated vegetation for at least 6 months after application.

AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4 In sites with special status plants, manual treatment will be preferred over chemical. A botanist will be present during the application of chemicals within special status plant populations. Individual special status plants will be flagged or carefully mapped prior to weed treatment. Chemicals which result in residual effects will not be allowed in sites with special status plants. Do not use pre-emergents within 50 yards of a known special status plant population. Broadcast spraying should not occur within 100 yards of known special status plant populations.

AQ3, AQ4, R1, W1 Notify potentially affected parties of treatment activities that occur on public lands. Participate in state reporting processes for herbicides and pesticides.

L1, WB1 Avoid using pesticides in areas actively grazed by livestock and/or wild horses. Preclude livestock grazing the prescribed number of days after application of pesticide (read the pesticide label).

W4 Avoid using pesticides in areas of special wildlife consideration.

WC1, WC2, WN1, WN2 Use chemicals only when they are the minimum method necessary to control weeds that are spreading within the wilderness or threaten lands outside the wilderness.

WC1-2, WN1, WN2 Use the minimum tool to treat noxious and invasive vegetation in wilderness, relying primarily on the use of ground-based tools including backpack sprayers, hand sprayers, and pumps mounted on pack and saddle stock.

Subactivity	Timber sales and forest health treatments
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Objective Number Best Management Practices (BMPs)

A1, AQ1, F1, V4, W1, W4, W5, W6 Protection of streams, wetlands-riparian areas, and other waters. When planning operations along streams, lakes, bogs, swamps marshes, wet meadows, springs, seeps or other sources where the presence of water is indicated, protect soil and vegetation from disturbance that could cause non-attainment of Aquatic and Wildlife Objectives. Give special consideration around sources that supply domestic water. Use streamside buffer strips of vegetation to attain Aquatic Objectives and protect natural streamside beauty.

A1, AQ1, F3, V4, W1, W4, W5, W6 To achieve fire hazard reduction, and to provide for reforestation and other intensive forest management opportunities, full consideration must be given at time of sale planning to desirability and method of slash disposal and site preparation. Factors to be considered include but are not limited to utilization of material, removal of debris, smoke management, fire protection, watershed protection, soil compaction, nutrient loss, wildlife habitat requirements, animal damage, and reforestation requirements.

Subactivity	Timber sales and forest health treatments
Objective Number	Best Management Practices (BMPs)
AC1, R3, R4,VR1, WSR1	Shape and design cutting areas to blend as much as possible with the natural terrain and landscape. The cutting area should minimize the effect on the total forest vista with due regard for future harvesting, impacts of road construction and other relevant factors.
AQ1, AQ11, S1, V4, VR1, WSR1	Clearcutting should be used only where it is silviculturally essential to accomplish the relevant forest management objectives, or where the size of clearcut blocks, patches, or strips are kept at the minimum necessary to accomplish silvicultural and other multiple-use management objectives. Cutting units should not exceed 40 acres in normal circumstances. More than 40 acres may be appropriate for salvage of an area already environmentally damaged by fire, insect or wind, or where larger cutting units would minimize road construction and other actions which would result in greater adverse environmental impact on the total forest.
AQ1, AQ3	Avoid trapping and turning small streams out of their natural beds.
AQ1, AQ3, AQ5, AQ6,T3	Install water bars and apply native seed, when available, to skid trails and landings prior to temporary seasonal closures and following harvest operations. Consider ripping or subsoiling on skid trails and abandoned haul roads to reduce compaction where soil and slope conditions permit.
AQ1, AQ3, AQ6, AQ7, AQ11, S1	Designate tractor skid trails to avoid cross ridge and cross drainage operations and to use existing trails when feasible. Skid trails will be subsoiled, tilled, and seeded with perennial grass and/or waterbars installed when logging is finished.
AQ1, AQ3, L2, R3, S1, V4, W2, W4, W5	Use an excavator with grapple for machine piling to reduce surface ground disturbance and to keep top soil out of the pile.
AQ1, AQ3, S1, V4	For areas that are sensitive to burning, have a high potential for erosion, or are in close proximity to homesite developments, use a chipper or shredder to disperse treated fuels over the soil surface without burning. Keep chip piles to less than 1 inch depth over the soil surface to allow vegetation to grow.
AQ1, F3, S1,V1, V4, VR1, W2	Each sale plan must include plans for prompt reforestation of the sale area after completion of the timber harvest operation by natural or artificial means. (Disturbed areas will be artificially reforested when natural forest regeneration cannot be reasonably expected in 5-15 years.)
AQ10, V1, W2	The selection of trees in partial cuts would be made in a manner to improve the genetic composition of the reforested stand.
AQ3, AQ6, N1, W2, W4, W5	If debris should unintentionally enter any stream, such debris will be removed concurrently with the yarding operation and before removal of equipment from the project site. Removal of debris will be accomplished in such a manner that the natural streambed conditions and streambank vegetation are not disturbed.
AQ3, AQ6, N1, W2, W4, W5	Use directional felling systems where needed to minimize site damage; to protect streams, buffer strips, riparian areas, cultural sites, or reserved timber (including wildlife trees); or to increase timber utilization.

Subactivity	Timber sales and forest health treatments
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Objective Number	Best Management Practices (BMPs)
AQ3, V2, V4, W2, W4	Encourage complete utilization of all harvested trees, including marginal and non-commercial species. Each forest products sale will provide opportunity for maximum use of all timber or other vegetative resources sold and to prevent destruction of unused materials, provided that such utilization is consistent with wildlife requirements.
AQ4, AQ7, AQ9, F3, L2, V4	Where timber should be removed because it would be subject to excessive windthrow and where it is difficult to leave an adequate buffer of timber to shade and protect the stream, plan to re-establish cover along the stream after cutting is completed. Fast growing deciduous species or other suitable vegetation may be required to restore shade as quickly as possible. Leave understory vegetation as undisturbed as possible to filter runoff and help stabilize the soil.
AQ4, S1, V3, W6	Minimize soil disturbance when disposing of treated fuels by using a lop-and-scatter method to dispose of fine fuels (no-burn) over bare soil areas. With heavier treatments, hand pile and burn during winter months when the ground is wet or frozen (snow). Swamper burning, or dragging treated fuels into a single pile, minimizes the area of detrimental soil damage from pile burning. Use burn pans or Kevlar burn cloths to absorb heat under the pile.
AQ4, V3, W6	Avoid contributing excess nitrogen and phosphorous to stream channels (including perennial, intermittent and connected ephemeral draws in the John Day Clarno Uplands Level 4 EPA ecoregion and perennial and intermittent stream channels in all other Level 4 Ecoregions) during fuels reduction projects. Lop and scatter within 20 feet of stream channels and do not burn these areas within three years. An exception is the presence of a sufficient type of riparian species (such as cottonwoods) and width of riparian buffers along stream channels to eliminate the contribution of nitrogen and phosphorous from burning in these areas.
AQ6, AQ10, S1	Logging systems that least disturb the soil mantel and RMAs are preferred to those methods that contribute to soil movement.
F1	Plan for use of harvest systems that minimize damage to the site and reserved trees, and provide maximum protection from fire, insects, disease, wind, and other hazards.
V2	Mechanical treatments will be designed to not result in residual debris on special status plant sites.

Subactivity	Wildlife
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Objective Number	Best Management Practices (BMPs)
L1, L3, W2, W5	Avoid constructing range improvements or conducting prescribed burning during migratory bird nesting season.

Activity**Watershed restoration****Subactivity****Bank restoration; Floodplain overburden removal**

Objective Number	Best Management Practices (BMPs)
AQ4	When doing bank restoration, eroding stream banks will be the first priority.
AQ4, AQ6, AQ11	Restore eroding stream banks to reduce chronic bank erosion, improve water quality, restore natural channel cross-sections, expand floodplain area, promote growth of riparian vegetation and create undercut banks for adult and juvenile fish hiding cover. Projects will not significantly restrict the channel migration zone and ability of the channel to form and maintain habitat. Construction may involve use of heavy equipment, such as excavators, spiders, backhoes, and dump trucks.
AQ4, AQ6, AQ7	Overburden or fill comprised of native materials originated from the project area may be used to reshape the floodplain, placed in small mounds on the floodplain, used to fill anthropogenic holes, buried on site, and/or disposed into upland areas.
AQ4, AQ6, AQ7	Remove anthropogenic overburden and fill, such as dredged mine tailings, railroad beds, dikes, berms, levees, and other fill types, to restore natural hydrologic and soil functions. Consider de-compaction of soils once overburden material is removed. Such functions include overland flow during high-water events, dissipation of flood energy, increased water storage to augment low flows, sediment and debris deposition, growth of vegetation, nutrient cycling, and development of side channels and alcoves. Construction may involve use of heavy equipment, such as excavators, earthmovers, scrapers, backhoes, front-end loaders, dump trucks, and bull dozers.
AQ4, AQ6, AQ7	To the greatest degree possible, non-native fill material originating from outside the project area will be removed from the floodplain to an upland site.
AQ4, AQ6, AQ7	Create floodplain characteristics (elevation, width, gradient, length, and roughness) that mimic those that would naturally occur at that stream and valley type. To the extent possible, use bank stabilizing materials that would naturally occur at that site (such as large wood, woody and herbaceous plantings, native sedge/rush mats, and native rock).
AQ4, AQ6, AQ7	Where it is not possible to remove all portions of dikes and berms, create openings with culverts and/or breaches. Place culverts through or remove portions of such structures to pass high flows-bankfull or greater- into floodplain areas. The width of a culvert or breach should be equal to or greater than the bankfull width of the stream. Culverts and breaches should be located at a depositional area of the channel. Design proper number and location of culvert and breach sites to help prevent fish stranding as high flows recede.
AQ4, AQ6, VR1, WSR1	Jute matting or other biodegradable material can be used with plantings to help prevent erosion of affected banks.
AQ4, AQ6, VR1, WSR1	Stream banks may be reshaped and sloped where the objective is to reduce bank slope angle to provide more favorable planting surfaces. Such work should not change the location of the bank toe.

Subactivity | General

Objective Number	Best Management Practices (BMPs)
AC1, AQ6, AQ10, N1, V1, V2, V4, W2, W4	Transport no more than a 1-day supply of fuel for chainsaws and string trimmers into riparian areas. The exception will include very remote areas such as portions of the Lower John Day River. In those areas, transport no more than a 5-day supply.
AC1, AQ6, AQ10, N1, V1, V2, V4, W2, W4	Fueling of chainsaws and string-trimmers will not occur within 100 feet of surface waters.
AQ1, AQ2, WSR1	Consider river recreation as part of the analysis before projects occur within 1/4 mile of all river segments shown on Map 1.
AQ3, AQ6, AQ12, W2, W4	Materials used for implementation of aquatic restoration categories (e.g., large wood, boulders, fencing material etc.) may be staged within the 100-year floodplain for short durations less than one field season.
AQ4, S1, V2	Minimize soil disturbance when disposing of treated fuels by using a lop-and-scatter method to dispose of fine fuels (no-burn) over bare soil areas. With heavier treatments, hand pile and burn during winter months when the ground is wet or frozen (snow). Swamper burning, or dragging treated fuels into a single pile, minimizes the area of detrimental soil damage from pile burning. Use burn pans or Kevlar burn cloths to absorb heat under the pile.

Subactivity | In-stream habitat structures and large wood restoration projects

Objective Number	Best Management Practices (BMPs)
AQ4, AQ6, AQ11, V4	The project designer or an inspector experienced in these instream structures should be present during installation.

Subactivity | Riparian area invasive plant treatment (Biological; Herbicide; Manual; Mechanical)

Objective Number	Best Management Practices (BMPs)
AC1, AQ5, AQ10, N1, V1, V4, W2, W4	Invasive plant treatment in riparian areas is intended to improve the function of riparian areas by restoring native ecosystem components. In general, improved riparian function due to invasive plant treatment will benefit listed fish by restoring inputs of native detritus to stream systems and reducing erosion. Treatment of invasive plant sites may include one or more of the following treatment methods listed below. A combination of treatments may be necessary to achieve effective control or eradication of an invasive plant species at many sites. All herbicide applications will comply with label instructions and may be further restricted as stated below. Design invasive plant treatments to reduce or eliminate adverse effects to species and critical habitats proposed and/or listed under the ESA. This may involve surveying for listed or proposed plants prior to implementing actions within unsurveyed habitat if the action has a reasonable potential to adversely affect the plant species. Use site-specific project design (e.g., application rate and method, timing, wind speed and direction, nozzle type and size, buffers, etc.) to mitigate the potential for adverse disturbance and/or contaminant exposure to ESA species.

Subactivity	Riparian area invasive plant treatment (Biological; Herbicide; Manual; Mechanical)
Objective Number	Best Management Practices (BMPs)
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	Areas used for mixing herbicides will be placed where an accidental spill will not run into surface waters or result in groundwater contamination. Impervious material will be placed beneath mixing areas in such a manner as to contain any spills associated with mixing/refilling.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	All biological controls used will be U.S. Animal and Plant Health Inspection Service and state approved. Agents demonstrated to have direct negative effects on non-target organisms will not be released.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	A spill cleanup kit will be available whenever herbicides are used, transported, or stored.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	A certified/licensed pesticide applicator will oversee all herbicide application projects.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	Do not spot spray sethoxydim, clopyralid, or chlorsulfuron within intermittent or ephemeral channels. Spot spray using aquatic labeled glyphosate and aquatic labeled imazapyr allowed to edge of water with hand-held, hand-pump spray or squirt bottles (no backpack sprayers). Hand-held spot spray of aquatic glyphosate to emergent weed (0.75 inches stem diameter) is allowed. Spot spray using metsulfuron methyl and sulfometuron methyl allowed to bankfull level of perennial streams with backpack sprayers, hand-pump sprayers, and squirt bottles. Spot spray of aquatic labeled glyphosate, imazapyr, metsulfuron methyl, and sulfometuron methyl within dry intermittent and ephemeral channels allowed only with hand-held, hand-pumped sprayers and squirt bottles (no backpack sprayers). Excluding backpack spot spray is a conservation measure intended to minimize overspray within channels, and subsequent "first flush" exposures to aquatic resources, while still allowing full efficacy of the treatment.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	The only herbicide application methods for plants emergent from water are stem injection, wicking or wiping, and hand-held spray bottle application. No application to submerged aquatic vegetation with any herbicide is included.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	Equipment cleaning and storage and disposal of rinsates and containers will follow all applicable state and federal laws.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	Use only surfactants or adjuvants in riparian areas that do not contain any ingredients on EPA's List 1 or 2, where listing indicates a chemical is of toxicological concern, or is potentially toxic with a high priority for testing.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	For foliar backpack spray applications, use only low pressure sprayers producing droplet sizes between 200 and 800 microns to minimize drift. Backpack spray activities will only occur during conditions with low drift potential, defined as wind velocities less than 10 mph, or as stated on the herbicide label.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	When approved herbicides are transported to a project site in a watercraft (inflatable boat, motor boat, etc.), the following protections will be implemented: no more than 1-day volume of herbicide(s) will be transported to project site; herbicide(s) will be transported in one gallon or smaller containers, sealed in a water- and air-tight plastic bag, and placed in a buoyant dry-bag. The entire package should be securely tied to the watercraft.

Subactivity	Riparian area invasive plant treatment (Biological; Herbicide; Manual; Mechanical)
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Objective Number	Best Management Practices (BMPs)
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AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	In order to allow efficient volatilization of naphtha solvent, application like sethoxydim will only occur during warm (above 60°F), calm, and dry weather.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	Minimize treating invasive plants on banks from the stream when listed aquatic species are present.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	Spot application: Herbicides to be used are chlorsulfuron, clopyralid, aquatic glyphosate, imazapyr, sethoxydim, metsulfuron methyl, and sulfometuron methyl. New herbicides may be used if they provide equivalent or better protection for aquatic species. Do not spot spray sethoxydim or clopyralid within 15 feet, and chlorsulfuron within 50 feet, of perennial stream bankfull. Do not spot spray sethoxydim, clopyralid, or chlorsulfuron within intermittent or ephemeral channels. Spot spray using aquatic labeled glyphosate and aquatic labeled imazapyr allowed to edge of water with hand-held, hand-pump spray or squirt bottles (no backpack sprayers). Do not spot spray sethoxydim or clopyralid within 15 feet, and chlorsulfuron within 50 feet, of perennial stream bankfull.
AC1, AQ6, AQ10, L2, N1, V1, V2, V4, W2, W4	Weed stem-injection: Individuals will be familiar with proper stem-injection methodology prior to treatment. Only aquatic glyphosate formulations will be used. New formulations may be used if they afford better or equivalent protection for aquatic species. The formulation can be used at up to 100% concentration for the stem injection method. The formulation will be diluted to 50% or less active ingredient when applied directly to fresh stem cuts using wicking/wiping and up to the percentage allowed by label instructions when applied to foliage using low pressure hand-held spot spray applicators. Larger emergent weeds can be treated with glyphosate by stem injection, and smaller emergent weeds by wicking/wiping and spot spray with hand-held sprayers. Wicking/wiping and hand-held spray bottle application of glyphosate is allowed to emergent weed plants less than four to five feet tall, and usually smaller. Emergent plants with stems over 0.75 inch in diameter will be treated by stem injection.
AC1, AQ6, AQ10, N1, V1, V2, V4, W2, W4, WSR1	Invasive plant infestation sites treated using herbicide, biological, manual or mechanical methods will be revegetated by planting cuttings, seedlings, or seeding of native plants. If defoliating herbicides or mechanical control of invasive plant infestations kills the majority of ground cover on areas greater than 0.2 acre within riparian areas follow-up seedings or plantings should be used to reduce erosion potential.
AC1, AQ6, AQ10, N1, V1, V4, W2, W4, WSR1	Minimize ground disturbance by clearing only the area necessary for effective planting.
AQ6, AQ10, V1, V2, V4, W4, AC1, N1, W2	Cut-stump and hack & squirt : Herbicides which may be used are imazapyr, metsulfuron methyl, and aquatic labeled glyphosate. New herbicides may be used if they provide equivalent or better protection for aquatic species. Application with aquatic labeled glyphosate and aquatic labeled imazapyr allowed to waters edge and to bankfull level for metsulfuron methyl and imazapyr not labeled for aquatic use.

Subactivity	Riparian juniper treatment (non-commercial)
Objective Number	Best Management Practices (BMPs)
A3, AC1, AQ1, AQ4, V4, W1, WSR1	Where ground vegetation is sparse, leave felled juniper in sufficient quantities to promote re-establishment of vegetation and prevent erosion.
AQ3, AQ6, F3, W2	When using heavy ground based equipment, such as feller-buncher and slash-buster equipment, reduce impacts to native vegetation, and eliminate moving back and forth over the same piece of ground.
AQ4	Avoid contributing excess nitrogen and phosphorous to stream channels (including perennial, intermittent and connected ephemeral draws in the John Day Clarno Uplands Level 4 EPA ecoregion and perennial and intermittent stream channels in all other Level 4 Ecoregions) during fuels reduction projects. Lop and scatter within 20 feet of stream channels and do not burn these areas within three years. An exception is the presence of a sufficient type of riparian species (such as cottonwoods) and width of riparian buffers along stream channels to eliminate the contribution of nitrogen and phosphorous from burning in these areas.
AQ4, AQ6, AQ11	Do not place juniper in streams if the action will preclude the stream from attaining its natural sinuosity.
AQ4, AQ6, AQ11	Where appropriate, move cut juniper stems into the stream channel and floodplain to provide aquatic benefits. Juniper can be felled or placed into the stream to promote channel aggradation as long as such actions do not obstruct fish movement, cover spawning gravels of ESA-listed fish or increase width to depth ratios.
AQ6, AQ7, L1, V4	If seeding is a part of the action, consider whether seeding will be most appropriate before or after juniper treatment.

Subactivity	Riparian vegetation planting
Objective Number	Best Management Practices (BMPs)
AC1, AQ10, V4, WSR1	Sedge and rush mats should be sized to prevent their movement during high flow events.
AC1, AQ10, V4, WSR1	Utilize planting stock from similar landscapes when possible; local collections or locally adapted stock is preferred.
AQ3, AQ10, V4	Conduct riparian vegetation planting as a means to help restore plant species composition and structure that would occur under natural disturbance regimes. Activities may include the following: planting conifers, deciduous trees and shrubs; placement of sedge and or rush mats; gathering and planting willow cuttings. Equipment may include but is not limited to: excavators, backhoes, dump trucks, power augers, chainsaws, and manual tools.
AQ4, AQ6, V4	Concentrate plantings above the bankfull elevation.
AQ4, AQ6, V4	Tree and shrub species as well as sedge and rush mats to be used as transplant material will come from outside the bankfull width, typically in abandoned flood plains, and where such plants are abundant.
F3, FV4	An experienced forester, botanist, ecologist, or associated technician will be involved in designing vegetation treatments.

Subactivity	Riparian vegetation treatment (controlled burning; non-commercial)
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Objective Number	Best Management Practices (BMPs)
AC1, AQ10, N1, V1, W2, W4	Prescriptions/burn plans should be written to help restore plant species composition and structure that would occur under natural fire regimes.
AQ1, AQ3, AQ5, AQ11	Within each sixth field subwatershed containing listed aquatic species or water quality limited streams, limit the total riparian area, measured as adjacent stream length, to be treated within any one year period. Where treatment may affect water quality or special status species, consider limiting treatment to no more than 10% of the total riparian area per year. As an example, weed treatment may not be effective if only 10% is treated per year.
AQ3, AQ6, F3	Moderate-severity burns are permitted in no more than 20% of the riparian area to invigorate decadent aspen stands, willows, and other relevant deciduous species. Such burns will be contained within the observable historic boundaries of the aspen stand or willow site. Moderate-fire severity, as defined in the National Fire Plan, is characterized by the following: moderate soil heating, or moderate ground char, occurs where the litter on forest sites is consumed and the duff is deeply charred or consumed, but the underlying mineral soil surface is not visibly altered. Light colored ash is present. Woody debris is mostly consumed, except for logs, which are deeply charred.
AQ3, AQ6, F3	Low severity burns will constitute the dominant type of controlled burn, resulting in a mosaic pattern of burned and unburned landscape. Low severity burns, as defined in the National Fire Plan, are characterized by the following: low soil heating, or light ground char, occurs where litter is scorched, charred, or consumed, but the duff is left largely intact, although it can be charred on the surface. Woody debris accumulation is partially consumed or charred. Mineral soil is not changed. Fire severity in forest ecosystems is low if the litter and duff layers are scorched but not altered over the entire depth.
AQ3, AQ6, F3	Non-commercial tree thinning and slash removal may be required to reduce fuel loads within the riparian area required to implement a low to moderate severity burn.
AQ3, AQ6, F3	Limit surface heating and residence time during prescribed fires; methods to consider include: Thin or limb rather than full cutting to get controlled fire to carry, reduce duff level under drip line of trees, burn during cooler seasons, or use lighting techniques to increase the spread rate.
AQ3, AQ6, F3, W2	To the greatest degree possible, avoid creating hydrophobic soils when burning slash piles within the riparian areas adjacent to the stream. Slash piles should be far enough away from the stream channel so as any sediment resulting from this action will be less likely to reach the stream.
AQ3, AQ6, W2, W4	Conduct non-commercial treatments of vegetation in the riparian area (as defined by the Aquatic objectives) as a means to help restore plant species composition and structure that would occur under natural disturbance regimes. Further, brush (felled trees) removal, planting of tree seedlings (conifer and deciduous) and shrubs, and animal damage control (no pesticides) are included. Equipment may include chainsaws, pruning shears, winch machinery, and slash-busters. The use of feller-buncher machinery is not specifically provided for here.
AQ3, AQ6, W2, W4	Restore meadow sites along stream corridors or adjacent uplands through removal of conifers which have become established as a result of fire exclusion or other anthropogenic causes.

Subactivity	Riparian vegetation treatment (controlled burning; non-commercial)
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Objective Number	Best Management Practices (BMPs)
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AQ3, AQ6, W2, W4	Thin conifers to accelerate attainment of late-seral conditions. A project example is thinning riparian areas in the ecosystem initiation or competitive exclusion developmental stages within plantations (i.e., where even-aged stands are growing because of previous silvicultural prescriptions, wildfire, or disease).
AQ3, AQ6, W2, W4	To increase species diversity of riparian vegetation, fell conifer and/or hardwood trees (if above natural stocking levels) to create planting gaps.
AQ3, AQ6, W2, W4	Trees felled within riparian area will be used to restore aquatic and terrestrial habitat by returning large and coarse woody debris levels to within the range of natural variability; trees in excess can be removed or piled and burned.
AQ7, AQ10, W2	Restoration and construction will be designed to produce native facultative, wetland and obligate species in wetland/hydric soils and manage to have arrested or retrogressed growth forms in the woody species.
AQ9, AQ10, W2, W4, W5	No new roads or landings will be constructed in RMAs except at minimal crossings designed to attain Aquatic Objectives. Re-route existing roads and restore landings.

Subactivity	Stabilize head-cuts; fish passage; In-stream structures & restoration; Legacy structure removal
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Objective Number	Best Management Practices (BMPs)
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AC1, AQ12, W2	Trees selected for harvest for large wood restoration projects must be spaced at least one site potential tree height apart and at least one crown width from any trees with potential nesting structure for ESA listed bird species.
AC1, AQ12, W2	No suitable nesting trees greater the 36 inches dbh are to be removed. Trees greater than 36 inches may be felled if a BLM determines those trees do not provide suitable nesting habitat.
AC1, AQ4, AQ6, AQ11, AQ12, W2	When removing large wood from blow-down or an area burned by a wildfire, consult a wildlife biologist to determine which trees can be removed without adversely affecting wildlife habitat.
AQ3, AQ4, AQ6, AQ7	Design project to naturally maintain inlet and outlet connections with the main stream channel (i.e., placement of large wood to increase local scour).
AQ3, AQ6, W2, W4	When doing in-channel large wood placement conifers should not be felled in the riparian area or stream channel unless they can be felled directly into the location designed to create the desired stream structure. Felled hazard trees can be used for in-channel wood placement.
AQ4, AQ11, V4	Place large wood and boulders only in those areas where they would naturally occur and in a manner that closely mimics natural accumulations for that particular stream type. Large wood includes whole conifer and hardwood trees, logs, and root wads. Large wood size (diameter and length) should account for bankfull width and stream discharge rates. When available, trees with rootwads should be a minimum of 1.5 bankfull channel width, while logs without rootwads should be a minimum of 2.0 x bankfull width. Structures may partially or completely span stream channels or be positioned along stream banks.

Subactivity	Stabilize head-cuts; fish passage; In-stream structures & restoration; Legacy structure removal
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Objective Number	Best Management Practices (BMPs)
AQ4, AQ6, AQ11	Stabilize active or potentially active head-cuts to prevent further channel degradation (upstream migration of head-cut) and to promote downstream channel aggradation. In streams currently or historically occupied by fish, provide fish passage over the stabilized headcut. Construction will involve use of heavy equipment, such as excavators, spiders, backhoes, dump trucks. These BMPs do not fully cover structures that include the use of gabion baskets, sheet pile, concrete, articulated concrete block, and/or cable anchors; and straight weirs, which disperse flows and can cause channel widening and thus structure "flanking" (erosion around the ends of the structure). The choice of design should be based on site characteristics and limitations (i.e., channel slope, bed material type), but may also be based on material availability, economics, land use, design competence or familiarity, and/or regulatory restrictions (i.e., jump heights for fish).
AQ4, AQ6, AQ11, V4	Rock for boulder weirs will be durable and of suitable quality to assure permanence in the climate in which it is to be used. Rock sizing depends on the size of the stream, maximum depth of flow, plan form, entrenchment, and ice and debris loading.
AQ4, AQ6, AQ11, V4	Install boulder weirs low in relation to channel dimensions so that they are completely overtopped during channel-forming flow events (approximately a 1.5-year flow event). If larger boulders are needed to withstand bankfull flows, boulder size should be determined through a site-specific analysis - such as a shear stress analysis - and should not promote bank scouring and channel routing around the structure.
AQ4, AQ6, AQ11, V4	The use of gabions, cable or other means to prevent the movement of individual boulders in a boulder weir is not allowed.
AQ4, AQ6, AQ11, V4	"V" or "U" boulder weir configurations with the apex oriented upstream. Boulder weirs are to be constructed to allow upstream and downstream passage of all native fish species and life stages that occur in the stream. This can be accomplished by providing plunges no greater than 6 inches in height, allowing for juvenile fish passage at all flows.
AQ4, AQ6, AQ11, V4	Key boulders (footings) or large wood can be buried into the stream bank or channel but will not constitute the dominant placement method of boulders and large wood.
AQ4, AQ6, AQ11, V4	Gravel augmentation should only occur in areas where the natural supply has been eliminated or significantly reduced through anthropogenic means. Gravel to be placed in streams will be a properly sized gradation for that stream, clean, and nonangular. When possible use gravel of the same lithology as found in the watershed. After gravel placement, allow the stream to naturally sort and distribute the material.
AQ4, AQ6, AQ11, V4	Full spanning boulder weir placement should be coupled with measures to improve habitat complexity and protection of riparian areas to provide long-term inputs of large wood.
AQ4, AQ6, AQ11, V4	Avoid full channel spanning boulder weirs.
AQ4, AQ6, AQ11, V4	For large wood restoration projects in RMAs, trees may be removed by cable, horses or helicopters, and felled directly into the stream. Felled trees may be stock piled for later use for instream restoration projects.

Subactivity	Stabilize head-cuts; fish passage; In-stream structures & restoration; Legacy structure removal
Objective Number	Best Management Practices (BMPs)
AQ4, AQ6, AQ11, V4	Boulder weirs are to be placed diagonally across the channel or in more traditional design.
AQ4, AQ6, AQ11, V4	Anchoring large wood with cable should be used sparingly, primarily for the protection of infrastructure and in consideration of downstream landowner concerns. Before using cable, attempt to use, when feasible, the following anchoring alternatives, in preferential order: 1) use adequate sized wood sufficient for stability; 2) orient and place adequate sized wood in such a way that wood movement is unlikely; 3) use ballasting (gravel and/or rock) to increase the mass of the structure to resist movement; 4) use large boulders as anchor points for the large wood; and 5) pin wood to large rock with rebar to increase wood weight.
AQ4, AQ6, AQ11, V4, W2	Reconnect and/or restore existing side channels and alcoves to increase rearing habitat for juvenile fish and high flow refuge areas for all life stages of fish. Functioning side channels have inlet and outlet connections to the main channel and often contain flow only during flood events-bankfull or greater. Functioning alcoves are back-water channels that typically contain water during both low and high flows. This action includes the removal of plugs which block water movement through side channels and alcoves. Further, side channel and alcove improvements include fill removal within channels and alcoves, large wood and/or boulder placement, riparian planting, etc. Boulder placement may be used in the main river to stabilize the channel and bring the entrance of the side channel into alignment (vertically and horizontally). Construction will involve use of heavy equipment, such as excavators, sypders, backhoes, and dump trucks. These BMPs do not cover creation of new side channels, or excavation of severely aggraded (completely filled in) side channels and alcoves.
AQ4, AQ6, AQ7	Design and construct side-channels in such a manner as to prevent the capture and relocation of the main channel.
AQ4, AQ6, AQ7	Excavated material removed from side-channels or alcoves will be hauled to an upland site or spread across the adjacent floodplain in a manner that does not restrict floodplain capacity.
AQ5, AQ10,W2, WSR1	Involve a wildlife biologist in all "Individual Tree Removal" planning efforts, and in considering whether individual trees are suitable for nesting or have other important listed bird habitat value.
AQ6, AQ11, AQ12	If the structure being removed contains material (i.e., large wood, boulders, etc.) that is typically found within the stream or floodplain at that site, the material can be reused to implement habitat improvements described under Large Wood, Boulder, and Gravel Placement activity category in these BMPs otherwise removed non-native material and place above the 100 year floodplain.
AQ6, AQ11, AQ12	Assess sites for a potential to headcut below the natural stream gradient.
AQ6, AQ11, AQ12	Construct weirs in a 'V' shape, oriented with the apex upstream, and lower in the center to direct flows to the middle of channel.

Subactivity	Stabilize head-cuts; fish passage; In-stream structures & restoration; Legacy structure removal
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Objective Number	Best Management Practices (BMPs)
AQ6, AQ11, AQ12	Large roughness elements, such as wood and boulder placement, are the preferred head-cut treatment for those areas where large wood and boulders provide natural grade control. This technique is applicable to a wide range of stream types, from low gradient meandering streams (less than 1%) to high gradient cascade channels (greater than 8%). The goal of using large roughness elements is not to completely halt the incision process, but rather to slow it down and spread the elevation change over a greater length of channel. Because log jams are porous structures, not all of the sediment will be held in place; sediment inputs, however, will be spread out over time and space.
AQ6, AQ11, AQ12	When removal of buried (keyed) structures may result in significant disruption to riparian vegetation and/or the floodplain, consider using a chainsaw to extract the portion of log within the channel and leaving the buried sections within the streambank.
AQ6, AQ11, AQ12	To promote or maintain fish passage, ensure that wood and boulder structures should contain enough spaces to allow for up and downstream movement of fish.
AQ6, AQ11, AQ12	Short-term headcut stabilization (including emergency stabilization projects) may occur without associated fish passage measures. However, fish passage must be incorporated into the final head cut stabilization action and be completed during the first subsequent in-water work period.
AQ6, AQ11, AQ12	Rock and wood structures should mimic natural colluvial features, such as debris flow or landslide deposits, to provide channel stabilization.
AQ6, AQ11, AQ12	If headcutting and channel incision are likely to occur due to structure removal, additional measures must be taken to reduce these impacts.
AQ6, AQ11, AQ12	Remove large wood, boulders, rock gabions, and other in-channel structures that were constructed to improve fish habitat but were installed in a manner that was and continues to be inappropriate for the given stream type. Examples of such structures, which were typically installed in the 1980s and early 1970s, include boulder configurations in meadow streams, stair-step perpendicular log weirs, and rock gabions. These legacy structures typically resulted in widened stream channels, increased width/depth ratios, decreased sinuosity, and increased stream exposure to solar radiation. Removal of legacy structures will include the use of excavator-type machinery, spyders, backhoes, and dump trucks.
AQ6, AQ11, AQ12	If several structures will be used in series, space the weirs at the appropriate distances to promote fish passage of all life stages of native fish. Incorporate state fish passage criteria (jump height, pool depth, etc.) in the design of weir structures. Recommended weir spacing should be no closer than the net drop divided by the channel slope (for example, a one foot high weir in a stream with a two-percent gradient will have a minimum spacing of 50-feet).
AQ6, AQ11, AQ12	Key weirs into the stream bed to minimize structure undermining due to scour, preferably at least 2.5 their exposure height. The weir should also be keyed greater than 8 feet into both banks, if feasible.
AQ6, AQ11, AQ12	Include fine material in the weir material mix to help seal the weir/channel bed, thereby preventing subsurface flow. Geotextile material can be used as an alternative approach to prevent subsurface flow.

Subactivity	Stabilize head-cuts; fish passage; In-stream structures & restoration; Legacy structure removal
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Objective Number	Best Management Practices (BMPs)
AQ6, AQ11, AQ12	In streams without current or historic fish presence, it is recommended to construct a series of downstream log or rock weirs to expedite channel aggradation.
AQ6, AQ11, AQ12	In streams with current or historic fish presence, provide fish passage over stabilized head-cut. Log or rock weir structures may be used to provide fish passage.
AQ6, AQ11, AQ12	If the structure is being removed because it has caused an over-widening of the channel, consider implementing other restoration actions to decrease the width to depth ratio of the stream at that location to a level commensurate with upstream and downstream (within the same channel type).
AQ6, AQ11, AQ12	If the structure being removed is keyed into the bank, fill in "key" holes with native materials as to restore contours of stream bank and floodplain. Compact the fill material adequately to prevent washing out of the soil during over bank flooding. Do not mine material from the stream channel to fill in "key" holes.
AQ6, AQ11, AQ12	Rock and wood should be sized so that it is not mobile during floods. An engineering technical note regarding buoyancy is available through NRCS (http://largewoodww.or.nrcs.usda.gov/technicalengineerin~eng-notes.html).
AQ6, AQ12	Rock and organic material placement is often used on severe headcuts in meadow areas to stop further channel incision. Stream types are typically Rosgen "C" and "E" channel types.
AQ6, AQ12	Focus stabilization efforts in the plunge pool, the head cut, as well as a short distance of stream above the headcut.
AQ6, AQ12	Minimize lateral migration of channel around head cut ("flanking") by placing rocks and/or organic material at a lower elevation in the center of the channel cross section to direct flows to the middle of channel.
V4, W2, W4	Individual trees or small groups of trees (<5) used for restoration projects should come from the periphery (i.e. within the first 2 tree lengths) of permanent openings (roads, etc) or from the periphery of non-permanent openings (e.g., plantations, along recent clear-cuts, etc).

Activity	Wildfire use and prescribed burning
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Subactivity	General
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Objective Number	Best Management Practices (BMPs)
AC1, VR1, WN1, WSR1	A Resource Advisor will be dispatched to all fires occurring in or threatening a WSR, Wilderness, WSA, ACEC or RNA. All prescribed burn activities should conform to "light hand on the land" techniques whenever possible, and at all times in WSAs.
AC1, VR1, WSR1	Consider effects on visual quality when making fire suppression and rehabilitation decisions. Evaluate need to rip soils if extensive soil compaction has occurred.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
AQ1, AQ11	Avoid delivery of chemical retardant, foam, or additives to surface waters, source water protection areas, or water of domestic use. An exception may be warranted in situations where overriding immediate safety imperatives exist, or, following a review and recommendation by a resource advisor and a fishery biologist, when the action agency determines an escape fire would cause more long term damage to aquatic habitats than chemical delivery to surface waters.
AQ1, AQ3, AQ5, AQ6	Use erosion control techniques such as tilling, waterbaring, or debris placement on firelines. Construct waterbars on tractor and hand firelines.
AQ1, AQ3, AQ6, W2	Avoid placement of any fireline where water would be directed into waterbodies, floodplains, wetlands, headwalls, or areas of instability.
AQ1, AQ6, V2	Locate incident bases, camps, helibases, staging areas, helispots, and other centers for incident activities outside of RMAs. If the only suitable location for such activities is within the RMA, an exemption may be granted following a review and recommendation by a resource advisor. The advisor will prescribe the location, use conditions, and rehabilitation requirements, with attainment of aquatic objectives as a primary goal. Use an interdisciplinary team, including a fishery biologist, to locate incident base and helibase locations during presuppression planning, with attainment of aquatic objectives.
AQ2 , S1, V1, V4	The location and construction of handlines should result in minimal surface disturbance while effectively controlling the fire. Hand crews should locate lines to take full advantage of existing land features that represent natural fire barriers. Whenever possible, handlines should follow the contour of the slope to protect the soil, provide sufficient residual vegetation to capture and retain sediment, and maintain site productivity. Avoid the use of heavy earth-moving equipment except where high value resources are being protected. The soil, provide sufficient residual vegetation to capture and retain sediment, and maintain site productivity. Avoid the use of heavy earth-moving equipment except where high value resources are being protected.
AQ2, F1, S1, V1	Where backyard stewardship contracts are forged to treat the hazardous fuels in the WUI, consider including an agreement with adjacent landowner/stewards to refrain from accessing their private lands or other BLM administered land through the treated area.
AQ3	Construct fire lines and ditches by hand on all slopes greater than 35 percent.
AQ3	Do not use heavy equipment on slopes greater than 35%, unless human health and safety are immediately at risk.
AQ3, AQ9, AQ10, AQ12, W2	Limit hand constructed firelines inside riparian management areas and prohibit machine constructed firelines in riparian management areas. Where hand constructed firelines are necessary in riparian management areas, angle the approach rather than have it perpendicular to the riparian management area.
AQ3, AQ6, AQ11, AQ12, W2, W4	Use temporary stream crossings to temporarily cross riparian management areas or streams to access the opposite bank with any equipment or vehicles (including ATVs). Follow BMPs under Stream Crossings.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
AQ3, AQ6, AQ12, W2, W4	Do not locate incident bases, camps (including spike/remote camps), helibases, staging areas, constructed helispots, and other centers for incident activities in riparian management areas or within 200 feet of any waterbody, floodplain, or wetland.
AQ3, AQ6, AQ9, AQ12, W2	Prohibit delivery of foam or additives to waterbodies, floodplains, or wetlands.
AQ3, AQ6, AQ9, AQ8, AQ12, F3,W2	Maintain and refuel equipment (e.g., drip torches and chainsaws) a minimum of 100 feet from waterbodies, floodplains, and wetlands. Prescribed or wildfire ignition within 50 feet of live water should not be done with toxic chemicals or fossil fuel ignition sources. Portable pumps may be refueled within 100 feet if a spill containment kit is present during refueling.
AQ3, AQ6, F3, S1, V2, W2	Minimize soil disturbance when disposing of treated fuels by using a lop-and-scatter method to dispose of fine fuels (no-burn) over bare soil areas. With heavier treatments, hand pile and burn during winter months when the ground is wet or frozen (snow). Swamper burning, or dragging treated fuels into a single pile, minimizes the area of detrimental soil damage from pile burning. Use burn pans or Kevlar burn cloths to absorb heat under the pile.
AQ3, AQ6, F3, W2	Locate hand piles outside of or above the first slope break of fish-bearing streams, perennial streams, intermittent streams and lentic areas. The greater of these areas applies.
AQ3, AQ7, AQ9, AQ12	Store and dispose of ignition devices/materials (e.g., flares, plastic spheres, etc.) outside riparian management areas.
AQ3, AQ9, AQ10, AQ12, W2, W4	Avoid brushing along stream channels and floodplains. Brushing may be unavoidable if it is necessary for human safety or to avoid threats to structural stability where modifying structure design would not eliminate the need for brushing. If the stream channel is within 10 feet measured horizontally from the edge of road, then restrict brushing width to 4 feet of the edge of the drivable road surface. Turn-out should be treated the same as the edge of the road, but not used to determine brushing width for other portions of the road. Maintain riparian overstory to provide stream shade. Maintaining a minimum height of riparian vegetation by brushing once every three years instead of once every 5 years or when vegetation is horizontal with the road on the fill slope. Prune riparian vegetation rather than completely removing it. Preserve as much ground vegetation as possible, and brush only where necessary for human safety rather than for convenience.
AQ3, W2	Avoid ignition of large woody material that is touching the high water mark of a waterbody or that may be affected by high flows.
AQ4	Avoid contributing excess nitrogen and phosphorous to stream channels (including perennial, intermittent and connected ephemeral draws in the John Day Clarno Uplands Level 4 EPA ecoregion and perennial and intermittent stream channels in all other Level 4 Ecoregions) during fuels reduction projects. Lop and scatter within 20 feet of stream channels and do not burn these areas within three years. An exception is the presence of a sufficient type of riparian species (such as cottonwoods) and width of riparian buffers along stream channels to eliminate the contribution of nitrogen and phosphorous from burning in these areas.

Subactivity	General
Objective Number	Best Management Practices (BMPs)
AQ5, AQ10, W2, WSR1	Prohibit mechanical piling within riparian management areas and prohibit mechanical fuel reduction equipment within 75 feet of streams and other waterbodies.
AQ6, AQ11, AQ12, F3, VR1, WSR1	Prohibit ignition within riparian management areas, and locate ignition lines away from large open meadows, unless prescribed to meet aquatic objectives.
AQ6, AQ11, AQ12, V4	Prohibit activities that will degrade the sediment regime of perennial, perennial interrupted or intermittent stream channels. Activities may be allowed if the long term intent of an activity is to restore stream physical function (e.g., juniper removal, thinning conifer encroachment, etc). The combination of BLM actions to restore upland watershed conditions and other landowner activities will not risk (1% or 100 year event) degrading sediment and flow regimes longer than three years. Limit treatment of riparian areas within each sixth field sub watershed, to less than 10% of the total riparian vegetation within any one year period. As an exception, low intensity burns backing into riparian areas may not exceed 50% of riparian area in 6th field watershed.
AQ6, AQ7	Keep high intensity wildfire, concentration burns and broadcast burns at least 100 feet away from riparian management areas unless prescribed to meet aquatic objectives.
AQ6, AQ9, W2	While heavy equipment may be useful in fire rehab, prohibit tractor piling in areas that could deliver sediment to waterbodies, floodplains, wetlands.
AQ9, AQ12, W2, W4	Retain 20% of the upland perimeter of lentic areas in vegetative species and structure needed for hiding cover, life cycle completion, and corridors of site riparian-dependent biotic community. This may translate into leaving areas untreated for fuels or other activities. The final delineation will be made by an ID team.
F1, R1, T1	Design features should be employed to reduce the potential indirect effects of the fuels treatment on designated trails. It may be appropriate to move or close designated trails or roads within the WUI zone to reduce conflicts between users and adjacent landowners.
F1, R1, T1	When physical barriers are left or installed as part of the fuels treatment, (e.g., boulder placement, log barriers, fences, and vegetative patches or strips) they should be designed in deliberate patterns to discourage unauthorized use.
V2	Any associated surface-disturbing activities (i.e. control lines, access routes, helipads, etc.) must be located outside special status plant habitat.
V2	Treatments will be designed to minimize travel through special status plant habitat.
V4, W2	Prescribed fire must achieve down wood volumes referenced in Down Wood Table of Vegetation Section.
V4, W4, WSR1	Provide mitigation, by reducing, restoring or compensating for important special habitats that are altered by management actions.
V4, WSR1	Reseed areas disturbed during project activities with a mix of grasses, forbs, and shrubs to meet site-specific needs or habitat requirements.

Appendix B: Monitoring

Introduction

Land use plan monitoring is the process of:

1. Tracking the implementation of land use planning decisions (Implementation Monitoring),
2. Collecting data/information necessary to evaluate the effectiveness of land use planning decisions (Effectiveness Monitoring), and
3. Changing course within the RMP, where the course is mapped by monitoring results (Adaptive Management).

In the land use plan, each resource or use identified desired outcomes in the form of objectives. These objectives are followed by management actions necessary to attain those objectives. Actions may occur once or on a regular basis. This monitoring plan will follow up on the management actions and document BLM's progress toward full implementation and attainment of objectives. The involvement of Tribes, state and local governments and the public will be essential to the success of this monitoring plan.

Adaptive Management

Adaptive management is a system of management practices based on clearly identified outcomes and monitoring to determine if management actions are meeting objectives. If management is not trending toward attaining objectives, adaptive management facilitates those necessary changes. Changes may include the addition, modification, or removal of objectives, actions or guidelines. Most adaptive management decisions are identified in the RMP. The changes not identified in the RMP may require plan maintenance or a plan amendment.

Monitoring Plan

The list below contains monitoring questions necessary to evaluate the implementation and effectiveness of the RMP. The monitoring frequencies and suggested methodologies have also been provided. In the event that monitoring identifies ineffective management, adaptive management strategies are identified. The following list of monitoring is organized in order of cost effectiveness for accomplishing priorities. Cost effectiveness may change due to new technology and partnership opportunities.

Monitoring Type Assessment

Monitoring Question (A1):	Are invasive and non-native weed species establishing in new sites or expanding current sites?
RMP Objectives	V1, V3
Method	Use GIS to track field sightings, current locations and densities of invasive plants, and their change over time in relation to treatments.
Frequency	Annually
Adaptive Management	Modify criteria for vegetation treatment methods and priorities.
Monitoring Question (A2):	Is BLM management restoring the physical function of streams and wetland areas?
RMP Objectives	AQ3
Method	PFC Technical References 1737-15 and 16.
Frequency	Update inventory during projects or assessments if previous inventories either indicate non-attainment, are older than 10 years, or both.
Adaptive Management	See Table 3 (Management of Riparian Areas by Function Rating) in the RMP/ROD.

Monitoring Type	Effectiveness
Monitoring Question (E1):	Are key vegetative communities at or moving toward targeted Acceptable Range of Variability (ARV)? Are vegetative attributes within desirable ranges for production, bare ground, canopy cover, and annual grass and noxious weeds? Is the health and productivity of rangeland, riparian and forest systems increasing? Is there invasion or loss of woody species in forests? Is vegetation structure sufficient to attain vegetation, wildlife and soils objectives?
RMP Objectives	V1, V2, V3, V4, AQ2, AQ9, S1, S2, F2, W1, W2, W3, W4, W5, W6
Method	Summarize changes to plan level ARV objectives based on BLM treatments and wildfire. Complete new or change detection inventories of the plan area using remote sensing, ground truthing, or a combination of the two or update existing data sets based on known disturbances or project activities. Use Core Terrestrial Indicators as described in ‘Terrestrial Indicators: Selection Process and Preliminary Recommendations’ or subsequent publications to measure the bare ground, vegetation composition, non-native invasive species, plant species of management concern, and vegetation height. Use line-point intercept and/or plot-level species inventory to measure bare ground, vegetation composition, non-native invasive species, and plant species of management concern. For forests, use Stand Density Index using tree density and diameter. Measure vegetation height measurement in the field or in combination with remote sensing and other technology. Collect other parameters as needed to be consistent with the Bureau’s Special Species Policy (6480).
Frequency	5 years or when disturbance exceeds 5% of total land base in plan area or 10% of BLM managed lands.
Adaptive Management	Add guidelines, change actions, amend BioPhysical Setting descriptions, or adjust the focus/range of Acceptable Range of Variability. Modify actions in order to improve the health and productivity of rangeland, riparian and forest systems. Modify actions to improve vegetation structure and composition for wildlife.
Monitoring Question (E2):	In light of climate change, are management actions and guidelines sufficient to attain RMP objectives for vegetation, wildlife and aquatics?
RMP Objectives	AQ1, AQ2, AQ7, V2, V3, F2, W5
Method	Gather climate information from regional and national datasets. Monitor peak flows using peak crest gages. Identify essential data gaps that need to be filled to answer the monitoring question. Install or modify existing climate monitoring sites and peak crest gauges, in cooperation with regional and national efforts. Correlate water quality monitoring with water supply monitoring in conjunction with the USGS, Forest Service, watershed councils, and other relevant partners.
Frequency	5 years
Adaptive Management	Update the descriptions of Biophysical Settings, shift focus within ARV, fire regime, and/or modify actions and guidelines. Change allocation of water use and/or modify instream flow goal levels to reflect changes in water cycle for values related to instream flows.
Monitoring Question (E3):	Are ACEC values being protected?
RMP Objectives	AC2
Method	Specific technical references and standard inventory procedures unique to the values protected.

