Exhibit R

Scenic Resources

Wheatridge Renewable Energy Facility East
December 2022

Prepared for
Wheatridge East Wind, LLC

Prepared by

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Acronyms and Abbreviations

ACEC	Area of Critical Environmental Concern
BLM	Bureau of Land Management
CMP	Comprehensive Management Plan
GIS	Geographic Information System
KOP	Key Observation Point
MBTH	Maximum Blade Tip Height
NTSA	National Trails System Act
NPS	National Parks Service
NWSTF	Naval Weapons Systems Training Facility
OAR	Oregon Administrative Rule
ONHT	Oregon National Historic Trail
OR-##	Oregon State Highway ##
REAMP	Real Estate Asset Management Plan
RFA	Request for Amendment
RMP	Resource Management Plan
RNA	Boardman Research Natural Area
TNC	The Nature Conservancy
USFS	U.S. Forest Service
VRM	Visual Resource Management
ZVI	Zone of Visual Influence

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1.0 Introduction

The Wheatridge Renewable Energy Facility East (Facility) is an approved, but not yet constructed, wind energy generation facility consisting of up to 66 turbines and related or supporting facilities with a peak generating capacity of up to 200 megawatts (MW), to be located in an Approved Site Boundary of approximately 4,582 acres on over 42,000 acres of leased land in Morrow and Umatilla counties, Oregon. As part of Request for Amendment (RFA) 1 to the Facility Site Certificate, Wheatridge East Wind, LLC (Certificate Holder) is proposing to expand wind power generation at the Facility to provide the opportunity for increased power capacity and availability. This includes expanding the Site Boundary and micrositing corridors, increasing the peak generating capacity by adding more and newer turbines, changing the intraconnection routes, and extending the construction date. See the RFA 1's Division 27 document (*Request for Amendment #1 for the Wheatridge Renewable Energy Facility East*) for a more detailed summary of the proposed changes.

This Exhibit R was prepared to meet the submittal requirements in Oregon Administrative Rule (OAR) 345-021-0010(1)(r). Analysis in this exhibit incorporates and/or relies on reference information, analysis, and findings found in the Application for Site Certificate, previous RFAs, and Oregon Department of Energy Final Orders to demonstrate that the Facility, as modified by RFA 1, continues to comply with applicable Site Certificate conditions and the approval standard in OAR 345-022-0080.

2.0 Analysis Area

In accordance with OAR 345-001-0010(35)(b), the Analysis Area for scenic resources is the area within and extending 10 miles from the site boundary (Figure R-1). The Amended Site Boundary is inclusive of portions of the Approved Site Boundary.

3.0 Identification of Significant or Important Scenic Resources – OAR 345-021-0010(1)(r)(A)

OAR 345-021-0010(1)(r) An analysis of potential visual impacts of the proposed facility, if any, on significant or important scenic resources within the analysis area, providing evidence to support a finding by the Council under OAR 345-022-0080, including:

(A) An inventory of scenic resources identified as significant or important in a land use management plan adopted by one or more local, tribal, state, or federal government or agency applicable to lands within the analysis area for scenic resources. The applicant must provide a list of the land management plans reviewed in developing the inventory and a copy of the relevant portion of the plans;

(B) A map or maps showing the location of the scenic resources described under paragraph (A), in relation to the site of the proposed facility;

This section inventories scenic resources identified as significant or important in local, tribal, and federal land use plans within the Analysis Area, as required to demonstrate compliance with the approval standard in OAR 345-022-0080. The Analysis Area includes parts of two Oregon counties, five Oregon municipalities, one State Natural Heritage Area, five parcels owned by the Oregon Department of State Lands (ODSL), and federal land administered by the Bureau of Land Management (BLM), National Park Service (NPS), and Department of Defense. In addition, the U.S. Forest Service (USFS) provides management guidance for a scenic byway that crosses the Analysis Area.

The Certificate Holder concludes that there are no significant or important scenic resources identified by any applicable plan within the Analysis Area. See Attachment R-1 for excerpts of the relevant plans that were reviewed for scenic resources. The following sections describe the applicable jurisdictions, their applicable land use plans, and the determination as to whether visual resources in the Analysis Area are designated as significant or important. These descriptions are summarized in Table R-1 and the locations of identified scenic resources are shown on Figure R-1.