Frequency	10 years
	Adaptive Management If the values for which each ACEC was proposed are not being protected, alter allowable management actions to protect ACEC values.
Monitoring Question (E4):	Are grazing allotments meeting Land Health Standards and Guidelines for Grazing Management?
RMP Objectives	L1
Method	Follow guidance from current technical references and local standards such as: 1) Upland watershed: Use TR1734-6 2) Riparian: Use TR1737-15&16W 3) Ecological processes: Use TR1734-6 4) Water quality: Use Oregon Water quality Standards, measures identified in TMDLs, WQRPs/WQMPs, or TR1737-15&16 5) Quality habitat: Use pertinent Biological Assessments.
Frequency	As needed or directed to ensure attainment of RMP objectives.
Adaptive Management	Follow guidance from 43 CFR 4180, currently: "The authorized officer will... formulate, propose, and analyze appropriate action to address the failure to meet standards or to conform to the guidelines. The authorized officer will issue a final decision... no later than 24 months after a determination. The authorized officer will implement the appropriate action as soon as practicable, but not later than the start of the next grazing year."
Monitoring Question (E5):	Is management for species that are listed under the Endangered Species Act consistent with recovery plans and designated critical habitat? Have protection measures maintained populations of BLM special status plant species?
RMP Objectives	V2
Method	All actions authorized by the BLM that "may affect" BLM special status plant populations will be surveyed. Inventory or monitor before every action that "may affect" BLM special status plant populations. If there was harm, monitor every year until stable. If there was no harm, monitor in three years and then assume five-year cycles.
Frequency	1-5 years
Adaptive Management	If management actions are not resulting in compliance with the Endangered Species Act and recovery plans for designated critical habitat, update guidelines or actions necessary to comply. If no harm is frequently associated with specific mitigations, reduce monitoring frequency when those mitigations are applied.
Monitoring Question (E6):	Are detrimental soil impacts (see glossary), including loss of organic matter content, compaction, soil displacement, and erosion limited to less than 15 percent of project areas (6,500 square feet per acre) on non-sensitive soils? Projects include, but are not limited to, ground-based timber harvest activities, mineral use, juniper thinning, authorized OHV use off designated trails, and other activities.
RMP Objectives	S2
Method	Use sampling or GIS to map the aerial extent of detrimental soil impacts on the first three of each project (unique combinations of activity type, equipment, methods, and landscapes). After three have been sampled, use sampling or GIS to map approximately 10 percent of each project area. The area of detrimentally

impacted soils is comprised of the area of compacted, displaced or eroding soils;based on the measures below. For compaction: Use a penetrometer to measure compacted areas (a 15% increase in bulk density or a 10% reduction in total porosity). Use a methodology similar to (Howes and others 1983). If field testing is not possible, map all skid trails and landings. For each, record thenumber of passes. Unless site specific measurements show otherwise, areas with five or more, one-way passes are considered compacted.

For Displacement: Displacement is removal of the forest/range flood and more than1 inch of the surface mineral layer. Soil may be in piles with subsoil at the surface.

Map areas of soil displacement.

For Erosion: Eroding soils are those that exceed their acceptable rate of erosion based on their T-Factor. Indicators of eroding soil includes rills, pedestals, deposition, and loss of soil cover. Select a statistical sampling method using standard methods, such as Statistical Methods Commonly Used in Soil Data Analysis by Blaney, Warrington, and Ponce Watershed Development Group (WSDG), Technical Paper WSDG-TP-00011, or other appropriate research approved techniques.

Frequency

Yearly

Adaptive Management

If the acres of productive soil are diminishing or acres of eroding soil are increasing, conduct a plan amendment or plan maintenance to either adjust the soils guidelines on amount of detrimental soil impacts allowable (15%) on existing and new facilities and infrastructure to balance the difference, or adjust the Soils objective to allow for the rate of loss identified by the monitoring.

Monitoring Question (E7):

Is the acreage of the plan area with soil disturbance from facilities staying constant or increasing?

RMP Objectives

S2

Method

Use a GIS layer to track acres (via project polygons) of soil disturbance from facilities and acres of soil productivity restoration (may include restoration of eroding roads and other facilities). Net should be at least zero.

Frequency

Annually

Adaptive Management

If the acres with soil disturbance are increasing, either A) adjust the area required to mitigate for soil disturbance from new facilities and infrastructure to balance the difference, or B) adjust the Soils objective to allow for the rate of loss identified by the monitoring.

Monitoring Question (E8):

Are authorized or unauthorized activities in areas managed to protect wilderness character resulting in maintenance of wilderness character for each unit and in concert with adjacent management?

RMP Objectives

WC2

Method

Complete portions of Wilderness Inventory consistent with current policy, as needed.

Frequency

5 years

Adaptive Management

If authorized uses are not maintaining wilderness character and in concert with adjacent management, add or remove management actions necessary to maintain wilderness character.

Monitoring Question (E9):	Are wilderness areas maintaining their wilderness character and the values for which Congress designated them?
RMP Objectives	WN1
Method	Follow BLM Manual 6340 (Management of Designated Wilderness Areas) and BLM Manual 6330 (Management of Wilderness Study Areas).
Frequency	5 years
Adaptive Management	If Wilderness areas are losing wilderness character, add or remove management, as necessary.
Monitoring Question (E10):	Are adult long-billed curlew utilizing the Horn-Butte area for reproduction?
RMP Objectives	W5, AC2
Method	Monitor the area between March and April.
Frequency	Yearly
Adaptive Management	Modify actions to attain wildlife objectives and to protect the values of the ACEC.
Monitoring Question (E11):	How is boating use changing through time? Does boating use match the prescribed recreation settings?
RMP Objectives	WSR1, R1
Method	Use registration data. Conduct river ranger compliance checks. Completed registration forms are collected and entered into a local BLM database.
Frequency	Annually
Adaptive Management	Modify river management through education, permits or recreation site management.
Monitoring Question (E12):	Would a new campground near Ellingson Mill improve the recreational experience, help to prevent unsanitary conditions, and protect water quality?
RMP Objectives	R1, R3, WSR1, AQ1, AQ2, S2
Method	Measure e-coli and shade using DEQ standards. Monitor sanitation and ecological disturbance levels using Limits of Acceptable Change. Collect information on user satisfaction.
Frequency	5 years
Adaptive Management	Consistent with monitoring results, install a new campground with toilet facilities near Ellingson Mill.
Monitoring Question (E13):	Are BLM special status plant species stable or with an upward population or habitat trend?
RMP Objectives	V2
Method	Measure individual species distribution, number, and habitat condition (weeds, soil movement, etc.).
Frequency	5 years or 1 year for at-risk or federally listed.

Adaptive Management	If stable or upward trends are not achieved, increase monitoring frequency, and update guidelines or actions necessary to protect special status plant species.
Monitoring Question (E14):	Is dispersed or developed recreation contributing to non-attainment of RMP objectives for resources and recreation? Is BLM management attaining the recreation settings prescribed for each Special Recreation Management Area?
RMP Objectives	R1, R2, R3, R4, WSR1, AQ1, AQ2, AQ2, AQ10, S2
Method	Standard Methodology for resource of concern may include LAC, using the physical and/or social components. Survey SRMA settings for benefits-based recreation, following standard methodologies or surveys for each attribute.
Frequency	5 years or more frequently in areas with high conflict.
Adaptive Management	Actions necessary to protect resources, such as campsite hardening, rehabilitation or closure may be taken at any time, if necessary. Modify recreation setting, add guidelines, change permitted uses or add actions.
Monitoring Question (E15):	Are road densities at or below Average Allowable Road Density Values for the specific Travel Management Area?
RMP Objectives	T1
Method	Using GIS, determine the existing road densities for each of the six travel management areas.
Frequency	5 years
Adaptive Management	In areas where the actual road densities are within 0.20 mile/square mile of the Average Allowable Road Density Values, field check road closures to verify effectiveness of closure.
Monitoring Question (E16):	Did BLM avoid, protect, or mitigate 100% of all significant archeological sites from proposed ground-disturbing activities at the project-specific level? Were 100 percent of all sites located during pre-project inventories assigned to one or more of the BLM's Use Categories?
RMP Objectives	C1
Method	Track ground-disturbing activities and significant sites, in either a corporate or local database. Attribute according to local and national protocols and policies.
Frequency	Annually
Adaptive Management	If plan objectives are not being met, increase inventory efforts or change plan objectives, actions, or guidelines.
Monitoring Question (E17):	Are control measures for invasive and non-native weed species effective in reducing and eliminating the spatial extent and total numbers of invasive plant populations?
RMP Objectives	V1, V4
Method	Visit 10% of noxious weed treatment sites and evaluate for effectiveness of control measures. Prioritize analysis areas with counties, weed boards and others treating weeds in the plan area.

Frequency	Annually
Adaptive Management	Modify criteria for vegetation treatment methods and priorities through plan maintenance or a plan amendment.
Monitoring Question (E18):	Is BLM management moving the Fire Regime Condition Class on BLM land toward FRCC1?
RMP Objectives	F3
Method	All fuels related projects will be monitored consistent with the COFMS fuels monitoring plan. Collect Stand level FRCC for each vegetation management project.
Frequency	Determine stand level FRCC Summarize Stand Level FRCC yearly. Evaluate Strat level FRCC every 10 years.
Adaptive Management	If management is not moving toward FRCC 1, add, remove, or modify actions to attain objectives.
Monitoring Question (E19):	Are BMPs effective at attaining RMP objectives for aquatics, soils and wildlife? Are BMPs being consistently implemented on every project?
RMP Objectives	S1, S3, AQ2, W2, W6
Method	The methodology would depend on the BMP being monitored. Monitor a random selection of 10 percent of the land-disturbing activities (approximately 3) and determine if the projects used BMPs during implementation. For projects using BMPs, assess the effectiveness of BMPs.
Frequency	Annually
Adaptive Management	Update plan guidelines and BMPs.
Monitoring Question (E20):	Are mineral lease site plans of operation sufficient to eliminate impacts to stream channel integrity, natural sediment and natural flow regimes?
RMP Objectives	AQ5, EM2
Method	Review with RMP's aquatic, vegetation, soils, visual, and wildlife objectives as criteria. Follow federal energy and minerals laws and policies.
Frequency	5 years
Adaptive Management	Amend plans of operation sufficiently to eliminate impacts to stream channel integrity, natural sediment and natural flow regimes.
Monitoring Question (E21):	Are visitors using the Rudio Plateau reporting experiences consistent with that for ERMA and Middle Country?
RMP Objectives	R1, R4
Method	Survey ERMA settings for benefits based recreation, following standard methodologies or surveys for each attribute.
Frequency	10 years
Adaptive Management	Modify management to meet recreation setting for Middle Country.

Monitoring Question (E22):	Are final Travel Management Plans (TMP) completed in accordance with criteria listed in Transportation Objective T3?
RMP Objectives	T3
Method	Review available final TMP against decision criteria.
Frequency	Every 5 years
Adaptive Management	Modify Travel Management Plans (TMPs) to meet decision criteria. Alternatively, conduct plan maintenance or amend plan to include new pertinent criteria that developed during travel management planning.
Monitoring Question (E23):	<p>Within the Wild and Scenic River Corridor, is authorized livestock grazing maintaining and/or allowing recovery within site capability of:</p> <ul style="list-style-type: none"> • diverse plant communities of upland vascular vegetation and ground cover • bank-stabilizing vegetation • biological soil crusts <p>Are vegetation recovery rates of grazed and ungrazed areas equal within the Wild and Scenic River?</p>
RMP Objectives	AQ1, WSR1, L2
Method	Daubenmire methodology described in Interagency Technical Team (1996a) for new sites. Existing sites use existing techniques. Also incorporate a point sampling technique for measuring soil cover using the legs on the corners of the plot frame. Remote Sensing of Riparian vegetation with ground truthing of sample sites, stratified by broader ecological site. Methods include Belnap et al. (2001) and Daubenmire. These methods were adapted to fit the landscape and monitoring question.
Frequency	Mid-term Review 10 years after baseline data is established. Final Determination 15 years after baseline data is established or the amount of time required to show ecological change.
Adaptive Management	At the midterm review, if recovery/changes are not similar between grazed and ungrazed sites, modify season of use, change duration of grazing, alter the number of AUMs, exclude grazing or use some combination of above. At final determination, issue a final determination on whether these resources are meeting the standard of equal recovery. If changes in grazed areas are not similar to ungrazed areas, grazing will be canceled in pertinent portions of pastures.
Monitoring Question (E24):	Is BLM meeting state water quality standards, meeting the state anti-degradation policy and not exceeding BLM's allocation of Total Maximum Daily Loads for water quality? Is BLM management and cooperative watershed restoration work contributing to attainment of 'excellent' or better water quality discharging from the John Day Basin and filling the Wild and Scenic Rivers?
RMP Objectives	AQ4, AQ5, AQ6, AQ8, WSR1
Method	Follow Oregon DEQ standards, EPA biannual reporting requirements or those in Water Quality Restoration Plans. Participate in the Oregon Water Quality Index Sites (ODEQ) in the John Day Basin. Monitor Wild and Scenic River water quality and streams where BLM management may have measurable effects on water quality. Use DEQ protocols to measure shade or other surrogates. Monitor each project that will temporarily or permanently reduce shade (or other surrogates/parameters) before and after the project to ensure that BLM is meeting TMDL allocations. For streams not specifically modeled by TMDL, correlate allocation by ecoregions, per the WQMP.

Frequency	Annually
Adaptive Management	Modify BMPs and management of uses per Table 3 (Management of Riparian Management Areas RMAs by Function Rating) in this RMP/ROD. Where modification of management activities are sufficient to attain PFC and/or are in an upward trend, but are not sufficient to attain state water quality standards and meet TMDLs, apply active restoration. Participate in cooperative restoration efforts across the basin.
Monitoring Question (E25):	Is BLM management allowing recovery of willow and cottonwood communities of the lower John Day River between Service Creek and Cottonwood Bridge?
RMP Objectives	AQ1, AQ8, AQ9, WSR1, L1
Method	Map entire river willow and cottonwood extent (greater than 10% cover) on aerial photos from the river, with occasional field stops as needed. (Continues existing studies from 1981, 1995, and 2006.)
Frequency	5 years
Adaptive Management	Modify management practices and restoration activities to allow recovery.
Monitoring Question (E26):	Are streams and wetland areas not properly functioning physical condition moving toward attainment by 2023?
RMP Objectives	AQ3, WSR1
Method	Monitor the most limiting factor. Select monitoring technique unique to the topic, site and recent science.
Frequency	Every 5-10 years, appropriate to the factor being measured.
Adaptive Management	See Table 3 (Management of Riparian Areas by Function Rating) in the RMP/ROD.
Monitoring Question (E27):	Are land uses and restoration actions meeting desired conditions for stream channels (see Appendix E)? Focus on streams at properly functioning condition that provide spawning and rearing habitat for locally important fish stocks (including but not limited to bull trout and anadromous fish) where BLM manages at least 0.5 contiguous miles of stream.
RMP Objectives	AQ9, AQ3
Method	Field monitoring techniques include, but are not limited to Multiple Indicator Monitoring protocol (Technical Reference 1737-23), Oregon Department of Fish and Wildlife stream survey information, and regional monitoring efforts like the PACFISH/INFISH Biological Opinion (PIBO) Effectiveness Monitoring Program. Monitor stream reaches at properly functioning condition and with more than 0.5 miles of contiguous BLM ownership. This is approximately 120 miles of stream within the plan area.
Frequency	3-5 years. Analyze all data every 10 years.
Adaptive Management	If BLM management is contributing to non-attainment, adjust BLM management so that streams will meet desired conditions. If factors beyond BLM's control are contributing to non-attainment, BLM consider partnerships and other collaborative ways of attaining desired conditions.

Monitoring Question (E28):	Are authorized or unauthorized activities in the WSAs resulting in maintaining their wilderness character for potential designation as wilderness by Congress? Did the paleontology research carried out in the Painted Hills CAMP use the minimum tool necessary to maintain the visual qualities and wilderness character of the Sutton Mountain WSA?
RMP Objectives	AC4, WC1, WN1
Method	Follow BLM Manual 6330 – Management of Wilderness Study Areas. Track proposed research and site-specific analysis of actions in WSA or areas where wilderness character is being protected. Use national WSA monitoring protocol.
Frequency	5 years
Adaptive Management	If authorized or unauthorized users are not maintaining wilderness character, mitigate the effects.
Monitoring Question (E29):	On Rudio Mountain, has the classification of Open to Off-Highway Vehicle triggered change to a Limited classification?
RMP Objectives	AQ2, W2, R6
Method	Follow standard methodologies associated with triggers.
Frequency	3 years
Adaptive Management	If one or more of the triggers are exceeded, prohibit off-route travel and limit travel to designated routes.
Monitoring Question (E30):	Is BLM grazing management changing the suitability of anadromous fish spawning habitat?
RMP Objectives	WSR1, AQ3
Method	Participate in basin ODFW spawning surveys. Conduct monitoring in stream reaches within grazing allotments rated as “may affect, likely to adversely affect.” Utilize bureau standard monitoring methodologies; will likely include photo monitoring.
Frequency	Annually
Adaptive Management	Modify grazing management using practices listed in RMP or change availability of land for livestock grazing.

Monitoring Type

Implementation

Monitoring Question (I1):	Is grazing occurring as authorized?
RMP Objectives	WSR1, L2
Method	43 CFR 4100 Regulations.
Frequency	Whenever trained personnel are within Wild and Scenic Rivers.
Adaptive Management	Follow guidance from 43 CFR 4150 and 4140. Modify actions and grazing land use allocations to meet RMP objectives.
Monitoring Question (I2):	Are 100% of all proposed project actions examined for their potential for the discovery of fossil resources? Are 100% of proposed projects containing fossil resources mitigated through recording locality information and avoidance or recovery?
RMP Objectives	P1
Method	Track proposed project actions and fossil analysis, in either a corporate or local database. Attribute according to local and national protocols and policies.
Frequency	Annually
Adaptive Management	If plan objectives are not being met, increase inventory efforts or change plan objectives, actions or guidelines.
Monitoring Question (I3):	Was paleontology research carried out within units of the Paleontological ACEC? Did the paleontological research promote the significance of fossil and geologic resources of the Basin through scientific publication or public interpretation? Has research been conducted on the seven plant community cells, especially sagebrush/Thurber's needle grass? Have these cells been included in the statewide RNA system?
RMP Objectives	AC5
Method	Maintain a library of paleontological research that utilized the ACEC. Request feedback from local partners. Methodology associated with statewide RNA system.
Frequency	10 years
Adaptive Management	If plan objectives are not being met, increase support of research efforts or change plan objectives, actions or guidelines. Encourage and enable attainment of RNA and paleontological research.
Monitoring Question (I4):	How many smoke intrusion occur in areas designated as Class I for air quality where non-attainment occurred as a result of BLM prescribed fire/fuels treatments?
RMP Objectives	A1, F1, F2, F4, F5
Method	Coordinate reports of intrusions through Oregon Department of Forestry data.
Frequency	Annually
Adaptive Management	If unacceptable smoke intrusions occur, conduct a plan amendment or plan maintenance to add, remove, or modify actions and guidelines to meet these objectives.

Appendix C:

Part 1: Biophysical Setting Summary

**Part 2: Comparison of Current Vegetation
Conditions to the Acceptable
Range of Variability**

**Part 3*: Biophysical Setting (BpS)
Descriptions**

*Incorporated by reference: <http://www.blm.gov/or/districts/prineville/plans/johndaymp/jdbdocuments.php>

Part 1: Biophysical Setting Summary

BPS #	Name	Fire Regime	Average Fire Size	Class A Dominant Species	Class A Canopy Cover	% Low ARV	% Mid ARV	% High ARV	Class B Dominant Species	Class B Canopy Cover	% Low ARV
81123	Columbia Plateau Steppe and Grassland	2	No Data	PSSP, POSE, FEID	10-50%	4	5	6.5	PSSP, POSE, FEID	50-90%	56
81065	Columbia Plateau Scabland Shrubland	5	No Data	ERTH4, POSE, LOMA, STST5	0-10%	4	5	6.5	ERTH4, ARRI2, POSE, STST5	0-10%	4
R2SBDWwt	Stiff and Low Sagebrush with Trees	3	No Data	PSSP6, ACTH7, ACHY, POSE	0-4%	7	10	13	ARAR8, ACHY, PSSP6	5-9%	46
81080	Inter-Mountain Basins Big Sagebrush Shrubland	3	No Data	POSE, HECO2, AMSIN, EPILO	0-10%	11	15	19.5	POSE, ARTR, GRSP, HECO2	0-10%	25
91062	Inter-Mountain Basins Mountain Mahogany Woodland and Shrubland	4	No Data	CELE3, ARTR2, CHRYS, SYMPH	0-40%	4	5	6.5	CELE3, ARTRV, PUTR2, SYMPH	10-50%	7
R2SBWYwt	Wyoming Big Sagebrush Semi Desert with Trees	4	No Data	ACHY, HECOC, CHV18, ARTR	0-10%	11	15	19.5	ARTR, ACHY, CHV18, HECO2	11-25%	35
R2SBMTwc	Mountain Big Sagebrush with Conifers	4	No Data	PSSP6, FEID, SYMPH, ARTRV	0-5%	14	20	26	ARTRV, PUTR2, CONIF, SYMPH	6-25%	35
R2PIJU	Juniper Steppe Woodland	3	No Data	EPAN, CRAC, CRYP, SENEC	2-10%	4	5	6.5	ARTRV, SYOR, ACOC3, CRAC	5-10%	4
81053x	Northern Rocky Mountain Ponderosa Pine Woodland-Xeric	3	No Data	ARTR, CHV18, AGSP, ELEL5	0-50%	18	25	32.5	PIPO, JUOC, FEID, ARTR	25-70%	4
81053m	Northern Rocky Mountain Ponderosa Pine Woodland Mesic	1	No Data	PIPO, FEID, PUTR2	0-30%	7	10	13	PIPO, PUTR2, FEID	41-80%	4
81045	Northern Rocky Mountain Dry-Mesic Montane Mixed Conifer Forest	1	1000	PIPO, PSME, LAOC, CAGE2	0-20%	7	10	13	PIPO, PSME, LAOC, ABGR	41-100%	4
910470	Northern Rocky Mountain Western Hemlock-Western Red-cedar Forest	3	No Data	CEVE, ACGL, SASC, PHMA	0-100%	11	15	19.5	PSME, ABGR, PIPO, LAOC	51-100%	28
911670	Rocky Mountain Poor Site Lodgepole Pine Forest	4	No Data	PICO	0-80%	18	25	32.5	PICO	41-85%	39
91046	Northern Rocky Mountain Subalpine Woodland and Parkland	3	No Data	VASC, POPU3, FEVI	0-20%	18	25	32.5	PIAL, VASC, POPU3	21-60%	14
91055	Rocky Mountain Subalpine Dry-Mesic Spruce Forest	4	No Data	VASC, ARCO9, ACOC3	0-40%	4	5	6.5	PICO, ABLA, PIEN, PSME	31-60%	14

% Mid ARV	% High ARV	Class C Dominant Species	Class C Canopy Cover	% Low ARV	% Mid ARV	% High ARV	Class D Dominant Species	Class D Canopy Cover	% Low ARV	% Mid ARV	% High ARV	Class E Dominant Species	Class E Canopy Cover	% Low ARV	% Mid ARV	% High ARV
80	100	ARTR, CHVI4, ERNA1, PSSPS	0-30%	11	15	19.5										
5	6.5	ARRI2, ERTH4, POSE, STST5	11-30%	63	90	100										
65	84.5	ARAR8, PSSP6, ACHY	10-20%	7	10	13	JUOC, PSSP6	6-40%	11	15	19.5					
35	45.5	ARTR, GRSP, POSE, HECO2	11-20%	28	40	52	ARTR, GRSP, POSE, HECO2	21-40%	7	10	13					
10	13	CELE3, ARTRV, CHRYS, SYMPH	10-50%	11	15	19.5	CELE3, ARTRV, PUTR2	11-40%	32	45	58.5	CELE3, SYMPH, ARTRV, FEID	10-60%	18	25	32.5
50	65	ARTR, CHVI8, ELEL5, HECO2	26-35%	18	25	32.5	JUNIP, ARTR	0-15%	4	5	6.5	JUNIP	16-90%	4	5	6.5
50	65	ARTRV, PUTR2, SYMPH, CONIF	26-45%	11	15	19.5	CONIF, ARTRV, PUTR2, SYMPH	10-25%	7	10	13	CONIF, ARTRV, PUTR2, SYMPH	26-80%	4	5	6.5
5	6.5	ARTRV, SYOR, POSE, ACOC3	11-20%	7	10	13	JUOC, SYOR, FEID	11-30%	25	35	45.5	JUOC, FEID, BASA	21-40%	32	45	58.5
5	6.5	PIPO, ARTR, PUTR, AGSP	0-25%	18	25	32.5	PIPO, ARTR, CELE3, ELEL5	0-25%	28	40	52	PIPO, CELE3, JUOC, FEID	25-70%	4	5	6.5
5	6.5	PIPO, PUTR2, FEID, CEVE	10-40%	25	35	45.5	PIPO, PUTR2, FEID, CEVE	10-40%	32	45	58.5	PIPO, PUTR2, FEID	41-80%	4	5	6.5
5	6.5	PIPO, PSME, LAOC, ABGR	11-40%	21	30	39	PIPO, PSME, LAOC, ABGR	11-40%	32	45	58.5	PIPO, PSME, ABGR, LAOC	41-100%	7	10	13
40	52	PIPO, LAOC, PSME, ABGR	0-50%	7	10	13	PSME, PIPO, LAOC, ABGR	0-50%	7	10	13	ABGR, PSME, PIPO, LAOC	51-100%	18	25	32.5
55	71.5	PICO, LUPIN, RICE	0-40%	14	20	26										
20	26	PIAL, ABLA, VASC, POPU3	21-50%	39	55	71.5										
20	26	PICO, ABLA, PIEN	11-30%	28	40	52	ABLA, PIEN, PICO, VASC	11-40%	18	25	32.5	ABLA, PIEN, PICO, VASC	41-70%	7	10	13

BPS #	Name	Fire Regime	Average Fire Size	Class A Dominant Species	Class A Canopy Cover	% Low ARV	% Mid ARV	% High ARV	Class B Dominant Species	Class B Canopy Cover	% Low ARV
91056	Pacific Northwest Subalpine Wet-Mesic Spruce Forest	4	1000	CHAN9, SASC, VAME, PICO	0-100%	11	15	19.5	ABLA2, PIEN, PSME, ABGR	0-100%	14
810610	Inter-Mountain Basins Aspen-Mixed Conifer Forest and Woodland	2	10	POTR5, SYOR2, RIBES	0-99%	10	14	18.2	POTR, SYOR2, RIBES	40-100%	28
81153	Inter-Mountain Basins Greasewood Flat	5	1	LECI4, SPAI, SAVE4	0-20%	4	5	6.5	SAVE4, DIST1, SPAI, LECI4	0-30%	67
81154	Inter-Mountain Basins Montane Riparian Systems	5	100	POPUL, SALIX, ALNUS, CAREX	0-80%	18	25	32.5	POPUL, ALNUS, SALIX	21%-100	46
00001	Riparian Systems	3 to 5	100	POPUL, SALIX, ALNUS, CAREX	0-100%	18	25	32.5	POPUL, ALNUS, SALIX	(0-21)-100%	42
81159	Rocky Mountain Montane Riparian System	3	100	POPUL, SALIX, ALNUS, CAREX	0-100%	21	30	39	POPUL, SALIX	0-100%	35
91160	Rocky Mountain Subalpine/Upper Montane Riparian Systems	3	10	SALIX, CAREX, PICEA	0-100%	35	50	65	SALIX, CAREX, PICEA	0-100%	35
91143	Rocky Mountain Alpine Fell-Field	5	1	SIAC, TRNA2, FEBR	0-20%	4	5	6.5	SIAC, TRNA2, FEBR	21-50%	67
911350	IMB Semi-Desert Grassland	4	250	ARTR2, HECO2, ACHY	21-40%	14	20	26	ARTR2, HECO2, ACHY	0-30%	56
911400	NRM Subalpine - Upper Montane Grassland	5	No Data	FEVI, LUPIN, JUPA, ACOCO	11-40%	1	1	1.3	FEVI, LUPIN, JUPA, ACOCO	41-90%	56
911240	Columbia Plateau Low Sagebrush Steppe	4	No Data	PSSP6, POSE, LOMA, EPPA	0-30%	7	10	13	PSSP6, POSE, LOMA, ARAR8	1-10%	28
911450	Rocky Mountain Subalpine-Montane Mesic Meadow	4	50	ERIGE2, LUPIN, DECA	0-100%	4	5	6.5	ERIGE2, LUPIN, DECA	0-100%	32

Acceptable Range of Variability (ARV) - Management actions are within the ARV when they direct vegetative communities and characteristics toward the types and amounts of seral structural communities and conditions identified as appropriate for a given BPS. Each BPS has an identified range of vegetative conditions and distributions that occurred based on site potential or Biophysical setting (elevation, aspect, precipitation, etc.) and “pre-European” disturbance regimes. While this does not mean replicating exact conditions from a selected date in the past, this approach manages the ecosystem for a range in, and combination of patterns, patch sizes, species distribution, and seral / structural stages that are consistent with the site’s potential and the expected fire frequency, intensity, and distribution. The ARV is often broad enough to encompass social as well as ecological goals.

Full Biophysical Setting (BpS) description write-ups (Appendix C Part 3) are on file at the Prineville District Office and on the planning web page at: <http://www.blm.gov/or/districts/prineville/plans/prinevillermph>.

% Mid ARV	% High ARV	Class C Dominant Species	Class C Canopy Cover	% Low ARV	% Mid ARV	% High ARV	Class D Dominant Species	Class D Canopy Cover	% Low ARV	% Mid ARV	% High ARV	Class E Dominant Species	Class E Canopy Cover	% Low ARV	% Mid ARV	% High ARV
20	26	PICO, LIBO3, VAME, VASC	0-100%	25	35	45.5	PICO, LIBO3, VAME, VASC	0-100%	14	20	26	ABLA, PIEN, CLUN2, VAME	0-100%	7	10	13
40	52	POTR, SYOR2, RIBES	40-100%	25	35	45.5	POTR, ABCO, ABLA,	0-40%	7	10	13	ABLA, ABCO, POTR,	40-80%	1	1	1.3
95	100	SAVE4, DISTI, SPAI, LEIC4	0.00%													
65	84.5	POPUL, ALNUS, SALIX	21-100%	7	10	13										
60	78	POPUL, PINUS, ALNUS, SALIX	(0-21)-100%	11	15	19.5										
50	65	POPUL, PINUS, SALIX	0-100%	14	20	26										
50	65															
95	100															
80	100															
80	100	ABLA, PIAL, FEVI, ARAC2	21-70%	13	19	24.7										
40	52	ARAR8, PSSP6, POSE, LOMA	11-30%	35	50	65										
45	58.5	ASTER, LUPIN, ROWO, RIBES	0-10%	35	50	65										

Part 2: Comparison of Current Vegetation Conditions to the Acceptable Range of Variability

	BPS	Seral Class	Plan Area Deficit (acres)	Plan Area Surplus (acres)	BLM Deficit (acres)	BLM Surplus (acres)	% of BpS in Priority Areas	Probable Treatment Type	
Rangeland - Grasslands	IMB Semi-Desert Grassland	A		3897		1498	15.9	RX Fire / Seeding	
		B	-498997		-6686				
		U		723619		18343			
	CP Steppe & Grassland	B	-229518				0.0	RX Fire / Seeding	
		C	-253465		-362				
		U		1238143		5295			
	NRM Subalpine - Upper Montane Grassland	A	-124				0.0	RX Fire / Seeding	
		B			-2888				
		C	-1977		-686				
		U		3780					
	Rangeland - Shrublands	CP Low Sagebrush Steppe	A		119974		3517	23.7	RX Fire / Seeding
			B	-166343		-3006			
C			-169500		-3013				
U				358448		6719			
CP Scabland Shrubland		A		224084		2869	2.8	RX Fire / Mechanical / Seeding	
		B	-15875		-224				
		C	-295167		-3771				
		U		219455		2554			
Stiff & Low Sagebrush w/ Trees		A		365464		2202	26.1	RX Fire / Mechanical / Seeding	
		B	-566397		-16418				
		C			-473				
		D		3790	-630				
IMB Big Sagebrush Shrubland		U		323110		2138	3.1	RX Fire / Mechanical / Seeding	
		A		295240		15256			
		B	-575177		-20849				
		C	-641393		-24700				
Wyoming Big Sagebrush Semi-Desert w/ Trees		U		1394826		28822	0.0	RX Fire / Mechanical / Seeding	
		A		546751		14677			
		B	-2588703		-34566				
		C	-531495						
		D		1143557		38618			
Mountain Big Sagebrush w/ Conifers		E		285440		18280	50.0	RX Fire / Mechanical / Seeding	
		U		2323975		17147			
		A		111465					
	B	-386582		-4736					
	C	-675							
	D		120132		3745				
	E		193812		5168				
	U		64666		287				

	BPS	Seral Class	Plan Area Deficit (acres)	Plan Area Surplus (acres)	BLM Deficit (acres)	BLM Surplus (acres)	% of BpS in Priority Areas	Probable Treatment Type	
Rangeland - Shrublands	IMB Mountain. Mahogany Woodland & Shrubland	A		16252		18	0.0	RX Fire / Mechanical / Seeding	
		B	-6434		-273				
		D			-86				
		U		1545		41			
	IMB Greasewood Flat Seral	A		603		22	27.2	RX Fire / Mechanical / Seeding	
		B	-2202		-502	9			
U			2563		37				
Rangeland - Juniper	Juniper Steppe Woodland	A		28050		877	33.4	Mechanical / RX Fire / Seeding	
		B	-11255		-293				
		D	-67226		-3098				
		E		23313					
		U		18605		351			
Forested	NRM Ponderosa Pine Woodland - Xeric	A			-197		42.0	Mechanical / RX Fire	
		B		258475		3111			
		C	-79527		-1088				
		D	-211431		-5347				
		E		215375		160			
		U		5759		29			
	NRM Ponderosa Pine Woodland - Mesic	A				1772	32.5	Mechanical / RX Fire	
		B		1190315		9844			
		C	-722343		-3301				
		D	-1110425		-6311				
		E		1299283		5230			
		U		14120		90			
	NRM Dry-Mesic Montane Mixed Conifer Forest	A			33369		37	0.0	Mechanical / RX Fire
		B			1971674		6661		
		C	-1625468		-4597				
		D	-2424037		-6026				
		E		3211852		18669			
		U		12998		67			
	NRM W. Hemlock - W. Red Cedar Forest	A				-40		0.0	Mechanical / RX Fire
		B				-226			
		C	-39788		-89				
		D	-35584						
		E		100501					
		U		125					
	IMB Aspen-Mixed Conifer Forest & Woodland	A				-169		66.8	Mechanical / RX Fire
		B	-235613		-1550				
		C	-208005		-1406				
		D				1157			
		E		606431		3724			
		U		12267		42			
RM Poor Site Lodgepole Pine Forest	A	-17249			-64		46.8	Mechanical / RX Fire	
	B	-47885			-175				
	C	-17491			-64				
	U		120199		454				

	BPS	Seral Class	Plan Area Deficit (acres)	Plan Area Surplus (acres)	BLM Deficit (acres)	BLM Surplus (acres)	% of BpS in Priority Areas	Probable Treatment Type	
Forested	NRM Subalpine Dry Woodland & Parkland	A		15390			0.0	Mechanical	
		B			-1				
		C	-12782		-7				
		U		1163					
	RM Subalpine Dry-Mesic Spruce Forest	A			56900		3	21.9	Mechanical
		B			74733		7		
		C	-121794		-2				
		D	-74290		-1				
		E			97952		5		
		U			6686				
	PNW Subalpine Wet-Mesic Spruce Forest	A			3261			28.6	Mechanical
		B			4582	-3			
		C	-38874		-8				
		D			20811	-4			
		E			-1				
U				1652					
Riparian	IMB Montane Riparian Systems	A	-121168		-353		0.0	Mechanical \ Rx Fire	
		B	-377346		-2816				
		C		466215		2858			
		U		236584		1442			
	Riparian Systems	A			27197		647	23.0	Mechanical \ Rx Fire
		B	-20638		-88				
		C	-4427						
		U			10473		234		
	RM Montane Riparian Systems	A	-172232		-986			0.0	Mechanical \ Rx Fire
		B	-313359		-2053				
		C			358017		3529		
		U			291242		846		
	RM Subalpine-Montane Mesic Meadow	A			8430		530	40.4	Mechanical \ Rx Fire
		B	-21806		-338				
		C	-24158		-422				
		U			56225				
	RM Subalpine/Upper Montane Riparian Systems	A					55	34.3	Mechanical \ Rx Fire
		B	-66215						
U				77536		74			

Full Biophysical Setting (BpS) description write-ups (Appendix C Part 3) are on file at the Prineville District Office and on the planning web page at: <http://www.blm.gov/or/districts/prineville/plans/prinevillermpphp>.

Abbreviations:

- IMP - Inter-Mountain Basins
- CP - Columbia Plateau
- NRM - Northern Rocky Mountain
- PNW - Pacific Northwest

Appendix D: Snags and Salvage

The following methodology describes how to identify an appropriate analysis area and measure the amount of area within a snag pulse. A snag pulse is an area at or above the 80% tolerance interval (see table below) by habitat type (DecAID 2007). A snag pulse recognizes areas where high snag densities exist due to tree mortality resulting from disturbances such as fire or insects and are important for some species (e.g., black-backed woodpeckers). The term “snag pulse” is used to recognize the diversity of densities of snags that occur naturally across landscapes when considering forestry actions such as salvage logging.

To calculate the size of the analysis area needed for snags pulses:

Acres of habitat type affected by high mortality (insect epidemic, fire, etc.) divided by 0.2 gives the total acres of that habitat type that should be included in the analysis area. The size of the total analysis area will be the cumulative amount of each habitat’s resultant value. The minimum allowable analysis area will be 12,800 acres.

Habitat Type	Acres with High Mortality	Divided by 0.2
East Side Mixed Conifer	2,000	10,000
Ponderosa Pine/Douglas Fir	1,000	5,000
Lodgepole Pine Forest and Woodlands	500	2,500
Total Analysis Area Needed		17,500

Start by delineating a contiguous area that encompasses the amount of area identified in the step above for the habitat type encompassing the largest amount of acreage. Make the area logical in terms of watershed or administrative boundaries. One option is to start with the 5th field HUC the project falls within and then add 6th field HUCs along the perimeter until the area requirement is met. The analysis area must contain the necessary acres for each habitat type.

Once the analysis area is identified, a review of each habitat type within the analysis area will be made to determine the number of acres meeting the 80% tolerance level for snag densities listed in the table below. A review of the total number of snags > 10 inches provides a sufficient review even if data on snags >20 inches isn’t available. Areas are identified through the use of recent fire information, insect surveys, aerial photo interpretation or other broad data sources. If more detailed snag density information exists, the > 20-inch data can be used.

Snag Densities per Acre at the 80% Tolerance Interval			
Habitat Type	Structure	> 10" (Total)	> 20"
East Side Mixed Conifer - Blue Mountains	Large Tree	21.21	9.11
	Open	58.32	12.79
	Small	25.25	8.62
Ponderosa Pine/ Douglas-fir	Large Tree	13.27	10.76
	Open	15.58	5.30
	Small	7.16	2.51
Lodgepole Pine Forests and Woodlands	Large Tree	No Data	No Data
	Open	26.59	4.25
	Small	27.64	6.64

Multiply the total acres of each habitat type in the analysis area by 0.2 (expected pulse acres), then subtract the number of acres determined to be meeting the 80% tolerance level for each habitat type (existing pulse acres).

Example:

	Existing Pulse Acres	8,500
Total East-Side Mixed Conifer - 40,000 x 0.2 =	Expected Pulse Acres of	8,000
	Acres available for Salvage	500

If the resultant number is positive, that is the number of acres available for salvage logging. If the number is negative, the manager should consider not salvaging or retaining snag levels at the 80% tolerance level on salvage acres.

Appendix E: Stream Channel Objectives and Instream Flow Reservations

Table E1 lists the quantitative stream channel objectives, Table E2 lists the current State Water Quality Standards, and Table E3 identifies interim instream flow reservations.

Quantitative stream channel objectives in Table E1 were derived using survey information collected by the PAC-FISH/INFISH Biological Opinion monitoring group, from streams believed to be near “reference¹” conditions. These values represent a set of “reference conditions”. While these values are thought to approximate the highest quality aquatic habitat, it is not likely that all streams exhibited these values at the same time. Aquatic habitats throughout the region exhibit a wide range of conditions based on the high frequency and varied intensity of natural disturbance processes inherent to aquatic ecosystems.

The desired future condition is defined as being within the range represented by 80% of the reference sites, with the median representing the value in the middle of this data set. However, it should be noted that none of the reference streams surveyed to develop these values actually met all reference values for all attributes listed in Table E1. In addition, there is not always a clear cause and effect relationship between local management actions and adjacent aquatic habitat parameters due to the low percentage of BLM managed land or the location of those lands low in the watershed. In many of these cases, on-site aquatic habitat conditions on BLM-managed segments of stream are driven by non-BLM management activities further upstream which may negatively influence habitat quality at a given site.

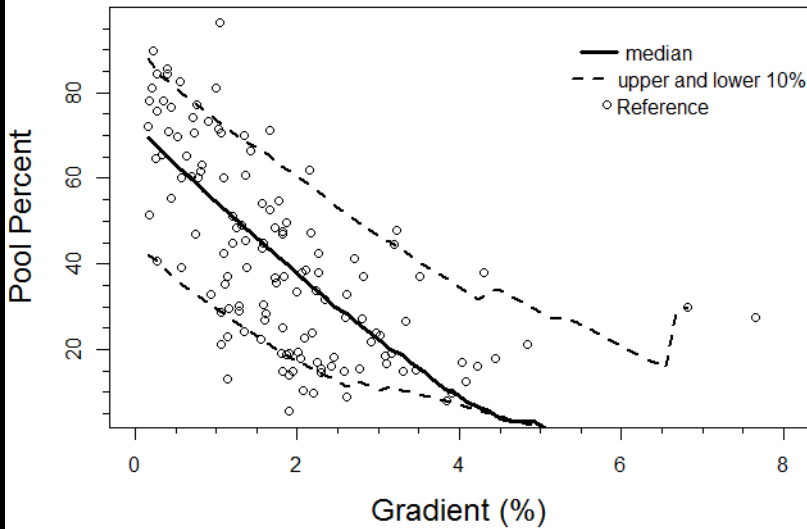
Based on the natural variability of stream channels and BLM’s land ownership patterns, the stream channel objective values may not be possible or practical to attain in all stream locations managed by the BLM. Justification for managing above or below the median will be provided by the ID team. Rather than simply adhering to the reference median values, ID Teams will assess BLM’s ability to attain stream channel objectives for proposed and on-going activities. When stream channel objective values do not represent local potential, ID Teams will identify appropriate values based on climate, geology, vegetative potential, and local monitoring results. The BLM will strive to attain stream channel objectives within existing site potential and natural disturbance regimes.

Data collected at reference sites displayed in the graphics in Table E1 below were collected following PIBO monitoring methods. Utilizing ODF&W, MIM, or other monitoring protocol is allowable but would require a correlation factor with PIBO methodologies for comparison purposes. Data represented in the graphics in Table E1 are applicable for all precipitation zones except where specifically noted.

¹reference reaches/ reference watersheds included both wilderness areas and watersheds where there was (1) no permitted livestock grazing during the last 30 years, (2) minimal timber harvest (10%), (3) minimal road density (0.5 km/km²) at the watershed scale, (4) no roads within the proximate (1 km) riparian buffer, and (5) no evidence of historic mining within riparian areas.

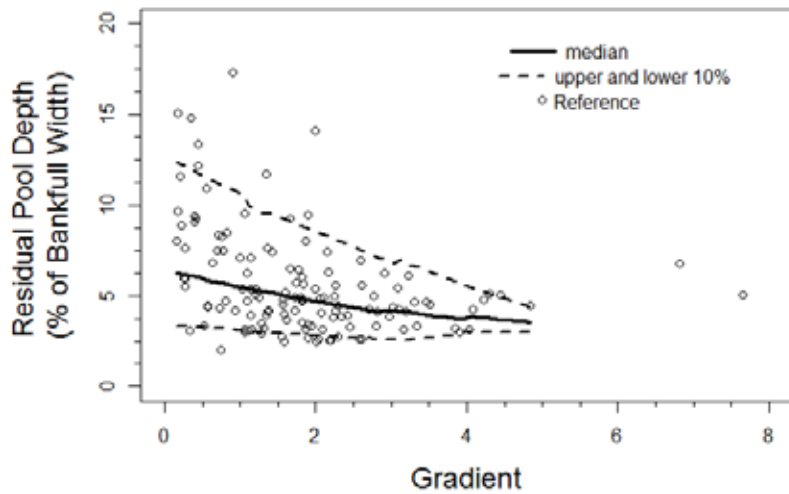
Table E1: Pool Percentage, Residual Pool Depth, Wood Frequency, Fine Sediment, Lower Bank Angle

Desired Condition – Pool Percent

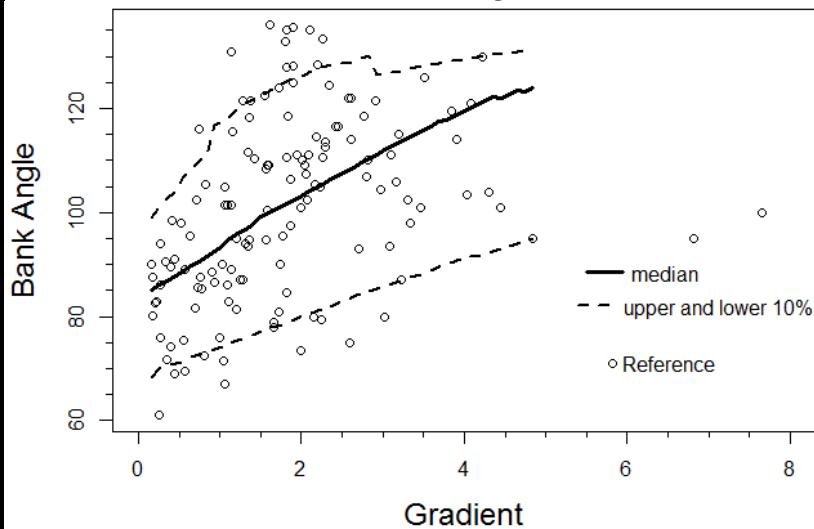


If data is collected following ODF&W stream survey protocol values would be adjusted by adding 7.9 to the value to get the equivalent PIBO value.

Desired Condition – Residual Pool Depth



Desired Condition – Lower Bank Angle



* In areas with one or more of the following factors: lower precipitation sites (especially in higher gradients), areas with non-cohesive soils, or intermittent streams an ID team will determine if it is more appropriate to utilize a surrogate approach. The ID team would also consider which measurement would better detect management induced change.

Suggested Surrogate – Utilize the Modified Greenline Stability Rating (Windward 2000) with a desired condition of >6 or 'High' rating.

Desired Condition – Sediment

Restore sediment in spawning incubation areas to be less than 10 percent fines in gravel and less than or equal to 12 percent surface fines.

Desired Condition – Wood Frequency

* In Rangeland settings there would be no specific desired condition. Rangeland settings are defined as non-forest sites typically found in precipitation zones less than 16 inches per year.

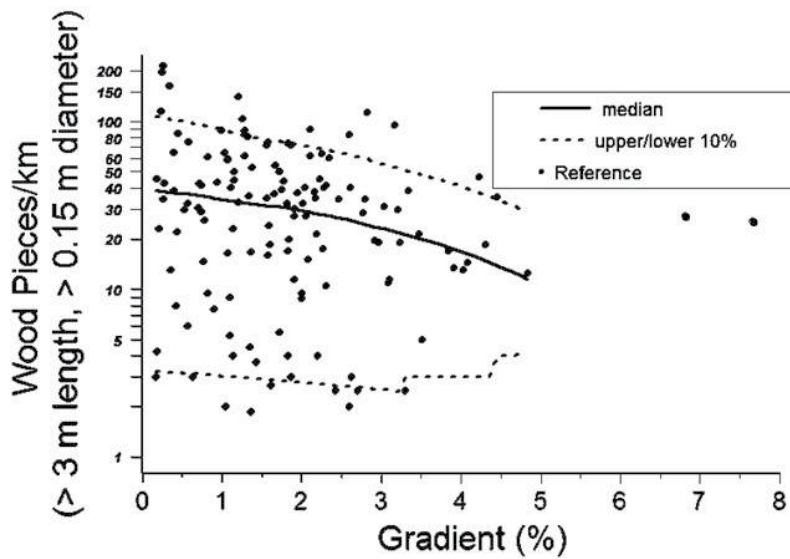
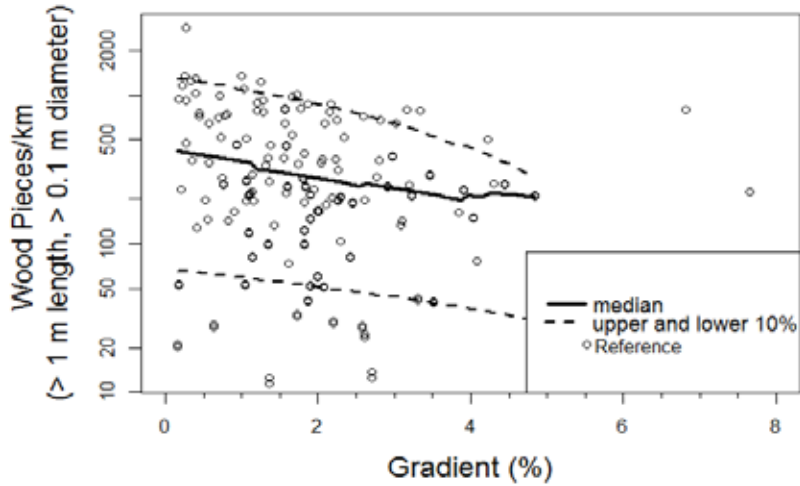


Table E2: State Water Quality Standards (or most current)

Parameter	Water Quality Criteria	Oregon Administrative Rule
Bacteria	Organisms of the coliform group commonly associated with fecal sources may not exceed a 30-day log mean of 126 E. coli organisms per 100 milliliters, (minimum of five samples)	340-041-0009
Nuisance Phytoplankton Growth	Chlorophyll a values must be less than 0.015 mg/l	340-041-0019
pH (hydrogen ion concentration)	pH values may not fall outside the following range: 6.5-9.0.	340-041-0175
Temperature	The seven-day-average maximum temperature of a stream identified may not exceed: <ul style="list-style-type: none"> • 13.0 degrees Celsius (55.4 degrees Fahrenheit) in salmon and steelhead spawning habitat • 16.0 degrees Celsius (60.8 degrees Fahrenheit) in core cold water habitat • 18.0 degrees Celsius (64.4 degrees Fahrenheit) in salmon and trout rearing and migration use habitat • 20.0 degrees Celsius (68.0 degrees Fahrenheit) in areas used as a migration corridor by salmon or steelhead. In addition, these water bodies must have coldwater refugia that are sufficiently distributed so as to allow salmon and steelhead migration without significant adverse effects from higher water temperatures elsewhere in the water body. • 20.0 degrees Celsius (68.0 degrees Fahrenheit) in Lahontan cutthroat trout or redband trout habitat • 12.0 degrees Celsius (53.6 degrees Fahrenheit) in bull trout spawning and juvenile rearing use habitat • In unidentified tributaries (waters that are not identified above), the applicable criteria for these waters are the same criteria as is applicable to the nearest downstream water body depicted on the applicable map (except Salmon and Steelhead Spawning Use Designations). 	340-041-0028
Total Dissolved Gas	Except when stream flow exceeds the ten-year, seven-day average flood, the concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection may not exceed 110 percent of saturation. However, in waters of less than two feet in depth, the concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection may not exceed 105 percent of saturation.	340-041-0031
Total Dissolved Solids.	Guide concentrations may not exceed 500.0 mg/l	340-041-0175
Turbidity	No more than a ten percent cumulative increase in natural stream turbidities may be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity. (as measured in Nephelometric Turbidity Units or NTUs)	340-041-0036

Table E3: Flow data for interim instream flow goals (OWRD 1986, and Lauman 1977).

Stream	Category	January	February	March	April	May	June	July	August	September	October	November	December	
John Day River River Mile 21 McDonald Ferry	Natural (50%)	1,250	2,440	3,250	4,860	5,050	2,700	715	340	271	380	542	940	
	Natural (80%)	626	1,050	1,680	2,920	3,020	1,440	470	246	194	283	393	513	
	C.U. & Storage	16.7	23.9	32.8	157.6	321.4	292.8	265.6	192.6	128.5	51.6	12.1	14.7	
	Net. Flow (50%)	1,233	2,416	3,217	4,702	4,729	2,407	449	147	142	328	530	925	
	Net. Flow (80%)	609	1,026	1,647	2,762	2,699	1,147	204	53	65	231	381	498	
	Scenic Flow	500	1,000	2,000	2,000	200	2,000 – 1,000	500	500	500	500	500	500	500
	Fish Flow (opt.)	500	500	500	500	500	500	500	500	500	500	500	500	500
	Fish Flow (min.)	390	390	390	390	390	390	390	390	390	390	390	390	390
John Day River River Mile 156.5 Service Creek	Natural (50%)	1,130	2,060	2,860	4,610	4,770	2,410	652	312	260	385	508	859	
	Natural (80%)	556	953	1,506	2,710	2,860	1,270	420	242	203	280	384	473	
	C.U. & Storage	12.5	16.5	25.8	100.5	192.2	189.6	230.3	176.3	119.3	50.1	9.6	11.8	
	Net. Flow (50%)	1,118	2,043	2,834	4,510	4,578	2,220	422	136	141	335	498	848	
	Net. Flow (80%)	544	936	1,480	2,610	2,668	1,080	190	66	84	230	374	462	
	Scenic Flow	500	1,000	2,000	2,000	2,000	2,000 – 1,000	500	500	500	500	500	500	500
	Fish Flow (opt.)	500	500	500	500	500	500	500	500	500	500	500	500	500
	Fish Flow (min.)	390	390	390	390	390	390	390	390	390	390	390	390	390
John Day River North Fork River Mile 0.0	Natural (50%)	649	1,240	1,820	3,170	3,500	1,650	353	159	141	169	243	490	
	Natural (80%)	293	523	952	1,830	2,130	813	215	120	109	127	165	216	
	C.U. & Storage	4	4.8	9.4	36.1	72.2	52.5	60.9	46.9	31.9	13.9	3.2	3.8	
	Net. Flow (50%)	645	1,235	1,811	3,134	3,428	1,597	292	112	109	155	240	486	
	Net. Flow (80%)	289	518	943	1,794	2,058	760	154	73	77	113	162	212	
	Scenic Flow	380	380 - 600	1,300	1,300	1,300	800	235	235	235	235	380	380	
	Fish Flow (opt.)	380	380 - 600	600	600	600	380	235	235	235	235	380	380	
	Fish Flow (min.)	235	235 - 380	380	380	380	235	175	175	175	175	235	235	
John Day River South Fork River Mile 0.0	Natural (50%)	110	177	245	358	267	147	42.6	31.9	29.1	38.3	54.2	72.3	
	Natural (80%)	53	84	132	197	146	72.8	24.1	18.8	18.1	31.6	37	44.2	
	C.U. & Storage	0.5	0.6	0.6	3.9	7.8	10.1	14.6	11.4	7.7	3.1	0.4	0.5	
	Net. Flow (50%)	53	83	131	193	138	63	10	7	10	28	37	44	
	Net. Flow (80%)	110	176	244	354	259	137	28	21	21	35	54	72	
	Scenic Flow	133	133 - 225	225	225	225	133	90	90	90	90	90	133	
	Fish Flow (opt.)	133	133 - 225	225	225	225	133	90	90	90	90	90	133	
	Fish Flow (min.)	100	100 - 133	133	133	133	100	50 - 25	25	25	25	50	100	

Appendix F: Management Direction for Greater Sage-Grouse

Summary of Management Direction Incorporated by reference from the Greater Sage-Grouse Conservation Assessment and Strategy for Oregon, 2011.

It is BLM's policy to conserve all special status species by providing management direction consistent with BLM's Land Use Planning Handbook (H1601-1) and BLM's Special Status Species Manual 6840. BLM IM-2012-044 provides additional direction for consideration and analysis of sage-grouse conservation measures for Resource Management Plans with occupied sage-grouse habitat. Within the JDBRMP plan area there is no known occupied habitat identified on public lands managed by the BLM. Small portions of the planning area, on private and Forest Service managed lands are identified as Core/Preliminary Priority Habitat (PPH) and Low Density/Preliminary General Habitat (PGH) sage-grouse habitats (see habitat definitions below).

The BLM IM 2012-044 identifies conservation measures developed by the National Technical Team (NTT 2011). However, conservation measures identified in the NTT Report are not required to be analyzed in the JDBRMP because there is no PPH or PGH (defined here as known occupied habitats outside of PPH) on public lands managed by the BLM in the planning area. Conservation measures identified in the JDBRMP including those incorporated from The Oregon Strategy in this appendix address all program areas identified in the NTT.

The Greater Sage-Grouse Conservation Assessment and Strategy for Oregon, 2011, (herein referred to as The Oregon Strategy) provides applicable conservation measures for issues identified for sage-grouse management in Oregon. Because the planning area contains potential future habitat, conservation measures from The Oregon Strategy are being incorporated as management direction as outlined in the remainder of this appendix.

BLM has reviewed The Oregon Strategy and agrees with the Core Area approach. The following description identifies how the BLM will utilize the conservation guidelines as land management direction in this RMP. The goals, objectives, and management recommendations in The Oregon Strategy (on or beginning on pages 3, 34, 74, & 98) have been reviewed and when implemented, as identified in this appendix, are consistent with other resource objectives identified within the JDBRMP. By incorporating these conservation guidelines, the JDBRMP provides additional management direction consistent with Objective W5 to conserve and recover special status species.

Information from The Oregon Strategy not specifically addressed in this appendix will be considered when making management decisions; however, it will not constitute management direction in the JDBRMP. If information in The Oregon Strategy not specifically addressed in this appendix conflicts with direction contained in the remainder of the JDBRMP, the direction in the JDBRMP will be utilized.

Habitat Definitions

Sage-grouse habitat management will follow The Oregon Strategy's Core area approach. As part of this approach, sage-grouse habitats are separated into three levels of priority in the following order of importance: Core, low density, and lands with potential to support sagebrush habitats and sage-grouse populations. The Oregon Strategy defines the process for identifying both Core and low density habitats (pg. 79-88). BLM IM 2012-044 only identifies two levels of habitat: PPH and PGH. Habitats identified as Core within The Oregon Strategy equate to those identified as PPH. IM 2012-044 defines PGH as all known occupied habitats outside of PPH/Core areas. Thus, PGH would include areas identified as low density in the Oregon Strategy as well as occupied sage-grouse habitats outside of low density.

The Oregon Strategy identifies management direction for lands outside of Core and low density referred to as occupied sage-grouse habitat; however, it does not clearly define occupied habitat or how it was identified on Figure 22 on page 90 (map legend -Sagebrush Habitat) of The Oregon Strategy. The ODFW has indicated that this map was created by identifying existing sagebrush habitat with potential to support sage-grouse within the Sage Grouse Distribution area also shown on this figure. This coverage was intended to portray areas with current sage-grouse use as well as those with potential to support populations in the future. Based on a review of mapping in The Oregon Strategy, the areas identified as occupied on BLM lands in the plan area do not contain sufficient sagebrush to provide habitat, nor is there documentation suggesting sage-grouse presence. In fact, The Oregon Strategy (pg. 20) refers to sagebrush habitats in the South Fork of the John Day as “unoccupied.”

To avoid confusion over habitat descriptions and provide management direction that addresses sage-grouse management direction that recognizes the potential of habitat within the JDBRMP, sage-grouse management direction in the JDBRMP and this appendix will be applied on all sagebrush site potential within the sage-grouse distribution line as identified on Map 3 of the JDBRMP, or habitats determined to be occupied in the future. Habitat definitions for Core and low density will still be used to guide management decisions when mitigation may be required as specified in the tables in rest of this appendix.

In this document, the terms Core, low density, PPH, and PGH will be used; however, it is the habitat definitions that are being incorporated, recognizing that terminology in reference to these areas may change. It is also recognized that applying these definitions may result in changes to current mapping efforts.

Although management direction from The Oregon Strategy will not be applied outside of potential habitats within the Sage-Grouse Distribution area unless occupancy is determined; direction provided in the Vegetation Management section of the JDBRMP was designed to manage for healthy sagebrush communities and is consistent with The Oregon Strategy’s goals of healthy sagebrush communities.

The BLM recognizes that The Oregon Strategy was developed to be an adaptive management approach (pg. 2). When additional data or management direction is incorporated into The Oregon Strategy, the BLM will review those changes and utilize the appropriate mechanism to adjust any necessary land management direction.

Roles and Responsibilities

The Oregon Strategy identifies in several places the role of ODFW and local implementation teams (pages xi, 87, 125, and 126). These requirements were primarily for activities occurring on private lands. The BLM recognizes the importance of continued coordination with ODFW, USFWS, and local implementation teams. However, BLM will maintain its management responsibility to make decisions regarding sage-grouse habitat management on public land managed by the BLM. ODFW and USFWS have been consulted at the local and state levels and agree that the approach taken in this RMP is consistent with the intent of The Oregon Strategy.

The Oregon Strategy identifies the need for population and genetic monitoring (pg. 39). The BLM recognizes the state as the primary agency responsible for monitoring populations and population dynamics, and will continue to support these efforts as appropriate.

Goals

The Oregon Strategy recommends that the BLM adopt the 70/30 habitat goal in RMPs, while recognizing that some of the Columbia Basin land is not a priority (pg. 75). However, pg. 74 identifies that the ultimate goal is to have a more specific habitat goal for sage-grouse that focuses on the sagebrush community types critical to the species.

The JDBRMP identifies the use of a vegetation management approach referred to as Acceptable Range of Variability (ARV). The approach identified in the Vegetation section of the JDBRMP utilizes site potential and establishes an acceptable range of seral structural stages for each area. A review of the Biophysical Settings (BpSs) with sagebrush potential revealed that management at the low end of ARV (assuming all seral conditions with shrub potential met the minimum shrub cover of 5%) would meet the 70% objective for all BpSs with the exception of the Columbia Plateau Scabland Shrubland (66.5% at low ARV), and Columbia Plateau Steppe and Grassland (66.5%). With the same assumptions, managing to the reference condition (Mid ARV) would result in 100% of all

BpSs with potential in a seral condition with sagebrush. Figure 2 displays ARV ranges within BpSs with potential to provide sagebrush habitat capable of supporting sage-grouse.

Biophysical setting descriptions identify a range of canopy covers for the dominant species expected on a particular site for each seral class. Based on a review of the BpS descriptions, the majority of the canopy covers for BpS seral conditions expected to provide potential sage-grouse habitat identifies canopy covers that would predominantly be equivalent to class 3, 4, and 5 (see Figure 3).

Based on this review, the application of the ARV standards identified in the Vegetation section of the JDBRMP is more prescriptive, site specific, and will meet the habitat objectives identified in The Oregon Strategy. The ARV objectives and management direction also provide direction for all sites with sagebrush potential, not simply big sagebrush. Thus, vegetation management objectives and direction will follow the actions in the JDBRMP rather than the methodology identified in The Oregon Strategy.

Management Direction incorporated into the JDBRMP

The approach identified in the Mitigation Framework for Sage-Grouse Habitats (Hagen 2011) for Core and low density areas as outlined in The Oregon Strategy will be used to guide BLM decisions regarding project approval or mitigation needs for renewable energy development and associated infrastructure or other landscape scale industrial-commercial developments. The BLM will continue to follow guidance in IM 2008-204 (Policy for the use of offsite mitigation for authorizations issued by the BLM) as applicable outside of Core and low density.

Conservation Guidelines identified in The Oregon Strategy on pages 100–119 will be implemented as follows:

The following codes have been placed at the beginning of each suggested Conservation Guideline from The Oregon Strategy in the table below to clarify if they will be included as management direction in the JDBRMP or not and if so how. Items identified as [A], [G], and [B] constitute direction from The Oregon Strategy that will be incorporated as management direction in the JDBRMP proposed actions.

Conservation Guidelines in The Oregon Strategy were written as recommendations to land management agencies, thus language such as ‘consider’ is often used. It is the intent of the BLM to manage consistent with the definitions of Actions, Guidelines, and Best Management Practices used throughout the JDBRMP as defined here:

Actions are also required land use plan decisions, and aim to achieve the objectives of a particular resource or resource use. They include actions to maintain, restore, or improve land health. These actions include proactive measures (e.g., measures that would be taken to enhance watershed function and condition), as well as measures or criteria that will be applied to guide day-to-day activities occurring on public lands. Actions also establish administrative designations such as ACECs, recommend proposed withdrawals, establish land tenure zones, and determine suitability for congressional designations (such as Wild and Scenic Rivers). Actions include expected future activities for allowable uses such as mineral leasing, recreation, timber harvest, and livestock grazing. Identifying these actions enables analysis of the effects among the various alternatives.

Guidelines are recommendations or rules that lead or direct a course of action to achieve objectives. Guidelines are followed unless there is a good reason to deviate from them. Such reasons are documented in subsequent decisions.

Best Management Practices (BMPs) are a suite of techniques that guide, or may be applied to, management actions to aid in achieving desired outcomes. Best Management Practices are often developed in conjunction with land use plans, but are not considered a land use plan decision unless the plan specifies they are mandatory. They may be updated or modified without a plan amendment if they are not mandatory. The Best Management Practices can be applied and monitored using adaptive management techniques. Similar to guidelines, rationale must be documented for deviating from applicable BMPs during implementation.

Application of Best Management Practices is required; however, it is not intended that all of the BMPs listed will be applied for any specific management action. The overall goal is not to adhere strictly to a particular set of BMPs, but to meet RMP objectives when implementing management actions. The correlation of BMPs to pertinent RMP objectives is provided in Appendix A-Best Management Practices. An interdisciplinary (ID) team of resource specialists relevant to the issues and resource concerns will review all BMPs associated with

the proposed activity type. The application of applicable BMP(s) becomes the BMP design. The ID team will provide rationale for the BMP design.

Thus, in cases where terms such as 'consider' are used in the table below, the BLM has reviewed the recommendation and will implement the direction consistent with the following symbols and associated definitions provided above.

[E] - Existing direction in the RMP sufficiently addresses this and will be used rather than The Strategies language.

[A] – This language will be implemented as an Action under Objective W5.

[G] – This language will be implemented as a Guideline under Objective W5.

[B] – This language will be implemented as a Best Management Practice.

[I] – This language has been determined to provide information to the reader or suggests analysis within the RMP but is not providing management direction. In some cases, this designation is given to management direction provided that is outside the scope of the RMP.

In some cases, language in The Oregon Strategy was modified to increase clarity or specificity or resolve potential conflicting management. Modifications are shown within the original text from The Oregon Strategy below. Text that was added is shown in bold and deleted text is shown with strikethrough. All literature citations are specifically made in Hagen 2011. For further reference material see: Greater sage-grouse conservation assessment and strategy for Oregon (Hagen 2011).

Action: Reduce negative impacts of wildfire on sage-grouse through efficient fire suppression techniques	
Issue	Conservation guidelines
<p><i>Fire management plans should identify sage-grouse habitat as a high priority for protection.</i></p> <p><i>During multiple fire events prompt access to local resource specialists, and subsequently to their knowledge concerning areas with critical habitat may be limited.</i></p>	<p>[E] 1) The act of fire fighting has little impact on sage-grouse as compared to the loss of habitat from a fire. Retain unburned areas (including interior islands and patches between roads and the fire perimeter) of sage-grouse habitat unless there is a compelling safety, resource protection, or control objectives at risk. This may require additional suppression and resources for holding and mop-up. Fire managers should proactively plan for and anticipate these needs early in the incident.</p> <p>[A] 2) Fire specialists and wildlife biologists should review District Fire Management Plans (Phase I) annually to incorporate new sage-grouse information (e.g., lek and habitat viability maps) in setting wildfire suppression priorities. Updates to Phase I Fire Plans will be distributed to dispatchers for initial attack planning.</p> <p>[E] 3) Train and use resource advisors to assist with prioritizing fires during suppression activities and work with Incident Commanders and Incident Management Teams as appropriate.</p> <p>[E] 4) Give wildfire suppression priority to known sage-grouse habitat within the framework of the Federal Wildland Fire Policy (human life and safety as the first priority, with property and natural resources as second priorities, USDI and USDA 1995).</p> <p>[G] 5) Use direct attack tactics when it is safe and effective at reducing amount of burned habitat.</p> <p>[A] 6) Within 5 km (3 miles) of a lek as well as identified winter range, should be given top priority in fire suppression. Judiciously use heavy equipment and limit brush removal to only the level necessary to expeditiously extinguish the fire.</p> <p>[G] 7) Consider establishing fire breaks or green-stripping along existing roadways to provide a fuel break and safe zone from which to fight fire.</p> <p>[G] a) Establishing strips no larger than 15 m (50 ft) on either side of the road will provide foraging habitat for grouse and provide >30 m (100 ft) of fuel breaks.</p> <p>[E] b) Consider planting crested wheat in fuel breaks where annual grasses are prevalent (see guideline on fire restoration for seeding rate).</p> <p>[E] 8) Given the scale of the cheatgrass problem, and its ramifications to sage-grouse habitat it is important to re-iterate that preventing fire from entering at risk communities – e.g., cheatgrass in understory/overstory sagebrush – should be a high priority for protecting sage-grouse habitat.</p>

Action: Reduce negative impacts of wildfire on sage-grouse through prompt and appropriate habitat reclamation or rehabilitation	
Issue	Conservation guidelines
<p><i>The lack of prompt and appropriate rehabilitation following a wildfire can present additional threats to sage-grouse habitat.</i></p>	<p>[A] 1) Wildfires burning >10 acres of sage-grouse habitat should be evaluated to determine if seeding is necessary to recover ecological processes and achieve habitat objectives.</p> <p>[E] a) If seeding is necessary, managers should use appropriate mixtures of sagebrush, native grasses and forbs and appropriate non-native perennials, that will increase the probability of recovering ecological processes and habitat features of the site.</p> <p>[G] b) Wyoming big sagebrush sites should be re-seeded or planted with seedlings of Wyoming big sagebrush when available.</p> <p>[E] c) Wildfires burning >10 acres of habitat that is at high risk of annual grass invasions should be seeded with an appropriate mixture to reduce the probability of cheatgrass establishment.</p> <p>[G] 2) Although planting shrub species is more common now than in the past, sagebrush should be included in fire rehabilitation seeding mixtures or as seedlings as often as possible.</p> <p>[E] 3) The seed supply of native species is generally limited when large acreages burn. Land managers should encourage development of native seed banks (both in the private and government sectors).</p> <p>[E] 4) If native plant and sagebrush seed is unavailable crested wheatgrass can be planted in lieu of native species or as a mixture with native species, because it is readily available, can successfully compete with cheatgrass, and establishes itself more readily than natives.</p> <p>[E] a) If crested wheatgrass is planted initially specific efforts or plans are needed to interseed native grasses, forbs and shrubs in the rehabilitation area. This might include an initial seed-mix of 1 to 2 lbs per acre of crested wheatgrass mixed with natives.</p> <p>[B] 5) If cheatgrass or other exotic plant species are present before a fire occurs, they are likely to become more dominant post-fire if the area is not properly rehabilitated (but see suppression activities above). Rehabilitation techniques that decrease the probability of cheatgrass invasion are needed.</p> <p>[E] 6) Drought can impact the success of a rehabilitation project. Post-treatment monitoring will be needed to determine if rehabilitation efforts need to be repeated if initial attempts fail.</p>

Listing Factor A: Prescribed Fire

The *Federal Wildland Fire Management Policy and Program Review* (USDI and USDA 1995) indicates that, consistent with land and resource management plans, fire must be reintroduced into the ecosystem to rehabilitate and maintain ecosystem health and reduce wildfire risk. Recent budget increases in fuels management has allowed increased use of prescribed fire and other fuels management treatments. However, prescribed fire has contributed to the decrease in sage-grouse habitat (Connelly et al. 1994, Fischer et al. 1996, Nelle et al. 2001). This decrease may be associated with temporary loss of sagebrush cover, or long-term loss due to post-fire dominance of invasive plants.

Action: Reduce negative impacts of prescribed fire on sage-grouse through appropriate strategic planning and field techniques	
Issue	Conservation guidelines
<i>If conducted correctly prescribed fires may be beneficial to sage-grouse habitat.</i>	<p>[A] 1) Burns should be conducted in such a way that there is a mosaic of sagebrush and burned areas. This “patchiness” will provide a seed source for sagebrush regeneration. [G] These treatments should occur at higher elevations (in the absence of cheatgrass) near juniper encroachment areas.</p> <p>[E] a) Remove juniper encroaching from mountain big sagebrush communities through cutting of juniper and burning piled trees and limbs (“jack-pot burning”).</p> <p>[E] b) Prescribed fires at lower elevations generally should be avoided as a management tool. This tool should be used only when</p> <ul style="list-style-type: none"> i) No other options are available ii) A pre-burn evaluation has determined that the risk of cheatgrass or other invasive weeds is minimal iii) There is a low risk of reducing critical features of sage-grouse habitat

Listing Factor A: Livestock Grazing

Moderate levels of livestock use are generally considered compatible with maintenance of perennial bunchgrass, however level of sustainable use varies with a number of environmental factors. Generally cool season bunchgrasses present across much of the sage-grouse range are most vulnerable to the effects of defoliation by grazing in late spring and early summer. Grazing during this time can reduce cover and vigor of perennial grasses and increase opportunity for invasion of undesirable species (Crawford et al. 2004). Optimum sage-grouse nesting habitat consists of a healthy sagebrush ecosystem complete with an herbaceous understory composed of native perennial grasses and forbs. Nesting and early brood-rearing periods are critical for sage-

Action: Promote vegetation that supports nesting, brood-rearing and winter habitats including maintenance or recovery of shrub and herbaceous (native grasses and forbs) cover. Retain residual cover adequate to conceal sage-grouse nests and broods from predation, and plant communities that provide a diversity of plant and insect food sources.

Issue	Conservation guidelines
<p><i>Appropriate livestock grazing regimes can be compatible with sage-grouse habitat needs.</i></p>	<p>[E] 1) Where livestock grazing management results in a level of forage use (use levels) that is consistent with Resource Management Plans, Allotment Management Plans, Terms and Conditions of Grazing Permits or Leases, other allotment specific direction, and regulations, no changes to use or management are recommended if habitat quality meets Rangeland Health Standard and Guidelines.</p> <p>[E] 2) Where livestock grazing management results in a forage use level detrimental to habitat quality, it is recommended changes in grazing management be made as soon as possible to recover habitat quality. Adjustments to grazing management should be conducted in accordance with regulations of responsible land management agency.</p> <p>a) Adaptive management that should be considered include:</p> <ul style="list-style-type: none"> i) changes in salting and/or watering locations, ii) change in the season, fencing, duration or intensity of use, iii) reducing grazing use levels, iv) temporary livestock non-use (rest), or v) extended livestock non-use until specific local objectives are met as identified by implementation group. <p>[A] 3) The timing and location of livestock turnout and trailing should not contribute to livestock concentrations on leks during the sage-grouse breeding season.</p> <p>[A] 4) Measurement of grazing levels should be conducted on that portion of the pasture which is known to be sage-grouse habitat and will not be based on “average use” throughout the entire pasture.</p> <p>[A] 5) Reduce physical disturbance to sage-grouse leks from livestock through managing locations of salt or mineral supplements by placing them greater than 1 km (0.6 mi) from lek locations between February 15 through August 15th.</p> <p>[A] 6) Avoid supplemental winter feeding of livestock in known/occupied habitat unless it is part of a plan to improve ecological health or to create mosaics in dense sagebrush stands that are needed for optimum grouse habitat. Although ecologically winter grazing may have a minimum ecological impact on the plant community, the impacts to residual cover for sage-grouse nesting can be detrimental.</p>

grouse.

<p><i>Livestock management infrastructure can promote balanced grazing distributions and compatibility with sage-grouse habitat needs.</i></p>	<p>[A] 1) Locate new and/or relocate livestock water developments within sage-grouse habitat to maintain or enhance habitat quality and relocate existing developments where impacts are substantially fragmenting or reducing habitat quality within nesting or wintering habitats.</p> <p>[E] 2) Spring developments both new and old should be constructed and/or modified to maintain their free-flowing natural and wet meadow characteristics.</p> <p>[E] 3) Ensure wildlife accessibility to water and install escape ramps in all new and existing water troughs.</p> <p>[A] 4) Construct new livestock facilities (livestock troughs, fences, corrals, handling facilities, “dusting bags,” etc.) at least 1 km (0.6 mi.) from leks to avoid concentration of livestock, reduce collision hazards to flying birds, or eliminate avian predator perches.</p> <p>[G] a) Fences can be detrimental to local sage-grouse populations. Those fences identified as such or within 1.6 km (1 mile) of an active lek or known seasonal use area should be marked with anti-strike markers. In areas of sensitive visual resources (WSAs, ACECs, WSRs, etc.) the need for fence identification should be balanced with visual resource management objectives. Factors such as topography and other flight obstructions should be evaluated when determining the amount and location of fence markers within sensitive visual areas.</p> <p>[A] 5) For playas, wetlands, and springs that have been hydrologically modified for livestock watering, local working groups should identify water improvements that have population limiting implications. These should be rehabilitated and off-site livestock watering facilities developed; new water should be available before existing water is eliminated.</p>
<p>Wild Horses--<i>The management goals for wild horses are to manage them as components of the public lands in a manner that preserves and maintains a thriving natural ecological balance in a multiple use relationship. Wild horses are managed in 20 Herd Management Areas (HMAs) that involve 2.8 million acres of public land, primarily in southeastern Oregon.</i></p>	<p>[E] 1) The cumulative Appropriate Management Level (AML) for horse numbers should be kept within current AML (1,351 to 2,650) in herd management areas.</p> <p>[G] a) Management agencies are strongly encouraged to prioritize funding for wild horse round-ups in sage-grouse areas that are over AML</p> <p>[I] b) Evaluate the AMLs for impacts on sagebrush habitat</p> <p>[I] c) Further measures may be warranted to conserve sage-grouse habitat even if horses are at, above, or below the appropriate AML for a herd management area.</p>

Listing Factor A: Juniper Expansion

Before settlement by Euro-Americans, western juniper existed on fuel limited sites including open, savannah-like woodlands in low sagebrush (Miller and Rose 1995), rocky surfaces or ridges (Barney and Frishknecht 1974, Cottam and Stewart 1940, Miller and Rose 1995) and pumice influenced soils. These woodlands had an understory that included various sagebrush species. Since the 1880s, western juniper has increased in density and distribution in the northern Great Basin (Miller and Rose 1995, 1999; Miller and Tausch 2001). Western juniper has expanded into mountain big sagebrush, low sagebrush, quaking aspen and riparian communities. The extent of the juniper expansion has increased 10 fold (Miller and Tausch 2001). Increased livestock grazing in the late 1800s and early 1900s contributed to a reduction in fuels that could carry fire, thereby decreasing fire frequency (Miller and Rose 1999, Miller and Tausch 2001). In addition fire suppression policies have generally lengthened fire- return intervals in juniper-dominated areas. The Natural Resource Conservation Service (NRCS) has developed a National Sage-Grouse Initiative to focus Farm Bill Funding to improve sage- grouse habitat on private land. In Oregon, this effort will focus on early phase juniper removal. Miller et al. (2005) recognize three stages of juniper succession:

- **Phase I**, trees are present but shrubs and herbs are the dominant vegetation that influence ecological processes (hydrologic, nutrient, and energy cycles) on the site;
- **Phase II**, trees are co-dominant with shrubs and herbs and all three vegetation layers influence ecological processes on the site;
- **Phase III**, trees are the dominant vegetation and the primary plant layer influencing ecological processes on the site.

Action: Juniper removal methods should promote the return sagebrush, native grasses, and forbs.	
Issue	Conservation guidelines^a
<i>Funding needed to remove early phase juniper</i>	Promote education and outreach through SWCD and local Implementation Teams to encourage participation in the NRCS's Sage-Grouse Initiative
<i>If conducted correctly juniper removal can restore native vegetation communities to proper functioning condition</i>	<p>1) Mechanical: Chainsaw</p> <p>[I] Advantages: selective (trees removed); control of the treated area; broad time period when treatment can be applied; minimal liability; friendly near urban interface, which may negate high costs; maintains shrubs with proper planning; little soil disturbance; not fuel limited; slash may be beneficial in restoring the site; broadcast seed beneath slash.</p> <p>[I] Disadvantages: high cost/acre; limited amount of area treated; large amounts of woody debris remains following treatment in dense woodlands; potential liability in fire protection zones adjacent to pine forests.</p> <p>2) Mechanical: Heavy machinery</p> <p>[I] Advantages: control of the treated area; broad time period when treatment can be applied; minimal liability; friendly near urban interface, which negate high costs; maintains shrubs with proper planning; not fuel limited;</p>

	<p>slash may be beneficial in restoring the site; broadcast seed beneath slash; soil surface disturbance may enhance germination of seed broadcast prior to treatment.</p> <p>[I] <i>Disadvantages:</i> high cost/acre; limited amount of area treated; some mechanical equipment are limited by steepness of slope and rockiness; large amounts of woody debris remain following treatment in dense woodlands; possible increase in non-native annual grasses; soil disturbance or compaction.</p> <p>3) Chemical</p> <p>[I] <i>Advantages:</i> Can treat areas quickly; not limited by topography; effective on trees less than 2 m (6 ft) in height.</p> <p>[I] <i>Disadvantages:</i> Use is highly restricted on Federal lands in Oregon; effectiveness of control often limited; few effective products are currently labeled for this use.</p> <p>4) Prescribed fire</p> <p>[I] <i>Advantages:</i> To minimize the spread of invasive weeds, please refer to cautions about this tool described above.</p> <p>[I] <i>Disadvantages:</i> risk; liability; weed threat in some locations; reduction of shrubs (e.g., sagebrush, bitterbrush, mountain mahogany); tree selectivity limited; must have adequate fuels; potential nutrient losses with high intensity fires; limited climatic conditions under which prescribed fire can be used; smoke issues; urban interface.</p>
<p><i>Slash from mechanical or chemical removals may continue to mislead habitat use.</i></p>	<p>[E] 1) For Phase I juniper <2 m (6 ft) felling and leaving may be effective.</p> <p>[E] a) Consider limbing any branches >1.5 m (4 ft) in height on a felled tree.</p> <p>[B] 2) For Phase I and Phase II where jackpot burning is the most appropriate method of slash removal consider a spring burning (Mar-Apr) when soils tend to be frozen but the moisture content of the felled trees is low.</p> <p>[B] 3) Broadcast burns of juniper invaded sagebrush should be conducted judiciously and such that only one-third of the treatment area is burned (i.e., not to exceed 160 acres). Once sagebrush has begun to recruit a broadcast burn can be conducted for another one-third of the treatment area, and so on for the final third of the area.</p>

^a These guidelines were adapted from Miller et al. (2005)

Recognizing the transitory phase of a juniper encroachment identified for removal is critical to understanding methods required for removal as well as site rehabilitation to sagebrush steppe. While rehabilitation of lands dominated by western juniper may be beneficial to sage-grouse, lack of proper post-treatment management of these lands may limit rehabilitation towards native shrubs and deep-rooted perennial grasses.

Action: Post-treatment management of juniper removal areas should promote the return of native grasses and forbs to the treatment area.	
Issue	Conservation guidelines
<i>If conducted correctly post-treatment management can return areas to native vegetation communities and reduce the risks of invasion of noxious weeds.</i>	<p>[G] 1) Seeding prior to treatment should be considered when current perennial grass community is in poor condition (<2 plants /10ft², <1 plant/10ft² on dry and wet sites) or if exotic annual grasses are present.</p> <p>[I] a) Broadcast seeding prior to soil disturbance or under slash may increase the chances of establishment.</p> <p>[E] 2) Length of rest from grazing following treatment will depend on understory composition at time of treatment and response of desirable vegetation following treatment. This typically varies from less than 1 to more than 3 years.</p> <p>[E] 3) Juniper succession stage (Phase I, II, or III) and site conditions should be considered when selecting removal and post-treatment methods.</p>

Listing Factor A: Invasive Vegetation

Nonnative Invasive Plants

While cheatgrass proliferation has been widespread, increases in other exotic species such as medusahead, knapweed, yellow starthistle and other noxious weeds are also adversely impacting sagebrush-steppe habitat (Quigley and Arbelbide 1997). Many exotic plants are adapted to the Great Basin climate (Trewartha 1981 in: Mack 1986, Young et al. 1972 in: Mack 1986), and have the greatest potential for impact on the warmer, lower elevation sagebrush communities. They alter the structure and function of ecosystems they invade and threaten biological diversity (Randall 1996, Vitousek et al. 1996, Olson 1999). Invasive weeds have increased soil erosion, reduced infiltration (Lacey et al. 1989), and displaced native plant species (Belcher and Wilson 1989 in Hagen 2011, Miller et al. 1994). The rapid rate of expansion is partly attributable to the life history of exotic plants. Exotic plants are often opportunists, and many are pioneering, colonizing species. They are frequently one of the first species to arrive and colonize areas that have experienced soil-surface disturbance or areas that lack plant cover. Their establishment and spread are aided by disturbance to the soil surface (Baker 1986, Bazzaz 1986). Spotted knapweed, yellow starthistle, and leafy spurge have exhibited the ability to invade relatively undisturbed sites, including wilderness areas (Asher 1994, Tyser and Key 1988).

Limitations on the Treatment of Invasive Plants

In 1984, the BLM and U.S. Forest Service completed the *Western Oregon Program Management of Competing Vegetation Environmental Impact Statement*. Legal action was taken on this EIS and the result was a court-ordered injunction that prohibited the use of herbicides on all federally administered lands in Oregon. The injunction was modified in 1987 and allowed federal land management agencies to use four herbicides to control noxious weeds only. Those four herbicides are: glyphosate, 2,4-D, picloram, and dicamba. These four are the only herbicides that can be used on BLM-administered lands. In September 2007, the BLM's *Vegetation Treatments Using Herbicides Final Programmatic EIS Record of Decision* was published.

Action: Minimize the impact of invasive noxious weeds on sage-grouse habitat.	
Issue	Conservation guidelines
<i>Prevention of invasive plants moving into new areas underemphasized.</i>	[E] The most successful and efficient method for managing weeds is prevention of invasion. Weed Prevention Areas (WPA's) should be established in areas with limited infestation. Spread vector analysis should be used to determine the highest probability spread mechanisms. "Invasive Plant Prevention Guidelines" developed by the Center for Invasive Plant Management should be followed to reduce the risk of spreading invasive noxious weeds into sagebrush communities.
<i>Newly arriving satellite weed patches are not detected before they become major infestations.</i>	[E] Systematic and strategic detection surveys should be developed and conducted in a manner maximizing the likelihood of finding new patches before they expand. Once patches are located, seed production should be stopped and the weeds should be eradicated. The most effective tools for eradication of many weeds are herbicides and possibly bio-controls.
<i>Invasive weeds continue to expand from borders of large infestations</i>	[E] Containment programs for large infestations should be maintained. Border spraying infestations, planting aggressive (even appropriate non-native species) plants as a barrier, establishing seed feeding biological control agents, and grazing weeds to minimize seed production are all methods that could help contain large infestations.
<i>Repeated periodic largescale herbicide applications are not sustainable.</i>	[E] The goal of weed management should be to establish and maintain a healthy, functioning sagebrush plant community that has some degree of invasion resistance by maximizing ecological site occupation by native plants.
<i>Many sagebrush steppe communities have not crossed a threshold after which they are no longer recoverable by weed control.</i>	[G] Areas with an adequate understory (> 20% composition) of desired vegetation should be identified and prioritized as high for control since they have higher likelihood of successful rehabilitation that areas where to desired species are completely displaced.
<i>Many sagebrush steppe communities have crossed a threshold after which they are no longer recoverable by control.</i>	[G] A rehabilitation and/or restoration plan should be developed and implemented for areas with inadequate understory (< 20% composition) of desired vegetation. The species of choice should include these with similar niche as the invasive weeds. The goal should be to maximize niche occupation with desired species.
<i>Herbicide injunction on public land limits land managers ability to treat various exotic weeds.</i>	[I] Work with various agencies and the courts to remove the injunction.

Listing Factor A: Vegetation Treatments

Large-scale sagebrush eradication programs of the mid-1900s resulted in the direct loss of sage-grouse habitat. There is a need (on a case by case basis) to reinvigorate some sagebrush communities that have transitioned into late seral stages. The use of such treatments need to be conducted judiciously, so that the needs of sagebrush associated species are not jeopardized. This section overlaps to some extent with juniper and prescribed fire, but focuses on sagebrush treatments.

Use of Crested Wheatgrass

This Plan recognizes the importance of native vegetation in functioning sagebrush systems; however, currently there is a limited supply of native seed and current technologies and protocols for establishing native species following disturbance have had only limited success. This Plan encourages the development of native seed sources and the use of native seed by land management entities. However, until that market is fully realized and technologies for establishing native species improve, this Plan supports the use of crested wheatgrass (seeded at low rates [1 to 2 lbs. per acre]) in conjunction with native plants as an intermediate step in rehabilitating disturbances to sagebrush habitats. In the recent past, monocultures of crested wheatgrass were used in lieu of native vegetation as livestock forage at the expense of thousands of acres of sagebrush habitat. Despite past use of this plant species it has potential to stabilize an area that has been recently disturbed. It is competitive with cheatgrass and if planted at low rates it is compatible with native grass and forb species (Monsen et al. 2004).

Action: Maximize benefits of vegetation treatments for sage-grouse through best management practices	
Issue	Conservation guidelines
<i>Vegetation manipulations should benefit the long-term health of sagebrush habitat.</i>	<p>[G] 1) Use brush beating (or other appropriate treatment) in strips (or a mosaic pattern) 4 to 16 meters (12 to 50 ft.) wide (with untreated interspaces 3 times the width of the treated strips) in areas and with relatively high shrub cover (>25%) to improve herbaceous understory for brood rearing habitats, where such habitats may be limiting. Such treatments should not be conducted in known winter habitat (Dahlgren et al. 2006).</p> <p>[E] 2) Avoid vegetation treatments in sage-grouse habitat in areas that are highly susceptible to cheatgrass or other exotic species invasion. Any vegetation treatments conducted in cheatgrass-dominated communities will be accompanied by rehabilitation, and if necessary, reseeding to achieve re-establishment of native vegetation.</p> <p>[A] 3) Minimize disturbance to sage-grouse populations and do not conduct any vegetation treatments within .6 miles of occupied nesting or brood rearing habitats during nesting and early-brood rearing periods when sage-grouse are present.</p> <p>[G] 4) Aggressively treat noxious weeds and other invasive plants where they threaten quality of sage-grouse habitat, and apply best management practices to prevent infestations from occurring.</p> <p>[E] 5) Crested wheatgrass can be planted (1 to 2 lbs. per acre) but preferably in a mixture with native species, because it is readily available, can successfully compete with cheatgrass, and establishes itself more readily than natives.</p> <p>[E] 6) The use of herbicides (primarily tebuthiuron) at low (0.1–0.3 kg ai/ha) application rates may effectively thin sagebrush cover while increasing herbaceous plant production (Olson and Whitson 2002). These treatments should be applied in strips or mosaic patterns.</p> <p>[E] a) Site conditions must be critically evaluated prior to treatment (including fire rehabilitation, new seedings and seeding renovations) to increase likelihood of the desired vegetation response.</p>

Listing Factor A: Realty

Various human activities and structures decrease quality of sage-grouse habitat, and some can result in habitat loss. This sub-section provides recommendations for a variety of land-use issues and methods of minimizing their impacts on sagebrush habitats. Because direct effects of these risks (disturbances) have not been demonstrated in all cases, it is critical that land management agencies err on the side of sage-grouse needs, rather than assume no effect. Thus, many of the set-back distances are based on the known habitat needs of sage-grouse relative to the distance from lek sites and serves as minimum area that should be protected from development. However, the size, duration, and intensity of a development should be considered when assessing potential impacts and determining the set-back distance for a project. Also, see Core Areas discussion in Section IV for mitigation recommendations related to industrial or commercial development.

Action: Minimize impacts of land-exchanges and the construction of anthropogenic features on sage-grouse habitat.	
Issue	Conservation guidelines
<i>Land Exchanges/Disposals</i>	<p>[E] 1) Evaluate sage-grouse habitat values when federal or state lands are being considered for sale or exchange. This should apply to the quality of the habitat as well as the quantity (i.e., should not be swapping high quality sagebrush for low quality sagebrush).</p> <p>[E] 2) Maintain existing sage-grouse habitats, with particular attention to areas of intact habitat.</p>
<i>Communication/Emitter Sites</i>	<p>[G] Use existing communication/emitter sites to consolidate activities of new construction, except where topographically impossible, and install new communication sites in forested landscapes. However, off-site mitigation should be considered if the area of impact from new construction is ≤ 640 acres; disturbance of larger areas for communication sites should be critically evaluated.</p>
<i>Road Rights-of-Ways</i>	<p>[A] Disturbance from high volume roads can lead to avoidance of otherwise suitable habitat or direct mortality of birds. Minimize the construction of new roads through occupied sage-grouse habitat, especially lek, nesting and brood-rearing areas.</p>
<i>Agricultural Conversion</i>	<p>[E] Sagebrush conversion on public lands (e.g., crested wheatgrass seedings) should be avoided if the sole purpose is to increase livestock forage. Alfalfa may provide foraging habitats for sage-grouse, but typically this occurs at the edge of extensive agricultural areas. A small number of alfalfa fields in an expanse of sagebrush may provide late-season brood habitat. Typically conversion to alfalfa is at the discretion of private landowner.</p>
<i>Insect outbreaks and insecticides</i>	<p>[I] There is potential for sage-grouse mortality if organophosphorus insecticides are applied to agricultural fields to limit insect damage. Recently similar treatments have been applied to rangelands for grasshopper outbreaks. Such treatments could lead to direct mortality or have indirect effects by removing important foods for chicks.</p> <p>[G] 1) Evaluate necessity of insecticide application</p>

	<p>[G] 2) Avoid use of any insecticide in brood-rearing habitats</p> <p>[G] 3) Avoid use of non-specific insecticides in sage-grouse habitats.</p> <p>[G] a) Use instar specific insecticides to limit the impacts to other invertebrate species</p>
<i>Urban Development</i>	<p>[I] Urban developments should be clustered to limit the extent of disturbance to sage-grouse habitats. If clustering is not possible off-site mitigation should be considered (i.e., funding or cost-sharing a habitat project elsewhere). Typically these developments will occur on private land and such stipulations would need to be addressed through county planning.</p>
<i>Habitat Fragmentation</i>	<p>[E] Habitat loss and fragmentation are probably the 2 leading causes for the long-term decline in sage-grouse. Current and future land management will need to examine landscape patterns of sagebrush habitat and seek strategies to ensure that large connected patches of sagebrush are present. The implementation of the connectivity model and habitat monitoring techniques suggested in the Plan will help minimize the impacts of habitat loss and fragmentation.</p>

Listing Factor A: Energy Development and Transmission

Commercial or industrial developments (i.e., energy development and transmission) have had varied but generally negative impacts on sage-grouse demography and habitat use (Naugle et al. 2011). Currently, there is a paucity of specific information about the effects of renewable energy development (e.g., solar, wind, geothermal) on sage-grouse ecology. Generally, oil and gas developments within 2-4 miles of leks and/or nesting areas had deleterious effects on populations (Lyon and Anderson 2003, Holloran 2005, Walker et al. 2007). Oil and gas fields may differ in the overall vertical structure and vehicle traffic relative to renewable energy developments, but they are similar from the standpoint that roads and infrastructure fragment native habitat (Becker et al. 2009). Recent work on coal-bed methane development indicates 3 wells per 4 km² (~988 acres) diminishes the use of otherwise suitable sage-grouse winter habitat by 10% and with 22 wells use is diminished by 47% (Doherty et al. 2008). The latter figure (22 wells / 4 km²) is likely similar to some of the densities observed for wind turbine placement (BLM 2010). Wyoming has identified impacts of >1 well per section (640 acres) as an unacceptable threshold for oil/gas developments in sage-grouse Core Areas (Doherty et al. 2008). Specific thresholds for other energy developments have not been quantified or documented in scientific literature.

Increased abundance of raptors and corvids within occupied sage-grouse habitats may result in predation rates outside the range of natural variation (Coates 2007). Transmission structures may also provide nesting sites for corvids and raptors in habitats with low vegetation and relatively flat terrain. Thus, raptors and corvids may preferentially seek out transmission structures in areas where natural perches and nesting sites are limited.

Implementing the Core Area approach to siting of industrial developments and related mitigation provides recommendations about where development should or should not occur. The following recommendations are provided for those areas where micro-siting of infrastructure is going to occur.

Action: Reduce risk of (avoid, minimize and mitigate) impacts from energy development, transmission lines and associated infrastructure on sage-grouse habitat in accordance with habitat mitigation policy.	
Issue	Conservation guidelines
<i>Core Areas (Guidance for habitat classification within core areas)</i>	<p>As a broad-scale filter, aim to avoid impacts from energy development in Core Areas. Determine site-specific habitat classifications by answering the following questions:</p> <p>[I] 1) Are the habitats those upon which sage-grouse depend (see Core Area section for details)?</p> <p>[I] 2) Is the site-specific habitat both essential and irreplaceable?</p> <p>[A] a) If the answer is yes to both questions, the appropriate classification is likely Habitat Category 1 under OAR 635-415-0025. Determine whether project will impact habitat and, if impacts are unavoidable, recommend alternative actions.</p> <p>[A] b) If the answer is yes to the first, but not to the second, the appropriate classification is likely Habitat Category 2 or lower and</p>

	<p>habitat mitigation alternatives should be recommended consistent with the Fish and Wildlife Habitat Mitigation Policy.</p>
<p><i>Low Density Habitat (Guidance for habitat classification in low density habitat)</i></p>	<p>Determine site-specific habitat classifications by answering the following questions:</p> <p>[I] 1) Are the habitats essential to the species and those upon which sage-grouse depend (see Core Area section for details)?</p> <p>[A] a) If the answer is yes, the appropriate classification is likely Habitat Category 2. Determine whether project will impact habitat and, if impacts are unavoidable, recommend habitat mitigation alternatives consistent with the Fish and Wildlife Habitat Mitigation Policy.</p> <p>Low density habitat will not be classified as Habitat Category 1.</p> <p>[G] 2) Appropriate set-back distances (thresholds) regarding density (# of units per area), size (total area disturbed), and noise levels of energy developments need examination to determine what the effects are on sage-grouse. Until better information is available, managers should err on the side of the birds' biology and use the greatest set-back distance where feasible and necessary.</p> <p>[A] 3) Use existing utility corridors and rights-of-ways to consolidate activities to reduce habitat loss, degradation, and fragmentation by new construction. Where topographically possible, install new power lines within existing powerline corridors or highway rights-of-way.</p> <p>[G] 4) In some cases power lines should be buried to minimize the disturbance.</p> <p>[A] 5) MET towers should be constructed without guy wires, if guy wires are necessary then should be marked with anti-strike devices</p>
<p><i>Habitat Mitigation</i></p>	<p>[I] 1) Use Core Area designations to Mitigate (avoid, minimize and mitigate) for impacts sage-grouse habitats.</p> <p>[A] 2) Update and revise Core Area and Low Density maps as new information is acquired on winter habitat use, lek distribution, disturbance thresholds to various types of development, and success of mitigation measures.</p>

Listing Factor A: Climate Change

Some climate change projection models indicate significant changes to the sagebrush biome in the next 20-30 years (Miller et al. 2011). Efforts in energy conservation and non-fossil fuel energy developments may assist in reducing greenhouse gases that contribute to global change, and could slow this process. However, if current climate change projections are realized, such changes may impact ODFW's ability to meet or maintain the goals of this Plan. Thus, achieving the 70% sagebrush and 30% disturbance habitat goal may be difficult. It is likely that habitat changes would occur first and population loss would follow. Most climate change studies indicated that higher elevation and more northerly latitude sagebrush communities would be among the most resilient to the projected changes (Miller et al 2011). The sagebrush biome occurring in Oregon is included in the more northerly latitudes and several of the mountain ranges therein (e.g., Steens, Pueblos, Hart, Trout Creeks) would be included in the higher elevation communities. Schrag et al. (2010:13) recommend an increased emphasis on conservation and protection of sagebrush communities with greater likelihood of resilience to climate change, and stated "We recommend increased emphasis on conservation and protection of areas with a high probability of suitable sagebrush habitat in the future, including both core and low density areas."

Action: Minimize the effects of climate change on sage-grouse populations and habitats.	
Issue	Conservation guidelines
<i>Non-fossil fuel energy generation in sage-grouse habitat</i>	<p>[E] 1) Use guidance provided by Core Areas to site energy development projects</p> <p>[E] 2) Use ODFW Mitigation Policy to avoid, minimize, and mitigate impacts to sage-grouse habitat</p>
<i>Resilient sagebrush habitats need to be identified and protected</i>	<p>[E] 1) Use Core Area maps and climate change models to identify those Core Areas that are likely to persist as sagebrush into the future.</p> <p>[E] a) Identify opportunities to conserve and protect those resilient habitats.</p>

Listing Factors B&E: Recreation

Human uses of the sagebrush steppe for recreational activity vary widely. The direct effects of these activities are unknown, but there are negative correlations with sage-grouse populations and increased human activity (Connelly et al. 2004). There is no commercial use of sage-grouse in Oregon.

Action: Minimize the impact of recreational activities on sage-grouse habitats while ensuring continued enjoyment of the sagebrush steppe ecosystem.	
Issue	Conservation guidelines
<i>Viewing</i>	<p>[A] 1) Protect existing leks and provide secure sage-grouse breeding habitat with minimal disturbance and harassment through seasonal closures of roads and areas.</p> <p>[E] 2) Provide sage-grouse habitats secure from direct human disturbance during the winter and breeding seasons (when birds are concentrated and susceptible to harassment).</p> <p>[E] 3) If alternative measures have not been successful in reducing disturbances initiate seasonal or area closures as necessary to protect sage-grouse habitats.</p> <p>[G] 4) Assist with developing public viewing areas of sage-grouse leks with oversight from ODFW and land management agencies to minimize disturbance. When necessary to protect sage-grouse lek disturbance from public viewing work with ODFW to develop viewing areas that minimize disturbance.</p>
<i>Off-Highway-Vehicles (e.g., includes ATVs, motorcycles, four-wheel-drive jeeps, pick-up trucks, or sport-utility vehicles).</i>	<p>[A] 1) Off-highway-vehicle (OHV) use off of designated routes should be restricted to areas >3.2 km (2 mi) from leks during the breeding season.</p> <p>[E] 2) OHVs should be restricted to on-trail or on-road use during the nesting season in areas known to be occupied by sage-grouse. Some playas serve as breeding display sites and could be impacted by off-road use.</p> <p>[E] 3) The extent and intensity of OHV use should be monitored. Quantifying OHV use (e.g., daily and seasonal use) will assist in mitigating potential conflicts with sage-grouse habitat needs and recreational pursuits.</p>
<i>Developed or Improved Recreation Sites</i>	<p>[A] 1) Facilities (i.e., kiosks, toilets, signs, etc.) should be constructed at least 3.2 km (2 mi.) from leks to minimize disturbance during the breeding season.</p> <p>[A] 2) Facilities (kiosks, toilets, signs, etc.) should be constructed to minimize disturbance in known/occupied sage-grouse nesting and early brood-rearing habitat. Avoid construction of facilities that provide avian predator perches unless they include mitigating features such as perch guards.</p>
<i>Hunting</i>	<p>[I] 1) Methods further clarified since 2005 for establishing harvest permits (Appendix I of the Oregon Sage-Grouse Strategy). Continue to evaluate and adaptively adjust permit numbers annually.</p> <p>[I] 2) Maintain biological data collection from hunter harvests for estimating productivity, gender ratios, hatch dates, and nesting success, and surveying the prevalence of West Nile virus.</p> <p>[I] 3) Regulations will be re-evaluated every 5-years consistent with ODFW Upland Game Bird Framework.</p>

Listing Factor C: Predation

Sage-grouse have many predators, but there is little published information indicating that predation is a major limiting factor for the species (Hagen 2011). Few studies have examined the effects of predator control on sage-grouse populations (Batterson and Morse 1948, Slater 2003, Coates and Delehanty 2004). Batterson and Morse (1948) and Coates and Delehanty (2004) removed ravens from their study areas and indicated increased nest success; however, neither study had an appropriate control in their experiment. Slater (2003) examined the effects of coyote removal on nest and brood survival and found no measurable effects between the removal and non-removal area. However, there may be instances where small isolated populations are declining or are at risk of extirpation because of predation. Human-induced increase in abundance of red fox, raccoon, or other predators may negatively impact local populations. Similarly translocated birds may be unfamiliar with their new habitat and more susceptible to predation. In such instances where populations are at a critical level, the feasibility of short-term predator control program should be evaluated. Long-term intensive predator control programs are not cost-effective or socially acceptable. Proper habitat management is the best long-term strategy to ensure predation does not threaten viability of populations (Schroeder and Baydack 2001).

Action: Minimize the effects of predation on isolated, translocated, or declining populations where predation has been identified as a limiting factor	
Issue	Conservation guidelines
<p><i>Predator populations have reached a level outside the range of natural variation</i></p> <p><i>Translocated populations have naïve birds and may be more susceptible to predation.</i></p> <p><i>Isolated populations may be at increased risk level due to marginal or fragmented habitat</i></p> <p><i>Populations have reached critically low numbers</i></p>	<p>[G] 1) Evaluate feasibility of short-term predator management programs.</p> <p>[G] 2) Consider predator management program only when identified as a limiting factor and other management tools have not stabilized declining population.</p> <p>[I] a) Predator management includes both lethal and non-lethal methods. Examples of non-lethal methods are: using perch deterrents on power poles or fence posts, modifications to power poles or other human-made structures that are used by corvids or raptors for nesting</p>

Listing Factor C: West Nile Virus

The emergence of West Nile Virus (WNV) in the western U.S. and the lack of resistance in the sage-grouse immune system is a serious management concern (Naugle et al. 2004, Clark et al. 2006). Outbreaks of the virus have been localized but sage-grouse have been documented with the disease in Alberta, California, Colorado, Idaho, Montana, Nevada, North Dakota, Oregon, and Wyoming. At this point in time, monitoring for outbreaks is priority and development of response strategies is needed. Oregon Department of Human Services (ODHS) has added sage-grouse to the species watch list for monitoring the spread of WNV. The ODHS has provided funding for testing of specimens and information and education. The ODFW provides each successful applicant for a sage-grouse hunting permit with 2 Nobuto strips to collect blood samples from each harvested grouse to be assayed for WNV. From 2006-2009, 1,503 samples were collected; 1,097 have been assayed (2009 samples still pending) with 1 positive (from a juvenile male) being detected in the Beulah Unit from the 2008 harvest.

Action: Minimize the effects of WNV (or other pathogens) on populations.	
Issue	Conservation guidelines
<i>The effect of WNV to the statewide population is unknown</i>	<p>[G] 1) Investigate and record deaths that could be attributed to disease or parasites.</p> <p>[G] 2) Develop and implement strategies to deal with disease outbreaks where appropriate.</p> <p>[G] 3) Continue to educate public about WNV and sage-grouse.</p> <p>[G] 4) Monitor radiomarked populations during WNV season (July – September) where applicable.</p> <p>[I] 5) Continue to collect blood samples from hunter harvested sage-grouse to monitor the presence of the disease over a broad area.</p>
<i>Areas of WNV outbreak in sage-grouse populations</i>	<p>1) Evaluate feasibility of mosquito control including:</p> <p>[G] a) Mitigate water sources that provide breeding habitat for mosquitoes.</p> <p>[G] i) Change irrigation techniques from flood to sprinkler systems.</p> <p>[G] ii) Control water overflow.</p> <p>[G] b) Use larvicides in areas where mosquito habitat cannot be reduced.</p> <p>[G] c) Evaluate the effectiveness of spraying for adult mosquitoes.</p> <p>[B] i) Consider using mosquito specific insecticides.</p>

Listing Factor D: Regulatory Mechanisms

The USFWS 2010 “warranted but precluded” finding determined that current regulatory mechanisms, including those administered through local (County) governments, state, and federal land management agencies, were insufficient to conserve sage-grouse populations, primarily with regard to habitat loss and fragmentation. Regulatory mechanisms have little control of wildfire, invasive weeds, and juniper encroachment. However, all of these regulatory entities can direct or guide location of commercial or industrial development that may result in large scale habitat loss or fragmentation, one of the primary causes contributing to a positive finding on Factor A. Thus, increasing regulatory mechanisms designed to maintain or enhance sage-grouse habitat by local, state and federal regulatory and land management agencies will increase the certainty of a conservation focus for these regions.

Action: Increase certainty that local, state, and federal agencies can fully implement regulatory mechanisms available to conserve sage-grouse habitats and populations.	
Issue	Conservation guidelines
<i>State and federal regulatory agencies lack regulations to adequately address the impact of industrial and commercial developments</i>	[A] 1) Adopt Core Area habitat categories and mitigation recommendations as part of Resource Management Plans, State Asset Planning, and Forest Planning.
<i>Current local regulations may not adequately address the impact of industrial and commercial developments.</i>	[I] 1) Adopt sage-grouse habitat as a Goal 5 resource in County Comprehensive Plans. [I] a) Adopt Core Area habitat categories and mitigation recommendations as part of the Goal 5 resource planning.
<i>Candidate Conservation Agreements (CCAs) and Candidate Conservation Agreements with Assurances (CCAAs) are underutilized tools to foster conservation of sage-grouse habitats</i>	[G] 1) Advocate proactive, cooperative approaches to protecting sage-grouse habitat by using CCA or CCAA processes to provide “safe harbor” for participating landowners or permittees and incentives for maintaining or improving habitat and sage-grouse populations. [G] 2) Advocate for regional or local conservation plans that meet the criteria of the USFWS Policy for Evaluating Conservation Efforts (PECE).

Figure 2. Biophysical Setting Seral Structural Classes with potential to provide sage-grouse habitat

BpS Structural Class	Low ARV (percent)	Reference (percent)	High ARV (percent)
Inter-Mountain Basins Semi-Desert Grassland - SCLASS A	14.0	20	26
Inter-Mountain Basins Semi-Desert Grassland - SCLASS B	56.0	80	100
	70.0	100	126
Columbia Plateau Steppe and Grassland - SCLASS B	56.0	80	100
Columbia Plateau Steppe and Grassland - SCLASS C	10.5	15	19.5
	66.5 or 10.5	100 or 15	126 or 20
Columbia Plateau Low Sagebrush Steppe - SCLASS A	7.0	10	13
Columbia Plateau Low Sagebrush Steppe - SCLASS B	28.0	40	52
Columbia Plateau Low Sagebrush Steppe - SCLASS C	35.0	50	65
	70 or 63	100 or 90	130 or 117
Columbia Plateau Scabland Shrubland - SCLASS B	3.5	5	6.5
Columbia Plateau Scabland Shrubland - SCLASS C	63.0	90	100
	66.5	100 or 95	113 or 107
Stiff and Low Sagebrush with Trees - SCLASS A	7.0	10	13
Stiff and Low Sagebrush with Trees - SCLASS B	45.5	65	84.5
Stiff and Low Sagebrush with Trees - SCLASS C	7.0	10	13
Stiff and Low Sagebrush with Trees - SCLASS D	10.5	15	19.5
	70 or 52.5	100 or 75	130 or 98
Wyoming Big Sagebrush Semi Desert with Trees - SCLASS A	10.5	15	19.5
Wyoming Big Sagebrush Semi Desert with Trees - SCLASS B	35.0	50	65
Wyoming Big Sagebrush Semi Desert with Trees - SCLASS C	17.5	25	32.5
Wyoming Big Sagebrush Semi Desert with Trees - SCLASS D	3.5	5	6.5
Wyoming Big Sagebrush Semi Desert with Trees - SCLASS E	3.5	5	6.5
	70 or 66.5	100 or 95	130 or 124
Mountain Big Sagebrush with Conifers - SCLASS A	14.0	20	26
Mountain Big Sagebrush with Conifers - SCLASS B	35.0	50	65
Mountain Big Sagebrush with Conifers - SCLASS C	10.5	15	19.5
Mountain Big Sagebrush with Conifers - SCLASS D	7.0	10	13
Mountain Big Sagebrush with Conifers - SCLASS E	3.5	5	6.5
	70.0	100	130
Inter-Mountain Basins Big Sagebrush Shrubland - SCLASS A	10.5	15	19.5
Inter-Mountain Basins Big Sagebrush Shrubland - SCLASS B	24.5	35	45.5
Inter-Mountain Basins Big Sagebrush Shrubland - SCLASS C	28.0	40	52
Inter-Mountain Basins Big Sagebrush Shrubland - SCLASS D	7.0	10	13
	70 or 59.5	100 or 85	130 or 111
Inter-Mountain Basins Mountain Mahogany W & S land - SCLASS A	3.5	5	6.5
Inter-Mountain Basins Mountain Mahogany W & S land - SCLASS B	7.0	10	13
Inter-Mountain Basins Mountain Mahogany W & S land - SCLASS C	10.5	15	19.5
Inter-Mountain Basins Mountain Mahogany W & S land - SCLASS D	31.5	45	58.5
Inter-Mountain Basins Mountain Mahogany W & S land - SCLASS E	17.5	25	32.5

BpS Structural Class	Low ARV (percent)	Reference (percent)	High ARV (percent)
	70.0	100	130
Juniper Steppe Woodland - SCLASS A	3.5	5	6.5
Juniper Steppe Woodland - SCLASS B	3.5	5	6.5
Juniper Steppe Woodland - SCLASS C	7.0	10	13
Juniper Steppe Woodland - SCLASS D	24.5	35	45.5
Juniper Steppe Woodland - SCLASS E	31.5	45	58.5
	70 or 10.5	100 or 15	130 or 20
Northern Rocky Mountain Ponderosa Pine Woodland - Xeric - SCLASS A	17.5	25	32.5
Northern Rocky Mountain Ponderosa Pine Woodland - Xeric - SCLASS B	3.5	5	6.5
Northern Rocky Mountain Ponderosa Pine Woodland - Xeric - SCLASS C	17.5	25	32.5
Northern Rocky Mountain Ponderosa Pine Woodland - Xeric - SCLASS D	28.0	40	52
	70 or 17.5	100 or 25	130 or 33
<p>Light Grey Shading - primary seral class providing sagebrush cover within limits of providing Sage-grouse habitat. Medium Grey Shading- seral classes with adequate sagebrush cover to provide habitat but may have transitioned to tree dominated. Dark Grey Shading - early seral condition that may still have 5% shrub cover especially as they begin to transition to the next seral state.</p>			

Figure 3. Sagebrush canopy cover classes by Biophysical Setting Seral Structural class with potential to provide sage-grouse habitat.

BPS Name	Fire Regime	Class A Dominant Species	Class A Canopy Cover	Class 1-5	Class B Dominant Species	Class B Canopy Cover	Class 1-5	Class C Dominant Species	Class C Canopy Cover	Class 1-5	Class D Dominant Species	Class D Canopy Cover	Class 1-5	Class E Dominant Species	Class E Canopy Cover	Class 1-5
Columbia Plateau Steppe and Grassland	2	PSSP, POSE, FEID	10-50%		PSSP, POSE, FEID	50-90%	1,2	ARTR, CHVI4, ERNAL, PSSPS	0-30%	1,2,3,4,5						
Columbia Plateau Scabland Shrubland	5	ERTH4, POSE, LOMA, STST5	0-10%		ERTH4, ARR12, POSE, STST5	0-10%	1,2,3	ARR12, ERTH4, POSE, STST5	11-30%	3,4,5						
Stiff and Low Sagebrush with Trees	3	PSSP6, ACTH7, ACHY, POSE	0-4%		ARAR8, ACHY, PSSP6	5-9%	3	ARAR8, PSSP6, ACHY	10-20%	3,4	JUOC, PSSP6	6-40%	3,4,5			
Inter-Mountain Basins Big Sagebrush Shrubland	3	POSE, HECO2, AMSIN, EPILO	0-10%		POSE, ARTR, GRSP, HECO2	0-10%	1,2,3	ARTR, GRSP, POSE, HECO2	11-20%	3,4	ARTR, GRSP, POSE, HECO2	21-40%	4,5			
Inter-Mountain Basins Mountain Mahogany W & S land	4	CELE3, ARTR2, CHRYS, SYMPH	0-40%	1,2,3,4,5	CELE3, ARTRV, PUTR2, SYMPH	10-50%	3,4,5	CELE3, ARTRV, CHRYS, SYMPH	10-50%	3,4,5	CELE3, ARTRV, PUTR2	11-40%	3,4,5	CELE3, SYMPH, ARTRV, FEID	10-60%	3,4,5
Wyoming Big Sagebrush Semi Desert with Trees	4	ACHY, HECOC, CHVI8, ARTR	0-10%	1,2,3	ARTR, ACHY, CHVI8, HECO2	11-25%	3,4,5	ARTR, CHVI8, EREL5, HECO2	26-35%	5	JUNIP, ARTR	0-15%	1,2,3	JUNIP	16-90%	
Mountain Big Sagebrush with Conifers	4	PSSP6, FEID, SYMPH, ARTRV	0-5%	1	ARTRV, PUTR2, CONIF, SYMPH	6-25%	3,4	ARTRV, PUTR2, SYMPH, CONIF	26-45%	5	CONIF, ARTRV, PUTR2, SYMPH	10-25%	3,4	CONIF, ARTRV, PUTR2, SYMPH	26-80%	5

BPS Name	Fire Regime	Class A Dominant Species	Class A Canopy Cover	Class 1-5	Class B Dominant Species	Class B Canopy Cover	Class 1-5	Class C Dominant Species	Class C Canopy Cover	Class 1-5	Class D Dominant Species	Class D Canopy Cover	Class 1-5	Class E Dominant Species	Class E Canopy Cover	Class 1-5
Juniper Steppe Woodland	3	EPAN, CRAC, CRYP, SENEC	2-10%		ARTRV, SYOR, ACOC3, CRAC	5-10%	3	ARTRV, SYOR, POSE, ACOC3	11-20%	3,4	JUOC, SYOR, FEID	11-30%		JUOC, FEID, BASA	21-40%	
N. Rocky Mt. Ponderosa Pine Woodland-Xeric	3	ARTR, CHV18, AGSP, ELEL5	0-50%	1,2,3, 4,5	PIPO, JUOC, FEID, ARTR	25-70%	5	PIPO, ARTR, PUTR, AGSP	0-25%	1,2,3,4	PIPO, ARTR, CELE3, ELEL5	0-25%	1,2,3,4	PIPO, CELE3, JUOC, FEID	25-70%	
IMB Semi-Desert Grassland	4	ARTR2, HECO2, ACHY	21-40%	4,5	ARTR2, HECO2, ACHY	0-30%	1,2,3, 4,5									
CP Low Sagebrush Steppe	4	PSSP6, POSE, LOMA, EPPA	0-30%	1,2,3, 4,5	PSSP6, POSE, LOMA, ARAR8	1-10%	2,3	ARAR8, PSSP6, POSE, LOMA	11-30%	3,4,5						
<p>Light Grey Shading - primary seral class providing sagebrush cover within limits of providing Sage-grouse habitat.</p> <p>Medium Grey Shading - seral classes with adequate sagebrush cover to provide habitat but may have transitioned to tree dominated.</p> <p>Dark Grey Shading - early seral condition that may still have 5% shrub cover especially as they begin to transition to the next seral state.</p>																

APPENDIX G:

Wild and Scenic River Suitability Report for North Fork John Day River

Suitability Determination:

A Draft Suitability Study was developed and included in the John Day Basin Draft RMP/EIS. A 90-day comment period was provided between October 30, 2008 and January 29, 2009. No comments were received on the Suitability Study. The John Day Basin Proposed Resource Management Plan and Final Environmental Impact Statement, published in March 2012, contained the District's preliminary recommendation that the North Fork John Day River between River Mile 55 (Camas Creek) and River Mile 20.4 (four miles upriver from Monument) is suitable for inclusion in the National Wild and Scenic River System. During the 30-day protest period following publication of the JDBPRPM/FEIS, no protests were received that addressed the recommendation of suitable, suitability study findings, or Wild and Scenic River management recommendations.

I have reviewed the eligibility report (Appendix I-1 JDB DRMP/EIS; USDI BLM 2008) and the suitability study (Appendix I-3 JDBPRMP/FEIS; USDI BLM 2012) and find that these documents address the appropriate information and there are no new circumstances warranting additional review of eligibility or change in the suitability factors. The BLM is the primary land management agency on this segment of river and has management control over the visual resource values adjacent to the river, as well as the free flowing nature of the river through implementation of this RMP. Accordingly, there should be no need to revisit the eligibility or suitability in the future.

Based on the findings in both the eligibility report and suitability study, my review of past and present circumstances that may require additional review, and the results of the public review process it is my determination that the North Fork of the John Day River between River Mile 55 (Camas Creek) and River Mile 20.4 (four miles upriver from Monument) is suitable for inclusion in the National Wild and Scenic River System for the Outstandingly Remarkable Values of Scenery, Recreational Opportunities, and Fish.



H.F. "Chip" Faver
Central Oregon Field Manager
Bureau of Land Management

10-31-12
Date

Suitability Study

Introduction

The process used by BLM to identify and evaluate river segments for inclusion into the National Wild and Scenic Rivers system is guided by the provisions of the Wild and Scenic Rivers Act and BLM planning guidance.

Section 5(d)(1) of the Act directs federal agencies to consider potential wild and scenic rivers in the land and water planning processes. To fulfill this requirement, the BLM inventories and evaluates rivers when it develops comprehensive resource management plans for public lands in a specified area.

An eligibility inventory was conducted during the data gathering stage of the John Day Basin Resource Management Plan. Sixteen segments of the North Fork John Day River that flow through public lands were reviewed, totaling 25.55 miles. The shortest segment is 0.13 mile and the longest segment is 7.79 miles. All 16 segments are located within a section of the river that is 36.24 miles long, beginning along County Road 31, roughly 3 miles northeast from Monument in Section 23, T. 7 S., R. 28 E., in Grant County, and ending at the confluence of Camas Creek in Section 26, T. 6 S., R. 31 E., in Umatilla County. The 16 review segments through public lands make up 70.5 percent of this section of river.

In the fall of 2006, BLM released the Analysis of the Management Situation (AMS) and Preliminary Public Involvement document. The AMS included the June 11, 2006 Final Report of Potential Wild and Scenic Rivers (WSRs) in the John Day Basin RMP planning area. That final report identified the North Fork John Day River as eligible for further study in the land use plan.

This suitability report was written during the formulation of the Draft RMP.

Outstandingly Remarkable Values along the North Fork John Day River

The Final Eligibility Report identified the following Outstandingly Remarkable Values (ORVs) for the North Fork John Day River in all studied segments:

Scenic values: The North Fork John Day River “flows through some of the finest scenery in Oregon” (BLM 2000, p. 110), which includes a river valley bordered by steep, rugged hillsides with rock outcroppings and a variety of vegetarian types, including stands of ponderosa pines and Douglas fir, grassy meadows, and scattered clumps of riparian vegetation. Views of adjacent mountain peaks are offered along some sections of the river. This mix of landform, vegetation, water, and color add to the visual values along the river.

While such features are not unique among rivers in the Blue Mountains ecoregion of northeastern Oregon, they are notable and of a quality to attract visitors from outside the area. The state of Oregon valued the scenic quality of the North Fork enough to include the entire study section in the State Scenic Waterway System under the Oregon Scenic Waterways Act (ORS 390.826). Only 18 other waterways and one lake in Oregon are afforded this protective status.

A BLM-maintained native surface road that runs adjacent to the river from State Highway 395 to Potamus Creek occasionally can intrude on the scenic nature of the river, while at the same time provides easy access for visitors to view the scenery. The river corridor in this section is narrow and the hills rise over 2,000 feet, with dense strands of mixed conifer on north-facing slopes. The warmer south-facing slopes are characterized by well-spaced ponderosa pine, a few junipers, and a terraced grassy understory. A few houses and ranches are located along this section of the river.

A primitive road (with no public easement through private sections) located from Potamus Creek downstream to the confluence with Wall Creek is less conspicuous and the scenery more primitive. Only a few structures and primitive roads are seen along this segment of the river, leaving much of the area in a natural appearing state. Here, the river flows through a wide valley with adjacent mountain peaks rising less than 2,000 feet. The area is mostly rangeland, with steep hillsides dotted with strands of ponderosa pine.

Recreation Values: The North Fork John Day offers numerous recreational opportunities, including boating, hunting, fishing, camping, hiking, sightseeing, watchable wildlife, recreational gold panning, nature study, and photography. The boating opportunities are particularly rare or unique in northeastern Oregon as visitors are offered opportunities for solitude and a natural environment with easily negotiated Class I & II rapids and multiple boat launch and take-out areas.

This access provides opportunities for trips that vary, from a few hours to multiple days. While the mainstem John Day, from Service Creek to Clamo, offers similar river rafting experiences (e.g., Class I & II rapids and numerous access points), the North Fork (from Dale to Monument, which encompasses the study section) is considered by some as having better scenery and whitewater (Cassady et al. 1994). The rafting season is generally limited to May and June with weather earlier and flow levels later in the season being limiting factors.

Boater registration data (albeit incomplete) collected between 1998 and 2005 documented that nearly one-third of trip leaders traveled from outside of Oregon to float the river, while the majority of those coming from Oregon (all except one) traveled over 100 miles. This data suggests that visitors are willing to travel long distances to visit the river for recreational purposes.

Fish Values: All steelhead trout in the John Day River Basin are genetically grouped into the Middle Columbia Evolutionarily Significant Unit (ESU). Steelhead in this ESU were listed as threatened under the Endangered Species Act (ESA) on March 25, 1999 ([64 FR 14517], effective May 24, 1999, with threatened status reaffirmed on January 5, 2006). The John Day basin is included in the ESU.

The North Fork John Day, including the 25.55 miles of river that flow through BLM land, is an important contributor to the total population of Middle Columbia summer steelhead trout in the Middle Columbia ESU.

In addition, the North Fork John Day population of the Middle Columbia Summer Steelhead Species Management Unit meets all six criteria used to determine near-term sustainability (e.g., existing populations, distribution, abundance, productivity, reproductive independence, and hybridization; ODFW 2005). This includes the study segment as well as approximately 54 miles upstream from the study managed by USDA-Forest Service that are already part of the national WSR system.

The U.S. Forest Service WSR designation is partially due to possessing outstandingly remarkable fisheries values, including steelhead trout. The protection afforded by the upstream WSR designation adds to the integrity of the fisheries in the review segments and helps ensure that the biological needs (i.e., migration corridor) of the species are met.

Classification

At the same time that eligibility recommendations are made, rivers that meet the eligibility criteria are given a tentative classification (either wild, scenic, or recreational), as required by the WSR Act. Tentative classification is based on the type and degree of human development associated with waterway and adjacent lands as they exist at the time of the review. This classification, however, is a planning recommendation and is tentative to Congressional legislative determination.

The tentative classifications are further defined as follows:

- **Wild River Area**-- Wild river areas are those where the rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America. Wild means undeveloped; roads, dams, or diversion works are generally absent from a one-quarter mile corridor on both sides of the river.
- **Scenic River Area**-- Scenic river areas are those where the rivers or sections of rivers that are generally free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads. Scenic does not necessarily mean the river corridor has to have scenery as an outstandingly remarkable value; however, it means the waterway or segment may contain more development (except for major dams or diversion works) than a wild segment and less development than a recreational segment. For example, roads may cross the river in places but generally do not run immediately parallel to it. In certain cases, if a parallel road is unpaved and well-screened from the river by vegetation, a hill, etc., it could qualify for scenic river area classification.
- **Recreational River Area**-- Recreational river areas are those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past. Parallel roads or railroads, or the existence of small dams or diversions can be allowed in this classification. A recreational river area classification does not imply that the river or section of river will be managed or have priority for recreational use or development.

The North Fork WSR Eligibility Report recommended;

1. BLM public lands from the Wrightman County Road to Wall Creek (river segments 2.02-2.10) have a tentative classification as Scenic and should be managed for semi-primitive non-motorized, to semi-primitive motorized settings.
2. BLM public lands west of Highway 395 to the Wrightman County Road and just upriver from Monument (river segments 2.01 and 2.11 to 2.16) are recommended a tentative classification as Recreational and should be managed for roaded to rural settings.

Additional information describing the inventory, evaluation process, and recommended tentative classification is in the Final Wild and Scenic River Eligibility Report on a CD in the back page of the Analysis of the Management Situation for the John Day Basin RMP.

The recommendations of this report are included in one or more RMP alternatives, to provide a range of management options to protect the ORVs of this river and also satisfy BLM guidance. The planning team

considered the WSR Final Report information in developing different land management alternatives for the two river segments of the North Fork John Day River.

Suitability

The final step in the river assessment process is the determination of suitability. BLM Manual 8351 (BLM 1992) (*replaced in July 2012 by BLM Manual 6400*) guidance identifies eight factors to answer when completing this study. Suitability determination results from a combined assessment of river attributes and other land uses associated with a river. Additional factors may be considered if applicable to a river segment.

Congressional legislation is required to actually designate a river as a federal Wild and Scenic River. The suitability evaluation does not automatically result in designation. If the suitability study determines that a river segment is suitable for WSR designation, then BLM makes that recommendation to Congress. However, if the suitability study determines that a river segment is not suitable, BLM would not recommend this river segment as suitable for Congressional WSR designation. This conclusion would be stated in the RMP, releasing it from further WSR review.

The following eight factors, identified in BLM Manual 8351, have been reviewed to determine the suitability for Wild and Scenic River status of the North Fork John Day River between Camas Creek and river mile 20.4 north of Monument.

1. Characteristics that do or do not make the river a worthy addition to the National WSR System:

The Eligibility Report for the North Fork John Day River (Appendix I-1 of JDBPRMP/FEIS) determined that this river has scenic quality, recreational opportunities, and fisheries values that are Outstandingly Remarkable and make this river segment a worthy addition to the National WSR System. These values are summarized in the Eligibility Report.

2. The status of land and mineral ownership, use in the area, and associated or incompatible uses:

Rights-of-way: 1) The Oregon Fish & Wildlife Commission's right-of-way for public access on road and river areas from Camas Creek to private land, just upriver from the Wrightman Canyon County Road. At this time the current landowner does not prevent public access on the road across private land. There is, however, no public right-of-way across this land and permission to cross may be revoked at any time. 2) Power/phone line rights-of-way to several homes downriver from Camas Creek for power and telephone service.

Mining Claims and Mineral Leases: As of June 2007, there were no known mineral, salable or oil, gas or geothermal leases or activities on public, private or state lands that would conflict with potential Wild and Scenic River designation on public lands along the North Fork John Day River, from its junction with Camas Creek at State Highway 395, downriver to Monument. There are several parcels adjacent to or near the river with mineral rights owned by private parties. Due to the relatively low mineral potential of the proposed WSR corridor, the probability of mineral development and conflicts with WSR Outstandingly Remarkable Values is low.

Livestock Grazing Status: Isolated tracts of public lands south of the North Fork John Day River near Monument have been grazed under BLM permit prior to the Oregon Land Exchange Act (OLEA). Range grazing allotments include Slick Ear, Neal Butte, Johnny Cake, Big Bend and North Fork. BLM has temporarily suspended grazing on these public lands until the JDBRMP is completed. Some lands north of Monument adjacent to the river that were owned prior to the exchange are still grazed.

Grazing has historically occurred on recently acquired BLM lands before BLM obtained ownership of these lands. After OLEA was completed, BLM decided to not authorize any grazing until the issue of authorizing grazing on acquired public lands is evaluated and decided in the JDBRMP. Grazing use and its potential effect on ORVs will be evaluated in this land use plan.

Fire/Fuels: The North Fork has been subject to wildfires over time. In 2001, the Monument Complex wildfire burned approximately 21,000 acres of public lands in Wall, Little Wall, Squaw, Cabin Creeks, Graves, Mallory, and Potamus Creeks, extending north into the Umatilla National Forest (FEMA report via Google). These values are summarized in the Eligibility report.

Other recent but smaller fires have occurred in this area: Wall and Graves Creek, Little Wall Creek (2003), and Hunter Creek (2006). In 2007, a second Monument Fire Complex burned about 54,000 acres, up to the west bank of river between river miles 39 and 31 and both sides of the river between river miles 31 and 24.

Other: Scattered private/public land ownership exists from the Camas Creek to Wrightman County Road Bridge. The private land ownership pattern increases along the North Fork John Day River downriver, from the Wrightman Canyon county road. The Outstandingly Remarkable Values that qualify this river segment as eligible for inclusion are not affected by either the Skull Canyon Bridge or the Wrightman Canyon Bridge; these bridges do not affect the free-flowing nature of the river.

3. Reasonably foreseeable potential uses of the land and related waters that would be enhanced, foreclosed, or curtailed if the area were included in the National WSR System and values that would be foreclosed or diminished if the area were not designated:

Management consistent with Wild and Scenic River status would maintain existing opportunities for fishing, big game hunting for deer and elk, rafting/kayaking/canoeing, camping, wildlife observation, photography, and driving or riding ATVs for pleasure. Due to the restrictions associated with Wild and Scenic river status, highly developed recreation opportunities would be precluded in the future on the North Fork of the John Day River.

Prior to BLM obtaining private lands through OLEA, timber harvest and livestock grazing occurred on lands near the North Fork John Day River. Existing and proposed management limits timber management to treatments to improve forest health. Similarly, grazing has been restricted to ensure the Congressional objectives stated in the OLEA.

No additional restrictions on livestock grazing, or timber harvest would result from WSR designation.

Existing private land uses and motorized access to private property are not expected to change if the North Fork is designated as a Wild and Scenic River. These uses will continue, regardless of what decision is made regarding WSR designation. WSR designation would have no direct impact on private lands, but could impact future requests for either vehicle or utility access to private land in order to protect ORVs associated with Wild and Scenic River status.

4. Federal, state, tribal, local, public, or other interest in designating or not designating the river:

The 1988 Omnibus Oregon Rivers Act designated a 54.1-mile segment of the North Fork John Day River, from its headwaters in the North Fork of the John Day Wilderness Area, to its confluence with Camas Creek.

By protecting lands adjacent to 25.5 miles, the North Fork below Camas Creek designation of the BLM portion of the North Fork as a Wild and Scenic River would also help protect the Outstandingly Remarkable Values for fish associated with the WSR designation on U.S. Forest Service managed public lands upriver from Camas Creek.

The BLM received several comments for and against WSR designation during the Scoping process for the John Day Basin RMP. Comments for designation described this river as worthy of designation due to its scenic beauty, fisheries, and natural appearance. Comments against designation felt that designation restricted management and attracted more visitations resulting in resource degradation. Public comment quotes for and against WSR designation that were received during the 2006-7 BLM public scoping meetings are included in this appendix.

As noted above, the state of Oregon valued the scenic quality of the North Fork enough to include the entire study section in the State Scenic Waterway System under the Oregon Scenic Waterways Act (ORS 390.826). State

Scenic waterway guidance and the participation of the Oregon Department of Parks and Recreation are important components in protecting the integrity of outstandingly remarkable values.

Existing and future management of mining within the potential WSR corridor will rely on restrictions of existing State Scenic waterway guidance, even if the state were to change guidance in the future, to protect scenic quality, and after the completion of the John Day Basin RMP, visual resource and energy and mineral management guidance will protect outstandingly remarkable values.

Several tribes that participated in the John Day Basin RMP planning process indicated concerns about preserving the fishery in the John Day River.

5. Estimated cost of acquiring necessary lands and interests in lands and administering the area, if designated:

Federal Wild and Scenic River designation with a Recreation or Scenic classification from Camas Creek to public lands downriver from Wall Creek would not result in the need to acquire any additional lands to manage the ORVs on existing BLM public lands adjacent to the North Fork John Day River. BLM would consider acquisition of private lands and leases adjacent to this river only from willing sellers, to enhance manageability of the area.

Estimated costs would depend on location and acreage of private land. Funding for acquisition would be expected to come from Land and Water Conservation Act funding by Congress. No additional costs are anticipated from the management of the area as a Wild and Scenic River. BLM currently manages this river to protect scenic, fishery and recreation values.

6. Ability of the agency to manage and protect the river area or segment as a Wild and Scenic River or other means to protect the identified values other than Wild and Scenic River designation:

The BLM management currently maintains or protects fishery ORVs through existing regulations to preserve and maintain habitat for special status fish (bull trout, and steelhead), through the Endangered Species Act (ESA), PACFISH, and the proposed Aquatic Conservation Strategy described in the John Day Basin RMP.

Water quantity is protected through a 1986 instream water right held by the Oregon Department of Fish and Wildlife. Water quality is protected by the State of Oregon water quality regulations.

The Federal government can also exert federal water right laws to protect ORVs within a river; “The designation of a river as a wild, scenic or recreational river under the Wild and Scenic Rivers Act of October 2, 1968, explicitly reserves sufficient unappropriated water to fulfill the purposes of the Act.”

The BLM will use a variety of tools, authorities and strategies to achieve instream flow levels that support Wild and Scenic River values. These tools include: leasing (in the short term) and transferring existing BLM consumptive use rights to instream uses (in the long term); entering cooperative agreements with the State of Oregon, other agencies, and organizations for the purchase of water rights from willing sellers for transfer to instream uses.

If these other tools are not effective, BLM may quantify and assert the BLM’s Federal reserved water right.” Recreation values for water-based recreation activities also benefit from instream flows for rafting, canoeing, kayaking, and fishing.

The amount of water reserved is the minimum amount necessary to fulfill the purposes of the Act and to protect the particular aesthetic, recreational, scientific, biotic, or historic features (‘values’) that led to the river’s designation. The amount of flow reserved will vary on a case-by-case basis.

The John Day Basin RMP proposes a Visual Resource Management Class 2 for the North Fork John Day. Under this classification, scenic quality ORV would receive a higher level of protection than under current management standards. A WSR designation would add weight and consideration to any decision regarding a proposed project within this river canyon that could be seen from the river or adjacent road.

Future project proposals such as timber harvests would require review for compliance with the WSR Act if the Camas-Wrightman Canyon and Wrightman Canyon to Monument river segments were designated as federal Wild and Scenic Rivers. Overall, the BLM would be able to manage and protect the river area with minimal effort.

7. Historical or existing rights that could be adversely affected with designation; and:

The BLM has a responsibility to ensure tribal members satisfy their treaty rights and to maintain cultural practices on all public lands managed by BLM. Government-to-government consultation is part of the RMP process and ongoing public land management necessary to ensure tribal rights to access and use resources and places important to Native Americans are not affected. Wild and Scenic River designation would not affect or impair activities traditionally pursued by tribal members as they exercise their treaty rights and cultural practices.

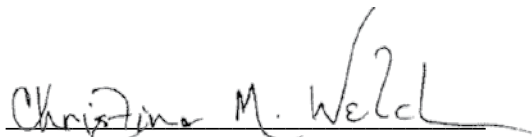
Wild and Scenic River status would have no impact on historical or existing rights except as described in sections 3 and 4 above.

8. Other:

The BLM would work with private landowners to minimize conflicts or trespass with public use of this waterway. No other issues or concerns regarding suitability of this segment have been identified in the land use planning process.

Recommendation:

Based on my review of both the Eligibility Study and the information provided in this Suitability Study my preliminary recommendation is that the North Fork John Day River between River Mile 55 (Camas Creek) and River Mile 20.4 (four miles upriver from Monument) are suitable for inclusion in the National Wild and Scenic Rivers System.



Christina M. Welch, Field Manager
Central Oregon Resource Area
Prineville District, Bureau of Land Management

References

Jonas, Lil. 2006. Final Report. Prineville District Office Eligibility Inventory of potential Wild and Scenic Rivers in the John Day Basin Resource Management Plan Planning Area. Prepared for the Bureau of Land Management Prineville District Office. Prineville, Oregon. 97754.

Bureau of Land Management (BLM). 2004. "Clarification of Policy in the BLM Manual Section 8351, Wild and Scenic Rivers, with Respect to Eligibility Criteria and Protective Management," Instruction Memorandum No. 2004-196, Washington, D.C.

Bureau of Land Management (BLM). 1993. Manual 8351 - Wild and Scenic Rivers - Policy and Program Direction for Identification, Evaluation, and Management. Washington, D.C.

2006-7 Public Comments Regarding Wild & Scenic River Issue John Day Basin Resource Management Plan

June 20, 2007

I. AMS Scoping Period Comments; Subject Source: SMA Special Management Areas For WSR Designation:

- We support ONDA's proposal that BLM evaluate and recommend and recommend for designation as Wild & Scenic the North Fork John Day from Camas Creek to Monument. (292/14)
- Special management designations for suitable lands. Give careful consideration to management of roadless areas. Designate special resource management for Wild & Scenic River status to improve protective status retaining the natural values permanently for future generations. (18/6)
- Nominating the North Fork for Wild and Scenic River status would be consistent with previous BLM and U.S. Forest Service planning decisions to seek protection for lands between Service Creek and Tumwater Falls on the main John Day, as well as on the upper North Fork above Camas Creek. The designation would also assist the BLM's effectiveness in carrying out the provisions of the Oregon Land Exchange Act of 2000 because the agency has acquired a nearly contiguous block of public land along the river between Dale and Monument. The North Fork John Day is a valuable public asset for scenery, for resource protection, and for recreation, and nominating it for National Wild and Scenic River status would help accomplish the central goals of the planning process. (29/1)
- The new RMP should consider adding additional Wild and Scenic river designations. The existing 54 miles of the designated North Fork John Day River lies immediately upstream of river segment 7 (as described in the John Day River RMP), which now contains significantly more public land after recent acquisitions. This 41 mile segment is remote, forested and includes high scenic and wildlife values. According to the current John Day River RMP, this segment contains important habitat for elk, Lewis' woodpeckers and bald eagles. Steep, forested hillsides border the river. This section should be studied and considered for addition to the North Fork John Day Wild & Scenic River. (52/2)
- Please consider assessing the suitability of streams and rivers such as the North Fork John Day from Camas Creek to Monument for Wild and Scenic River status. (15/4)
- Please consider the North Fork of the John Day River from Camas Creek to Monument for Wild and Scenic status. (17/5); (pg. 55)
- Assess suitability of the North Fork John Day from Camas Creek to Monument for Wild and Scenic River Status. (21/4)
- Consider nominating streams and rivers such as North Fork John Day from Camas Creek to Monument for Wild & Scenic River Status. (27/6)
- Consider nominating streams and rivers such as North Fork John Day from Camas Creek to Monument for Wild & Scenic River Status. (30/5)
- The new RMP should consider adding additional Wild and Scenic river designations. The existing 54 miles of the designated North Fork John Day River lies immediately upstream of river segment 7 (as described in the John Day River RMP), which now contains significantly more public land after recent acquisitions. This 41 mile segment is remote, forested and includes high scenic and wildlife values. According to the current John Day River RMP, this segment contains important habitat for elk, Lewis' woodpeckers and bald eagles. Steep, forested hillsides border the river. This section should be studied and considered for addition to the North Fork John Day Wild & Scenic River. (49/2))
- The new RMP must address designating additional Wild and Scenic River areas. Newly acquired North Fork John Day lands should be inventoried for potential addition to the Wild & Scenic River System. The North Fork John Day River from Camas Creek to Monument is one area that merits WSR designation. (49/6)
- You must consider nominating streams and rivers such as North Fork John Day from Camas Creek to Monument for Wild and Scenic River status in order to gain the most protection for this area. (54/6)

Against WSR Designation

- Do not add any Wild or Scenic rivers to the existing inventory and do not allow verbal cultural history as valid. (35/9)
- Designation of more Wild and Scenic Rivers will serve no purpose and in fact is counterproductive to keeping these streams in a healthy condition. Designation of these streams eliminates the ability to manage them. If at this current date, they still qualify for Wild and Scenic designation, it tells me we have been doing ok without this designation and can continue to do so through proper management. (290/2)
- I am opposed to any additional designation of Wild & Scenic Rivers for the same reasons I am opposed to additional Wilderness designations...Don't take away your [management] options by designating them.... (No additional wording).

II. 2007 February and March Public Scoping Meetings

Public comments sorted by key words.

For WSR Designation:

- Wild and Scenic Rivers - Please consider for designation the North Fork John Day River between Wall and Camas Creek as well as BLM managed sections of Bridge Creek and Jackknife canyon.
- Special designations (WSR, Wilderness, ACEC, etc.) attract tourism opportunities for education; also attracts tourists.

Against WSR Designation:

- Designation [as Wild & Scenic River] does not save it; degrades it; causes overuse from recreationists. Like overuse in Strawberry Mountain Wilderness, then it burned. It put it on the map for more people to visit. Same with wild & scenic rivers- overuse causes degradation.
- Pototmus Cr. - Not qualified for wild & scenic river spawning & rearing habitat.
- WSR. Designation does not save it, degrades it causes overuse from recreationists. Like overuse in Strawberry Mtn. Wilderness, then it burned. It put it on the map for more people to visit. Same with wild & scenic rivers-overuse causes degradation.

III. Monument Landowner Meeting - Tuesday June 5, 2007

The BLM held a public meeting in Monument on June 5, 2007, specifically inviting 26 private landowners along the North Fork from Camas Creek to Monument. Sixteen individuals attended this meeting; most were landowners who had the following concerns regarding Wild & Scenic River designation:

1. Does what the public say matter, or has someone within government already made a decision?
2. If this became a federal WSR, would it change the state designation or jurisdiction?
3. I was on two different committees, one for the WSR designation [1988]; there were a lot of tough battles. We had Kimberly to Wall Creek taken out of the WSR provision. Is this still the case? So it (WSR designation) may come up again?
4. I have a specific question. If a WSR decision is made, will it be difficult to tear down our existing house and build something different?

The BLM is aware that landowners would like to maintain their motorized access to their private lands and do not want public trespass on their private lands.

2008-9 Public Comments Regarding Wild & Scenic River Issue John Day Basin Resource Management Plan

October 1, 2009

Draft RMP/EIS - Public Comment received:

Special Management Areas - Wild and Scenic River:

- Alternative 4 is that it doesn't recommend Wild and Scenic status for the North Fork John Day River given its defense in the FEIS. For an alternative designed to strengthen protection for BLM lands this doesn't make sense. The DEIS states clearly that this status will protect the river from more modification plus protect the identified outstandingly remarkable values and where possible enhance them.
- The Resource Management Plan should clearly protect from OHV use: The Wild and Scenic River corridor and all critical steelhead habitat.
- As many as possible of the tributaries should be re-reviewed and placed in protected status : Camas, Desolation, Big Wall, Cottonwood, Ditch, Graves, Indian, Jericho, Little Wall, Mallory, Potamus and Stony Creeks should be protected for fish and fishermen, kayakers and other American recreationists . Give them wild and Scenic or whatever designations that will keep them from development.
- Big Wall, Cottonwood, Ditch, Graves, Indian, Jericho, Little Wall, Mallory, Potamus, and Stony Creeks for eligibility in the Acquired Lands. These creeks should all have at least the ORV of 'fishery'. The North Fork John Day and these tributaries support the largest spawning populations of wild spring Chinook salmon and threatened summer steelhead in the entire Columbia River System. According to the National Marine Fisheries Service (NMFS) (2005), these tributary creeks are Middle Columbia River Critical Steelhead Habitat Areas. These fish rely on the cooler waters of the North Fork and its tributaries to spawn and rear and as such, are integral to the survival and viability of this threatened species.
- The sections of Bridge Creek and Jackknife Canyon under BLM management on the lower John Day River should also be recommended as eligible wild and Scenic Rivers. The Camas and Desolation creeks and all of the smaller creeks feeding the 37 mile eligible section of the North Fork have been determined by NMFS to be critical steelhead habitat and the BLM should also consider these creeks for future eligibility review.
- The North Fork John Day and its tributaries alone support the largest runs of steelhead in the entire Columbia River system. As proposed in the JDB Draft RMP Preferred Alternative (Alternative 2), we ask the BLM to recommend to Congress that the eligible 37 mile segment of the North Fork John Day from Camas Creek to Monument be deemed suitable for WSR designation, with the classification of "Scenic" along the entire 37 miles. We ask that the BLM provide interim protection to the ORVs in this river segment and a 1/4 mile buffer on each side of the river corridor until the time that WSR designation is secured.
- We do not agree with other findings of the Eligibility Inventory regarding the ineligibility of the additional 17 reviewed creeks. According to the Inventory, none of these creeks were found to have any ORVs. However, the Inventory states clearly the criteria for determining the ORVs of these creeks, including the definition for 'fishery' habitat:

"The river provides exceptionally high quality habitat for fish species indigenous to the region. Of particular significance is habitat for state, federally listed, or candidate threatened and endangered species"" (pg I-1-7; emphasis added). Based on these criteria, it should have been fully recognized while reviewing these creeks for WSR eligibility that the North Fork John Day and its tributaries support the largest spawning populations of wild spring Chinook and threatened summer steelhead in the entire Columbia River System". Ten of the creeks found 'ineligible' in the review - Big Wall, Cottonwood, Ditch, Graves, Indian, Jericho, Little Wall, Mallory, Potamus, and Stony Creek - are all fish-bearing tributaries to the North Fork. These tributaries provide colder water and additional miles of spawning and rearing habitat to these fish runs. The Eligibility Inventory acknowledges such habitat, but nonetheless does not find 'fishery' as an ORV for any of these streams. To validate our claim that these tributaries do indeed contain the ORV of 'fishery', the BLM should examine and espouse the existing scientific data and acknowledge the full requirements of the Endangered Species Act (ESA). A critical habitat analysis was conducted by the National Marine Fisheries Service's (NMFS) Critical Habitat Analytical Review Teams4 as part of the Middle Columbia River Steelhead Distinct Population Segment ESA Recovery Plans

development process, and included data collection in the North Fork Sub-basin. These data confirm that the North Fork's tributaries (including ten which are reviewed in the Eligibility Inventory) are Middle Columbia River Critical Steelhead Evolutionary Significant Unit (ESU) Habitat Areas. In addition, on September 2, 2005; NMFS published a final rule in the Federal Register⁶ for Middle Columbia Steelhead critical habitat. The rule found that ten watersheds in the North Fork Subbasin provide critical steelhead habitat:

1. Upper North Fork John Day Watershed
2. Granite Creek Watershed
3. North Fork John Day/Big Creek Watershed
4. Desolation Creek \ Watershed
5. Upper Camas Creek Watershed
6. Lower Camas Creek Watershed
7. North Fork John Day River/Potamus Creek Watershed
8. Wall Creek Watershed
9. Cottonwood Creek Watershed
10. Lower North Fork John Day River Watershed

NB. Watershed 7 includes all the steelhead tributaries. This determination of critical habitat confirms that the tributary watersheds to the North Fork are essential spawning and rearing habitat for steelhead and that the ORV of 'fishery' exists for the North Fork and its tributaries. Furthermore, the Eligibility Inventory acknowledges that the existing WSR North Fork designation for 54 miles upstream of Camas Creek exists:

"... partially due to possessing outstandingly remarkable fisheries values, including steelhead trout. The protection afforded by the upstream WSR designation adds to the integrity of the fisheries in the review segments and helps ensure that the biological needs ... of the species are met" (pg-I-13). From this acknowledgement it therefore follows that new WSR designation for currently undesignated sections of the North Fork and its tributaries should also benefit the steelhead population in a larger area of the North Fork Sub-basin.

- Based on the Middle Columbia River Steelhead Recovery Plan and associated critical habitat analysis, the BLM should re-examine the eligibility determinations for the ten creeks in the Eligibility Inventory that are tributaries to the North Fork John Day, and find that all these creeks have at least the ORV of 'fishery'. These creeks should be recommended as eligible and suitable for WSR designation in the final RMP and FEIS.
- Recommendation 4:
 1. Prioritize protection and restoration efforts (to be implemented through the ACS) on degraded tributary habitat" in the planning area, as this is a main threat to the MPG.
 2. Implement Key Actions proposed in the Recovery Plan as outlined in Section 7.3.2 and Table 2 (pg. 7-13) that are applicable to the planning area and BLM jurisdiction, including actions to:
 - Protect and improve freshwater habitat conditions and connectivity for steelhead production. Improvements to freshwater habitat should be targeted to address specific factors in specific areas as described in the Oregon Steelhead Recovery Plan.
 - Protect highest quality habitats through acquisition and conservation (refer to Section I above on recommendations of Wild and Scenic designation for North Fork tributaries).
 - Conserve rare and unique functioning habitats.
 - Consistently apply Best Management Practices and existing laws to protect and conserve natural ecological practices.
 - Remove or replace barriers blocking passage.
 - Reconnect side channels and off-channel habitats to stream channels.
 - Restore wet meadows.
 - Reconnect floodplain to channel.

- Restore natural riparian vegetative communities.
 - Develop grazing strategies that promote riparian recovery.
 - Implement agricultural water conservation measures.
 - Improve irrigation conveyance and efficiency.
 - Lease or acquire water rights and convert to in-stream.
 - Employ BMPs to forest, agriculture and grazing practices and to road management.
- The JDB RMP should include a management alternative that authorizes the removal of all livestock grazing in sensitive areas, critical habitat, and special management areas, including Wild and Scenic River corridors and Areas of Critical Environmental Concern.
 - Ensure that the JDB RMP includes management alternatives to monitor levels of grazing in riparian corridors, and exclude grazing permanently if conditions in riparian areas are 7 of 14 not improved. Adopt monitoring guidance similar to the 2001 John Day Wild and Scenic River Management Plan.
 - The agency should continue to enforce and cite any illegal plane landings on BLM lands in the lower John Day Wild and Scenic River corridor, especially the area adjacent to the private air strip known as 'Tucker Flats'. Such activities, including clearing and destruction of sagebrush and other vegetation in the corridor, are illegal both under the mandate of the WSR and the management of Wilderness Study Areas (of which the area is one). The lower John Day River Wild and Scenic River was designated for the ORVs of 'scenery', 'geology' and 'fish', and motorized vehicle use in the WSR corridor adversely affects these ORVs. Furthermore, the use of airplanes or landing areas in the BLM-managed section of the WSR corridor is NOT identified in the 2001 John Day Wild and Scenic River Management Plan. We recommend the BLM use its full Authority as the federal administering agency to prohibit and enforce such illegal use, and we are fully supportive of the agency's efforts to do so.
 - We support ONDA's recommendation that the BLM to work with the State Marine Board to restrict motorized boat use from all sections of the John Day River that are designated as either Wild and Scenic, critical habitat, or special management areas, as well as from all reaches of the river where salmon, steelhead, and threatened bull trout spawn. Accordingly, we applaud the BLM's proposal that the North Fork John Day from Camas Creek to Monument be recommend for designation as Wild and Scenic. Recommendation: In addition to closing uplands surrounding the North Fork John Day River, OHV closures should be considered for such lands as riparian corridors, wildlife habitat management areas, Areas of Critical Environmental Concern, Wild and Scenic River corridors, Wilderness Study Areas, landscapes possessing wilderness characteristics and citizen-proposed wilderness. In most cases, the management strategies that prompt consideration of these varying protective categories would benefit from the prohibition of motorized vehicles.
 - ONDA supports the preferred Alternative (Alternative 2) recommendation to Congress that the eligible 37 mile segment of the North Fork John Day from Camas Creek to Monument is suitable for WSR designation, with the classification of "Scenic" along the entire 37 miles. In the period of time prior to congressional action regarding this recommendation, we ask that the BLM manage the river corridor in such a way that does not degrade the ORVs and establishes an interim 1/4 mile buffer on each side of the river corridor.
 - The WSR inventory for the John Day River basin was not comprehensive: critical habitat for steelhead trout and bull trout must be considered as a "fishery" ORV based on the genetic and regional significance of their populations in the John Day. All available scientific data emphasizes that the John Day steelhead population is unique in its size, viability, genetic diversity and purity. BLM must consider protection of public lands that contain these species' habitat a highest priority. Please review the Wild and Scenic River inventory for ten of the creeks in the North Fork lands- Big Wall, Cottonwood, Ditch, Graves, Indian, Jericho, Little Wall, Mallory, Potamus, and Stony Creek -in the context that these streams are critical

Appendix H: Oregon State Scenic Waterway

June 2, 2000

TO THE READER:

The John Day River system is fortunate to have designation under two important river preservation programs; the National Wild and Scenic Rivers Act and the Oregon Scenic Waterways Act. Together, these two Acts, one a federal program and one a state program, provide the best protection available today for the natural, scenic, and recreational values of our river environments.

The Oregon Parks and Recreation Department administers the Oregon Scenic Waterways Program. The department has participated with the Bureau of Land Management, the Tribes, state agencies, local government and the public in the development of the John Day River Management Plan and Environmental Impact Statement and the Rules of Land Management for the John Day River Scenic Waterway system. We deeply appreciate the opportunity offered by the BLM to include this chapter on the State Scenic Waterway Program and the state Rules of Land Management in the federal John Day River Management Plan. It is our sincere desire that displaying the state program side by side with the federal program in this manner, will give the public a clearer picture and more complete understanding of how these two programs will work together to preserve and protect the outstanding values of the John Day River system.

The rules contained in this chapter were adopted by the Oregon Parks and Recreation Commission on May 31, 2000. When they become effective later this year, these rules will be used by the Parks and Recreation Department in evaluating proposals for development, improvement or alteration of private and non-federal, public lands within the John Day River Scenic Waterway system.

For more information on the State Scenic Waterways Program or the Rules of Land Management for the John Day Scenic Waterway, please contact the Oregon Parks and Recreation Department Rivers Program at 1115 Commercial St. NE, Salem, Oregon, 97301-1002, or call (503) 378-4168.

Sincerely,
Laurie A. Warner
Acting Director Oregon Parks and Recreation Department

Background

The Oregon Scenic Waterways System was created by ballot initiative in 1970. The original Act designated 496 free-flowing miles of six different rivers. Designation of the John Day River main stem accounted for about 147 of these miles. Scenic waterways are defined as including the designated river and related adjacent lands within one-fourth of one mile of the bank on either side of the river.

In 1988, Oregon voters passed a second scenic waterways initiative, the Oregon Rivers Initiative (Ballot Measure #7). This measure added 573 river miles to the Oregon Scenic Waterways System, including 167 additional miles to the John Day River Scenic Waterway. The John Day River addition was divided among four new segments. These segments are: an 11 mile addition to the John Day River Scenic Waterway on the main stem extending upstream from Service Creek to Parrish Creek; a 56 mile addition on the North Fork, from approximately three miles upstream from Monument to the North Fork John Day Wilderness Area; a 71 mile addition on the Middle Fork, from its confluence with the North Fork to its confluence with Crawford Creek; and a 29 mile addition on the South Fork, from the north boundary of the Phillip W. Schneider Wildlife Area (formerly Murderer's Creek Wildlife Area) to the Post-Paulina Road crossing. There are now segments of 19 rivers (1,148 river miles) and one lake (Waldo Lake) in the Oregon Scenic Waterways System.

Rivers can also be added to the system by the state legislature or through administrative act of the Governor. Such actions have added segments of five rivers and the entirety of Waldo Lake to the scenic waterway system.

Administration

Scenic waterways are administered by the Oregon Parks and Recreation Commission in accordance with Oregon Revised Statutes (ORS) 390.805 to 390.925. Oregon Administrative Rules (OAR) have been adopted to govern the program. General rules set forth generic standards that apply to all scenic waterways. Specific rules are also developed for each river during the management planning process. These rules are designed to manage development within the scenic waterway corridor to maintain the natural beauty of the river.

The Scenic Waterways Act and rules require evaluation of proposed land development, improvement or alteration relative to the scenic and aesthetic beauty of the waterway as viewed from the river. This review and evaluation apply to all related adjacent lands within one-fourth of one mile of the banks of the scenic waterway. Landowners wanting to build houses or roads, cut timber, mine, or pursue other similar projects, must make written notification to the Oregon Parks and Recreation Department (OPRD). OPRD reviews the proposal in coordination with other jurisdictions and determines if the proposal will substantially impair the natural beauty of the scenic waterway. When a project is inconsistent with scenic waterway goals, OPRD works with the landowner to resolve conflicts. The Commission has one year from the date of initial notification in which to reach accommodation with the landowner. This may include revising the project or compensating the landowner by purchasing the land or resource or negotiating a scenic easement. If satisfactory resolution is not reached within one year, the landowner may proceed with the initial development proposal.

Local and state agencies must comply with the scenic waterway law and rules. Federal land managing agencies are encouraged to coordinate with OPRD to insure their own land management actions are compatible with scenic waterway management prescriptions.

Management Plans

Scenic waterway management plans (administrative rules) are developed to protect or enhance the aesthetic and scenic values of scenic waterways while allowing compatible agriculture, forestry and other land uses. The plans are composed of management principles, standards and prescriptions applicable to scenic waterway shorelines and related adjacent lands. The rules establish varying intensities of protection or development based on the special attributes of each river segment. This is done through the use of river classifications.

In addition to developing formal management rules, the scenic waterway planning process may also identify other management tools. These may take the form of prescribed agency actions, interagency agreements, agency commitments, and cooperative arrangements with a variety of other parties, all designed to more effectively preserve and protect the natural values and special attributes of scenic waterways.

Scenic Waterway Classification

A scenic waterway may be divided into multiple segments with each segment having its own classification. Scenic waterway segments are assigned one of six possible classifications according to the character of the landscape and the amount and type of development present within the corridor at the time of designation.

The following describes each of the six classifications and the management goals each represents.

Natural River Areas are generally inaccessible, except by trail or river, with primitive or minimally developed shorelines. Preservation and enhancement of the primitive character of these areas are the goals of this classification.

1. Accessible Natural River Areas are readily accessible by road or railroad but otherwise possess the qualities of Natural or Scenic River Areas. Preserving or enhancing the primitive scenic character while allowing compatible recreation use are the goals of this classification.
2. Scenic River Areas are accessible by roads in places but contain related adjacent lands and shorelines still largely primitive and undeveloped except for agriculture and grazing. Scenic River Areas are administered to preserve their undeveloped character, maintain or enhance their high scenic quality, recreation, fish and wildlife values while allowing continued agriculture use.
3. Natural Scenic View Areas possess the qualities of Natural or Scenic River Areas except that one shore and the related adjacent lands have development or access that only qualify for a lesser classification. Protecting or enhancing the primitive scenic character while allowing compatible recreation use are the goals of this classification.
4. Recreational River Areas are readily accessible by road or railroad, may have some development along their shoreline and on related adjacent lands and may have undergone impoundment or diversion in the past. Allowing compatible existing uses and a wide range of river-oriented recreation use while protecting the natural beauty, fish and wildlife values are the management goals of this classification.
5. River Community Areas are river segments where the density of existing structures (residential tract or platted subdivision), or other development precludes a more restrictive classification.
6. River Community Areas are managed to allow development that is compatible with county zoning and blends into the natural character of the surrounding landscape. This also means protecting riparian vegetation and encouraging activities that enhance the landscape.

The rules established for each river classification generally do not affect development existing at the time of scenic waterway designation. None of the classifications are designed as absolute prohibitions of new development. Though some types of improvements require notification, review, and approval, others do not.

Mining, road building, new structures, mobile home placement, land clearing and timber harvest typically must go through the notification process. River classifications and the administrative rules for each scenic waterway determine what proposals may be approved and how they must be conditioned to protect the natural and scenic beauty of the waterway.

Notification and approval is generally not needed for new fences, farm building maintenance, irrigation lines, crop rotation, danger tree removal, residential maintenance and remodeling, homesite landscaping, minor road maintenance and firewood cutting. However, landowners are generally advised to contact OPRD before making any changes to their land within a scenic waterway corridor, especially if it is visible from the river.

Classification for the John Day River Scenic Waterway (Main Stem)

The John Day River main stem from Tumwater Falls to the confluence with Service Creek was designated as a state scenic waterway in 1970. In 1988, an additional 11 miles of river extending upstream from the confluence of Service Creek to the confluence of Parrish Creek was designated as scenic waterway.

Oregon Administrative Rules divide the John Day River Scenic Waterway (main stem) into four reaches. The upstream most reach is classified as a Recreational River Area, followed by a Scenic River Area, a Natural River Area and then another Scenic River Area at the downstream end of the scenic waterway. Amendments to the John Day River Scenic Waterway rules adopted by the Oregon Parks and Recreation Commission in May 2000, lengthened the reach of the Natural River Area segment along the lower John Day River, added more definitive land management rules to the segments of the John Day River between Tumwater Falls and Service Creek, and established management rules for the new scenic waterway segment from Service Creek to Parrish Creek.

The 11.3 mile segment of the John Day River from river mile 168.7, at the confluence with Parrish Creek near Spray, to river mile 157.4, at the confluence with Service Creek, runs parallel to Oregon State Highway 19. Along most of this segment, the highway can be seen from the river. OPRD has classified this scenic waterway segment as a Recreational River Area. The management goal for this segment is to ensure that the view of any new development along the river is unobtrusive as seen from the river.

The 62.4 mile segment of the John Day River from Service Creek, at river mile 157.4, to the Wasco County-Sherman County line, at river mile 95, is fronted mainly by private agricultural lands. Public access along this segment is less prominent than the upstream reach. The management goal for this segment is to allow the continuation of existing farm, rural residential and recreation uses while protecting the scenic character of the river. OPRD has classified this segment of river as a Scenic River Area.

The 51.7 mile segment of the John Day River from the Wasco County-Sherman County line, at river mile 95, downstream to river mile 43.3, about three and one-half miles upstream from Cottonwood Bridge, is largely inaccessible by road. This segment of river is remotely located between steep-walled canyons where very little sign of structures or human settlement exists. River frontage in this segment is mainly Bureau of Land Management administered public land. The management goal for this segment is to preserve and protect the primitive, undeveloped character of the river corridor. OPRD has classified this segment as a Natural River Area.

The lower 33.3 mile segment of the John Day River Scenic Waterway begins at river mile 43.3, upstream from Cottonwood Bridge, and terminates at river mile 10 at Tumwater Falls. This segment is fronted mostly by private agriculture and range lands. The management goal for this segment is to allow the continuation of existing farm, rural residential and recreation uses while protecting the scenic character of the river corridor. The classification for this segment is Scenic River Area.

Land Management Rules for the John Day River Scenic Waterway (Main Stem)

736-040-0065

John Day River Scenic Waterway

1. Natural River Area:
 - a. That segment of the scenic waterway beginning at the intersection of the John Day River with the township line between Township 5 South and Township 6 South, Willamette Meridian, at about river mile 95, thence downstream approximately 51.7 miles to the intersection of the John Day River

- with the southern section line of Section 30, Township 1 South, Range 19 East, Willamette Meridian, (Section 30, T 1S, R 19E, W.M.) at about river mile 43.3, is classified as a Natural River Area;
- b. This Natural River Area shall be administered consistent with the standards set by OAR 736-040-0035 and OAR 736-040-0040(1) (a) (C). In addition to these standards, all new development in resource zones (i.e. farm-related dwellings) shall comply with Gilliam County or Sherman County land use regulations.
 - c. New structures and associated improvements shall be totally screened from view from the river by topography and/or vegetation, except as provided under OAR 736-040-0030(5), and except those minimal facilities needed for public outdoor recreation or resource protection. If inadequate topographic or vegetative screening exists on the site, the structure or improvement may be permitted if native vegetation can be established to provide total screening of the proposed structure or improvement within a reasonable time (4-5 years). The condition of “total screening,” as used in Section (1) of this rule, shall consist of adequate topography and/or density and mixture of native evergreen and deciduous vegetation to totally obscure (100%) the subject improvement.
 - d. Commercial public service facilities, including resorts and motels, lodges and trailer parks which are visible from the river, shall not be permitted.
 - e. New mining operations, except recreational placer mining and recreational prospecting, as those terms are defined and used in ORS 390.835, and similar improvements, shall be permitted only when they are totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists to totally screen the proposed mining site, the mining operation may be permitted if native vegetation can be established to provide total screening of the proposed mining site within a reasonable time (4-5 years).
 - f. New roads may be permitted only when totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists to totally screen the proposed road, the road may be permitted if acceptable topography can be created or road design techniques used to totally screen the road at the time of construction or native vegetation can be established to provide total screening of the proposed road within a reasonable time (4-5 years).
 - g. Where existing roads are visible from the river, major extensions, realignments, or upgrades to existing roads shall not be permitted. Necessary minor road improvements shall be substantially screened from view from the river. If inadequate topography or vegetation exists to substantially screen the road improvement, the road improvement may be permitted if acceptable topography can be created or road design techniques used to substantially screen the road at the time of construction or native vegetation can be established to provide substantial screening of the road improvement within a reasonable time (4-5 years). The condition of “substantial screening,” as used in Section (1) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to substantially obscure (at least 75%) the subject improvement. When an existing road is regraded, no side cast into or visible from the river shall be permitted. Excess material shall be hauled to locations out of view from the river.
 - h. Visible tree harvest or other vegetation management may be permitted provided that:
 - A. The operation complies with the relevant Forest Practices Act rules;
 - B. Harvest and management methods with low visual impact are used;
 - C. The harvest or vegetation management does not degrade the riparian buffer of any waterway; and
 - D. The harvest or vegetation management is designed to enhance the scenic view within a reasonable time (5-10 years). For the purposes of this paragraph, “enhance” means to benefit forest ecosystem function and vegetative health by optimizing forest stand densities and vegetative composition, fostering forest landscape diversity and promoting sustainable forest values.
 - i. Improvements needed for public recreation use or resource protection may be visible from the river, but shall be primitive in character and designed to blend with the natural character of the landscape.

- j. Proposed utility facilities shall share existing utility corridors, minimize any ground and vegetation disturbance, and employ non-visible alternatives when reasonably possible.
 - k. Whenever the standards of OAR 736-040-0035 and Section (1), Subsections (a) through (j) of this rule, are more restrictive than the Gilliam and Sherman County Land Use and Development Ordinances, the above Oregon Administrative Rules shall apply.
2. Scenic River Areas: two segments of the John Day River main stem are designated as Scenic River Areas:
- a. That segment of scenic waterway beginning at the confluence of Service Creek at about river mile 157.4 and extending downstream approximately 62.4 miles to the intersection of the John Day River with the township line between Township 5 South and Township 6 South, Willamette Meridian, at about river mile 95, is classified as a Scenic River Area;
 - b. That segment of scenic waterway beginning at the intersection of the John Day River with the southern section line of Section 30, Township 1 South, Range 19 East, Willamette Meridian, (Section 30, T 1S, R 19E, W.M.) at about river mile 43.3 and extending approximately 33.3 miles downstream to Tumwater Falls, at about river mile 10, is classified as a Scenic River Area.
 - c. These Scenic River Areas shall be administered consistent with the standards set by OAR 736-040-0035 and OAR 736-040-0040(1)(b)(B). In addition to these standards, all new development in resource zones (i.e. farm related dwellings) shall comply with Sherman County, Gilliam County, Wasco County, Wheeler County, or Jefferson County land use regulations, whichever applies.
 - d. New structures and associated improvements shall be substantially screened by topography and/or native vegetation, except as provided under OAR 736-040-0030(5), and except for those minimal facilities needed for public outdoor recreation or resource protection. If inadequate topographic or vegetative screening exists on a site, the structure or improvement may be permitted if native vegetation can be established to provide substantial screening of the proposed structure or improvement within a reasonable time (4-5 years). The condition of "substantial screening," as used in Section (2) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to substantially obscure (at least 75%) the viewed structure or improvement.
 - e. Commercial public service facilities, including resorts and motels, lodges and trailer parks which are visible from the river, shall not be permitted.
 - f. New mining operations, except recreational placer mining and recreational prospecting, as those terms are defined and used in ORS 390.835, and similar improvements, shall be permitted only when they are totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists on a site, mining and similar forms of development may be permitted if native vegetation can be established to provide total screening of the affected area within a reasonable time (4-5 years). The condition of "total screening," as used in Section (2) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to totally obscure (100%) the subject improvement.
 - g. New roads may be permitted only when totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists to totally screen the proposed road, the road may be permitted if acceptable topography can be created or road design techniques used to totally screen the road at the time of construction or native vegetation can be established to provide total screening of the proposed road within a reasonable time (4-5 years).
 - h. Where existing roads are visible from the river, extensions, realignments, upgrades, or other improvements, shall only be permitted when substantially screened from view from the river. If inadequate topography or vegetation exists to provide substantial screening, the road improvement may be permitted if acceptable topography can be created or road design techniques used to substantially screen the road at the time of construction or native vegetation can be established to provide substantial screening of the subject improvement within a reasonable time (4-5 years). When an existing road is improved or regraded, no side cast into or visible from the river shall be permitted. Excess material shall be hauled to locations out of view from the river.
 - i. Visible tree harvest or other vegetation management may be allowed provided that:
 - A. The operation complies with the relevant Forest Practices Act rules;

- B. Harvest and management methods with low visual impact are used;
 - C. The harvest or vegetation management does not degrade the riparian buffer of any waterway; and
 - D. The harvest or vegetation management is designed to enhance the scenic view within a reasonable time (5-10 years). For the purposes of this paragraph, “enhance” means to benefit forest ecosystem function and vegetative health by optimizing forest stand densities and vegetative composition, fostering forest landscape diversity and promoting sustainable forest values.
- j. Improvements needed for public recreation use or resource protection may be visible from the river, but shall be primitive in character and designed to blend with the natural character of the landscape.
 - k. Proposed utility facilities shall share existing utility corridors, minimize any ground and vegetation disturbance, and employ non-visible alternatives when reasonably possible.
 - l. Whenever the standards of OAR 736-040-0035 and Section (2), Subsections (a) through (k) of this rule are more restrictive than the applicable County Land Use Development Ordinances, the above Oregon Administrative rules shall apply.
3. Recreational River Area:
- a. That segment of scenic waterway beginning at the confluence of Parrish Creek, at about river mile 168.7, about one mile west of Spray and extending downstream approximately 11.3 miles to the confluence of Service Creek, at about river mile 157.4, is classified as a Recreational River Area.
 - b. This Recreational River Area shall be administered consistent with the standards set by OAR 736-040-0035 and OAR 736-040-0040(1)(c)(B). In addition to these standards, all new development in resource zones (i.e. farm and forest related dwellings) shall comply with Wheeler County land use regulations.
 - c. New structures and associated improvements shall be moderately screened from view from the river by topography and/or vegetation, except as provided by OAR 736-040-0030(5) and except those minimal facilities needed for public outdoor recreation or resource protection. If inadequate topographic or vegetative screening exists on a site, the structure or improvement may be permitted if native vegetation can be established to provide moderate screening of the proposed structure or improvement within a reasonable time (4-5 years). The condition of “moderate screening,” as used in Section (3) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to moderately obscure (at least 50%) the viewed improvement or structure.
 - d. Commercial public service facilities, including resorts and motels, lodges and trailer parks which are visible from the river, shall not be permitted.
 - e. New mining operations, except recreational placer mining and recreational prospecting, as those terms are defined and used in ORS 390.835, and similar improvements, shall be permitted only when they are totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists on a site, mining and similar forms of development may be permitted if native vegetation can be established to provide total screening of the affected area within a reasonable time (4-5 years). The condition of “total screening,” as used in Section (3) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to totally obscure (100%) the altered improvement site.
 - f. New roads constructed for agricultural use, mining or residential use shall be moderately screened with vegetation and/or topography. If inadequate topographic or vegetative screening exists, the road may be permitted if acceptable topography can be created or road design techniques used to moderately screen the road at the time of construction or native vegetation can be established to provide moderate screening of the road within a reasonable time (4-5 years).
 - g. Where existing roads are visible from the river, extensions, realignments, upgrades, or other improvements, shall only be permitted when partially screened from view from the river. If inadequate topography or vegetation exists to provide partial screening, the road improvement may be permitted if acceptable topography can be created or road design techniques used to partially screen the road at the time of construction or native vegetation can be established to provide partial

screening of the subject improvement within a reasonable time (4-5 years). The condition of “partial screening,” as used in Section (3) of this rule shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to partially obscure (at least 30%) views of the road improvement. When an existing road is improved or regraded, no side cast into or visible from the river shall be permitted. Excess material shall be hauled to locations out of view from the river.

- h. Visible tree harvest or other vegetation management may be allowed provided that:
 - A. The operation complies with the relevant Forest Practices Act rules;
 - B. Harvest and management methods with low visual impact are used;
 - C. The harvest or vegetation management does not degrade the riparian buffer of any waterway; and
 - D. The harvest or vegetation management is designed to enhance the scenic view within a reasonable time (5-10 years). For the purposes of this paragraph, “enhance” means to benefit forest ecosystem function and vegetative health by optimizing forest stand densities and vegetative composition, fostering forest landscape diversity and promoting sustainable forest values.
- i. Improvements needed for public recreation use or resource protection may be visible from the river, but shall be primitive in character and designed to blend with the natural character of the landscape.
- j. Proposed utility facilities shall share existing utility corridors, minimize any ground and vegetation disturbance, and employ non-visible alternatives when reasonably possible.
- k. Whenever the standards of OAR 736-040-0035 and Section (3), Subsections (c) through (j) of this rule are more restrictive than Wheeler County Land Use and Development Ordinances, the above Oregon Administrative Rules shall apply.

Classification for the North Fork John Day River Scenic Waterway

The North Fork John Day River was designated a scenic waterway in 1988. The designated reach extends approximately 56.2 miles from the North Fork John Day Wilderness boundary at about river mile 76.7, downstream to about river mile 20.3 approximately three miles upstream from Monument. OPRD divides the North Fork John Day River Scenic Waterway into three segments.

The upper segment begins at the North Fork John Day Wilderness boundary at about river mile 76.7 and extends downstream approximately 16.7 miles to the State Highway 395 Bridge crossing at about river mile 60, just north of Dale. A primitive road, intermittently visible from the river runs along the north side of the river for most of this segment. Publicly owned National Forest land borders the river for most of this segment. Cattle grazing and timber harvest is common on the privately owned parcels along this reach of river. The impact of these activities as viewed from the river has, for the most part, been minimal. Dwellings, ranch buildings and public campground structures are lightly distributed making the overall impression one of primitiveness and isolation. The management goal is to preserve the primitive character of the landscape throughout this portion of the river corridor. OPRD classifies this segment of scenic waterway as an **Accessible Natural River Area**.

The next scenic waterway segment extends from about river mile 60, at the State Highway 395 Bridge crossing, downstream approximately three miles to the confluence of Camas Creek at about river mile 57. State Highway 395 closely parallels the north bank of the river throughout this segment and is readily visible from the river. River frontage on both banks is primarily privately owned. The management goal for this section is to ensure that the view of any new developments is unobtrusive as seen from the river. OPRD classifies this segment of scenic waterway as a **Recreational River Area**.

The third North Fork scenic waterway segment extends approximately 36.7 miles from the confluence with Camas Creek downstream to about river mile 20.3 approximately three miles north of Monument. Landownership in this reach is a patchwork of private holdings and public lands managed by the Bureau of Land Management. The upstream half of this segment is closely paralleled by a road which is visible from the river. The lower half of the reach is essentially unroaded. As with the upstream most segment of this scenic waterway, range and timber practices provide the economic base and evidence of settlement is minimal. The management goal is to maintain the primitive character of the river corridor. OPRD classifies this segment as an **Accessible Natural River Area**.

Land Management Rules for the North Fork John Day River Scenic Waterway

736-040-0066

North Fork John Day River Scenic Waterway

1. Accessible Natural River Areas: two segments of the North Fork John Day River are designated Accessible Natural River Areas:
 - a. That segment of scenic waterway beginning at the west boundary of the North Fork John Day Wilderness in the Umatilla National Forest as that boundary was constituted on December 8, 1988, being at about river mile 76.7, where the North Fork John Day River intersects the western section line of Section 18, Township 7 South, Range 34 East, Willamette Meridian, (Section 18, T 7S, R 34E, W.M.) and extending downstream approximately 16.7 miles to the State Highway 395 Bridge crossing, at about river mile 60, is classified as an Accessible Natural River Area;
 - b. That segment of scenic waterway beginning at the confluence of Camas Creek, at about river mile 57, and extending downstream approximately 36.7 miles to the intersection with the northern boundary of the south one-half of Section 20, Township 8 South, Range 28 East, Willamette Meridian, (Section 20, T 8S, R 28E, W.M.) at about river mile 20.3, is classified as an Accessible Natural River Area.
 - c. These Accessible Natural River Areas shall be administered consistent with the standards set by OAR 736-040-0035 and OAR 736-040-0040(1)(e)(B). In addition to these standards, all new development in resource zones (i.e. farm and forest related dwellings) shall comply with Grant or Umatilla County land use regulations.
 - d. New structures and associated improvements shall be totally screened from view from the river by topography and/or vegetation, except as provided under OAR 736-040-0030(5), and except those minimal facilities needed for public outdoor recreation or resource protection. If inadequate topographic or vegetative screening exists on the site, the structure or improvement may be permitted if native vegetation can be established to provide total screening of the proposed structure or improvement within a reasonable time (4-5 years). The condition of "total screening," as used in Section (1) of this rule, shall consist of adequate topography and/or density and mixture of native evergreen and deciduous vegetation to totally obscure (100%) the subject improvement.
 - e. Commercial public service facilities, including resorts and motels, lodges and trailer parks which are visible from the river, shall not be permitted.
 - f. New mining operations, except recreational placer mining and recreational prospecting, as those terms are defined and used in ORS 390.835, and similar improvements, shall be permitted only when they are totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists to totally screen the proposed mining site, the mining operation may be permitted if native vegetation can be established to provide total screening of the proposed mining site within a reasonable time (4-5 years).
 - g. New roads may be permitted only when totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists to totally screen the proposed road, the road may be permitted if acceptable topography can be created or road design

techniques used to totally screen the road at the time of construction or native vegetation can be established to provide total screening of the proposed road within a reasonable time (4-5 years).

- h. Where existing roads are visible from the river, major extensions, realignments, or upgrades to existing roads shall not be permitted. Necessary minor road improvements shall be substantially screened from view from the river. If inadequate topography or vegetation exists to substantially screen the road improvement, the road improvement may be permitted if acceptable topography can be created or road design techniques used to substantially screen the road at the time of construction or native vegetation can be established to provide substantial screening of the road improvement within a reasonable time (4-5 years). The condition of "substantial screening," as used in Section (1) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to substantially obscure (at least 75%) the subject improvement. When an existing road is regraded, no side cast into or visible from the river shall be permitted. Excess material shall be hauled to locations out of view from the river.
 - i. Visible tree harvest or other vegetation management may be permitted provided that:
 - A. The operation complies with the relevant Forest Practices Act rules;
 - B. Harvest and management methods with low visual impact are used;
 - C. The harvest or vegetation management does not degrade the riparian buffer of any waterway; and
 - D. The harvest or vegetation management is designed to enhance the scenic view within a reasonable time (5-10 years). For the purposes of this paragraph, "enhance" means to benefit forest ecosystem function and vegetative health by optimizing forest stand densities and vegetative composition, fostering forest landscape diversity and promoting sustainable forest values.
 - j. Improvements needed for public recreation use or resource protection may be visible from the river, but shall be primitive in character and designed to blend with the natural character of the landscape.
 - k. Proposed utility facilities shall share existing utility corridors, minimize any ground and vegetation disturbance, and employ non-visible alternatives when reasonably possible.
 - l. Whenever the standards of OAR 736-040-0035 and Section (1), Subsections (c) through (k) of this rule are more restrictive than Grant County's or Umatilla County's Land Use and Development Ordinance, the above Oregon Administrative Rules shall apply.
2. Recreational River Area:
- a. That segment of scenic waterway beginning at the State Highway 395 Bridge crossing, at about river mile 60, and extending downstream approximately three miles to the confluence of Camas Creek, at about river mile 57, is classified as a Recreational River Area.
 - b. This Recreational River Area shall be administered consistent with the standards set by OAR 736-040-0035 and OAR 736-040-0040(1)(c)(B). In addition to these standards, all new development in resource zones (i.e. farm and forest related dwellings) shall comply with Grant County or Umatilla County land use regulations.
 - c. New structures and associated improvements shall be moderately screened from view from the river by topography and/or vegetation, except as provided by OAR 736-040-0030(5), and except those minimal facilities needed for public outdoor recreation or resource protection. If inadequate topographic or vegetative screening exists on a site, the structure or improvement may be permitted if native vegetation can be established to provide moderate screening of the proposed structure or improvement within a reasonable time (4-5 years). The condition of "moderate screening," as used in Section (2) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to moderately obscure (at least 50%) the viewed improvement or structure.
 - d. Commercial public service facilities, including resorts and motels, lodges and trailer parks which are visible from the river, shall not be permitted.

- e. New mining operations, except recreational placer mining and recreational prospecting, as those terms are defined and used in ORS 390.835, and similar improvements, shall be permitted only when they are totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists on a site, mining and similar forms of development may be permitted if native vegetation can be established to provide total screening of the affected area within a reasonable time (4-5 years). The condition of “total screening,” as used in Section (2) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to totally obscure (100%) the altered improvement site.
- f. New roads constructed for agricultural use, mining or residential use shall be moderately screened with vegetation and/or topography. If inadequate topographic or vegetative screening exists, the road may be permitted if acceptable topography can be created or road design techniques used to moderately screen the road at the time of construction or native vegetation can be established to provide moderate screening of the road within a reasonable time (4-5 years).
- g. Where existing roads are visible from the river, extensions, realignments, upgrades, or other improvements, shall only be permitted when partially screened from view from the river. If inadequate topography or vegetation exists to provide partial screening, the road improvement may be permitted if acceptable topography can be created or road design techniques used to partially screen the road at the time of construction or native vegetation can be established to provide partial screening of the subject improvement within a reasonable time (4-5 years). The condition of “partial screening,” as used in Section (2) of this rule shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to partially obscure (at least 30%) views of the road improvement. When an existing road is improved or regraded, no side cast into or visible from the river shall be permitted. Excess material shall be hauled to locations out of view from the river.
- h. Visible tree harvest or other vegetation management may be allowed provided that:
 - A. The operation complies with the relevant Forest Practices Act rules;
 - B. Harvest and management methods with low visual impact are used;
 - C. The harvest or vegetation management does not degrade the riparian buffer of any waterway; and
 - D. The harvest or vegetation management is designed to enhance the scenic view within a reasonable time (5-10 years). For the purposes of this paragraph, “enhance” means to benefit forest ecosystem function and vegetative health by optimizing forest stand densities and vegetative composition, fostering forest landscape diversity and promoting sustainable forest values.
- i. Improvements needed for public outdoor recreation use or resource protection may be visible from the river, but shall be primitive in character and designed to blend with the natural character of the landscape.
- j. Whenever the standards of OAR 736-040-0035 and Section (2), Subsections (c) through (i) of this rule are more restrictive than Grant County or Umatilla County Land Use and Development Ordinances, the above Oregon Administrative Rules shall apply.

Classification for the Middle Fork John Day River Scenic Waterway

The Middle Fork John Day River was designated a scenic waterway in 1988. The designated reach begins at about river mile 71, at the confluence with Crawford Creek, and extends approximately 71 miles to the confluence of the Middle Fork with the North Fork John Day River. OPRD divides the Middle Fork John Day River into two scenic waterway segments.

The first segment extends from Crawford Creek downstream approximately 60 miles to about river mile 11 approximately four miles downstream from Ritter. The upper 30 miles of this segment flows through an interspersed ownership of private parcels and public lands managed by the Malheur National Forest. The lower 30 miles is bounded mostly by private lands. This river segment is paralleled by a paved but lightly traveled road that provides access to thinly distributed ranches and rural dwellings. The road and development in the area is not obtrusive on the view from the river. The management goal is to allow continuation of existing farm, forest, rural residential and recreational uses while protecting the scenic character of the river corridor. OPRD classifies this segment of the river as a **Scenic River Area**.

The second scenic waterway segment extends from about river mile 11 to the confluence with the North Fork John Day River. While this segment of river is bordered by mostly private lands, it flows through a steep walled canyon, is inaccessible by road and exhibits little sign of settlement or development. The management goal is to preserve and protect the primitive undeveloped character of the river corridor. OPRD classifies this segment of scenic waterway as a **Natural River Area**.

Land Management Rules for the Middle Fork John Day River Scenic Waterway

736-040-0067

Middle Fork John Day River Scenic Waterway

1. Natural River Area:
 - a. That segment of scenic waterway beginning at the intersection of the Middle Fork John Day River with the eastern section line of Section 11, Township 8 South, Range 29 East, Willamette Meridian, (Section 11, T 8S, R 29E, W.M.), at about river mile 11, and extending downstream approximately 11 miles to its confluence with the North Fork John Day River is classified as a Natural River Area.
 - b. This Natural River Area shall be administered consistent with the standards set by OAR 736-040-0035 and OAR 736-040-0040(1)(a)(C). In addition to these standards, all new development in resource zones (i.e. farm and forest related dwellings) shall comply with Grant County land use regulations.
 - c. New structures and associated improvements shall be totally screened from view from the river by topography and/or vegetation, except as provided under OAR 736-040-0030(5), and except those minimal facilities needed for public outdoor recreation or resource protection. If inadequate topographic or vegetative screening exists on the site, the structure or improvement may be permitted if native vegetation can be established to provide total screening of the proposed structure or improvement within a reasonable time (4-5 years). The condition of "total screening," as used in Section (1) of this rule, shall consist of adequate topography and/or density and mixture of native evergreen and deciduous vegetation to totally obscure (100%) the subject improvement.
 - d. Commercial public service facilities, including resorts and motels, lodges and trailer parks which are visible from the river, shall not be permitted.
 - e. New mining operations, except recreational placer mining and recreational prospecting, as those terms are defined and used in ORS 390.835, and similar improvements, shall be permitted only when they are totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists to totally screen the proposed mining site, the mining operation may be permitted if native vegetation can be established to provide total screening of the proposed mining site within a reasonable time (4-5 years).
 - f. New roads may be permitted only when totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists to totally screen the proposed road, the road may be permitted if acceptable topography can be created or road design techniques used to totally screen the road at the time of construction or native vegetation can be established to provide total screening of the proposed road within a reasonable time (4-5 years).

- g. Where existing roads are visible from the river, major extensions, realignments, or upgrades to existing roads shall not be permitted. Necessary minor road improvements shall be substantially screened from view from the river. If inadequate topography or vegetation exists to substantially screen the road improvement, the road improvement may be permitted if acceptable topography can be created or road design techniques used to substantially screen the road at the time of construction or native vegetation can be established to provide substantial screening of the road improvement within a reasonable time (4-5 years). The condition of “substantial screening,” as used in Section (1) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to substantially obscure (at least 75%) the subject improvement. When an existing road is regraded, no side cast into or visible from the river shall be permitted. Excess material shall be hauled to locations out of view from the river.
 - h. Visible tree harvest or other vegetation management may be permitted provided that:
 - A. The operation complies with the relevant Forest Practices Act rules;
 - B. Harvest and management methods with low visual impact are used;
 - C. The harvest or vegetation management does not degrade the riparian buffer of any waterway; and
 - D. The harvest or vegetation management is designed to enhance the scenic view within a reasonable time (5-10 years). For the purposes of this paragraph, “enhance” means to benefit forest ecosystem function and vegetative health by optimizing forest stand densities and vegetative composition, fostering forest landscape diversity and promoting sustainable forest values.
 - i. Improvements needed for public outdoor recreation or resource protection may be visible from the river but shall be primitive in character and designed to blend with the natural character of the landscape.
 - j. Proposed utility facilities shall share existing utility corridors, minimize any ground and vegetation disturbance, and employ non-visible alternatives when reasonably possible.
 - k. Whenever the standards of OAR 736-040-0035 and Section (1), Subsections (c) through (j) of this rule are more restrictive than the Grant County Land Use and Development Ordinance, the above Oregon Administrative Rules shall apply.
2. Scenic River Area:
- a. That segment of scenic waterway beginning at the confluence with Crawford Creek at about river mile 71, being in the Northwest 1/4 of Section 25, Township 11 South, Range 35 East, Willamette Meridian, (NW 1/4, Section 25, T 11S, R 35E, W.M.) and extending downstream approximately 60 miles to the intersection of the Middle Fork John Day River with the eastern section line of Section 11, Township 8 South, Range 29 East, Willamette Meridian, (Section 11, T 8S, R 29E, W.M.), at about river mile 11, is classified as a Scenic River Area.
 - b. This Scenic River Area shall be administered consistent with the standards set by OAR 736-040-0035 and OAR 736-040-0040(1)(b)(B). In addition to these standards, all new development in resource zones (i.e. farm and forest related dwellings) shall comply with Grant County land use regulations.
 - c. New structures and associated improvements shall be substantially screened by topography and/or native vegetation, except as provided under OAR 736-040-0030(5), and except for those minimal facilities needed for public outdoor recreation or resource protection. If inadequate topographic or vegetative screening exists on a site, the structure or improvement may be permitted if native vegetation can be established to provide substantial screening of the proposed structure or improvement within a reasonable time (4-5 years). The condition of “substantial screening,” as used in Section (2) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to substantially obscure (at least 75%) the viewed structure or improvement.
 - d. Commercial public service facilities, including resorts and motels, lodges and trailer parks which are visible from the river, shall not be permitted.
 - e. New mining operations, except recreational placer mining and recreational prospecting, as those

terms are defined and used in ORS 390.835, and similar improvements, shall be permitted only when they are totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists on a site, mining and similar forms of development may be permitted if native vegetation can be established to provide total screening of the affected area within a reasonable time (4-5 years). The condition of “total screening,” as used in Section (2) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to totally obscure (100%) the subject improvement.

- f. New roads may be permitted only when totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists to totally screen the proposed road, the road may be permitted if acceptable topography can be created or road design techniques used to totally screen the road at the time of construction or native vegetation can be established to provide total screening of the proposed road within a reasonable time (4-5 years).
- g. Where existing roads are visible from the river, extensions, realignments, upgrades, or other improvements, shall only be permitted when substantially screened from view from the river. If inadequate topography or vegetation exists to provide substantial screening, the road improvement may be permitted if acceptable topography can be created or road design techniques used to substantially screen the road at the time of construction or native vegetation can be established to provide substantial screening of the subject improvement within a reasonable time (4-5 years). When an existing road is improved or regraded, no side cast into or visible from the river shall be permitted. Excess material shall be hauled to locations out of view from the river.
- h. Visible tree harvest or other vegetation management may be allowed provided that:
 - A. The operation complies with the relevant Forest Practices Act rules;
 - B. Harvest methods with low visual impact are used;
 - C. The harvest or vegetation management does not degrade the riparian buffer of any waterway; and
 - D. The harvest or vegetation management is designed to enhance the scenic view within a reasonable time (5-10 years). For the purposes of this paragraph, “enhance” means to benefit forest ecosystem function and vegetative health by optimizing forest stand densities and vegetative composition, fostering forest landscape diversity and promoting sustainable forest values.
- i. Improvements needed for public outdoor recreation use or resource protection may be visible from the river but shall be primitive in character and designed to blend with the natural character of the landscape.
- j. Proposed utility facilities shall share existing utility corridors, minimize any ground and vegetation disturbance, and employ non-visible alternatives when reasonably possible.
- k. Whenever the standards of OAR 736-040-0035 and Section (2), Subsections (c) through (j) of this rule are more restrictive than the Grant County Land Use and Development Ordinance, the above Oregon Administrative Rule shall apply.

Classification for the South Fork John Day River Scenic Waterway

The South Fork John Day River was designated a scenic waterway in 1988. The designated reach extends from the Post-Paulina Road crossing near river mile 35, downstream approximately 29 miles to the northern border of the Phillip W. Schneider Wildlife Area (formerly Murder’s Creek Wildlife Area) at about river mile six. OPRD divides this reach into two segments.

The first segment extends from the Post-Paulina Road crossing downstream approximately five miles to Ellingson Mill. This section of river is paralleled by a gravel road which crosses from the east bank to the west bank at Ellingson Mill and can be seen frequently from the river. The road is lightly traveled and provides access to a few ranch dwellings. Utility lines also follow the road and river in this segment. In this segment, the river flows through public lands, managed by the Bureau of Land Management, interspersed with private holdings. The management goal is to allow the continuation of existing ranch, forest and recreation uses while protecting the scenic character of the river corridor. OPRD classifies this segment as a **Scenic River Area**.

The remaining segment of the South Fork extends from Ellingson Mill approximately 24 miles downstream to about river mile six at the north boundary of the Phillip W. Schneider Wildlife Area. The river is paralleled by an all season road which begins on the west river bank, crosses the river shortly downstream from Izee Falls, follows the east bank to the end of the segment and is visible from the river at numerous locations. River frontage in this segment includes state owned lands as well as private parcels and BLM managed lands. While there is access to the river in this segment, there is little evidence of development or settlement. The management goal for this reach is to preserve and protect the fairly primitive and undeveloped character of the river corridor. OPRD classifies this segment as an **Accessible Natural River Area**.

Land Management Rules for the South Fork John Day River Scenic Waterway

736-040-0068

South Fork John Day River Scenic Waterway

1. Accessible Natural River Area:
 - a. That segment of scenic waterway beginning at Ellingson Mill at about river mile 30, being at the intersection of the South Fork John Day River with the northern section line of Section 29, Township 16 South, Range 27 East, Willamette Meridian, (Section 29, T 16S, R 27E, W.M.) and extending downstream approximately 24 miles to the north boundary of the Murder's Creek Wildlife Area as constituted on December 8, 1988, at about river mile six, being in the Southeast 1/4 of Section 24, Township 13 South, Range 26 East, Willamette Meridian, (SE1/4, Section 24, T 13S, R 26E, W.M.) is classified as an Accessible Natural River Area.
 - b. This Accessible Natural River Area shall be administered consistent with the standards set by OAR 736-040-0035 and OAR 736-040-0040(1)(e)(B). In addition to these standards, all new development in resource zones (i.e. farm and forest related dwellings) shall comply with Grant County land use regulations.
 - c. New structures and associated improvements shall be totally screened from view from the river by topography and/or vegetation, except as provided under OAR 736-040-0030(5), and except those minimal facilities needed for public outdoor recreation or resource protection. If inadequate topographic or vegetative screening exists on the site, the structure or improvement may be permitted if native vegetation can be established to provide total screening of the proposed structure or improvement within a reasonable time (4-5 years). The condition of "total screening," as used in Section (1) of this rule, shall consist of adequate topography and/or density and mixture of native evergreen and deciduous vegetation to totally obscure (100%) the subject improvement.
 - d. Commercial public service facilities, including resorts and motels, lodges and trailer parks which are visible from the river, shall not be permitted.
 - e. New mining operations, except recreational placer mining and recreational prospecting, as those terms are defined and used in ORS 390.835, and similar improvements, shall be permitted only when they are totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists to totally screen the proposed mining site, the mining operation may be permitted if native vegetation can be established to provide total screening of the proposed mining site within a reasonable time (4-5 years).

- f. New roads may be permitted only when totally screened from view from the river by topography and/ or vegetation. If inadequate topographic or vegetative screening exists to totally screen the proposed road, the road may be permitted if acceptable topography can be created or road design techniques used to totally screen the road at the time of construction or native vegetation can be established to provide total screening of the proposed road within a reasonable time (4-5 years).
 - g. Where existing roads are visible from the river, major extensions, realignments, or upgrades to existing roads shall not be permitted. Necessary minor road improvements shall be substantially screened from view from the river. If inadequate topography or vegetation exists to substantially screen the road improvement, the road improvement may be permitted if acceptable topography can be created or road design techniques used to substantially screen the road at the time of construction or native vegetation can be established to provide substantial screening of the road improvement within a reasonable time (4 -5 years). The condition of "substantial screening," as used in Section (1) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to substantially obscure (at least 75%) the subject improvement. When an existing road is regraded, no side cast into or visible from the river shall be permitted. Excess material shall be hauled to locations out of view from the river.
 - h. Visible tree harvest or other vegetation management may be allowed provided that:
 - A. The operation complies with the relevant Forest Practices Act rules;
 - B. Harvest and management methods with low visual impact are used;
 - C. The harvest or vegetation management does not degrade the riparian buffer of any waterway; and
 - D. The harvest or vegetation management is designed to enhance the scenic view within a reasonable time (5-10 years). For the purposes of this paragraph, "enhance" means to benefit forest ecosystem function and vegetative health by optimizing forest stand densities and vegetative composition, fostering forest landscape diversity and promoting sustainable forest values.
 - i. Improvements needed for public outdoor recreation use or resource protection may be visible from the river, but shall be primitive in character and designed to blend with the natural character of the landscape.
 - j. Proposed utility facilities shall share existing utility corridors, minimize any ground and vegetation disturbance, and employ non-visible alternatives when reasonably possible.
 - k. Whenever the standards of OAR 736-040-0035 and Section (1), Subsections (c) through (j) of this rule are more restrictive than the Grant County Land Use and Development Ordinance, the above Oregon Administrative Rules shall apply.
2. Scenic River Area:
- a. That segment of scenic waterway beginning at the Post -Paulina Road crossing at about river mile 35, being in the Northwest 1/4 of Section 9, Township 17 South, Range 27 East, Willamette Meridian, (NW1/4, Section 9, T 17S, R 27E, W.M.) and extending downstream approximately five miles to Ellingson Mill at about river mile 30, being at the intersection of the South Fork John Day River with the northern, section line of Section 29, Township 16 South, Range 27 East, Willamette Meridian, (Section 29, T 16S, R 27E, W.M.) is classified as a Scenic River Area.
 - b. This Scenic River Area shall be administered consistent with the standards set by OAR 736-040-0035 and OAR 736-040-0040(1)(b)(B). In addition to these standards, all new development in resource zones (i.e. farm and forest related dwellings) shall comply with Grant County land use regulations.
 - c. New structures and associated improvements shall be substantially screened by topography and/ or native vegetation, except as provided under OAR 736-040-0030(5), and except for those minimal facilities needed for public outdoor recreation or resource protection. If inadequate topographic or vegetative screening exists on a site, the structure or improvement may be permitted if native vegetation can be established to provide substantial screening of the proposed structure or improvement within a reasonable time (4-5 years). The condition of "substantial screening," as used

- in Section (2) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to substantially obscure (at least 75%) the viewed structure or improvement.
- d. Commercial public service facilities, including resorts and motels, lodges and trailer parks which are visible from the river, shall not be permitted.
 - e. New mining operations, except recreational placer mining and recreational prospecting, as those terms are defined and used in ORS 390.835, and similar improvements, shall be permitted only when they are totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists on a site, mining and similar forms of development may be permitted if native vegetation can be established to provide total screening of the affected area within a reasonable time (4-5 years). The condition of “total screening,” as used in Section (2) of this rule, shall consist of adequate topography and/or density and mixture of native, evergreen and deciduous vegetation to totally obscure (100%) the subject improvement.
 - f. New roads may be permitted only when totally screened from view from the river by topography and/or vegetation. If inadequate topographic or vegetative screening exists to totally screen the proposed road, the road may be permitted if acceptable topography can be created or road design techniques used to totally screen the road at the time of construction or native vegetation can be established to provide total screening of the proposed road within a reasonable time (4-5 years).
 - g. Where existing roads are visible from the river, extensions, realignments, upgrades, or other improvements, shall only be permitted when substantially screened from view from the river. If inadequate topography or vegetation exists to provide substantial screening, the road improvement may be permitted if acceptable topography can be created or road design techniques used to substantially screen the road at the time of construction or native vegetation can be established to provide substantial screening of the subject improvement within a reasonable time (4-5 years). When an existing road is improved or regraded, no side cast into or visible from the river shall be permitted. Excess material shall be hauled to locations out of view from the river.
 - h. Visible tree harvest or other vegetation management may be allowed provided that:
 - A. The operation complies with the relevant Forest Practices Act rules;
 - B. Harvest and management methods with low visual impact are used;
 - C. The harvest or vegetation management does not degrade the riparian buffer of any waterway; and
 - D. The harvest or vegetation management is designed to enhance the scenic view within a reasonable time (5-10 years). For the purposes of this paragraph, “enhance” means to benefit forest ecosystem function and vegetative health by optimizing forest stand densities and vegetative composition, fostering forest landscape diversity and promoting sustainable forest values.
 - i. Improvements needed for public outdoor recreation use or resource protection may be visible from the river but shall be primitive in character and designed to blend with the natural character of the landscape.
 - j. Proposed utility facilities shall share existing utility corridors, minimize any ground or vegetation disturbance, and employ non-visible alternatives when reasonably possible.
 - k. Whenever the standards of OAR 736-040-0035 and Section (2), Subsections (c) through (j) of this rule are more restrictive than the Grant County Land Use and Development Ordinance, the above Oregon Administrative Rule shall apply.

Appendix I:

Rules of Conduct for Designated and Suitable River Corridors

Implement the following rules of conduct on lands administered by the BLM within designated and suitable river corridors in order to protect outstandingly remarkable values:

- All fire restrictions must be followed; fireworks are strictly prohibited.
- When allowed, campfires must be contained in a metal fire pan that protects the ground from scarring and ash. All ash and unburned contents of the fire shall be removed and carried out of the river corridor.
- You must not gather, cut, burn, or destroy any standing wood, either alive or dead, found within the river corridor.
- An approved portable toilet must be carried and used by all members of overnight boating groups, and the contents disposed of properly. Toilet contents and human waste disposal bags may not be dumped into any BLM vault toilet or any other facility not developed and identified especially for that purpose.
- Each boating group must obtain, possess, and carry a BLM John Day River Boater Permit and present the permit upon request of a BLM authorized officer or representative.
- You must not violate any term or condition of a BLM boater registration, permit, contract, special-use authorization, or approved operating plan.
- You must not camp, operate, or travel by boat with a group that exceeds the maximum group size of 16 persons.
- You must not operate any personal watercraft or motorboat in any area closed to such use.
- You must not launch a boat, take out a boat, or camp in an area designated as closed to such activity.

Appendix J

Interim Wilderness Management Plan- Spring Basin Wilderness Area

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Spring Basin Wilderness

Interim Management Plan

Introduction

The Department of the Interior, Bureau of Land Management (BLM) is the agency responsible for managing the Spring Basin Wilderness area. The Spring Basin Wilderness is located within the Central Oregon Resource Area of the Prineville District, and is located in Wheeler County, approximately six miles southeast of Clarno, Oregon and State Highway 218.

Background

On March 30, 2009 the Omnibus Public Lands Management Act of 2009, subtitle J, designated the 6,382-acre Spring Basin Wilderness. The Spring Basin Wilderness Study Area inventory unit was first identified by BLM in 1980 in the “Wilderness Inventory, Oregon and Washington, Final Intensive Inventory Decisions.” Under the Federal Land Policy and Management Act of 1976, the BLM was directed to complete wilderness inventories and prepare a wilderness study area report based on a legislative environmental impact statement. The study report was forwarded by the Secretary of the Interior to Congress in 1991 and the Secretary recommended that the majority of the 6,481 acres of the Spring Basin study area be designated by Congress as wilderness. Since then, the study area has been subject to interim management guidelines designed to preserve its wilderness characteristics. Its special status has been acknowledged in applicable federal, state and local land use and activity plans. In 1994, the Confederated Tribes of the Warm Springs Reservation (CTWSR) purchased a 40-acre in-holding within the Spring Basin Wilderness Study boundary, along with lands to the east and north of the WSA. Since that purchase, there have been no substantive changes to the study area lands.

Interim Plan Purpose

The purpose of this management plan is to provide interim management guidance for the Spring Basin Wilderness and document BLM’s commitment to comply with the letter and spirit of the Omnibus Public Lands Management Act of 2009. While the BLM’s proposed (FEIS) and approved (ROD) plan documents could have simply acknowledged the legislation and expressed intent to complete a long term management plan, there could have been some uncertainty or ambiguity over overlapping land use and natural resource plans, policies and operating procedures. By documenting the extraordinary values and related protective management needs of Spring Basin, we hope to avoid proposals by the public or staff that are inconsistent with the Congressional intent.

This interim management plan is designed to set broad goals and objectives, so that any near-term on-the-ground actions and planning efforts will be fully consistent with protective management. Management actions may be proposed and modified as additional resource and visitor data become available.

Relationship to BLM Land Use and Activity or Project Planning

This interim management plan is a component of the John Day Basin Resource Management Plan. The Two Rivers RMP (1986) directed that areas under wilderness review, which included the Spring Basin WSA, continue to be managed following the guidance of the Bureau’s Interim Management Policy for Lands Under Wilderness Review (since superseded by BLM Manual 6330 - Management of Wilderness Study Areas). Subsequent plan amendments and the (interagency) John Day Wild and Scenic River Plan provided the same direction. Since the Congressional designation occurred during the Prineville District’s RMP revision process, it was not considered a planning issue or subject to a variety of alternatives in the draft environmental impact statement. Nevertheless, it was addressed in the sense that it was assumed to be under management prescriptions to protect its wilderness characteristics (see DEIS pp. 80-84, 273 and 426-429). The following proposed interim plan elements are broad in nature and do not change BLM land use allocations or violate Congressional intent. None of the land use prescriptions, restrictions or exclusions, proposed partnerships or monitoring activities would diminish the

wilderness values of the Spring Basin Wilderness area. The interim plan does not contain any “project level” or site-specific project proposals or decisions. At most, interim management actions would be insignificant, reversible protective actions, such as installing signs, providing interpretive and educational materials and developing cooperative partnerships to facilitate protection of the Spring Basin’s wilderness characteristics.

Public Involvement

The public was deeply involved in the wilderness inventory, wilderness review, interim management and support of the applicable component of the 2009 Omnibus Act. The public was involved in the John Day Basin RMP process. Activities included mass mailings, public meetings, posting information on-line and one-on-one contacts. The Summary of the Analysis of the Management Situation and draft environmental impact statement were made available to the public for review and comment. The final EIS was subject to a public review and a comment period, concurrent with a public protest opportunity (43 CFR 1610.5-2). The Governor of Oregon was invited to indicate if there were any inconsistencies between the proposed plans (43 CFR 1610.3-2(e)) (including this interim guidance) and any officially approved, natural resource related plans, programs or policies of the state or applicable counties.

John Day-Snake Resource Advisory Council

The John Day/Snake Resource Advisory Council (JDSRAC) has provided input to the John Day Basin RMP throughout the development of the Draft Environmental Impact Statement (EIS). On April 17, 2009 the JDSRAC subcommittee assigned to provide input to the John Day Basin RMP met with District staff to discuss possible modifications to the Draft EIS that would make the Final EIS a better document. At that time, options for management of the Spring Basin Wilderness and the legislatively identified land exchanges were discussed and it was agreed that this appendix identifying interim management would benefit wilderness values and future wilderness planning efforts.

Spring Basin Wilderness Area Overview

General Location and Boundaries

The Spring Basin Wilderness is located between ¼ mile and one mile east of the John Day River in the Clarno Valley of Wheeler County, Oregon, approximately 6 miles southeast of Clarno, Oregon. The western and southern boundaries are a combination of high standard graded county roads, bladed and low standard private roads and private lands. Private land and a low standard private road form the eastern and northern boundaries. The area has rugged, diversified, steep rolling topography with sagebrush, western juniper, and bunchgrass covering its slopes. Isolated springs are the only source of perennial water. Three intermittent streams flow southerly and southwesterly towards the John Day River.

Access

The nearest State Highway is route 218, which passes through the small community of Clarno at the John Day River. County and private roads provide access to the boundary at several points. Points on the western boundary of the wilderness are accessible by boat from the river.

Land Ownership

Land ownership within and adjacent to the Spring Basin area has not changed except for the purchase of former private lands by the CTWSR in 1994. Several owners have indicated a willingness to exchange private lands for BLM-managed lands. The Omnibus Public Lands Management Act of 2009 authorized various land exchanges that would assist in consolidating lands within the Spring Basin Wilderness, as discussed in the realty section of the JDBPRMP/FEIS and the Lands and Realty section below.

Unique Attributes of the Spring Basin Wilderness

The Spring Basin Wilderness has colorful geologic features and rugged cliffs which give it a unique beauty. Numerous vista points provide a sweeping view of the John Day River valley, and 360 acres of the Wilderness fall within the Wild and Scenic River corridor. Solitude is provided by the remote canyons and vegetative diversity growing in a predominantly perennial bunchgrass and shrub-steppe plant community. The Spring Basin Wilderness contributes a variety of values to the Wilderness Preservation System including several wildlife species, a prehistoric cultural site, several plant species of interest, as well as a rare cactus (*Pediocactus simponii*). Elevations range from 1,340 to 2,827 feet above sea level.

Significant History

One American Indian pictograph site is known within the wilderness. Other American Indian site types are known to exist in areas adjacent to the wilderness and it is likely that these same site types also exist within the wilderness. Historically, early settlement occurred along water courses at the edges of the wilderness as noted in the 1873 General Land Office survey maps and notes. Homestead claims begin to appear in the early 1900s, mostly along the water courses north and west of the wilderness and continue through the 1930s. A few claims were filed in the interior of the wilderness but were relinquished only after a few months time. This was probably due to the harsh condition of the landscape and lack of adequate water sources. Homesteading was typically associated with livestock (cattle and sheep, and later, horse) ranching. A few deteriorating corrals from the mid-1900s occur within the boundaries of the wilderness. Several early wagon road routes skirt the wilderness, primarily along the western and northern boundaries. There is one known mining claim for Morrisonite within the wilderness filed in 1976. This claim produced a bladed path to minor surface exploration, and has no recent evidence of mining activity.

General Management Situation

Nine miles of abandoned ways (primitive roads) within the previous WSA continue to revegetate. Wildlife habitat would be maintained and meet ODFW targets for mule deer. The BLM's 1991 Wilderness Study Report to Congress indicated actual livestock grazing use was 89 AUMs and recreation use totaling 8,000 visitor days per year.

Vegetation management activities that have occurred include treatment of noxious weeds and prescribed fire.

Desired Conditions for the Natural Environment

Natural succession occurs in all existing vegetation communities and is influenced by natural processes and disturbances. Structure, composition, function and special distribution of vegetative types are influenced and sustained by natural processes. Human influence on vegetation is minimal, except where prescribed fire or other treatments are needed to protect or restore wilderness resources. Plant species are predominantly native and indigenous to the immediate area. There are no known increases in non-indigenous species composition. Evidence of fire, insects or disease may be present.

Human influence on the composition, structure and function of ecosystems is minimal in most areas, except where restoration is determined necessary to restore or facilitate natural processes. A range of habitats is sustained for all naturally occurring species. Special status species abundance and distribution is maintained or increased. Human influence on physical features, such as soils and geologic materials is minimal.

Desired Conditions for the Human Environment

In more rugged areas, opportunity exists for a moderate level of risk and challenge. Contact with other users or agency personnel is relatively infrequent. Day use opportunities are common within this management area

and campsites are dispersed, providing a wilderness experience. Signing to indicate trail routes or trail junctions may be present provided they are the minimum necessary to protect resources or visitor safety. Boundary signs, trailhead signs, and other information are provided to educate and inform wilderness users.

Permitted outfitters provide services to visitors for activities meeting identified public needs and which generally cannot be provided in non-wilderness settings. All users follow Leave No Trace practices, effects are limited and meet Desired Future Conditions for the Natural Environment (see above). Conflicts between human users and livestock are minimized. No facilities or improvements within the wilderness area are provided for the safety and convenience of the visitor. Evidence of historic and cultural sites may exist, but sites are not interpreted or signed within Spring Basin Wilderness.

National Guidance

Additional guidance related to management of wilderness and Wild and Scenic Rivers (WSRs) is provided in BLM Manual 6340 - Management of Designated Wilderness Areas (2012) and BLM Manual 6400 for Wild and Scenic Rivers - Policy and Program Direction for Identification, Evaluation, Planning and Management (2012)/ Other guidance for wilderness can be found at Title 43 Code of Federal Regulations (43 CFR) Part 6300 and for WSRs at 43 CFR Part 8351.2. This guidance will be incorporated into management activities that take place in the Spring Basin Wilderness or WSR corridors. New guidance will be incorporated into this management plan as manuals are periodically updated or new guidance becomes available and applicable.

Spring Basin Interim Management

General management of the Spring Basin Wilderness and John Day W&S River is guided by the Wilderness Act of 1964, the Omnibus Oregon Wild and Scenic Rivers Act of 1988, and the Omnibus Public Lands Management Act of 2009. It is assumed that where management requirements differ between Congressional Acts, the more restrictive requirements shall apply. Since the Spring Basin Wilderness designation was signed into law during the BLM's Resource Management Plan Revision process, the non-discretionary management direction is incorporated into the proposed plan to provide consistency and facilitate management until such time as a formal wilderness plan can be prepared and approved. The interim direction is designed to enhance natural values and allow protective management. Public scoping and input related to the interim direction and resulting management actions will be used to help guide development of a long-term plan.

Wilderness Guidance

The Wilderness Act provides four main goals guiding management of statutory wilderness. These goals are reiterated as standard goals for BLM wilderness management plans as directed in BLM Manual 8561, Appendix 1. The goals are as follows:

1. **Wilderness character:** To provide for long-term protection and preservation of the area's wilderness character under a principle of non-degradation. The area's natural condition, opportunities for solitude, opportunities for primitive and unconfined types of recreation, and ecological, geological or other features of scientific, educational, scenic, or historic value present will be managed so they will remain unimpaired.
2. **Wilderness use:** To manage the wilderness area for use and enjoyment of visitors in a manner that will leave the area unimpaired for future use and enjoyment as wilderness. The wilderness resource is dominant in all resource decisions where a choice must be made between preservation of wilderness character and visitor use.
3. **Minimum Requirement Decision:** To manage the area using the minimum tool, equipment, or structure necessary to successfully, safely and economically accomplish an objective. The chosen tool, equipment or structure should least degrade wilderness values temporarily or permanently. Management will seek to preserve spontaneity of use and as much freedom from regulation as possible. The BLM will use the Minimum Requirement Decision Guide (MRDG) for all projects undertaken in the wilderness to determine the need and type of actions to be taken.
4. **Nonconforming Uses:** To manage nonconforming but accepted uses permitted by the Wilderness Act and

subsequent laws in a manner that will prevent unnecessary or undue degradation of the area's wilderness character. Nonconforming uses are an exception rather than the rule; therefore, emphasis is placed on maintaining wilderness character.

Wild and Scenic Rivers and State of Oregon Scenic Waterway Guidance

In addition to the BLM's February 2001 John Day Wild and Scenic River Management Plan, the State of Oregon adopted Oregon Administrative Rule (OAR) 736-040-0065 for the John Day Scenic Waterway, including the segment flowing on the west and southwestern boundaries of the Spring Basin Wilderness. The State rules are enforceable at both the state and local government levels and address the full suite of historic, existing or potential uses of all land ownerships. Prohibitions or restrictions apply to structures, commercial services, mining operations, roads, timber harvest, recreational facilities, and utility facilities for all classes of state scenic waterways. Although the state regulations generally are applicable to only those lands within a ¼ mile of the river boundary, the net effect for the Spring Basin Wilderness is a de-facto buffer on one of its most scenic borders. In addition, the State Land Conservation and Development Commission Statewide planning goal 5 requires state and local governments to recognize and protect federally designated wilderness areas when developing comprehensive plans or approving projects.

Wild and Scenic Rivers Management Assumptions

1. In general, requirements associated with protection of wilderness resources are more restrictive than those for WSRs, even those with a Wild River classification. In this case, the federal *recreational* classification and the State Scenic Waterway classification are both considered less restrictive. An estimated 360 acres of BLM managed land have the overlapping management prescriptions. About 640 acres of non-federal land between the federal wilderness and east bank of the John Day River are within the State Scenic Waterway.
2. Unless, otherwise addressed, the protection of wilderness resources and character will provide adequate protection for the Outstandingly Remarkable Values within the John Day W&SR corridor.
3. Any management action or project proposed for the Spring Basin Wilderness that falls within the WSR or State Scenic Waterway corridor will be screened for compliance with the applicable acts and plan restrictions.

Wilderness Minimum Requirement Decision Guide (MRDG)

Development of the MRDG was an interagency effort among United States Forest Service (USFS), National Park Service, BLM and United States Fish and Wildlife Service (USFWS) with assistance from the Arthur Carhart National Wilderness Training Center. The guide was developed to provide consistency in evaluating project proposals to help determine if decisions strive toward or maintaining wilderness character. There are two steps to the minimum requirement analysis; 1) To determine if the project or activity is the minimum necessary for the administration of the area for purposes of the Wilderness Act, and 2) to determine which tool(s) will have the least effect on the wilderness resource. Any analysis required by the National Environmental Policy Act (NEPA) for project implementation that falls within the Spring Basin Wilderness is preceded by an MRDG evaluation. The MRDG is meant to assist, not replace, analysis required by NEPA. Management direction described in the elements below is meant to provide overall guidance for the Spring Basin Wilderness. As project implementation occurs, the MRDG is part of the planning process.

Wilderness Administrative Elements

The Spring Basin Wilderness falls within the John Day Basin planning unit of the Central Oregon Resource Area (RA) of BLM's Prineville District Office (DO). The BLM also actively manages other programs within these areas including recreation, rangeland resources, wildlife and fisheries habitat, soils, watershed, cultural and paleontological resources. Administrative responsibilities are vested with the Central Oregon Resource Area Field Manager and are carried out by the Resource Area staff. On-the-ground management activities, such as visitor contact, visitor use data collection, monitoring and informational signing are accomplished mainly by BLM staff and volunteers. Cooperative management with various state and local governments and Native American

tribes, as well as other federal agencies is also important for comprehensive and consistent management of the John Day Basin natural resources. Below are other administrative functions associated with managing the Spring Basin Wilderness and associated Wild and Scenic rivers.

Aircraft Overflights

Current Management Situation

The BLM does not have jurisdiction to regulate aircraft flight paths, altitude parameters, or noise levels caused by civilian or military aircraft and overflights. By agreement in 1992 between BLM and the Federal Aviation Administration, civilian aircraft are requested to maintain a minimum altitude of 2,000 feet above ground level or higher while in airspace over designated wilderness. This altitude advisory does not apply to military aircraft operating within an established training corridor.

During wildlife management activities, Oregon Department of Fish and Wildlife (ODFW) uses aircraft over Spring Basin to conduct aerial big game census activities and inspect wildlife habitat. During winter months, low-level helicopter and fixed-wing inventories are taken of mule deer, elk, pronghorn antelope, and bighorn sheep. Historically, some livestock grazing operations on allotments have been conducted with periodic use of helicopters to locate and monitor cattle, transport supplies and equipment, and manage fences and gates. Any potential landing and dropping of supplies by aircraft into Spring Basin Wilderness will be analyzed in an environmental assessment (EA) prior to the landing of the aircraft or landing of supplies.

Aircraft, fixed wing and helicopter, are used for emergency operations such as search and rescue. Use of aircraft for such purposes is authorized by 43 CFR Part 6303.1. The Wheeler County Sheriff's Office is responsible for search and rescue operations in this area, with the BLM assisting these efforts as necessary and within their capabilities.

Use of aircraft by BLM personnel for administrative purposes includes use of fixed wing and helicopter for reconnaissance of wildfires. Aircraft are used in wildlife and invasive species monitoring and management programs. Analysis required by NEPA for use of administrative flights includes use of an MRDG evaluation. Fire suppression activities involving aircraft are considered annually, prior to the fire season. Aircraft activities are developed and considered through an MDRG evaluation. This consideration aids in decision making for potential initial attack during Wildland Fire Situation Analyses and other planning cycles. The need for aircraft to participate in the protection of human life is considered emergency activity during fire suppression or prescribed fire activities.

Management Objectives

- Prevent unnecessary overflights and landing of aircraft within the Spring Basin, except as necessary for emergency situations or as otherwise approved by the authorized officer.

Management Direction

- Pursue development of agreements with cooperating agencies and permittees, which give concise direction for authorization and use of aircraft within Spring Basin Wilderness.
- Direct BLM personnel by education and policy to restrict overflights and landing of aircraft within the Spring Basin Wilderness except as necessary for emergency situations or as otherwise approved by the authorized officer.

Lands and Realty, including Renewable Energy

Current Management Situation

Land management requirements in the 2009 Omnibus Public Lands Management Act regarding land exchanges, Spring Basin Wilderness designation, created minor inconsistencies between the current land tenure allocations and legislative requirements. These inconsistencies are addressed in the proposed John Day Basin RMP/FEIS by adjusting land tenure zones to provide consistency with the Omnibus Act. The FLPMA also provides authority for the acquisition of lands within areas with high public values, such as the Spring Basin Wilderness

and components of the WSR system. As per specific language in the Omnibus Act, acquired lands within the designated Spring Basin Wilderness boundaries will be managed in accordance with the Act.

The Spring Basin Wilderness was identified as a right-of-way avoidance/exclusion area in the Two Rivers RMP, as amended in 2001. The John Day Basin RMP adjusts these zones to reflect the Spring Basin Wilderness as a realty use exclusion zone. Commercial activities including filming permits will be generally prohibited in Spring Basin Wilderness. Commercial activities allowed in the wilderness are addressed in this management plan under Special Recreation Permits (SRPs).

Management Objectives

- To retain, consolidate, and acquire land or interest in land with high public resource values for effective administration and improvement of resource management, as specified in the Omnibus Public Lands Management Act, Subsection J.
- To acquire legal public access or administrative access to public land where necessary.

Management Direction

- Public land holdings in Spring Basin Wilderness will be retained and increased. Public lands within Spring Basin Wilderness may not be disposed of under any circumstances. However, BLM lands in the Spring Basin Wilderness Study Area not designated as part of the Spring Basin Wilderness were released from Wilderness Study area status through a combination of a specified map and Section 1753 of the Omnibus Act. Some of these lands may be subject to exchange.
- Acquisition opportunities within or adjacent to special management areas, including Spring Basin Wilderness are considered higher priority than non-public lands elsewhere in the Central Oregon Resource Area. All forms of acquisition will be with willing landowners.
- Spring Basin Wilderness is designated as a right-of-way, realty use and renewable energy exclusion area, except authorizations necessary to provide reasonable access to non-public lands and interests in lands.
- Valid existing rights within Spring Basin Wilderness not currently noted on the BLM's land status records will be adjudicated, acknowledged and noted in accordance with applicable law.

Wildland Fire Management

Current Management Situation

Plant and animal communities throughout the Spring Basin Wilderness have developed with some influence of wildland fire. The extent of the influence depends on many physical and biological factors. Biophysical Settings in the Spring Basin Wilderness have fire return intervals that range from 5 - 115 years with the entire area likely burning at least once every 62 years. More Wildland fires may be ignited, but are not discovered because they are extinguished by accompanying precipitation, or burn only a short time because of limited quantities of fuel.

Wilderness prescribed fire issues are addressed by subsequent NEPA analysis on a "project-level" basis. These documents analyze objectives of such actions. In addition, an MRDG will be developed for each action taken. BLM Manual 6340, Management of Designated Wilderness Areas, also allows for use of prescribed burns to achieve resource management goals and restoration of natural ecological processes.

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

Management Objectives

- To protect human life, private property or areas that possess significant resource values that are threatened by wildfire.
- To restore and maintain the integrity of ecosystems by reestablishing appropriate wildland fire regimes.

Management Direction

- Fire Management Plan (FMP) direction will be tiered to the RMP and will be stepped down to meet the resource objectives of the RMP. . Emphasis is given to restoring appropriate wildland fire regimes and ecosystem integrity, while still protecting human life, private property or other significant resource values. Appropriate rehabilitation guidelines associated with protecting wilderness resources will also be developed as needed.
- As part of the FMP, agreements with other land management agencies and private landowners to facilitate cooperative wildland fire management will also be developed as needed.
- All unplanned ignitions in the Spring Basin Wilderness will be managed, to the greatest extent possible, to minimize adverse effects of suppression actions on wilderness resources.
- Consider using aerial resources first before ground based mechanized equipment when protecting improvements on private land along the perimeter from wildfire.

Emergency Services and Law Enforcement

Current Management Situation

The BLM law enforcement rangers enforce Federal regulations on 1.65 million acres of BLM administered land in the Prineville District. Law enforcement violations in the Spring Basin Wilderness could include motorized vehicle travel in closed areas, illegal outfitters/guides, illegal wildlife hunting, vandalism and theft of archeological or paleontological resources, trash dumping, and vandalism of signs or facilities.

The Wheeler County Sheriff's Office is responsible for managing all search and rescue operations in the Spring Basin Wilderness. The BLM assists the County in search and rescue operations, as requested, generally providing personnel, and on occasion, aircraft. The Oregon State Police also conducts patrols focused mainly on violations of State fish and game laws, although officers respond to other violations.

The 43 CFR 6303.1 states "As necessary to meet minimum requirements for the administration of the wilderness area, BLM may: (d) Prescribe measures that may be used in emergencies involving the health and safety of persons in the area including but not limited to, the conditions of use of motorized equipment, mechanical transport, aircraft, installations, structures, rock drills and fixed anchors. The BLM will require any restoration activities that we find necessary to be taken concurrently with the emergency activities or as soon as practicable when the emergency ends." In addition, BLM manual 6340 states mechanical transport and motorized equipment may be used for emergency situations involving human health and safety and for emergencies involving criminal law and pursuit of fugitives.

Management Objectives

- To increase BLM law enforcement capabilities to protect Spring Basin Wilderness resources.
- To pursue coordination and cooperation with other law enforcement agencies and work to inform them about Spring Basin Wilderness enforcement issues.

Management Direction

- Where needed, develop additional supplemental regulations governing public use in Spring Basin Wilderness as provided by 43 CFR 8365.1-6.
- Continue and promote law enforcement and other cooperative agreements with Wheeler County Sheriff's Office and Oregon State Police for protection of Spring Basin Wilderness.
- Develop written materials to help educate cooperating law enforcement and search and rescue agency personnel about protection of Spring Basin Wilderness and resources related to public use appropriate use of motor vehicles, aircraft and other motorized or mechanical equipment needs during emergency situations.

Partnerships and Volunteers

Current Management Situation

Partnerships and volunteers can be vital parts of managing the Spring Basin Wilderness. BLM staff potential projects include removal of unneeded fences, noxious weed and other inventories, trail monitoring, visitor use monitoring, etc.

Management Objectives

- To develop relationships and cooperative agreements with partners to benefit management of Spring Basin Wilderness.

Management Direction

- Initiate/continue efforts to recruit and utilize individual and group volunteers for work projects in Spring Basin Wilderness.
- Develop an inventory of work projects needed to improve or monitor Spring Basin Wilderness resources and values, which can be used for recruiting volunteers.

Education and Outreach

Current Management Situation

At present there is little specific education information available to the public regarding the Spring Basin Wilderness; however BLM distributes a map of Spring Basin WSA that includes information on Leave No Trace practices and general wilderness use and materials regarding wilderness use and ethics, including single sheet handouts and general "Leave No Trace" information.

Management Objectives

- To create a wilderness education program on Prineville District that informs staff and public about unique aspects of Spring Basin and wilderness management guidelines.

Management Direction

- Include wilderness ethics in brochures and include similar information on the Prineville District website.
- Post use ethics information about Spring Basin in high use areas such as trailheads, developed recreation and boat launch sites and appropriate locations in nearby communities.

Research

Current Management Situation

There are currently no known short or long term research studies in the Spring Basin Wilderness. Partnerships could be possible with other agencies or universities.

Management Objectives

- To work with other agencies, universities and interested entities to conduct research activities in a manner that preserves the area's wilderness character and furthers management, scientific, educational, historical and conservation purposes of Spring Basin Wilderness.

Management Direction

- Pursue cooperating partners for wilderness dependent research projects.
- Initiate cooperative management agreement between researchers and BLM.
- Use information gained through research for developing management projects and actions which promote wilderness and WSR character and values.

Visitor Use Elements

Recreational Facilities

There are no developed campsites, day use, or other facilities within the Spring Basin Wilderness Area. There are no developed water sources with reliable potable water for human consumption. There are no developed or authorized “cherry stem roads” that intrude into the original BLM portions of the Spring Basin WSA. The interim plan has no management objectives or guidelines for new recreational facilities within the wilderness area. Any future proposals will be subject to appropriate reviews including use of the MRDG, application of NEPA, and appropriate public and interagency review and comment.

Wilderness Trails and Trailheads: Use Guidelines

Recreation facilities include a signed trailhead and parking area located just outside the western boundary of the wilderness along Clarno Road, a Wheeler County Road. Visitors may also park along other portions of Clarno Road in roadside turn-outs located on BLM land or within the County road right-of-way. About 9 miles of abandoned “ways” are available within the previous WSA for use as defacto trails for foot or equestrian travel. The non-WSA portion of the wilderness is being inventoried for possible additional hiking routes. Cross-country travel is permitted provided resource damage does not result. There are no current plans to construct new trails; however, any information materials should identify any *defacto* routes that are noteworthy, safe, and unlikely to diminish wilderness values. Mechanized equipment such as bicycles, game carts and other wheeled devices, and motorized equipment such as ATVs, motorcycles, snowmobiles, chainsaws and generators are not permitted within the wilderness boundary.

Use regulations will be posted on the BLM Prineville District website and at trailheads.

- All users are required to practice Leave No Trace principles.
- The maximum group size is 12 people (dogs are permitted and are not counted in group size).
- Camping is permitted for up to 14 days.
- All trash must be packed out of the wilderness and disposed of properly.
- Human waste must be fully buried in a cat hole that is approximately six inches deep and located at least 200 feet away from water, trails, or camping areas.
- No personal equipment or supplies may be cached within the wilderness.
- No temporary structures may be erected, except for portable camping equipment (such as tents), or as authorized in advance by BLM permit.
- The use of recreational stock or pack animals is permitted provided the user follows the special requirements for such use posted on the BLM Prineville District website and at trailheads.

Management Objectives

- Provide and manage a trail system, if found necessary for visitor safety or to reduce sensitive resource damage, that could also allow visitors to experience wilderness resources and opportunities for solitude.
- Trails will likely follow old two-track ways that were closed to vehicle use in 2003, and are naturally converting to single tracks.
- Any new trail construction or maintenance will meet wilderness trail design and safety standards for hiking and horseback riding use.
- Allow for non-motorized/non-mechanized cross country travel, but minimize the establishment of user-established trails from designated trails.

Management Direction

- Identify any trail construction or maintenance needs for Spring Basin Wilderness that meet minimum requirements for ensuring visitor safety or preventing resource damage. Any proposals for trail construction would be subject to appropriate reviews including use of the MRDG, application of NEPA. Signs will be installed to clearly identify the wilderness boundary on major trails.

- Obliterate and restore user established trails that cause resource damage. Seek trail development opportunities outside the Spring Basin Wilderness to reduce the effects to wilderness resources if they begin to show signs of overuse or crowding.

Special Use Permits

Current Management Situation

Historically, the BLM has not authorized any commercial activities within Spring Basin WSA; however, some unauthorized commercial use is known to have occurred by educational groups and hunting guides. The wilderness management plan will include a needs assessment to consider the appropriate types and use levels of commercial use to be authorized for the wilderness. All commercial use and organized group use will require a special recreation permit in advance from the BLM. Until decisions on commercial use are made in the wilderness plan, no commercial use will be authorized. Organized group use will be considered during the interim planning period on a case-by-case basis.

Management Objectives

- To provide for the level and type of commercial or educational services necessary, consistent with the Wilderness Act to enable the public to use, access, enjoy and experience recreational and other values of wilderness, emphasizing opportunities for primitive and unconfined types of recreation, and solitude.

Management Direction

- New proposals for special recreation permits will be considered after preparing a needs assessment. No permanent caches are allowed for either outfitter/guides or the general public.
- Monitor future permitted activities to assure consistency with the Wilderness and other applicable acts.

Natural and Cultural Resource Elements

Air Quality

Current Management Situation

The Clean Air Act (CAA) requires federal agencies to comply with all Federal, State and local air pollution requirements. Under criteria established through the CAA as amended in 1990, Spring Basin Wilderness (as well as most BLM land) is designated as a Class II airshed (Loomis 2002).

Management Objectives

- To manage wildland fires to avoid degradation of the Spring Basin airshed.

Management Direction

- Utilize wildland fire to meet wilderness management objectives, while meeting Federal and State air quality and opacity standards.

Water Resources

Management Objectives

- To comply with State and Federal requirements to protect public waters.
- To maintain or improve ground water recharge and holding capacity of riparian/wetland areas to maintain or increase base flow conditions of water sources (streams and springs).

Management Direction

- Develop and implement Best Management Practices (BMPs) for management and restoration activities to maintain or restore water quality, and to reasonably prevent, reduce or mitigate localized or short-term effects to water quality through project specific planning.

- Maintain existing water developments for protection and management of existing uses and wilderness resources in accordance with regulations, policies and wilderness program objectives.
- Maintain, reclaim or restore existing water developments for management of existing and grandfathered uses and wilderness resources through active or passive measures.
- Manage riparian/wetland areas through active or passive measures using the MRDG and methods comparable with wilderness [and WSR] designations to maintain or increase the distribution and abundance of riparian/wetland vegetation.

Soils and Biological Soil Crusts

Current Management Situation

Soils of spring basin are formed on highly dissected hills, and on alluvial fans overlying the John Day-Clarno volcanic formations. Common soil series are Donning, Simas, Day, Sorf and Courtrock. These series are predominately fine textured and range from 16 to 60 inches deep to hard or soft bedrock. On steep colluvial hill slopes, rock fragment content can range from 35 to 60 percent mostly as cobble and stone sized rock fragments. Calcium carbonate is present in many of these series at depths of 12 to 30 inches. These soils are dry, warm up early in the spring, and have a long growing season. With excessive detrimental soil disturbance, these conditions favor the spread of annual grasses (cheat grass, North African grass, and Medusahead rye).

Management Objectives

- To manage soils to maintain, restore or improve soil productivity, watershed health and to reduce detrimental soil disturbance and control existing soil erosion especially in sensitive soil areas.

Management Direction

- The John Day Basin RMP BMPs will be implemented to protect and manage soils and biological soil crusts (if any) for all ground disturbing activities including but not limited to livestock grazing, rehabilitation of closed roads and trail maintenance and construction.
- To maintain biological soil crusts, minimize soil disturbances. Crusts are sensitive to trampling by hikers, livestock, and vehicles. There is considerable debate over recovery times for biological soil crusts, from a few years for visual recovery of the crust structure to several decades for full community recovery; recovery times depend on the site and degree of disturbance (Cole 1990; Belnap 1993; Johansen et al. 1993).
- Where restoring biological soil crusts is the goal, use exclosures or non-fence methods to eliminate trampling. Inoculating disturbed soils with material from surrounding biological crusts can hasten recovery times (Belnap 1993).
- Where your goal is to protect or recover biological soil crusts, limit grazing to wet periods and winter months. Crusts are more sensitive to damage in dry months and can better tolerate the impact of hooves when wet or frozen.

Vegetation

Current Management Situation

According to the Soil Vegetation Inventory Method completed in the early 1980s, the ecological condition of the eastern 1/3 of the Wilderness Area is poor due to high amounts of western juniper and cheatgrass. Also in poor condition are the alluvial fans adjoining the alluvial terraces of the John Day River on the northwestern side of the wilderness area. The condition here was rated poor due to the high amounts of cheat grass. The western and central uplands were rated mostly in good condition with perennial bunch grasses being mostly bluebunch wheat grass on south and west aspects and Idaho fescue on north to northeast aspects. Shrub cover consists of Basin and Wyoming big sagebrush mostly in the alluvial valleys and in pockets on the uplands. Bitterbrush occurs on upland slopes at higher elevations.

Management Objectives

- To maintain or improve the ecological status of native plant communities, utilizing management tools consistent with wilderness guidance.

Management Direction

- Develop a restoration strategy where invasive species encroachment does not threaten ecological function and species diversity, using the MRDG and methods compatible with wilderness designation.

Noxious Weeds [*and Invasive Plant Species*]

Current Management Situation

Noxious weeds are present within the Spring Basin Wilderness. Medusahead has invaded the valleys and alluvial fans of Rhodes Canyon to the southeast of the wilderness area. It is highly probable that medusahead has spread into the poor condition rangeland on the south east side of the Spring Basin Wilderness. The Prineville District has an ongoing weed management program, which involves education/awareness, prevention, inventory, treatment and monitoring. Disturbance, especially along roads and other transportation corridors, is the primary contributor to the introduction and spread of weeds. Biological spread through birds or mammals and hydrologic transfer of seeds also play a role. The Prineville District Weed Management Program is intergovernmental in scope and practice and incorporates a variety of treatment options including manual, chemical, mechanical and biological methods of control. Additional analysis and guidance for noxious weed and invasive plant species is underway at the statewide level for all BLM lands and programs, including those in wilderness areas.

Management Objectives

- To reduce existing and prevent new noxious weed infestations in wilderness. Priority is given to lands with high-quality natural resource areas or disturbed areas.
- To improve awareness in BLM staff, permittees, private land owners, and the public about what they can do to help identify weed infestations and prevent the spread of noxious weeds and invasive plant species in wilderness areas.

Management Direction

- Identify areas with noxious weed infestations and implement the treatment method(s) consistent with Minimum Requirements Decision Guide (2009 revision) and protecting wilderness character.
- Continue with current outreach activities, which include informational handouts, interpretive displays, and posting of information about noxious weed identification and preventing the spread of noxious weeds. Consider targeting key public areas, such as trailheads, where there is a specific noxious weed concern.
- Maintain partnerships with local groups and government agencies to combine efforts in the control and prevention of noxious weed infestations.
- Control new weed infestations in the first year of discovery whenever possible, consistent with Minimum Requirements Decision Guide and protecting wilderness character.

Fish

Current Management Situation

There are no known fish-bearing perennial streams or bodies of water within the Spring Basin Wilderness. Fisheries in the John Day River are addressed in the proposed RMP/FEIS and 2001 John Day WSR plan.

Management Objectives - none required at this time

Management Direction - none required at this time

Wildlife

Current Management Situation

The Spring Basin and adjacent segment of the John Day WSR contain a wide diversity of wildlife habitat with many species of amphibians, reptiles, birds and mammals found in the area. Commonly found species include mule deer, elk, chukar, golden eagles, prairie falcons, mountain lions, bobcats, California quail, meadowlarks and mountain bluebirds. The northern bald eagle is an occasional winter resident. Parts of the wilderness are in close proximity to the John Day River. A summary of Special Status and other species is listed in the John Day Basin PRMP/FEIS in Appendix H. The ODFW is responsible for managing wildlife species populations through management objectives in their respective management plans; the BLM is responsible for managing habitat that supports these populations. The ODFW and BLM work cooperatively together on the management of wildlife and wildlife habitat under a statewide Memorandum of Understanding (MOU) signed in 2001. The entire wildlife program is also subject to various international and tribal treaties, numerous federal laws, executive orders and actions related to the Endangered Species Act.

Management Objectives

- To the extent possible, wildlife species are allowed to maintain a natural balance with their habitat and each other. Depending on wilderness conditions, however, management actions may be necessary at times for the preservation of sensitive, rare, threatened or endangered species.
- To evaluate habitat requirements and conditions for the reintroduction of extirpated species into historic habitat within the wilderness.
- To continue cooperation and coordination with other State and Federal agencies on the management of wildlife, wildlife habitat, and protection of the character of the wilderness.

Management Direction

- Develop and implement habitat management actions, using the MRDG, where necessary to preserve special status wildlife species, while still protecting wilderness values.
- Continue coordination with ODFW and other State and Federal agencies on wildlife habitat management actions necessary to provide critical habitat (e.g. mule deer winter range) for these populations while still protecting wilderness resources.
- In wilderness, actions such as transplants, trapping, distribution of medicine, and emergency situations may be authorized on a case-by-case basis in accordance with the Wilderness and other applicable acts.
- Predator control measures will only be initiated when necessary to protect federally listed threatened and endangered species, prevent diseases from infecting other wildlife or humans, control non-indigenous species in order to reduce conflicts with indigenous species. Direction is provided by BLM Manual 6340. Any control activities undertaken on predator or non-native wildlife will be the minimum necessary to effectively control the situation. An MRDG analysis will be conducted for each action on a case-by-case basis.

Paleontological Resources

Current Management Situation

Paleontological resources are defined as fossilized remains of plants and animals. Of particular interest and importance are vertebrate fossils such as those of camels, saber-toothed tigers, rhinos, mammoths, giant sloths, turtles and horses. Fossil localities have been reported on public lands throughout the Clarno sub-basin and the Spring Basin Wilderness. Public education and interpretation has been initiated at the basin scale, especially at the USDI, National Park Service, John Day Fossil Beds National Monument. No specific interpretive materials have been prepared for paleontological resources within this specific wilderness area.

Management Objectives

- To 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.

Management Direction

- Use predicative modeling and sample inventory for identifying significant paleontological localities, which may be in conflict with other resource uses.
- Excavate significant paleontological localities in cooperation with universities, museums, and other Federal agencies in compliance with all laws, regulations or other requirements, if compatible with wilderness designations and the MRDG.
- Create paleontological interpretive opportunities for public education including but not limited to brochures and portable or static interpretive displays for local, regional, and national education, where applicable.

Cultural Resources

Current Management Situation

Approximately one percent of the designated Spring Basin Wilderness has been inventoried for cultural resources. One pictograph site is known to exist within the wilderness. Illegal surface-collecting and excavation are the greatest threats to site integrity. Under current management, sites in conflict with other resource uses are mitigated on a case-by-case basis. Inventory data are used in site evaluation, effects assessments, interpretation and public education.

Management Objectives

- To preserve, protect and manage cultural resources in accordance and in compliance with existing federal laws, regulations, and Executive Orders in coordination/consultation with applicable federally recognized American Indian tribes and other interest groups to make cultural resources available for appropriate uses by present and future generations.

Management Direction

- Use inventory data, site evaluations, condition assessments, site management plans and interpretation in public education.
- Research significant cultural sites in cooperation with universities, applicable American Indian tribes, and other interested entities.

American Indian Traditional Practices and Cultural Values

Current Management Situation

Prior to establishment of a Euro-American population, the area now designated as Spring Basin Wilderness was used by a variety of tribes. Many of their descendants now live on the Confederated Tribes of the Warm Springs Reservation in Warm Springs, Oregon, the Confederated Tribes of the Umatilla Reservation near Pendleton, Oregon, and the Burns Paiute Reservation in Burns, Oregon. The BLM does not know of any specific American Indian traditional use areas within the Spring Basin Wilderness.

Management Objectives

- To monitor and protect archaeological sites, tribally identified traditional use areas, and other areas of interest in consultation with the applicable tribes.

Management Direction

- The BLM continues to consult with the appropriate tribes to identify and manage traditional use areas. Traditional Cultural Properties will be nominated for formal listing and protection. Burial sites, if discovered, will be monitored. Coordination and consultation with American Indian tribes are documented.
- Where appropriate and practical, integrate maintenance of native subsistence species into vegetation management objectives.

Visual Resources

Current Management Situation

The Federal Land Policy and Management Act (FLPMA) of 1976 requires the BLM to consider effects of management actions on the visual quality of the landscape. The BLM uses Visual Resource Management (VRM) classes, which are assigned site-specifically through visual resource inventories. Because Spring Basin has been Congressionally-designated a Wilderness Area it has been assigned a Class I VRM class to preserve its natural landscape and wilderness character. Class I provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change should be very low and must not attract attention.

Management Objectives

- To protect, maintain, enhance or restore visual resource values by managing all BLM administered lands in the Spring Basin Wilderness in accordance with Class I objectives.

Management Direction

- Spring Basin Wilderness is designated as VRM Class I, which requires the preservation of the existing character of the landscape with very limited management activity.
- A Visual Contrast Rating worksheet (BLM form 8400-4) is used to assess visual changes from key observation points before implementing any project that may affect visual resources.

Energy and minerals

Current Management Situation

The BLM administered land within the Spring Basin Wilderness is withdrawn by the Omnibus Public Lands Management Act of 2009 from mineral exploration and development under terms of the Wilderness Act. There were no pre-designation claims, leases or permits with grandfathered or valid existing rights in the Spring Basin Wilderness on BLM lands. Under Section 1754 of the Omnibus Act, any acquired lands or interest in lands will be “withdrawn from all forms of entry, appropriation or disposal under the public land laws; location, entry and patent under the mining laws; and disposition under any law related to mineral and geothermal energy leasing or mineral materials.”

Management Objectives - none required

Management Direction - none required

Wild Horse and Burro Herd Areas

Current Management Situation

Under the Wild Horse and Burro Protection Act of 1971, the BLM has responsibility for inventory, management and protection of historical herds. No wild horse or burro herds currently or historically occupied the Spring Basin Wilderness or nearby public lands. The area would not be available for relocation of wild horse or burro herds or portions of herds.

Management Objectives - none required

Management Direction - none required

Areas of Critical Environmental Concern

Current Management Situation

The Federal Land Policy and Management Act of 1976 requires the BLM to give priority attention to potential areas of critical environmental concern (ACEC). The Draft John Day Basin RMP/DEIS identified numerous potential and contingent areas for ACEC designation (volume 1). The designation of the area as wilderness by Congress supersedes any potential Spring Basin ACEC and makes it unnecessary and redundant, since the Wilderness Act requires an equal or higher level of protection.

Management Objectives - none required

Management Direction - none required

Permitted Uses

This section addresses permitted nonconforming uses in the Spring Basin Wilderness and those roads bounded by wilderness, but not considered part of wilderness.

Roads and Trails

Current Management Situation

There are approximately 9 miles of unimproved and unmaintained primitive roads or “ways” within the WSA portion of Spring Basin Wilderness. There are no maintained roads or trails within the area. Several county, BLM and private road segments, with various surfaces and degrees of road maintenance, form portions of the wilderness area boundaries, as designated in the Congressional referenced map in subtitle J of the Omnibus Act.

Spring Basin Road Wepp Erosion Summary (The following table is a summary of the potential for road erosion completed for the John Day Basin RMP. The 0.75 lbs of sediment per foot was the threshold used to separate erosive vs. non erosive conditions on actively used roads - over half of these roads for the wilderness boundary and thus are not subject to wilderness management.) See the John Day Basin PRMP/FEIS (March 2012), Chapter 4, Soils, for an explanation of WEPP analysis.

RT Type	Total mi	Erosive (>=0.75) mi	Non Erosive (<0.75) mi	Erosive %	Non Erosive %
RD	18.5	8.21	10.32	44%	56%
TRL	0.92	0.39	0.53	42%	58%
Null	0.06	0	0.06	0%	100%
Total	19.48	8.6	10.91	44%	56%

Management Objectives

- Maintain or support county or other road maintenance for public, private, and permittee routes and other related infrastructure located outside of the wilderness boundary in a manner that minimizes effects to wilderness resources, such as solitude.

Management Direction

- Maintain BLM owned boundary roads and BLM wilderness portals or trailheads on non-BLM roads at their assigned condition and maintenance standards.
- Repair boundary roads with erosive characteristics. Repair wilderness trails with erosive characteristics subject to appropriate reviews including use of the MRDG.

Livestock Grazing

Current Management Situation

The Omnibus Public Lands Management Act of 2009 subsection J specifically provides for the continuation of livestock grazing in the Spring Basin Wilderness, unless the allotment is voluntarily relinquished. The 1967 Wheeler County Range Survey indicates a forage base of 350 animal unit months in the Wilderness. The area includes all or portions of the Hayfield (#2535, 11 AUMs), Spring Basin (#2536, 146 AUMs), Rim (#2649, 3 AUMs), and Dry Knob (#2656, 7 AUMs) grazing allotments as well as approximately 1,580 acres of unallotted range. There are no wells or water diversions for livestock and there has been no historical use of pipelines or water tanks for livestock on the BLM lands. There has been no significant use of non-native plant seed, except as an emergency reseeding effort following wildfire. There may be some livestock management developments on the non-BLM lands that may be acquired within the congressionally designated wilderness boundary.

Management Objectives

- Provide for a sustained level of livestock grazing while meeting Standards for Rangeland Health and Guidelines for Livestock Management for Public Lands in Oregon and Washington (S&G).
- Implement administrative solutions and analyze any rangeland projects that are the minimum necessary to preserve wilderness character and to ensure proper management for livestock grazing.

Management Direction

- Within the area open to grazing, management actions will provide for sustainable levels of livestock grazing that meets allotment management (natural resource) objectives and the S&Gs. Revision of Allotment Management Plans (AMPs) is based on evaluations and rangeland health assessments, which determine allowable AUMs and plant community management.
- Interim and long-term grazing management levels are adjusted in accordance with the results of monitoring studies, allotment evaluations, and rangeland health assessments. Accepted livestock management practices (e.g. adjustment of timing, duration and frequency of grazing or periodic rest and or deferment) will be implemented. These will be supplemented by administrative actions (e.g. season of use changes, stocking level adjustments, exclusionary pastures) or rangeland projects to accomplish natural resource management objectives, including preservation of wilderness character.
- Existing grazing management projects will be maintained if they continue to support grandfathered livestock grazing. Projects not functioning to support grazing or wildlife will be abandoned and the sites rehabilitated (e.g., removal of fencing).

Private Land Inholdings

Current Management Situation

Neither the Omnibus Act, Wilderness Act, nor FLPMA, provides federal land management agencies with authority to regulate private land. Pending the outcome of a land exchange, there are at most approximately 40 acres of private lands (and no state lands or mineral interest in lands) surrounded by the Spring Basin Wilderness.

Management Objectives

- Encourage a cooperative working relationship between BLM and private landowners within Spring Basin Wilderness.
- Provide reasonable access to private inholdings while minimizing impacts to wilderness characteristics.

Management Direction

- Pursue cooperative agreements or projects with willing landowners that help improve wilderness resources.
- Pursue cooperative agreements, projects, or land tenure adjustments with willing landowners.

Monitoring

Monitoring will be consistent with BLM Manual 6340- Management of Designated Wilderness Areas. Appendix B of the John Day Basin RMP addresses monitoring for other resources.

Management Sequence

Upon signing of the Record of Decision for the John Day Basin RMP, this interim wilderness management plan will guide management of the Spring Basin Wilderness until a final Wilderness Management Plan is completed and approved.

Appendix K: Grazing

Key for Table K-1

AUMs = Animal Unit Months

Allotments with their names in upper case letters are lands acquired under the Oregon Land Exchange Act of 2000.

Grazing Decision Tree (based on voluntary relinquishment) - Allotment results are based on conditions at the time of ROD publishing:

A = Allotment is available for livestock grazing.

U = If permit is voluntarily relinquished (or allotment is already vacant), allotment would be unavailable for livestock grazing.

#	Name	Total acres	BLM acres	BLM AUMs	Results of Decision Tree at Publishing of the ROD	Allotment Subject to Seasonal Flow Restrictions	WSR Management Includes Riparian Exclosure	Grazing Period Begin	End
2500	Frank Anderson	7,467	79	10	U	N	N	1-Oct	28-Feb
2501	Herbert Asher	3,585	2,522	101	A	N	Y	1-Apr	31-Dec
2503	Asher Hubert	580	317	17	U	N	N	15-Jun	21-Oct
2504	Barker	5,823	157	18	U	N	N	1-May	31-Oct
2505	Barnett	2,099	394	55	U	N	N	1-Mar	1-May
2506	Maxine Barnett	3,284	195	19	A	N	N	1-Apr	7-Nov
2507	Brooks	7,059	121	3	A	N	N	15-Apr	29-Nov
2508	Bear Creek	3,717	723	45	A	N	N	15-Apr	29-Nov
2509	Belshe	2,688	1,596	66	A	Y	N	1-Nov	15-Jul
2511	Haystack	1,895	151	11	A	N	N	1-Apr	31-Dec
2512	Big Muddy	77,040	15,708	615	A	Y	Y	1-Mar	28-Feb
2513	Big Sky	7,124	592	26	U	Y	Y	1-Mar	28-Feb
2514	Black Rock	15,751	3,408	224	U	N	N	1-Apr	31-Oct
2515	Bantam	319	40	1	A	N	N	1-Apr	1-Jul
2516	Gable Creek	4,979	4,979	210	U	N	N	1-Nov	1-May
2517	Borschowa	2,170	76	4	U	N	N	1-May	31-Oct
2518	Pine Creek	16,518	5,437	346	A	Y	N	1-Mar	28-Feb
2520	Smith Point	2,712	2,422	93	A	Y	Y	1-Dec	30-Sep
2521	Horseshoe Bend	2,326	850	46	A	Y	N	1-Nov	1-Jul
2522	James Brown	4,624	2,649	68	U	Y	Y	1-Mar	28-Feb
2524	Buck Hollow	4,987	441	10	U	N	N	1-May	30-Sep
2525	Rock Creek	11,232	2,619	231	A	N	N	1-Dec	7-Jun
2526	Peter Campbell	15,786	771	60	A	N	N	1-Dec	14-Apr
2528	Sentinel Peak	1,477	568	44	U	N	Y	15-Apr	24-Nov
2529	F.C. Cherry	19,498	161	17	A	N	N	1-Jun	30-Sep
2530	Cimmiyotti	6,844	669	118	A	N	N	1-Oct	16-Jun
2531	Circle Bar	18,501	18,224	637	A	N	N	1-Nov	30-May
2532	T. Cole	24,828	454	8	A	Y	N	5-Mar	11-Dec
2533	Sutton Mountain	26,352	25,788	489	A	N	Y	15-Oct	15-May
2534	Richmond	5,823	239	10	U	N	N	10-Apr	30-Dec
2535	Hayfield	491	309	11	A	Y	N	1-Mar	28-Feb
2536	Spring Basin	29,247	5,659	146	A	N	N	1-Apr	30-Dec
2537	Dead Dog Canyon	4,263	4,013	243	U	Y	Y	1-Apr	30-May
2538	Decker	4,656	2,875	206	A	Y	Y	1-Mar	28-Feb
2539	Biggs Junction	1,472	114	14	U	N	N	1-Apr	15-Jul
2540	Persimmon Woods	2,298	82	5	A	N	N	1-Nov	1-Jun
2541	Eakin	6,248	1,758	12	U	N	N	1-Mar	28-Feb
2543	Ellsworth	1,696	642	32	U	N	N	1-May	31-Aug
2544	Circle Bar S Ranch	2,164	664	16	U	Y	N	1-Mar	28-Feb
2545	Cherry Creek	57,428	11,645	438	A	Y	N	1-Mar	28-Feb
2546	Freeway	2,021	160	2	A	N	N	1-Mar	1-May
2547	Sixmile	4,926	2,356	245	A	N	N	1-Dec	1-May
2548	Hogan Creek	2,823	41	3	A	N	N	1-Mar	28-Feb

#	Name	Total acres	BLM acres	BLM AUMs	Results of Decision Tree at Publishing of the ROD	Allotment Subject to Seasonal Flow Restrictions	WSR Management Includes Riparian Exclosure	Grazing Period Begin	End
2549	Hardie	4,576	1,062	84	U	N	N	1-Mar	9-Dec
2551	Clinton O. Harris	26,525	862	98	U	N	N	1-Mar	26-Jan
2553	Willow Spring	1,648	1,093	20	U	Y	N	1-Nov	31-Aug
2554	Charles H. Hill	3,782	1,584	86	U	N	N	1-Apr	30-Nov
2555	Hoag	1,180	369	10	U	Y	N	1-Nov	1-Jun
2556	Murray Howard	8,488	638	34	U	Y	Y	1-Apr	19-Dec
2557	Hulden	4,590	157	15	U	N	N	1-Mar	15-Oct
2558	Squaw Creek	12,594	4,747	301	U	N	Y	1-Apr	30-Nov
2559	Fopiano	15,160	163	17	U	N	N	1-Apr	15-Nov
2560	Baseline	1,101	535	27	U	Y	Y	1-Nov	1-Jun
2561	Girds Creek	21,243	1,696	61	U	N	N	1-Mar	15-Nov
2562	J Bar S	4,533	707	34	A	Y	Y	1-Nov	1-Jun
2563	Horseshoe Creek	28,865	1,612	98	U	N	Y	1-Mar	28-Feb
2564	Cactus Ridge	1,045	323	20	A	N	N	1-Mar	28-Feb
2565	Leroy A. Britt	8,954	212	33	U	N	N	15-Apr	3-Nov
2566	Justesen	2,545	113	3	U	N	N	16-Mar	30-Apr
2567	Kaser Brothers	6,049	1,526	59	A	N	N	1-Mar	28-Feb
2568	Keegan	7,102	610	29	A	N	N	1-May	23-Oct
2569	Zack T. Keys	9,800	1,812	64	A	Y	Y	1-Sep	30-May
2570	Zack T Keys	3,246	1,595	58	U	Y	Y	1-Nov	2-Jun
2571	Horn Butte	17,819	4,521	836	U	N	N	1-Mar	28-Feb
2572	Laffoon and Carlson	6,712	2,823	74	U	Y	Y	1-Mar	28-Feb
2573	L.B. Ranch	457	24	2	U	N	N	1-Mar	28-Feb
2574	Lear	2,994	200	13	U	N	N	1-Apr	15-Oct
2575	Andrew F. Leckie, Jr	2,187	33	1	U	N	Y	1-May	31-May
2576	Left Hand Canyon	4,759	117	3	A	N	N	1-Apr	30-Jun
2577	Byrds Point	6,469	1,690	94	U	Y	Y	15-Mar	15-Dec
2578	Logan	15,713	1,428	111	A	N	N	15-Sep	31-Dec
2579	Eugene Logan Jr.	1,582	831	42	A	N	N	1-Sep	28-Feb
2581	Elsie Martin	4,806	985	22	A	N	N	1-Nov	1-Jun
2583	Mulkey	1,354	199	15	A	N	N	1-Feb	22-Oct
2584	Catherine Maurer	45,880	14,213	789	U	Y	N	1-Mar	28-Feb
2585	Seek Peak	1,681	317	11	U	N	N	1-Apr	19-Jul
2586	Tom McDonald	6,947	458	27	U	N	N	1-Apr	15-Nov
2587	Corral Canyon	2,353	1,598	46	U	Y	N	1-Nov	1-Jun
2588	Spud	1,319	619	40	U	Y	Y	1-Oct	1-Jun
2589	McQuinn	392	40	1	U	N	N	1-Jun	30-Jun
2590	Carroll Rim	3,704	3,471	101	A	N	N	1-Mar	1-Jun
2591	Miller	3,815	1,822	47	U	Y	N	1-Mar	28-Feb
2592	Mary Misener	1,020	511	33	U	N	Y	1-Apr	7-Oct
2593	Verne A. Mobley	6,415	1,316	133	A	N	N	1-Oct	31-Jan
2594	Morehouse and Elliot	232	64	3	A	Y	N	1-Nov	1-Jun
2595	Windy River	1,772	721	43	U	Y	Y	1-Mar	28-Feb

John Day Basin ROD & RMP

#	Name	Total acres	BLM acres	BLM AUMs	Results of Decision Tree at Publishing of the ROD	Allotment Subject to Seasonal Flow Restrictions	WSR Management Includes Riparian Exclosure	Grazing Period Begin	End
2596	Howard Mortimore	8,495	40	6	A	N	N	1-May	31-Oct
2597	John T. Murtha	15,458	8,894	258	U	Y	Y	1-Mar	28-Feb
2598	Hay Creek	4,186	1,757	126	U	Y	Y	15-Oct	15-Jun
2599	Kenneth Myers	6,363	159	10	A	N	N	1-Apr	28-Feb
2600	J. Willis Nartz	2,371	473	48	A	N	N	1-Mar	18-Dec
2601	Victor B. Nash	2,347	152	14	A	N	N	1-Mar	31-Jan
2603	Lee H. Petty John	9,874	355	14	U	N	N	1-Aug	28-Feb
2604	Philippi	3,492	862	48	U	N	N	1-Mar	28-Feb
2605	E. Glenn Potter	1,268	76	3	U	N	N	1-Oct	31-Jan
2606	William W. Potter	884	82	4	U	N	N	1-Jun	30-Sep
2607	Pryor Farms	5,280	787	109	U	N	N	1-Mar	28-Feb
2608	Rattray	27,646	10,795	534	A	Y	Y	1-Mar	28-Feb
2609	Crown Rock	4,277	4,257	108	A	N	N	15-Oct	30-May
2611	Van Rietmann	3,398	843	25	U	N	N	1-Mar	5-Jul
2612	Arthur N. Robinson	819	39	1	U	N	N	1-Mar	1-Apr
2613	Frank R. Robinson	2,851	794	2	A	N	N	1-Nov	31-Aug
2614	Clarno Homestead	2,255	2,181	63	U	Y	Y	1-Nov	1-Jun
2616	Orville Ruggles	2,680	160	11	U	N	N	1-Jun	20-Sep
2617	Emigrant Canyon	5,759	609	20	U	Y	N	1-Nov	1-Jun
2619	Sid Seale	40,052	14,705	733	A	Y	Y	1-Mar	28-Feb
2620	Evelyn E. See	2,041	176	3	A	N	N	16-Apr	15-Jul
2621	Earl A. Smith	16,032	221	35	U	N	N	16-Apr	15-Sep
2622	Alta M. Spalding	620	130	7	A	N	N	1-Apr	31-Oct
2623	Butte Creek	62,597	4,176	230	U	Y	Y	1-Mar	28-Feb
2624	Burnt Ranch	1,566	293	5	A	Y	N	15-Mar	14-Oct
2625	David M. Stirewalt	5,100	1,216	65	U	N	Y	1-Mar	7-Jun
2626	Harper Mountain	10,808	718	18	A	N	Y	1-Apr	31-Oct
2627	Robert W. Straub	5,322	1,585	69	U	N	Y	16-Apr	30-Jun
2628	Fourmile Canyon	2,408	835	152	U	N	N	16-Jul	30-Apr
2629	Tatum	6,080	2,860	113	A	Y	Y	1-Mar	28-Feb
2630	Tripp		71	7	A	Y	Y	15-Sep	31-Dec
2631	Dipping Vat	2,123	1,151	25	U	N	N	1-Mar	15-Nov
2632	Larson	474	77	5	U	N	N	1-Apr	31-Dec
2633	Amine Peak	14,631	4,372	294	U	Y	Y	1-Nov	1-Jun
2634	Corral Hollow	4,451	157	32	U	N	N	15-Mar	5-Jun
2635	Richard Foster	708	252	20	A	N	N	1-Apr	19-Oct
2636	Weedman Ranches	3,196	301	11	U	Y	N	16-Apr	15-Oct
2637	V.O. West	3,389	232	15	A	Y	Y	1-Mar	28-Feb
2639	Tubb Creek	6,510	407	50	A	N	N	1-Mar	10-Nov
2641	North Eighty	144	78	3	A	N	N	1-Mar	30-May
2642	Mascall Cant	9,932	4,162	265	U	N	N	1-Apr	5-Nov
2644	Hi Meadows	680	544	98	U	N	N	1-Mar	28-Feb
2645	Clark	15,531	4,135	158	U	N	N	15-Apr	16-Oct

#	Name	Total acres	BLM acres	BLM AUMs	Results of Decision Tree at Publishing of the ROD	Allotment Subject to Seasonal Flow Restrictions	WSR Management Includes Riparian Enclosure	Grazing Period Begin	End
2646	Lonerock	87	68	27	A	N	N	1-May	12-Oct
2648	Hartung	1,884	697	22	U	Y	N	1-Nov	1-Jun
2649	W Rim	2,023	349	3	A	N	N	15-Apr	31-Jul
2651	Bull Canyon	1,879	278	10	A	N	N	20-May	19-Aug
2653	Brooks Lease	16,658	36	2	A	N	N	1-Apr	31-May
2655	Norton Ranch	25,499	316	21	A	N	N	1-Apr	31-Oct
2656	Dry Knob	1,087	334	7	A	Y	N	1-Mar	28-Feb
2657	Bridge Creek	553	52	2	U	N	N	15-Mar	30-Nov
2659	Packsaddle Mountain	1,100	397	20	U	N	Y	15-Mar	1-May
2660	Rattlesnake Creek	4,218	283	11	A	N	N	1-Mar	30-Jan
2661	Pebble Springs	5,742	158	53	A	N	N	1-Apr	17-Nov
2662	Johnson Creek	21,031	7,115	436	U	N	Y	1-Apr	15-Nov
2663	Smith Hollow	8,858	570	51	U	N	N	1-May	15-Oct
2664	Speckle Canyon	134	79	2	U	N	N	15-Mar	14-Oct
2665	Workman	2,667	40	3	A	N	N	15-Apr	15-Oct
2667	Gooseberry Mountain	3,475	1,266	43	A	N	N	1-Apr	15-Nov
2669	Kiosk	4,738	159	16	A	N	N	1-Nov	31-May
2670	Rowe Creek	1,379	360	16	U	N	N	1-Apr	15-Dec
2671	Red Rock	2,728	964	40	U	Y	N	1-Nov	1-Jun
2672	Table Mountain	10,836	123	11	A	N	N	1-Apr	15-Nov
2673	Hummingbird	640	466	22	A	N	N	1-Mar	31-Dec
2674	Rock Mountain	1,920	200	11	A	N	N	1-Apr	15-Dec
2676	Snabel Creek	4,000	160	7	A	N	N	1-Apr	31-Oct
2677	Corridor	1,025	80	6	A	N	N	1-Mar	28-Feb
4001	Johnny Creek	6,788	2,114	423	U	N	Y	1-Apr	30-Nov
4003	Slicear Mtn.	41,724	2,840	537	A	N	N	1-Mar	28-Feb
4007	Windy Point	5,878	2,585	407	U	N	N	1-Apr	30-Nov
4009	Birch Creek	7,917	2,851	350	U	N	N	1-Mar	28-Feb
4012	River	258	114	13	U	N	Y	1-Oct	30-Nov
4013	John Day	91	40	5	U	N	N	1-Apr	30-Nov
4014	Middle Fork	81	81	16	U	N	N	1-Nov	1-Jun
4015	MUD SPRINGS	3,542	1,913	U	U	N	N		
4016	Dixie	6,599	2,215	236	U	N	N	1-Apr	30-Nov
4020	Murderer's Creek	37,181	16,917	1,948	A	Y	Y	1-May	30-Oct
4026	Sidehill	40	40	9	A	N	N	1-Jun	15-Oct
4028	Neal Butte	3,565	684	119	A	N	N	1-Mar	28-Feb
4029	North Fork	5,666	2,279	316	U	N	N	15-Apr	31-May
4035	Rim	724	677	41	A	N	N	1-Apr	30-Nov
4036	Stonehill	2,895	511	80	A	N	N	1-Apr	30-Sep
4038	Dayville	3,945	1,667	141	U	N	N	1-Jun	13-Jul
4039	Aldrich Mtn.	9,995	40	5	A	N	N	1-Apr	30-Nov
4040	Merrell	15	5	9	U	N	N	1-May	31-Oct
4041	Franks Creek	3,703	2,109	196	U	N	Y	1-Apr	30-Nov

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#	Name	Total acres	BLM acres	BLM AUMs	Results of Decision Tree at Publishing of the ROD	Allotment Subject to Seasonal Flow Restrictions	WSR Management Includes Riparian Exclosure	Grazing Period Begin	End
4042	Johnny Cake Mtn.	2,930	290	20	A	N	N	1-Nov	1-Jun
4043	Mahogany	10,514	319	64	U	N	N	1-Apr	30-Nov
4044	Soda Creek	6,317	1,968	405	U	N	N	1-Apr	30-Nov
4049	Battle Creek	6,713	4,781	830	U	N	N	1-Apr	30-Nov
4050	Jinks Creek	5,750	80	16	U	N	N	1-Apr	30-Nov
4052	Big Baldy	15,139	12,036	1743	U	Y	N	15-Apr	31-May
4056	Pointer	219	219	12	A	N	N	1-May	30-Oct
4058	Sugarloaf	214	160	45	A	N	N	15-Jun	30-Oct
4059	Cold Springs	240	240	30	A	N	N	1-Apr	30-Nov
4061	Scott Creek	4,420	913	119	A	N	N	1-Apr	30-Nov
4064	Antelope	501	40	2	U	N	N	1-May	30-Jul
4065	East Franks Creek	1,625	630	81	U	N	N	15-Jul	30-Nov
4066	Kidd Creek	6,211	720	91	U	N	N	1-Apr	30-Nov
4067	Sheep Creek Butte	17,598	810	153	U	Y	N	1-Mar	28-Feb
4068	Sheep Gulch	5,804	3,561	292	A	N	N	1-Mar	15-Jul
4072	Tamarack Creek	6,206	1,046	64	U	N	N	1-Jul	30-Oct
4074	McCarty Creek	1,471	1,158	20	A	N	N	1-Apr	31-May
4075	Echo	80	40	5	U	N	N	15-May	30-Aug
4076	Cottonwood Creek	8,985	3,372	204	A	N	N	1-Apr	30-Sep
4078	Gibson Hill	5,261	40	8	A	N	N	1-Apr	30-Nov
4080	South Stonehill	805	389	63	A	N	N	1-Apr	30-Nov
4082	Jack Of Clubs	1,574	83	8	A	N	Y	1-Apr	30-Nov
4083	19 20	981	157	26	A	N	N	1-Nov	1-Jun
4086	Rudio Mtn.	4,999	3,788	590	U	N	N	1-Jul	15-Oct
4087	Blue Basin	2,118	932	305	U	N	N	1-Apr	30-Nov
4093	West Bologna Creek	4,453	79	12	U	N	N	1-May	30-Jun
4095	Fields Creek	4,051	1,011	198	A	N	N	1-Jun	15-Sep
4099	Indian	3,108	41	5	U	N	N	1-Apr	30-Nov
4103	Rockpile	9,830	4,925	928	U	Y	Y	1-Apr	30-Nov
4104	South Fork	4,841	240	47	A	Y	N	1-Mar	28-Feb
4106	Izee	1,744	227	41	A	Y	Y	1-Apr	30-Nov
4107	Canyon Terrace	181	147	20	A	N	N	1-Apr	30-Nov
4108	Little Wall Creek	678	319	53	A	N	N	1-Apr	31-May
4109	Big Canyon Creek		146	20	U	N	N	1-May	30-Nov
4115	Canyon Mtn.	50	49	5	U	N	N	1-Apr	30-Nov
4119	Black Canyon	4,684	954	188	U	N	Y	1-Apr	30-Nov
4120	Ferris Creek	5,364	3,374	277	U	N	N	16-Apr	30-Nov
4122	Big Bend	712	266	25	A	N	Y	1-Apr	30-Nov
4124	Smokey Creek	4,556	2,449	307	U	Y	Y	1-Mar	28-Feb
4125	UMATILLA	2,014	1,848	U	U	N	N		
4127	Kimberly	273	233	40	U	N	Y	1-Apr	30-Nov
4131	Day Creek	2,511	1,586	160	U	N	N	1-May	30-Sep
4135	Gibson Creek	1,363	41	7	U	N	N	1-Mar	28-Feb

#	Name	Total acres	BLM acres	BLM AUMs	Results of Decision Tree at Publishing of the ROD	Allotment Subject to Seasonal Flow Restrictions	WSR Management Includes Riparian Exclosure	Grazing Period Begin	End
4139	BONE YARD	21,023	20,536	1369	A	N	N	1-Mar	28-Feb
4140	Shirt Tail Creek	40	40	8	A	N	N	1-May	30-Nov
4145	Two County	29,203	14,010	1105	U	N	Y	1-Apr	30-Nov
4151	Kinzua	39,089	8,002	539	U	N	N	1-May	31-Oct
4154	Morgan Creek	4,834	1,411	290	U	N	N	1-Apr	30-Nov
4155	Blackhorse Draw	4,276	476	29	U	N	N	1-Apr	30-Nov
4156	Rudio Creek	8,444	2,271	369	U	N	N	1-Apr	30-Nov
4159	Miller Mountain	1,683	41	5	A	N	N	1-Aug	30-Nov
4160	Bologna Creek	995	393	37	U	N	N	1-Apr	30-Nov
4163	Creek	1,105	757	51	A	N	N	1-Apr	30-Nov
4164	Corral Gulch	5,606	2,953	318	U	N	N	1-May	15-Jun
4184	Pass Creek	3,816	79	10	U	N	N	1-Apr	30-Nov
4186	Big Flats	12,581	924	100	U	Y	Y	15-Apr	30-Nov
4190	POTAMUS	4,341	4,304	U	U	N	N		
4191	Jack Rhodden	39,983	101	26	U	N	N	1-Jun	30-Sep
4192	WILLIAM HEALY	7,082	5,160	U	A	N	N		
4193	DOHERTY	4,310	4,272	U	A	N	N		
4194	Howell	80	80	8	A	N	N	1-Apr	30-Nov
4195	JERICOH CREEK	7,400	6,303	U	A	N	N		
4196	Big Wall Creek	1,536	40	3	U	N	N	1-Apr	30-Nov
4197	SCAFFOLD CREEK	1,846	1,614	108	U	N	N	1-Apr	30-Nov
4198	WALL CREEK	485	485	U	U	N	N		
4352	Cow Creek	1,648	149	10	U	N	N	1-Apr	30-Nov

Appendix L:

Special Recreation Management Areas

Overview

This appendix describes desired conditions for each Special Recreation Management Area (SRMA) and subsequent Recreation Management Zone (RMZ). Outcome objectives, Targeted Opportunities and Outcomes, and Prescribed Setting Character are not prescriptive management direction; rather they are intended to provide managers an understanding of the types of activities and experiences desired. A summary of implementation direction is provided. Recreation management objectives, actions, and guidelines are detailed in the RMP. If there is a discrepancy, that direction will be considered the accurate portrayal of management direction. Specific implementing actions for each SRMA will be in the implementation plan for this RMP.

The BLM uses Recreation Opportunity Spectrum and Outcome Focused Management, which are similar to Benefits-Based Recreation management tools to specify, allocate and maintain a diverse array of high quality non-motorized and motorized recreation opportunities with a particular focus on SRMAs. Recreation Opportunity Spectrum (ROS) principles are used to describe recreation settings on a continuum that ranges from “Primitive” to “Urban” (Clark and Stankey 1979, Driver et al. 1987). Three broad categories of factors are used to define recreation *setting character*:

- **Physical** - remoteness, naturalness, visitor facilities or site improvements
- **Social** - group size, number of contacts with other groups, evidence of use
- **Operational** - types of travel allowed, visitor services, management controls

These factors are used to classify recreation settings as follows:

- **Primitive (P)** - The landscape is relatively undisturbed with few signs of human presence. Very few encounters with other visitors occur. Regulations and information will normally be posted prior to entering this zone and agency presence is very rare.
- **Back Country (BC)** - The landscape is more natural and the limited improvements tend to blend with the environment. Access does not include motorized vehicles and signing and agency presence is scarce.
- **Middle Country (MC)** - The landscape is natural in appearance with some modifications not highly noticeable. Visitors will encounter other groups utilizing the area, but agency presence is random. Information and signing are present.
- **Front Country (FC)** - The landscape is partially modified with visitors prevalent and agency personnel periodically available. Rules and information are clearly posted.
- **Rural (R)** - Includes a substantially modified landscape with visitors dispersed throughout and a prominent level of agency presence and regulation.
- **Urban** - Not found within the planning area.

Setting character and the kinds of experience opportunities being produced are directly influenced by the management, marketing, and operational actions of BLM and other recreation-tourism providers.

The SRMAs may have RMZ subunits where distinctly different recreation activities, opportunities, and management exist within the same SRMA boundary.

Within each SRMA, the BLM has also identified related land use allocations (such as an Off-Highway Vehicle designation or a Visual Resource Management Class) that interact with the recreation setting of an area. These actions, along with proposed recreation setting, combine to influence the type and quality of recreation opportunities and experiences available.

John Day River Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Local communities in Sherman, Gilliam, Umatilla, Morrow, Wasco, and Wheeler counties		Undeveloped	
John Day River Segment 1 Recreation Management Zone			
(Tumwater Falls to Cottonwood Bridge)			
RMZ MARKET NICHE			
In the River Zone, visitors engage in day or overnight river-based recreation opportunities such as steelhead and bass fishing, rafting, canoeing and kayaking in a scenic river canyon environment. In the Upland Zone, visitors engage in day use, upland bird and deer hunting, photography and sightseeing; in the future, overnight camping in a developed state park facility			
RMZ OUTCOME OBJECTIVE			
Within the River Zone, visitors engage in water-based day use and overnight activities, year-round land-based day uses, boat-in camping, fishing, hiking, sightseeing, photography and wildlife observation experiences. Within the Upland Zone, visitors engage in diverse non-motorized activities such as hiking, upland bird and big game hunting experiences. Both zones provide opportunities for friends and families to participate in scenic water based activities as well as upland recreation experiences in a predominately undeveloped setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
* Steelhead fishing * Bass fishing * Upland bird and big game hunting * Major watercraft take-out for upriver floaters * Driving for pleasure * Seasonal motorized boating (Oct. 1 - Apr.30)	* Fishing for pleasure * Being close to nature * Pursue upland birds and challenging big game hunting during seasons * Being with family and friends in a river canyon and upland landscape * Enjoying solitude and/or river canyon scenery while participating in a favorite recreation activity. * Enjoying physical exercise	<p>Personal: Greater appreciation for family and friends and natural landscapes. Greater environmental awareness with family and friends.</p> <p>Community/Social: Increased awareness of need for community involvement in public land stewardship.</p> <p>Environmental: Increased awareness and compliance for protection of natural landscapes.</p> <p>Economic: Increased desirability as a place to visit. Increased contributions to local and regional economy.</p>	
PRESCRIBED SETTING CHARACTER: Front Country			
Physical	Social	Operational	
<p>Remoteness: Moderate evidence of the sights and sounds of humans. Opportunities for challenge in a natural environment but less expectation of risk.</p> <p>Naturalness: Alterations to the landscape are subtle. Natural characteristics remain dominant. Moderate evidence of human development. Impoundments, diversions or channel modifications may be evident.</p> <p>Facilities: Rustic facilities developed for resource protection and to accommodate visitor use. Rustic facilities providing some comfort for the user as well as site protection. Use native materials but with more refinement in design. Synthetic materials should not be evident.</p>	<p>Social Encounters: Moderate use occurs - contact with others is expected and occasionally continual, with some chance for isolation. Some evidence of other users. Moderate to high contact with other users, particularly at rapids and access points. Moderate to high contact on access roads. Moderate to low contact on trails and at developed sites.</p> <p>Visitor Impacts: Natural ecosystems may be modified by human use. Human impacts obvious but subordinate. Sites may be subtly hardened to accommodate motorized use.</p>	<p>Visitor Management: A few on-site visitor management controls or regulations may be expected. Contact with management personnel is frequent. On guided trips, visitors perceive a moderate to low degree of challenge and risk. On-site regimentation and controls are noticeable but harmonize with the natural environment. Simple information facilities.</p>	
Related Management Prescriptions			
Recreation, Travel and Visual Resource Management	<p>Provide public access to river for fishing and rafting, kayaking, boating, emphasizing river-related activities. Provide seasonal motorized boating opportunities Oct. 1st - Apr. 30 annually. Seek viable partnership opportunities with user groups and County and State agencies to provide stated recreation opportunities and help maintain existing public access along the John Day River.</p> <p>OHV: Limited</p> <p>VRM: Class II</p>		

John Day River Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Local communities in Sherman, Gilliam, Umatilla, Morrow, Wasco, Wheeler, and Grant counties		Undeveloped	
John Day River Segment 2 Recreation Management Zone			
(Cottonwood Bridge to Clarno)			
RMZ MARKET NICHE			
In the River Zone, visitors engage in day or overnight river-based recreation opportunities, primarily rafting, canoeing, kayaking, bass and steelhead fishing, and camping in a rugged, scenic river canyon environment. In the Upland Zone, visitors engage in hiking, upland, water fowl (upriver from Thirtymile) deer and big horn sheep hunting, photography and sightseeing. Visitors value these primitive landscapes and enjoy challenging recreation activities with friends and family.			
RMZ OUTCOME OBJECTIVE			
Within the River Zone, visitors engage in year round water-based day use and overnight activities, rafting, canoeing, kayaking, camping, fishing for smallmouth bass and steelhead, wildlife watching, photography, hiking, sightseeing, and swimming experiences. Within the Upland Zone, visitors engage in non-motorized activities such as chukar, deer and bighorn sheep hunting and hiking experiences. Visitors enjoy and value primitive, unconfined recreation activities with family and friends in a predominately undeveloped and rugged setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
* Rafting, canoeing, kayaking	* River floating through a highly scenic and rugged, primitive basalt river canyon	<p>Personal: Improved physical fitness; stronger ties with family and friends, improved mental well-being, greater environmental awareness for river canyon environment.</p> <p>Community/Social: Greater family bonding improved image of land management agencies, enlarged sense of community dependency and value of public lands.</p> <p>Environmental: Increased awareness and compliance for protection of natural landscapes.</p> <p>Economic: Increased desirability as a place to visit. Increased contributions to local and regional economy.</p>	
* Bass fishing	* Being close to nature		
* Steelhead fishing	* Challenging big game hunting		
* Chukar, deer, and big-horn sheep hunting	* Bass/steelhead fishing for pleasure		
* Wildlife watching	* Being with family and friends in a river canyon and upland landscape		
* Photography	* Enjoying solitude while participating in a favorite recreation activity.		
* Swimming	* Enjoying physical exercise		
* Camping			
PRESCRIBED SETTING CHARACTER: Back Country			
Physical		Social	Operational
<p>Remoteness: Few trailed access sites along the river. Fairly high expectation of experiencing isolation from the sights and sounds of humans. Fairly high sense of remoteness. Self-reliance through application of outdoor skills in an environment that offers a high to moderate degree of challenge and risk. Out of sight and sound of human activity. Sense of commitment to river trip and perception of no return.</p> <p>Naturalness: Largely undisturbed natural environment. Little evidence of development. No impoundments, diversions or channel modifications.</p> <p>Facilities: Minimal facility development primarily for resource protection. Parties on river responsible for human waste disposal and leave no trace camping practices. No facilities for user comfort. Rustic and rudimentary facilities for site protection only. Native material only.</p>		<p>Social Encounters: Few contacts with other users, primarily at rapids and access points. Little, but some evidence of other users. Small party size. Very few contacts while on the river (3-6.) No more than one other party within sight or sound of a campsite.</p> <p>Visitor Impacts: Natural ecosystems operate freely. Human impacts are generally limited to campsites of small to moderate size. Unnoticeable impacts, no site hardening or modification of camp areas.</p>	<p>Visitor Management: Only a few subtle on-site visitor management controls or regulations are apparent. Contact with management personnel is occasional. On guided trips, visitors perceive a high to moderate degree of challenge and risk. Low regimentation. No on-site controls or information facilities.</p>
Related Management Prescriptions			
Recreation, Travel and Visual Resource Management	<p>Provide primitive, non-motorized public access to river for fishing and rafting, kayaking, boating, camping in river area, emphasizing non-motorized river-related activities consistent LAC study. Seek viable partnership opportunities with user groups, private landowners, county and state agencies to provide stated recreation opportunities. Monitor river and upland visitor satisfaction based on stated John Day Plan ROD, 2011 and LAC physical, social and managerial LAC Indicators and Standards for this river segment.</p> <p>OHV: Closed</p> <p>VRM: Class I</p>		

John Day River Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Local communities in Sherman, Gilliam, Umatilla, Morrow, Wasco, Wheeler, and Grant counties		Undeveloped	
John Day River Segment 3 Recreation Management Zone			
(Clarno [RM109] to Service Creek [RM157])			
RMZ MARKET NICHE			
In the River Zone, visitors engage in day or overnight river based recreation opportunities such as steelhead and bass fishing, rafting, canoeing, kayaking, and camping in a scenic river canyon with or without an adjacent road. In the Upland Zone, visitors engage in hiking, upland bird, deer and elk hunting, photography, sightseeing, driving for pleasure and vehicle or walk-in camping in authorized dispersed areas and at the BLM Priest Hole Recreation Site and Service Creek.			
RMZ OUTCOME OBJECTIVE			
Within the River Zone, visitors engage in water-based day use and overnight activities, year-round land-based day and overnight uses camping, fishing, hiking, sightseeing, photography and wildlife observation experiences. In the Upland Zone, visitors engage in diverse recreation activities such as hiking, upland bird, deer and elk hunting, sightseeing, driving for pleasure and camping experiences in authorized dispersed areas and at the Priest Hole BLM Recreation Site and Service Creek. Both zones provide opportunities for friends and family to participate in scenic water based activities as well as upland recreation experiences in a predominately undeveloped setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
* Bass fishing * Steelhead fishing * Upland waterfowl and deer or elk hunting * Camping * Seasonal motorized boating (Oct. 1 - Apr. 30)	* Being close to nature * Challenging big game hunting * Fishing for pleasure * Being with family and friends in a river canyon and upland landscape * Enjoying solitude and/or river canyon scenery while participating in a favorite recreation activity * Enjoying physical exercise	<p>Personal: Improved physical fitness, stronger ties with family and friends; improved mental well-being, greater environmental awareness.</p> <p>Community/Social: Greater family bonding improved image of land management agencies, enlarged sense of community dependency and value of public lands.</p> <p>Environmental: Increased awareness and need to protect natural landscapes and greater environmental stewardship.</p> <p>Economic: Increased desirability as a place to visit. Increased contributions to local and regional economy.</p>	
PRESCRIBED SETTING CHARACTER: Front Country			
Physical		Social	
<p>Remoteness: Moderate evidence of the sights and sounds of humans. Opportunity for challenge in a natural setting but low expectation of risk.</p> <p>Naturalness: Alterations to the landscape are subtle. Natural characteristics remain dominant. Moderate evidence of human development. Impoundments, diversions or channel modifications may be evident.</p> <p>Facilities: Rustic facilities developed for resource protection and to accommodate visitor use. Rustic facilities providing some comfort for the user as well as site protection. Use native materials but with more refinement in design. Synthetic materials should not be evident.</p>		<p>Social Encounters: Moderate use occurs. Contact with others is expected and occasionally continual; some chance for isolation. Some evidence of other users. Moderate to high contact with other users, particularly at rapids and access points. Moderate to high contact on access roads. Moderate to low contact on trails and at developed sites.</p> <p>Visitor Impacts: Natural ecosystems may be modified by human use. Human impacts obvious but subordinate. Sites may be subtly hardened to accommodate motorized use.</p>	
Operational			
<p>Visitor Management: A few on-site visitor management controls or regulations may be expected. Contact with management personnel is frequent. On guided trips, visitors perceive a moderate to low degree of challenge and risk. On-site regimentation and controls are noticeable but harmonize with the natural environment. Simple information facilities.</p>			
Related Management Prescriptions			
Recreation, Travel and Visual Resource Management	<p>Provide public access to river for fishing and rafting, kayaking, boating, emphasizing river-related activities. Seek viable partnership opportunities with user groups and County and State agencies to provide stated recreation opportunities and help maintain existing public access along the John Day River. Apply administrative actions to maintain Front Country recreation experiences in River and Uplands. Administrative actions include, but are not limited to: identifying camping, boat launch, and boater registration areas. Partnering with the National Park Service to provide consistent interpretative information. Occasional on-site presence.</p> <p>OHV: Limited</p> <p>VRM: Class II</p>		

John Day River Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Local communities in Sherman, Gilliam, Umatilla, Morrow, Wasco, and Wheeler counties		Undeveloped	
John Day River Segment 4 Recreation Management Zone			
(Service Creek to Dayville)			
RMZ MARKET NICHE			
Visitors drive for pleasure. Dispersed camping on BLM lands, overnight camping opportunities at Mule Shoe: bass and steelhead fishing, boating, wildlife and scenic landscape viewing, photography, swimming, tubing, and picnicking at the BLM Shady Grove Picnic Area.			
RMZ OUTCOME OBJECTIVE			
Visitor drive for pleasure. Viewing and photographing scenic geologic land formations on BLM and NPS public lands. Some visitors engage in bird and big game hunting experiences. Within the River Zone area, visitors raft from Kimberly to Service Creek, fish, day-use, and some engage in overnight vehicle camping at the BLM Mule Shoe campground, have boat-in camping experiences, or picnics at the BLM Shady Grove Picnic Site. The river and upland areas provide opportunities for friends and family to participate in upland and water based activities in a predominately roadside setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
* Driving for pleasure *Sightseeing *Vehicle and boat-in camping * Steelhead fishing * Bass fishing * Upland bird and big game hunting * Watercraft access points * Natural landscape views * Education and interpretation of historic, geologic and paleontological resources * Motor boating	* Driving and sightseeing for pleasure * Geologic study * Photography * Camping and picnics * Being with family and friends in a river canyon and roadside landscape * Enjoying river canyon scenery while participating in a favorite recreation activity. * Enjoying physical exercise	Personal: Greater appreciation for family and friends and natural landscapes. Greater environmental awareness with family and friends. Community/Social: Increased awareness of need for community involvement in public land stewardship. Environmental: Increased awareness and compliance for protection of natural landscapes. Economic: Increased desirability as a place to visit. Increased contributions to local and regional economy.	
PRESCRIBED SETTING CHARACTER: Rural			
Physical		Social	Operational
<p>Access: Some parallel roads, bridges, and power lines evident. Highway vehicle and off-road vehicle use is consistent and may be seen from the river. Limited public access due to private land.</p> <p>Remoteness: Evidence of sights and sounds of humans common from other river user, traffic, and agricultural activity. Distant sight and/or sound of human activity.</p> <p>Naturalness: Modified landscape having both human-made and natural features. Evidence of human development prevalent. Impoundments, diversions or channel modifications may be evident.</p> <p>Facilities: Some development for resource protection, visitor comfort due to number of visitors. Sites developed to provide health/ sanitation. Land-based recreation facility development more prevalent. Some synthetic materials may be used.</p>		<p>Social Encounters: Contact with others expected, including frequent interface between river users and shore users. Frequent evidence of other users. Frequent interface between river users and shore users. Moderate to high contact with other river users.</p> <p>Visitor Impacts: Ecosystems are modified by human use. Human impacts obvious. Site hardening provided to minimize impacts and to provide for user convenience.</p>	<p>Visitor Management: Visitor management controls are visible and expected. Contact with management personnel is frequent. On guided trips visitors perceive a low degree of challenge and risk. Regimentation and controls obvious and numerous, but harmonious. More complex information facilities.</p>
Related Management Prescriptions			
Recreation, Travel and Visual Resource Management	<p>John Day WSR Plan: Provide public access for fishing and rafting, kayaking, boating. Seek viable partnership opportunities with user groups and the County and State agencies to provide stated recreation opportunities and to help maintain existing public access along the John Day River. Apply operational actions to maintain Rural recreation experiences in River and Uplands. Operational actions include, but are not limited to partnering with the National Park Service to provide consistent interpretative information. Occasional on-site presence.</p> <p>OHV: Limited</p> <p>VRM: Class II</p>		

John Day River Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Local communities in Sherman, Gilliam, Umatilla, Morrow, Wasco, and Wheeler counties		Undeveloped	
John Day River Segment 6 Recreation Management Zone			
(Kimberly to Monument)			
RMZ MARKET NICHE			
Visitors drive for pleasure. Overnight camping opportunities at Lone Pine and Big Bend BLM Campgrounds; bass and steelhead fishing, boating, wildlife and scenic landscape viewing, photography, swimming, tubing, and picnicking at the BLM Monument picnic/boat take-out/put-in area.			
RMZ OUTCOME OBJECTIVE			
Visitor drive for pleasure on State Highway 402 along the John Day River. Some visitors engage in bird and big game hunting experiences in the uplands where limited public land exists. Within the River Zone area, visitors raft from Kimberly to Monument, fish, day-use, and some engage in overnight vehicle camping at the BLM Lone Pine and Bid Bend campgrounds, or have boat-in camping experiences or picnics at the BLM Monument Picnic Site. The river and upland areas provide opportunities for friends and family to participate in upland and water based activities in a predominately roadside setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
<ul style="list-style-type: none"> * Driving for pleasure * Sightseeing * Vehicle and boat-in camping * Steelhead fishing * Bass fishing * Day use * Upland bird and big game hunting * Watercraft access * Natural landscape views * Motorized boating 	<ul style="list-style-type: none"> * Driving and sightseeing for pleasure * Photography * Camping and picnics * Being with family and friends in a river canyon and roadside landscape * Enjoying river canyon scenery while participating in a favorite recreation activity. 	<p>Personal: Greater appreciation for family and friends and natural landscapes. Greater environmental awareness with family and friends.</p> <p>Community/Social: Enlarged sense of community dependency and value of public lands.</p> <p>Environmental: Greater retention of distinctive natural landscapes.</p> <p>Economic: Contribution to local economy.</p>	
PRESCRIBED SETTING CHARACTER: Rural			
Physical		Social	Operational
<p>Access: Some parallel roads, bridges and power lines evident. Highway vehicle and off-road vehicle use is consistent and may be seen from the river. Limited public access due to private land.</p> <p>Remoteness: Evidence of sights and sounds of humans common from other river users and from people off the river. Distant sight and/or sound of human activity.</p> <p>Naturalness: Modified landscape having both human-made and natural features. Evidence of human development prevalent. Impoundments, diversions or channel modifications may be evident.</p> <p>Facilities: Some facility development for resource protection, visitor comfort and number of visitors. Specific sites developed to provide health/sanitation. Land-based recreation facility development more prevalent. Some synthetic materials may be used.</p>		<p>Social Encounters: Contact with others expected, including frequent interface between river users and shore users. Frequent evidence of other users. Frequent interface between river users and shore users. Moderate to high contact with other river users.</p> <p>Visitor Impacts: Ecosystems are modified by human use. Human impacts obvious. Site hardening provided to minimize impacts and to provide for user convenience.</p>	<p>Visitor Management: Visitor management controls are visible and expected. Contact with management personnel is frequent. On guided trips, visitors perceive a low degree of challenge and risk. Regimentation and controls obvious and numerous, but harmonious. More complex information facilities.</p>
Related Management Prescriptions			
Recreation, Travel and Visual Resource Management	<p>Provide public access to river for fishing and rafting, kayaking, and boating. Maintain existing public access along the John Day River. Continue to provide recreation opportunities on public lands and pull-outs along State Highway 402. Pursue partnerships with the local communities to identify land and water-based recreation opportunities on BLM public lands, emphasizing "Leave No Trace" and "Tread Lightly" principles. Look for opportunities to interpret natural history and past historical events in the area, such as the historic use of a route between Kimberly and Monument.</p> <p>OHV: Limited</p> <p>VRM: Class II</p>		

South Fork John Day River Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Local communities in Grant and Wheeler counties		Community	
River and Upland Recreation Management Zones			
MARKET NICHE			
In the River Zone, visitors engage in day or overnight river based recreation opportunities such as fishing, day-use, and camping in a scenic river canyon environment. In the Upland Zone, visitors engage in day use and overnight camping, hunting, hiking, mountain bike, horseback riding, and seasonal Class I, II and III motorized use activities. Recreation activities within the Aldrich Mountain WSA are managed to protect wilderness character and provide primitive, unconfined recreation opportunities such as big game hunting, hiking and back-country exploration.			
OUTCOME OBJECTIVE			
Within the River Zone, visitors engage in water-based day use and overnight activities, year-round land-based day and overnight uses, camping, fishing and driving for pleasure experiences. Within the Upland Zone, visitors engage in diverse non-motorized experiences such as hiking, horseback trail experiences, and big game hunting within the Aldrich Mountain WSA. In other upland areas, visitors engage in these activities and seasonal motorized trail Class I, II and III trail and route riding experiences. Both Recreation Management Zones provide opportunities for friends and family to participate in water based activities in the River Zone, as well as non-motorized and motorized trail experiences in the Upland Zone, in a predominately undeveloped setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES: River/Upland Zones			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities & Outcomes	
<p>River RMZ: Day-use, fishing, hiking camping, driving for pleasure, wildlife viewing and photography.</p> <p>Upland RMZ: Hiking, mountain bike, and horseback trail riding, big game hunting and seasonal motorized trail Class I, II and III trail and route riding. Primitive Recreation in the Aldrich Mtn. WSA.</p>	<ul style="list-style-type: none"> * Being in a relatively natural landscape * Viewing scenic landscapes * Pursue upland bird and big game during hunting seasons * Fishing for pleasure * Viewing wild horses * Being with family and friends in a river canyon and upland landscape * Finding solitude while participating in a favorite recreation activity * Different types of physical exercise 	<p>Personal: Greater appreciation for natural landscapes and environmental awareness.</p> <p>Community/Social: Increased awareness of need for community involvement in public land stewardship. Increased involvement in recreation and land use decisions.</p> <p>Environmental: Increased awareness of “Leave No Trace” and “Treading Lightly” practices on public lands.</p> <p>Economic: Increased desirability as a place to visit or work. Positive contributions to local and regional economy.</p>	
PRESCRIBED SETTING CHARACTER: Middle Country			
Physical	Social	Operational	
<p>River Remoteness: On or near improved gravel roads, but at least 0.5 mile from highways (FC).</p> <p>Upland Remoteness: On or near motorized routes but at least 0.5 mile from all improved roads, through they may be in sight (MC).</p> <p>River Naturalness: Landscape partially modified by roads/trails, utility lines, etc., but none overpower natural landscape features (FC).</p> <p>Upland Naturalness: Naturally-appearing landscapes except for obvious motorized routes (MC).</p> <p>River Facilities: Maintained and marked trails, simple trailhead developments, improved signs, and very basic toilets (MC).</p> <p>Upland Facilities: Some primitive trails made of native materials such as log bridges and carved wooden signs (BC).</p>	<p>River Contacts: 15-29 encounters/day off travel routes and 30 or more encounters/day on routes (FC).</p> <p>Upland Contacts: 7-14 encounters/day off travel routes (e.g., Staging Areas) and 15-29 encounters/day on route (MC).</p> <p>River Group Size: 13-25 per group (FC).</p> <p>Upland Group Size: 7-12 people per group (MC).</p> <p>River Evidence of Use: Small areas of alteration prevalent. Surface vegetation gone with compacted soils observed. Sounds of people regularly heard (FC).</p> <p>Upland Evidence of Use: Small areas altered. Vegetation showing wear with some bare soils. Sounds of people occasionally heard (MC).</p>	<p>River Mechanized Use: Two-wheel drive vehicles predominant, but also four wheel drives and non-motorized, mechanized use (FC).</p> <p>Upland Mechanized use: Four wheel drives, all-terrain vehicles, dirt bikes, or snowmobiles in addition to non-motorized, mechanized use (MC).</p> <p>River and Upland Visitor Services: Basic Maps, but area personnel seldom available to provide on-site assistance (BC).</p> <p>River and Upland Management Controls: Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence (MC).</p>	
Related Management Prescriptions for River and Upland RMZs			
Recreation, Travel and Visual Resource Management	<p>OHV: Limited with seasonal restrictions.</p> <p>VRM: Class I in Aldrich Mountain WSA; Class II along the South Fork John Day River; Class IV in the Uplands away from the South Fork John Day River.</p>		

North Fork John Day River Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Local communities in Grant, Umatilla, Morrow, and Wheeler Counties		Community	
River and Upland Recreation Management Zones			
MARKET NICHE			
In the River Zone, visitors engage in day or overnight river based recreation opportunities such as fishing, rafting, canoeing, kayaking, day-use, camping and driving for pleasure in a scenic river canyon environment. In the Upland Zone, visitors engage in day use and overnight camping, upland and big game hunting, hiking, mountain bike, horseback riding, and seasonal Class I, II and III motorized use activities.			
OUTCOME OBJECTIVE			
Within the River Zone, visitors engage in water-based day use and overnight activities, year-round land-based day and overnight uses, river floating, camping, fishing, and driving for pleasure experiences. Within the Upland Zone, visitors engage in diverse non-motorized activities such as hiking, mountain bike, and horseback trail experiences, big game hunting and seasonal motorized trail Class I, II and III trail and route riding experiences. Provide opportunities for friends and family to participate in water based activities in the River Zone, as well as non-motorized and motorized trail experiences in the Upland Zone in a predominately undeveloped setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale; 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
<p>River RMZ: Day-use, fishing, rafting, canoeing, kayaking, motored boating, camping, hiking, driving for pleasure.</p> <p>Upland RMZ: Hiking, mountain biking, and horseback trail experiences, big game hunting and seasonal motorized Class I, II and III trail and route riding.</p>	<ul style="list-style-type: none"> * Explore the landscape * Viewing scenic landscapes * Pursue upland bird and big game during hunting seasons * Fishing for pleasure * Being with family and friends in a river canyon and upland landscape * Finding solitude while participating in a favorite recreation activity * Opportunities for different types of physical exercise 	<p>Personal: Greater awareness of natural landscapes and environmental awareness.</p> <p>Community/Social: Increased awareness of need for community involvement in public land stewardship. Increased involvement in recreation and land use decisions.</p> <p>Environmental: Increased awareness of "Leave No Trace" and "Treading Lightly" practices on public lands.</p> <p>Economic: Increased desirability as a place to visit, live or retire. Positive contributions to local and regional economy.</p>	
PRESCRIBED SETTING CHARACTER: Middle Country			
Physical (River/Upland)		Social (River/Upland)	Operational (River/Upland)
<p>River Remoteness: On or near motorized routes but at least 0.5 mile from all improved roads, through they may be in sight (MC).</p> <p>Upland Remoteness: More than 0.5 mile from any kind of motorized route/use area, but not as distant as 3 miles (BC).</p> <p>River and Upland Naturalness: Naturally-appearing landscapes except for obvious motorized routes (MC).</p> <p>River Facilities: Maintained and marked trails, simple trailhead developments, improved signs and very basic toilets (MC).</p> <p>Upland River Facilities: Maintained and marked trails, simple trailhead developments, improved signs, and very basic toilets (MC).</p> <p>Upland Facilities: Some primitive trails made of native materials such as log bridges and carved wooden signs (BC).</p>		<p>River and Upland Contacts: 7-14 encounters/day off travel routes (e.g., Staging Areas) and 15-29 encounters/day on route (MC).</p> <p>River and Upland Group Size: 7 -12 people group (MC).</p> <p>River Evidence of Use: Small areas of alteration prevalent. Surface vegetation gone with compacted soils observed. Sounds of people regularly heard (FC).</p> <p>Upland Evidence of Use: Small areas of alteration. Surface vegetation showing wear with some bare soils. Sounds of people occasionally heard (BC).</p>	<p>River Mechanized Use: Two-wheel drive vehicles predominant, but also four wheel drives and non-motorized, mechanized use (FC).</p> <p>Upland Mechanized use: Four-wheel drives, all-terrain vehicles, dirt bikes, or snowmobiles in addition to non-motorized, mechanized use (MC).</p> <p>River Visitor Services: Area brochures and maps, plus area personnel occasional present to provide on-site assistance (MC).</p> <p>Upland Visitor Services: Basic Maps, but area personnel seldom available for on-site assistance (BC).</p> <p>River and Upland Management Controls: Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence (MC).</p>
Related Management Prescriptions for River and Upland RMZs			
Recreation, Travel and Visual Resource Management	<p>Recreation: Two semi-primitive campgrounds on the North Fork will be seasonally closed from December 1 through April 15.</p> <p>OHV: Limited with seasonal closures to protect big game, soil, and water.</p> <p>VRM: Class I in ACEC; and Class III everywhere else.</p>		

Bridge Creek Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Regional visitors and Local residents of Mitchell, Fossil and Service Creek		Community	
Sutton Mountain and Pat's Cabin WSAs and Wilderness Character Areas Recreation Management Zones			
RMZ MARKET NICHE			
Visitors engage in cross-country hiking and primitive overnight camping, big game and upland hunting, hiking, horseback riding, back-country navigation and exploration, photography and rock and fossil study in steep, challenging terrain. Recreation activities within the Sutton and Pat's Cabin WSAs and adjacent areas with wilderness characteristics are managed to protect wilderness character and provide primitive, unconfined recreation opportunities listed above. Visitors value these primitive landscapes and enjoy participating in these challenging recreation activities with friends and family.			
RMZ OUTCOME OBJECTIVE			
Visitors engage in cross-country hiking, horseback trail experiences, big game and upland hunting, back-country navigation and exploration, photography and rock/fossil study within the WSAs and areas with wilderness characteristics. Visitors enjoy and value challenging primitive, unconfined recreation activities with family and friends in a predominately undeveloped and rugged setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
* Hiking * Horseback riding * Big game and upland hunting * Backcountry exploration * Photography of natural landscapes * Rock and fossil study	* Enjoying physical exercise * Being with family and friends * Enjoying solitude * Enjoying challenging hunting opportunities * Learning more about rocks and fossils * Increasing skills in back-country navigation and trekking * Increased self-confidence * Escaping daily responsibilities	Personal: Improved physical fitness; stronger ties with family and friends, improved mental well-being, greater environmental awareness. Community/Social: Greater family bonding improved image of land management agencies, enlarged sense of community dependency and value of public lands. Environmental: Increased awareness and need to protect natural landscapes and greater environmental stewardship. Economic: Positive contribution to local economy.	
PRESCRIBED SETTING CHARACTER: Back Country			
Physical	Social	Operational	
Remoteness: More than 0.5 mile from any kind of motorized route/use area, but not as distant as 3 miles. (BC). Naturalness: Naturally-appearing landscape having modifications not readily noticeable. (BC). Facilities: None. (P)	Contacts: 3-6 encounters/day off travel routes) and 7-15 encounters/day on travel routes. (BC). Group size: 7-12 people per group. (BC). Evidence of Use: Areas of alteration uncommon. Little surface vegetation wear observed. Sounds of people infrequent. (BC).	Mechanized Use: Limited to approximately 4 miles of designated routes. Visitor Services: Basic Maps, but area personnel seldom available to provide on-site assistance. (BC). Management Controls: Signs at key access points on basic user ethics. May have back country use restrictions. Enforcement presence rare. (BC).	
Related Management Prescriptions: Upland RMZs			
Recreation, Travel and Visual Resource Management	OHV: Closed VRM: Class I in WSAs and Class II in wilderness characteristic areas		

Bridge Creek Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET
Regional visitors and Local residents of Mitchell, Fossil and Service Creek		Community
Sutton Mountain Back Country Byway Recreation Management Zone		
RMZ MARKET NICHE		
By driving or biking around Sutton Mountain on State and County roads, visitors and residents enjoy year-round scenic viewing. By visiting roadside information kiosks at selected locations, visitors learn about the natural history, geology, paleontological features and early settlement history of Bridge Creek. Visitors and local residents see and value wide open spaces and landscapes of the Sutton Mountain, Pat's Cabin and Painted Hills areas. Visitors enjoy hiking on selected trail routes, and learning about local history and natural features.		
RMZ OUTCOME OBJECTIVE		
The Sutton Mountain Back Country Byway provides visitors and residents opportunities to enjoy the scenic beauty of Sutton Mountain, Pat's Cabin and Painted Hills areas, while also increasing knowledge and appreciation of their natural history and early settlement history. Visitors drive or bike around Sutton Mountain on State and County roads and view open scenic landscapes, stopping to view information at interpretative kiosks along the byway. Visitors enjoy hiking on selected trail routes. Visitors realize a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).		
TARGETED OPPORTUNITIES AND OUTCOMES		
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes
<ul style="list-style-type: none"> * Driving for pleasure * Photography * Motorcycle and bike touring * Hiking selected trail routes * Natural landscape views * Education and Interpretation of Geologic, Paleontological resources and historic values 	<ul style="list-style-type: none"> * Opportunities for learning early history of Bridge Creek and natural history * Enjoying open spaces and scenery * Being close to nature * Sharing experiences with all ages of family and friends 	<p>Personal: Increased awareness and appreciation for natural landscapes and formation of geologic and paleontological features and early history of the Bridge Creek area.</p> <p>Community/Social: Increased community connection to natural processes and historic community "roots".</p> <p>Environmental: Increased awareness for protecting and interpreting of natural landscapes and historic locations.</p> <p>Economic: Economic development with local communities and other entities resulting from more visitors to the Back Country Byway.</p>
PRESCRIBED SETTING CHARACTER: Rural		
Physical	Social	Operational
<p>Remoteness: On or near paved primary highways, but still within a rural area. (R)</p> <p>Naturalness: Landscape partially modified by roads/trails, utility lines, etc, but none overpower natural landscape features. (FC).</p> <p>Facilities: Adjacent or within the vicinity of improved yet modest, rustic facilities such as primitive campsites, basic restrooms, trails and interpretative sign. (FC).</p>	<p>Contacts: 30 or more encounters/day on byway during summer months. Less encounters in off-season. (FC).</p> <p>Group Size: 13-25 people per group in summer months; less people per group in off-season (FC).</p> <p>Evidence of Use: Small areas of alteration prevalent. Surface vegetation gone with impacted soils observed. Sounds of people regularly heard. (FC).</p>	<p>Mechanized Use: Ordinary highway auto, truck, motorcycle and bike traffic is characteristic. (R)</p> <p>Visitor Services: Basic maps, but area personnel seldom available to provide on-site assistance. (BC).</p> <p>Management Controls: Signs at key access or pull-out points along the Byway. Would have motorized use restrictions adjacent to byway. Random law enforcement presence. (BC).</p>
Related Management Prescriptions		
<p>Recreation: Coordinate management with State and County road departments for sustained, year-round use on the Byway and identify safe roadside pull-outs for education and interpretive kiosks. Manage recreation use to ensure no cross-country use occurs off Byway. Manage trail hiking opportunities on selected trail routes. Pursue partnerships with organizations, and local, state, and federal agencies, if consistent with RMZ outcome objectives and management for on-site and off-site education and interpretation of geologic resources, paleontological resources, explorers and early settlers of the Bridge Creek area.</p>		

Bridge Creek Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Regional visitors and Local residents of Mitchell, Fossil and Service Creek		Community	
Sand Mountain Recreation Management Zone			
RMZ MARKET NICHE			
Visitors engage in cross-country hiking and primitive overnight camping, big game and upland bird hunting, hiking, horseback riding, photography and rock and fossil study in undulating terrain. Recreation activities within the Sand Mountain area are managed to retain the existing landscape character and provide primitive, unconfined recreation opportunities. Visitors value these primitive landscapes and enjoy participating in these recreation activities with friends and family.			
RMZ OUTCOME OBJECTIVE			
Visitors engage in cross-country hiking, horseback trail experiences, big game and upland bird hunting, and photography. Visitors enjoy and value primitive, unconfined recreation activities with family and friends in a predominately undeveloped setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
* Hiking * Horseback riding * Big game and upland bird hunting * Photography of natural features * Rock and fossil study * Possibly mountain biking	* Enjoying physical exercise * Being with family and friends * Enjoying solitude * Enjoying challenging hunting opportunities * Learning more about rocks and fossils * Escaping daily responsibilities	<p>Personal: Improved physical fitness, stronger ties with family and friends, improved mental well-being, greater environmental awareness.</p> <p>Community/Social: Greater family bonding improved image of land management agencies, enlarged sense of community dependency and value of public lands.</p> <p>Environmental: Increased awareness and need to protect natural landscapes and greater environmental stewardship.</p> <p>Economic: Positive contribution to local economy.</p>	
PRESCRIBED SETTING CHARACTER: Back Country			
Physical	Social	Operational	
<p>Remoteness: More than 0.5 mile from any kind of motorized route/use area, but not as distant as 3 miles (BC).</p> <p>Naturalness: Naturally appearing landscape except for obvious Juniper treatment areas on landscape (MC).</p> <p>Visitor Services: None</p>	<p>Contacts with other groups: 3-6 encounters/day off travel routes and 7-15 encounters/day on travel routes (BC).</p> <p>Group Size: 4-6 people per group (BC).</p> <p>Evidence of Use: Areas of alteration uncommon. Little surface vegetation wear observed. Sounds of people infrequent (BC).</p>	<p>Mechanized Use: All non-motorized use; perhaps mountain bike use (BC).</p> <p>Visitor Services: Basic maps, but area personnel seldom available to provide on-site assistance (BC).</p> <p>Management Controls: Signs at key access points on basic user ethics. May have back country use restrictions. Enforcement presence rare (BC).</p>	
Related Management Prescriptions			
Recreation, Travel and Visual Resource Management	<p>OHV: Limited</p> <p>VRM: Class II</p>		

Bridge Creek Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Regional visitors and Local residents of Mitchell, Fossil and Service Creek		Community	
Golden Triangle Recreation Management Zone			
RMZ MARKET NICHE			
Visitors engage in casual use on local motorized trail and route opportunities in a juniper-forested setting.			
RMZ OUTCOME OBJECTIVE			
Visitors engage in either motorized, or shared-use, or non-motorized trail and route experiences within a forested setting to realize a moderate level of satisfaction for one or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
<ul style="list-style-type: none"> * Class I - ATV riding * Class II - 4x4 driving * Class III- Motorcycle riding * Mountain bike riding 	<ul style="list-style-type: none"> * Enjoy Scenery * Experience casual trail riding or route driving with family and friends * Experience challenging motorized or non-motorized trail riding * Opportunities for different types of physical exercise 	<p>Personal: Greater environmental awareness with family and friends.</p> <p>Community/Social: Increased awareness of need for community involvement in public land stewardship. Increased involvement in recreation and land use decisions.</p> <p>Environmental: Increased awareness of "Leave No Trace" and "Treading Lightly" practices on public lands.</p> <p>Economic: Increased desirability as a place to visit, live or retire. Positive contributions to local and regional economy.</p>	
PRESCRIBED SETTING CHARACTER: Middle Country			
Physical	Social	Operational	
<p>Remoteness: On or near improved gravel roads but at least 0.5 mile from Highways (FC).</p> <p>Naturalness: Landscape partially modified by roads/trails, utility lines, etc; but none overpower natural landscape features (FC).</p> <p>Facilities: Maintained and marked trails, simple trailhead developments, improved signs and very basic toilets (MC).</p>	<p>Contacts: 7-14 encounters day off travel routes and 15-29 encounters/day on routes (MC).</p> <p>Group Size: 7-12 people per group (MC).</p> <p>Evidence of Use: Small areas of alteration prevalent. Surface vegetation gone with impacted soils observed. Sounds of people regularly heard (FC).</p>	<p>Mechanized Use: Four-wheel drives, all-terrain vehicles, dirt bikes, or snowmobiles in addition to non-motorized, mechanized use (MC).</p> <p>Visitor Services: Basic maps, but area personnel seldom available to provide on-site assistance (BC).</p> <p>Management Controls: Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence (MC).</p>	
Related Management Prescriptions			
Recreation, Travel and Visual Resource Management	<p>OHV: Limited</p> <p>VRM: Class III</p>		

Bridge Creek Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Regional visitors and Local residents of Mitchell, Fossil and Service Creek		Community	
Gable Creek Recreation Management Zone			
RMZ MARKET NICHE			
Visitors engage in local motorized and non-motorized trail opportunities in a juniper woodland setting			
RMZ OUTCOME OBJECTIVE			
Visitors engage in trail experiences within a woodland setting, to realize a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
* Class I - ATV riding * Class II - 4x4 driving * Class III- Motorcycle riding * Horseback riding * Hiking * Mountain Biking	* Experience challenging trail riding * Viewing scenic landscapes * Pursue upland bird and big game during hunting seasons * Opportunities for different types of physical exercise	<p>Personal: Greater environmental awareness with family and friends.</p> <p>Community/Social: Increased awareness of need for community involvement in public land stewardship. Increased involvement in recreation and land use decisions.</p> <p>Environmental: Increased awareness of “Leave No Trace” and “Treading Lightly” practices on public lands.</p> <p>Economic: Increased desirability as a place to visit, live or retire. Positive contributions to local and regional economy.</p>	
PRESCRIBED SETTING CHARACTER: Middle Country			
Physical	Social	Operational	
<p>Remoteness: On or near improved gravel roads but at least 0.5 mile from Highways (FC).</p> <p>Naturalness: Naturally-appearing landscapes except for obvious motorized routes (MC).</p> <p>Facilities: Some primitive trails made of native materials such as log bridges and carved wooden signs (BC).</p>	<p>Contacts: 3-6 encounters/day off travel routes and 7-15 encounters/day on travel routes (BC).</p> <p>Group Size: 7-12 people per group (MC).</p> <p>Evidence of Use: Small areas of alteration prevalent. Surface vegetation gone with impacted soils observed. Sounds of people regularly heard (FC).</p>	<p>Mechanized Use: Four-wheel drives, all-terrain vehicles, dirt bikes, or snowmobiles in addition to non-motorized, mechanized use (MC).</p> <p>Visitor Services: Basic maps, but area personnel seldom available to provide on-site assistance (BC).</p> <p>Management Controls: Signs at key access points on basic user ethics. May have back country use restrictions. Enforcement presence rare (BC).</p>	
Related Management Prescriptions			
Recreation, Travel and Visual Resource Management	<p>OHV: Limited</p> <p>VRM: Class III</p>		

Bridge Creek Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Regional visitors and Local residents of Mitchell, Fossil and Service Creek		Community	
Logging Road South Recreation Management Zone			
RMZ MARKET NICHE			
Residents and visitors engage in motorized Class I, II and III opportunities on designated trails and routes in a juniper woodland landscape.			
RMZ OUTCOME OBJECTIVE			
Visitors engage in Class I, II and III motorized travel on designated routes within a juniper woodland area. Visitors enjoy and value motorized recreation activities with family and friends in a predominately undeveloped setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
* Class I - ATV riding * Class II - 4x4 driving * Class III- Motorcycle riding	* Enjoy Scenery * Experience trail riding or driving experiences * Interact with other community users * Enjoy physical exercise	<p>Personal: Improved physical fitness, stronger ties with family and friends, improved mental well-being, greater environmental awareness.</p> <p>Community/Social: Enlarged sense of community dependency and value of public lands.</p> <p>Environmental: Manage public lands for enjoyable recreational use in an environmentally responsible manner by limiting all use to designated routes and trails.</p> <p>Economic: Positive contributions to local/regional economy.</p>	
PRESCRIBED SETTING CHARACTER: Middle Country			
Physical	Social		Operational
<p>Remoteness: On or near improved gravel roads but at least 0.5 mile from highways (FC).</p> <p>Naturalness: Naturally-appearing landscapes except for obvious motorized routes (MC).</p> <p>Facilities: Some primitive trails made of native materials such as log bridges and carved wooden signs (BC).</p>	<p>Contacts: 15-29 encounters/day on routes (MC).</p> <p>Group Size: 7-12 people per group (MC).</p> <p>Evidence of Use: Small areas of alteration prevalent. Surface vegetation gone with impacted soils observed. Sounds of people regularly heard (FC).</p>		<p>Mechanized Use: Four-wheel drives, all-terrain vehicles, dirt bikes, or snowmobiles in addition to non-motorized, mechanized use (MC).</p> <p>Visitor Services: Basic maps, but area personnel seldom available to provide on-site assistance (BC).</p> <p>Management Controls: Regulatory signing clearly posted. Motorized and mechanized use restrictions. Random enforcement presence (MC).</p>
Related Management Prescriptions			
Recreation, Travel and Visual Resource Management	<p>OHV: Limited</p> <p>VRM: Class III</p>		

Bridge Creek Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Regional visitors and Local residents of Mitchell, Fossil and Service Creek		Community	
Priest Hole Triangle Recreation Management Zone			
RMZ MARKET NICHE			
Residents and visitors engage in motorized and non-motorized opportunities near an upland river canyon area setting.			
RMZ OUTCOME OBJECTIVE			
By the year 2016, visitors engage in upland and big game hunting, hiking, mountain biking, motorized travel on designated routes and photography of the adjacent John Day River canyon area. Visitors enjoy and value these recreation activities with family and friends in a predominately undeveloped setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
* Driving or riding for pleasure * Natural landscape views * Hiking * Mountain biking * Upland and big game hunting * Photography of natural landscapes	* Being with family and friends * Enjoying hunting opportunities * Escaping daily responsibilities * Enjoying physical exercise	<p>Personal: Improved physical fitness; stronger ties with family and friends, improved mental well-being, greater environmental awareness.</p> <p>Community/Social: Enlarged sense of community dependency and value of public lands.</p> <p>Environmental: Greater retention of distinctive natural landscapes.</p> <p>Economic: Positive contribution to local economy.</p>	
PRESCRIBED SETTING CHARACTER: Middle Country			
Physical	Social	Operational	
<p>Remoteness: On or near improved gravel roads but at least 0.5 mile from Highways. (FC).</p> <p>Naturalness: Naturally-appearing landscapes except for obvious motorized routes. (MC).</p> <p>Facilities: Some primitive trails made of native materials such as log bridges and carved wooden signs. (BC).</p>	<p>Contacts: 3-6 encounters/day off travel routes and 7-15 encounters/day on travel routes. (BC).</p> <p>Group Size: 7-12 people per group. (MC).</p> <p>Evidence of Use: Small areas of alteration prevalent. Surface vegetation gone with impacted soils observed. Sounds of people regularly heard. (FC).</p>	<p>Mechanized Use: Four-wheel drives, all-terrain vehicles, dirt bikes, or snowmobiles in addition to non-motorized, mechanized use (MC).</p> <p>Visitor Services: Basic Maps, but area personnel seldom available to provide on-site assistance (BC).</p> <p>Management Controls: No visitor controls apparent. No use limits. Enforcement presence rare.</p>	
Related Management Prescriptions			
Recreation, Travel and Visual Resource Management	<p>OHV: Limited</p> <p>VRM: Class II within view of the John Day River; Class III away from river.</p>		

Little Canyon Mountain Special Recreation Management Area

SRMA PRIMARY MARKET STRATEGY		SRMA MARKET	
Local communities in Grant County		Community	
Little Canyon Mountain Recreation Management Zone (RMZ)			
MARKET NICHE			
Visitors engage in local motorized and non-motorized trail opportunities in a forested setting			
OUTCOME OBJECTIVE			
Visitors engage in trail experiences within a forested setting, realizing a moderate level of satisfaction for two or more recreation activities (i.e., 3.0 on a probability scale where 1 = not at all; 2 = somewhat; 3 = moderate; 4 = total satisfaction).			
TARGETED OPPORTUNITIES AND OUTCOMES			
Activity Opportunities	Experience Opportunities and Outcomes	Benefit Opportunities and Outcomes	
<ul style="list-style-type: none"> * Class I - ATV riding * Class II - 4x4 driving * Class III- Motorcycle riding * Horseback riding * Hiking * Mountain Biking 	<ul style="list-style-type: none"> * Viewing scenic landscapes * Experience challenging trail riding * Interact with other community users * Opportunities for different types of physical exercise 	<p>Personal: Greater environmental awareness.</p> <p>Community/Social: Greater community involvement in recreation and land use decisions. Reduced social isolation. Improved functioning in community.</p> <p>Environmental: Manage previously disturbed or unclaimed mining areas for recreational use on public land.</p> <p>Economic: Increased desirability as a place to live or retire. Positive contributions to local/regional economy.</p>	
PRESCRIBED SETTING CHARACTER: Front Country			
Physical	Social		Operational
<p>Remoteness: On or near improved gravel roads but at least 0.5 mile from highways (FC).</p> <p>Naturalness: Landscape partially modified by roads/trails, utility lines, etc, but none overpower natural landscape features (FC).</p> <p>Facilities: Maintained and marked trails, simple trailhead developments; improved signs and very basic toilets (MC).</p>	<p>Contacts: 7-14 encounters off travel routes and 15-29 encounters/day on routes (MC).</p> <p>Group Size: 7-12 people per group (MC).</p> <p>Evidence of Use: Small areas of alteration prevalent. Surface vegetation gone with impacted soils observed. Sounds of people regularly heard (FC).</p>		<p>Mechanized Use: Four-wheel drives, all-terrain vehicles, dirt bikes, or snowmobiles in addition to non-motorized, mechanized use (MC).</p> <p>Visitor Services: Area brochures and maps, plus area personnel occasional present to provide on-site assistance (MC).</p> <p>Management Controls: Rules clearly posted with some seasonal or day-of-week use restrictions. Periodic enforcement presence (FC).</p>
Related Management Prescriptions			
Recreation, Travel and Visual Resource Management	<p>OHV: Limited; Only Class II OHVs in South Pit; Only Class III OHVs in the parking area in North Pit.</p> <p>VRM: Class II</p>		

Appendix M: Withdrawals

This appendix contains a table of existing withdrawals (serialized) and withdrawals proposed in previous plans (not serialized). It is recommended that all “Protect Water Power and Reservoir Development Potential;” withdrawals associated with a designated or suitable segment of Wild and Scenic River be revoked. All other withdrawals or proposed withdrawals are recommended to continue.

Existing

Serial Number	Order Number/Date	Legal Description	Purpose/Name	Managing Agency	Segregative Effect
<p>Legal description indicates sections within which withdrawn lands are located. Information on which portions of the cited sections are withdrawn is available at the Prineville BLM District Office. Within PSRs, sections noted with * contain land where the surface is Open to Entry Subject to Section 24 of the Federal Power Act. Table does not include other agency withdrawals within National Park boundaries or lands within National Forest boundaries.</p>					
ORE 0 5286	PLO 3871	T.4N. R.22E. Sec. 26,33	Protection of Navigation and Power Development/ John Day Lock and Dam Project	USACE	A
		T.3N. R.17E. Sec. 1			
		T.3N. R.18E. Sec. 18,20, 22,26,30			
		T.3N. R.19E. Sec. 34,35			
		T.3N. R.20E. Sec. 26,28,32			
		T.3N. R.21E. Sec. 2,10			
		T.3N. R.22E. Sec. 4,6			
		T.2N. R.18E. Sec. 10,11,12			
		T.2N. R.19E. Sec. 4,6			
OR 59369	FO of 1/22/2004	T.3N. R.17E. Sec. 28;	Protection of Power Development/ Power Project 12468	FERC	C
ORE 0 3141	PLO 1256	T.2N. R.16E. Sec. 7,9,10,18;	Protection of Dam Project/The Dalles Dam Project	COE	A
OR 19024	EO of 10/12/1932	T.3N. R.18E. Sec. 30*;	Protect Water Power & Reservoir Development Potential/ PSR 24	BLM	D
		T.1N. R.19E Sec. 4*;			
		T.1N. R.20E Sec. 30*31*;			
		T.1S. R.20E Sec 6,7;			
		T.3S. R.18E. Sec. 2,11,23, 24,27,35;			
		T.4S. R.18E. Sec. 2,3,15, 22,23,25;			
		T.4S. R.19E. Sec. 29;			
		T.5S. R.19E. Sec. 9,21,29;			
		T.7S. R.19E. Sec. 5,7,8 17-20;			
		T.8S. R.19E. Sec. 3,9,21, 25,26;			
		T.8S. R.20E. Sec. 31;			
		T.9S. R.19E. Sec. 12;			
		T.9S. R.20E. Sec. 6,30,32;			
		T.9S. R.21E. Sec. 28*,29, 30,31;			
		T.9S. R.22E. Sec.13*,14,22, 23,27,28,32*;			
T.9S. R.23E. Sec. 1,8*,9*, 10*, 11,12,18;					
T.9S. R.25E. Sec. 24,25;					

Serial Number	Order Number/Date	Legal Description	Purpose/Name	Managing Agency	Segregative Effect
OR 19083	EO of 11/24/1916	T.2N. R.18E. Sec.10*;	Protect Water Power & Reservoir Development Potential/ PSR 566	BLM	D
		T.2N. R.19E. Sec. 18,19,28, 30,32;			
		T.1N. R.19E. Sec. 2*;			
		T.1N. R.20E. Sec. 30;			
		T.1S. R.19E. Sec. 10*,11*,12*,15, 17,19, 21-23,30,31;			
		T.2S. R.18E. Sec 1,11-14, 23-26,34,35;			
		T.3S. R.18E. Sec 1,13,14, 22,23,26,27,34,35;			
		T.4S. R.18E. Sec 3,10,13, 14,23-25;			
		T.4S. R.19E. Sec 19,29-32;			
		T.5S. R.18E. Sec 25;			
		T.5S. R.19E. Sec 5,6,8,17, 20,28-30;			
		T.6S. R.19E. Sec 6,7,30;			
		T.8S. R.19E. Sec 5;			
T.9S. R.23E. Sec 11;					
OR 44721	PL 100-557	T.2N. R.18E. Sec 11-13;	Protection under Wild & Scenic Rivers Act /John Day W&SR	BLM	Various
		T.2N. R.19E. Sec 18-20, 27-30,32,33;			
		T.1N. R.19E. Sec 2-4,11,14, 23-25,36;			
		T.1N. R.20E. Sec 5-7;			
		T.1S. R.18E. Sec 36;			
		T.1S. R.19E. Sec 3;			
		T.2S. R.18E. Sec 1,11-13, 23-26,34,35;			
		T.2S. R.19E. Sec 5-7;			
		T.3S. R.18E. Sec 2,3,11-15, 22-24,26,27,34,35;			
		T.4S. R.18E. Sec 2,3,10,11, 13-15,22-25;			
OR 44721	PL 100-557	T.4S. R.19E. Sec 19,29-32;	Protection under Wild & Scenic Rivers Act /John Day W&SR	BLM	Various
		T.5S. R.18E. Sec 25,36;			
		T.5S. R.19E. Sec 5,6,8,9,16, 17,20,21,29,30;			
		T.6S. R.18E. Sec 1;			
		T.6S. R.19E. Sec 6-8,17-20, 29-32;			
		T.7S. R.19E. Sec 5-8,17-20, 29,30,32,33;			
		T.8S. R.19E. Sec 3-5,9,10, 15,16,22,23,25,26,35,36;			
		T.8S. R.20E. Sec 31;			
		T.9S. R.19E. Sec 1,11-14, 24,25;			
		T.9S. R.20E. Sec 1;			
		T.9S. R.21E. Sec 27-36;			
		T.9S. R.22E. Sec 13,14, 21-24,27-29,31-33;			
		T.9S. R.23E. Sec 17-19;			
T.10S. R.20E. Sec 1-4;					
T.10S. R.21E. Sec 1,2,6;					
T.10S. R.22E. Sec 5,6;					
OR 44713	PL 100-557	T.1S. R.16E. Sec 4-6,8,9, 16,17,19-21,29-32;	Protection under Wild & Scenic Rivers Act /John Day W&SR	BLM	Various
		T.2S. R.16E. Sec 5-7,18,19;			

Serial Number	Order Number/Date	Legal Description	Purpose/Name	Managing Agency	Segregative Effect
OR 19046	EO of 7/2/1910	T.1S. R.19E. Sec 10,31;	Protect Water Power & Reservoir Development Potential/ PSR 145	BLM	D
		T.1S. R.20E. Sec 6,7;			
		T.3S. R.18E. Sec 11,15,27;			
		T.4S. R.18E. Sec 13;			
		T.5S. R.19E. Sec 20,29;			
		T.6 S. R.19E. Sec 7,8,17-20, 29;			
		T.7S. R.19E. Sec 8,17,29;			
		T.8S. R.19E. Sec 22;			
		T.9S. R.19E. Sec 12;			
		T.9S. R.20E. Sec 30,32;			
		T.9S. R.22E. Sec 23;			
T.9S. R.24E. Sec 6*;					
OR 9041 C	EO of 4/17/1926	T.6 S. R.18E. Sec 25;	Protection of public domestic and livestock water source/PWR 107	BLM	E
		T.12S. R.27E. Sec 1;			
OR 19027	EO of 7/2/1910	T.7S. R.28E. Sec 33-35;	Protect Water Power & Reservoir Development Potential/ PSR 61	BLM	
		T.8S. R.28E. Sec 4,5,7-9, 17,18,19*,20*,30*;			
		T.9S. R.26E. Sec 14*,19,20*, 21, 30;			
		T.9S. R.27E. Sec 2;			
OR 19026	EO of 7/2/1910	T.8S. R.29E. Sec 10*,11*, 12*;	Protect Water Power & Reservoir Development Potential/ PSR 60	BLM	D
		T.8S. R.30E. Sec 7*,17,24*, 25*;			
		T.8S. R.31E. Sec 30*,32*;			
		T.9S. R.31E. Sec 4*,5*;			
OR 19031	EO of 7/2/1910	T.9S. R.26E. Sec 31;	Protect Water Power & Reservoir Development Potential/ PSR 65	BLM	D
		T.10S. R.26E. Sec 7*,18*;			
		T.12S. R.26E. Sec 20*;			
ORE 010418	PLO 3076	T.11S. R.25E. Sec 3	Protection of Air Navigation Site/John Day ANS	FAA	B

John Day Basin ROD & RMP

Serial Number	Order Number/Date	Legal Description	Purpose/Name	Managing Agency	Segregative Effect
OR 46602	SO of 9/28/1928	T.12S. R.25E. Sec 1,2;	Protection of lands for State, RP&P Selection/ Recreational Withdrawal #15	BLM/NPS	Closed to Public Land Laws except RP&P disposal
		T.11S. R.26E. Sec 5,8,18,20;			
OR 44748	PL 100-557	T.13S. R.26E. Sec 24-26, 36;	Protection under Wild & Scenic Rivers Act /S Fork John Day W&SR	BLM	Various
		T.14S. R.26E. Sec 1, 12, 13,14, 23, 24, 25, 26, 35, 36 ;			
		T.14S. R.26E. Sec 1,12-14, 24,25,36;			
		T.15S. R.27E. Sec19,30,31;			
		T.16S. R.26E. Sec 1;			
		T.16S. R.27E. Sec 7,18-20, 29,32,33;			
		T.17S. R.27E. Sec 4,9,10, 15,22-25;			
		T.17S. R.28E. Sec 28-30, 32-34;			
		T.18S. R.28E. Sec 3,4,10, 11,13-15,24;			
OR 19030	EO of 7/2/1910	T.14S. R.26E. Sec 23*,26*,35*;	Protect Water Power & Reservoir Development Potential/ PSR 64	BLM	D
OR 44758		T.17S. R.36E. Sec 21,22,27, 28,33,34;	Protection under Wild & Scenic Rivers Act /N Fork Malheur Study River	BLM	A

Proposed in Previous Plans (not serialized but potentially Segregated)

Serial Number	Order Number/ Date	Legal Description	Purpose/Name	Managing Agency	Segregative Effect
Not Serialized	12/30/1982	T.2S. R.18E. Sec 1,11-14, 20-29,34,35;	Protection of Wilderness Area Potential/Lower John Day	BLM	
		T.2S. R.19E. Sec 6,7,18,19;	Lower John Day		
		T.3S. R.18E. Sec 1-3,9-16; 20-30,32-35;			
		T.4S. R.18E. Sec 1-4,10-15, 22-27;	Lower John Day, Thirtymile		
		T.4S. R.19E. Sec 19,29-32;	Thirtymile		
		T.5S. R.18E. Sec 24-26;	North Pole Ridge		
		T.5S. R.19E. Sec 7,8,17, 19-21,28-32;			
		T.13S. R.26E. Sec 25;	Aldrich Mountain		
		T.13S. R.27E. Sec 19,20, 28-32;			
		T.14S. R.26E. Sec 1;12,13;			
		T.14S. R.27E. Sec 5-8,17, 19-21,27-29,34;			
		T.14S. R.31E. Sec 24,25;	Sheep Gulch		
		T.14S. R.32E. Sec 11;	Pine Creek		
T.14S. R.33E. Sec 10;	Indian Creek				
Not Serialized		T.10S. R.20E. Sec 4,9,10,11 14-17,19-23,28-35;	Protection of Wilderness Area Potential/Pat's Cabin Wilderness Study Area	BLM	A
		T.11S. R.20E. Sec 4;			
Not Serialized		T.10S. R.20E. Sec12,13,24, 25;	Protection of Wilderness Area Potential/Sutton Mountain Wilderness Study Area	BLM	A
		T.10S. R.21E. Sec 2-12, 14-23,25-36;			
		T.10S. R.22E. Sec 30-32;			
		T.11S. R.21E. Sec 1-5,9-16, 21-23;			
		T.11S. R.22E. Sec 5-8,18;			
		T. 9S. R.21E. Sec 32-34			
Not Serialized		Rock Creek (RM 23) T1N, R19E, Sec 14, E 1/2	Recreation Sites to be withdrawn from Mineral Entry (2001 John Day Wild and Scenic River Plan Record of Decision Appendix J)	BLM	A
		Cottonwood Bridge (RM 40) T1S, R19E, Sec 17, SW 1/4 SW 1/4, SW 1/4, SE 1/4			
		Butte Creek (RM97) T6S, R19E, Sec 8, SW 1/4 SW 1/4, Sec 17 NW 1/4 NW 1/4			
		Clarno (RM 106-109) T7S, R19E Sec 18 S 1/2 SW 1/4, SW 1/4 SE 1/4 Sec 19; Sec 20 W 1/2; Sec 29 W 1/2, SW 1/4 SE 1/4 Sec 30 E 1/2 ; Sec 32 N 1/2, N 1/2 SW 1/4			
		Clarno East (RM 112) T8S, R19E Sec 3 NE 1/4 SW 1/4			
		Burn Ranch (RM 132-133) T9S, R20E Sec 32 SW 1/4 NW 1/4, S 1/2			
		Priest Hole (RM 137) T9S, R20E Sec 36 S 1/2			
		Service Creek (RM 157) T9S, R23E Sec 17 NW1/4 Sec 18 E1/2 NE 1/4			
		Muleshoe (RM 159) T9S, R23E Sec 9 SW 1/2 NE 1/4			

John Day Basin ROD & RMP

Serial Number	Order Number/ Date	Legal Description	Purpose/Name	Managing Agency	Segregative Effect
Not Serialized		Wooden Bridge (RM 162) T9S, R23E Sec 12 N 1/2 NW 1/4	Recreation Sites to be withdrawn from Mineral Entry (2001 John Day Wild and Scenic River Plan Record of Decision Appendix J)	BLM	A
		Shady Grove (RM178) T9S, R25E Sec 9 N1/2 NE1/4			
		Lone Pine (North Fork RM2) T9S, R26E Sec 20 W1/2 NE1/4, NW1/4			
		Lone Pine (North Fork RM 2) T9S, R26E Sec 20 W1/2 NE1/4, NW 1/4			
		Big Bend (North Fork RM 3) T9S, R26E			
		Monument (North Fork RM 16) T9S, R27E Sec 1 SW1/4, NW1/4 SE1/4			
		Ellingson Mill (South Fork RM 32) T16S, R27E, Sec 29 W1/2			
Not Serialized	EO of 4/17/1926	T15S,R26E,Sec 26,SE1/4 NE1/4	Protection of public domestic and livestock water source/PWR 107 Martin Creek Spring	BLM	Various
		T8S, R28E, Sec 4, NW ¼ NW1/4	Protection of public domestic and livestock water source/PWR 107 North Fork John Day River Spring		
		T8S,R28E,Sec 11,NE1/4 SE1/4, T8S, R28E, Section 12,NW1/2 SW1/4	Protection of public domestic and livestock water source/PWR 107 Cole Canyon Springs		
		T14S,R26E,Sec 15,NE1/4 NE1/4	Protection of public domestic and livestock water source/PWR 107 Youngs Creek Spring		
		T11S,R27E,Sec 23,NW1/4 NE1/4	Protection of public domestic and livestock water source/PWR 107 McGarr Meadows Springs		
		T16S,R26E,Sec 16,	Protection of public domestic and livestock water source/PWR 107 Carcajou Spring		
		T16S,R27E,Sec 25,SW 1/4 NW 1/4	Protection of public domestic and livestock water source/PWR 107 French Butte Spring		
		T16S,R27E,Sec 28,NW 1/4 SW 1/4	Protection of public domestic and livestock water source/PWR 107 Little Frazier Spring		
Not Serialized	EO of 4/17/1926	T16S,R27E,Sec 28,NW1/4 SW1/4	Protection of public domestic and livestock water source/PWR 107 Junction Ck Spring	BLM	Various
		T16S,R27E,Sec 30,NE 1/4 SE 1/4 and T16S,R27E,Sec 29,SW 1/4 NW1/4	Protection of public domestic and livestock water source/PWR 107 Ellingson Mill Administrative Site		
		T16S,R27E,Sec 30,SW 1/4 NW 1/4	Protection of public domestic and livestock water source/PWR 107 No Where Spring		
		T17S,R27E,Sec 2,NE 1/4 SW 1/4	Protection of public domestic and livestock water source/PWR 107 Phillips Spring #2		
		T17S,R27E,Sec 5,NE 1/4 SW 1/4	Protection of public domestic and livestock water source/PWR 107 Pine Creek Spring		
		T17S,R28E,Sec 18,NE 1/4 NW 1/4	Protection of public domestic and livestock water source/PWR 107 Wildcat Spring		
		T17S,R28E,Sec 18,NE1/4 NW1/4	Protection of public domestic and livestock water source/PWR 107 St. Clair - Wildcat Spring		
		T17S,R28E,Sec 19,NE1/4 SW1/4	Protection of public domestic and livestock water source/PWR 107 St. Clair - Reservoir Spring		
		T17S,R28E,Sec 20,NE 1/4 NW 1/4	Protection of public domestic and livestock water source/PWR 107 Poison Spring		
		T17S,R28E,Sec 20,SE1/4 NW1/4	Protection of public domestic and livestock water source/PWR 107 St. Clair-Tributary Spring		

Serial Number	Order Number/ Date	Legal Description	Purpose/Name	Managing Agency	Segregative Effect
Not Serialized	EO of 4/17/1926	T1S,R19,Sec 10,NW1/4 NW1/4	Protection of public domestic and livestock water source/PWR 107 High Spring # 3	BLM	Various
		T1S,R19,Sec 11,NW1/4 SW1/4	Protection of public domestic and livestock water source/PWR 107 High Spring # 2		
		T1S,R19,Sec 11,SW1/4 SE1/4	Protection of public domestic and livestock water source/PWR 107 High Spring # 5		
		T2S,R18E,Sec 27,SW1/4 SW1/4	Protection of public domestic and livestock water source/PWR 107 Eakin & Stewart Spring 3		
		T2S,R18E,Sec 27,SW1/4 SW1/4	Protection of public domestic and livestock water source/PWR 107 Eakin & Stewart Spring 2		
		T2S,R20E,Sec 11,NW1/4 SW1/4	Protection of public domestic and livestock water source/PWR 107 Barnett Spring		
		T2S,R20E,Sec 4, NE 1/4	Protection of public domestic and livestock water source/PWR 107 Hay Ck Spring # 1 (6 springs)		
		T2S,R20E,Sec 9,	Protection of public domestic and livestock water source/PWR 107 Hay Ck Spring # 2		
		T2S,R20E,Sec 9,	Protection of public domestic and livestock water source/PWR 107 Hay Ck Spring # 3		
		T8S,R19E,Sec 03,SW1/4 NE1/4	Protection of public domestic and livestock water source/PWR 107 Sidehill Sp & Pipeline		
		T9S,R20E,Sec 26 ,NW1/4 NW 1/4	Protection of public domestic and livestock water source/PWR 107 Tom Stephen Spring # 1		
		T9S,R20E,Sec 26 ,W1/2 SW1/4	Protection of public domestic and livestock water source/PWR 107 Tom Stephen Spring # 2		
		T9S,R21E,Sec 29 ,SE1/4 SW1/4	Protection of public domestic and livestock water source/PWR 107 C.O. Warren Spring		
		T9S,R25E,Sec 8,NW 1/4 SW 1/4	Protection of public domestic and livestock water source/PWR 107 Fischer Spring		
		T10S,R21E,Sec 9 and Sec 10	Protection of public domestic and livestock water source/PWR 107 Chapman Springs (5 springs)		
		T10S,R26E,Sec 30,NE1/4 NE 1/4	Protection of public domestic and livestock water source/PWR 107 W-4 Spring # 2		
		T10S,R26E,Sec 30,SE 1/4 SW 1/4	Protection of public domestic and livestock water source/PWR 107 W-4 Spring # 3		
		T10S,R26E,Sec 31,NW 1/4 NE 1/4	Protection of public domestic and livestock water source/PWR 107 Branson Creek Spring		
		T10S,R26E,Sec 7,SW 1/4 NE 1/4	Protection of public domestic and livestock water source/PWR 107 W-4 Spring #1		
		T11S,R21E,Sec 29,NE1/4 SW1/4	Protection of public domestic and livestock water source/PWR 107 Willow Springs		
		T11S,R21E,Sec 34,SW1/4 SE1/4	Protection of public domestic and livestock water source/PWR 107 Pee Wee Spring (RC)		
		T11S,R21E,Sec 35,SW1/4 SW1/4	Protection of public domestic and livestock water source/PWR 107 Broken Hip Spring		
		T11S,R25E,Sec 13,SE1/4 NW 1/4	Protection of public domestic and livestock water source/PWR 107 Elmer Asher Spring # 1		
		T11S,R26E,Sec 24,SW 1/4 NW 1/4	Protection of public domestic and livestock water source/PWR 107 Blue Basin Spring		
		T11S,R26E,Sec 35,NW 1/4 SE 1/4	Protection of public domestic and livestock water source/PWR 107 Maggie Spring		
T11S,R26E,Sec 35,SE 1/4 SW 1/4	Protection of public domestic and livestock water source/PWR 107 Corral Springs				
T11S,R27E,Sec 31,SE 1/4 SE 1/4	Protection of public domestic and livestock water source/PWR 107 Whisenhunt Spring				
T13S,R26E,Sec 21,SE1/4 NE1/4	Protection of public domestic and livestock water source/PWR 107 McNulty Basin Spring				

Serial Number	Order Number/ Date	Legal Description	Purpose/Name	Managing Agency	Segregative Effect
	EO of 4/17/1926	T12S,R26E,Sec 33,NE 1/4 SE 1/4	Protection of public domestic and livestock water source/PWR 107 Nash Reservoir Spring	BLM	Various
		T12S,R26E,Sec 34,SW 1/4 SE 1/4	Protection of public domestic and livestock water source/PWR 107 Bluebird Springs		
		T12S,R26E,Sec 4,SE 1/4 SW 1/4	Protection of public domestic and livestock water source/PWR 107 Cactus Spring		
		T12S,R26S,Sec 2,SW 1/4 NW 1/4	Protection of public domestic and livestock water source/PWR 107 Two Through Spring		
		T13S,R26E,Sec 21,SE 1/4 NW 1/4	Protection of public domestic and livestock water source/PWR 107 Battle Creek Spring #2		
		T13S,R26E,Sec 26,SW1/4 NE 1/4	Protection of public domestic and livestock water source/PWR 107 N. Munjar Spring		
		T13S,R26E,Sec 8,SW1/4 SE1/4	Protection of public domestic and livestock water source/PWR 107 Boundary Fence Spring		
		T13S,R26E,Sec 9,SW 1/4 NE 1/4	Protection of public domestic and livestock water source/PWR 107 West Fork Spring (Battle Creek)		
		T13S,R26E,Sec 9,SW 1/4 SW 1/4	Protection of public domestic and livestock water source/PWR 107 Battle Creek Spring		
		T13S,R27E,Sec 20,SW1/4 NE 1/4	Protection of public domestic and livestock water source/PWR 107 Gray Gulch Spring #3		
		T13S,R27E,Sec 31,SW 1/4 NE 1/4	Protection of public domestic and livestock water source/PWR 107 Oliver Creek Spring		
		T14S,R26E,Sec 35,NW 1/4 SE1/4	Protection of public domestic and livestock water source/PWR 107 Rockpile Spring		
		T14S, R26E, Sec13, SE1/4NW1/4	Protection of public domestic and livestock water source/PWR 107 Clark Spring #2		
		T14S, R26E, Sec13, NE1/4NW1/4	Protection of public domestic and livestock water source/PWR 107 Clark Spring #1		
		T14S,R27E,Sec 20,NE 1/4 SW 1/4	Protection of public domestic and livestock water source/PWR 107 Cow Gulch		
		T14S,R27E,Sec 20,SE 1/4 SE 1/4	Protection of public domestic and livestock water source/PWR 107 Big Pine Spring		
		T14S, R27E, Sec31, NW1/4 NW1/4	Protection of public domestic and livestock water source/PWR 107 Murderer's Creek Spring		
		T14S,R27E,Sec 30,SW 1/4 SW 1/4,	Protection of public domestic and livestock water source/PWR 107 Cow Gulch Springs		
		T14S,R27E,Sec 33,SE 1/4 SW 1/4	Protection of public domestic and livestock water source/PWR 107 Bull Spring		
		T15S,R26E,Sec 23,NE 1/4 NW 1/4	Protection of public domestic and livestock water source/PWR 107 Hairpin Curve Spring		
	T15S,R26E,Sec 22,S1/2 SE1/4 and T15S, R26E, Sec 23, SW1/4 SW1/4	Protection of public domestic and livestock water source/PWR 107 North Cougar Spring			
		Protection of Wilderness Area/Spring Basin Wilderness			
BO: Bureau Order		FERC: Federal Energy Regulatory Commission	PLO: Public Land Order	R&PP: Recreation and Public Purposes	
COE: Corps of Engineers		FO: FERC Order	PSC: Power Site Classification	SO: Secretarial Order	
DO: Director Order Engineers		FPC: Federal Power Commission	PSR: Power Site Reserve	USACE: United States Army Corps of Engineers	
EO: Executive Order		PL: Public Law	PWR: Public Water Reserve	WPD: Water Power Designation	
(If more than one withdrawal applies, utilize the most stringent one). A: Withdrawn from operation of the general land laws, the Mining Law, and the Mineral Leasing Act B: Withdrawn from operations of the General Land and Mining Laws C: Withdrawn from operation of the General Land Law D: Withdrawn from operation of the General Land Law, open to mining subject to Public Law 359 E: Withdrawn from operation of the General Land Law, withdrawn from mining except metalliferous					

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**John Day Basin
Record of Decision and Resource Management Plan**

**April
2015**