Table R-1. Important Scenic Resources Inventory

Jurisdiction	Plan	Scenic Resources Specified in Plan (Y/N)	Important or Significant Scenic Resources Identified in Analysis Area (Y/N)	Name of Scenic Resource	Plan Location of Scenic Resources Discussed
Counties					
Morrow County	Morrow County Comprehensive Plan (Morrow County 2019)	No	No	N/A	Natural Resources Element, p. 19
Umatilla County	Umatilla County Comprehensive Plan (Umatilla County 2022)	Yes	No	N/A	Chapter 8
Cities					
City of Lexington	City of Lexington Comprehensive Plan (City of Lexington 2015)	No	No	N/A	Section 3, Goal 5
City of Heppner	City of Heppner Comprehensive Plan (City of Heppner 2015) and Code of Ordinance (City of Heppner 2022)	No	No	N/A	Code of Ordinance 10-1-5
City of Hermiston	City of Hermiston Comprehensive Plan (City of Hermiston 2021)	No	No	N/A	Chapter III
City of Stanfield	City of Stanfield Comprehensive Plan (City of Stanfield 2003) and Development Code (City of Stanfield 2017)	No	No	N/A	Goal 5, Development Code Chapters 2-3
City of Echo	City of Echo Comprehensive Plan (City of Echo 2005) and Zoning Administrative Regulations (City of Echo 2015)	No	No	N/A	Comprehensive Plan Section 7-1-5
State					

Jurisdiction	Plan	Scenic Resources Specified in Plan (Y/N)	Important or Significant Scenic Resources Identified in Analysis Area (Y/N)	Name of Scenic Resource	Plan Location of Scenic Resources Discussed
ODSL	Real Estate Asset Management Plan (ODSL 2012)	Yes	No	N/A	Chapter 2, Land Classification, Special Stewardship Lands
The Nature Conservancy – voluntarily registered State Natural Heritage Area	Oregon Natural Heritage Areas Program (2020), Oregon Parks and Recreation Department	Yes	No	N/A	Chapter 3, Natural Area Conservation (site/designation-specific)
Tribal					
None Applicable	None	N/A	N/A	N/A	N/A
Federal					
BLM, Vale District, Baker Resource Area	Baker Resource Management Plan (BLM 1989)	Yes	No	N/A	Chapter 2, Visual Resources; Management Guidance for Applicable Geographic Units; Map 5
NPS	Management and Use Plan Update, Oregon National Historic Trail and Mormon Pioneer National Historic Trail (NPS 1999)	No	No	N/A	Historic Routes and Significant Resources Chapter
Department of Defense	Integrated Natural Resource Management Plan and Integrated Cultural Resource Management Plan for Boardman Bombing Range (Naval Weapons System Training Facility) (U.S. Navy 2012a, 2012b)	No	No	N/A	N/A; scenic resources not addressed in plan

Jurisdiction	Plan	Scenic Resources Specified in Plan (Y/N)	Important or Significant Scenic Resources Identified in Analysis Area (Y/N)	Name of Scenic Resource	Plan Location of Scenic Resources Discussed
USFS/ Oregon Department of Transportation	Blue Mountain Scenic Byway Interpretive Guide (USFS 1993, 2022)	Yes	No	N/A	Section II Resource Inventory

3.1 Counties

3.1.1 Morrow County, Oregon

The Morrow County Comprehensive Plan (Morrow County 2019) was reviewed for designated scenic resources or sites. In the Natural Resources Element, under the heading "Scenic Views; Sites" is the statement, "Addressed in plan (p. 69) but none identified." No information on scenic views or sites is found in the indicated location. In the Goal 5 Resources section of the plan is the statement, "Morrow County contains a variety of landscapes, many of which may be considered to be scenic. The County has not, however, designated any sites or areas as being particularly high in scenic-resources value." Therefore, the Morrow County Comprehensive Plan does not identify any scenic resource of value for inclusion in this exhibit.

3.1.2 Umatilla County, Oregon

The Umatilla County Comprehensive Plan (Umatilla County 2022) addresses the 14 statewide planning goals adopted by the State of Oregon. Chapter 8 of the plan addresses Goal 5, which is "To conserve open space and protect natural and scenic resources." The plan states "Umatilla County has a number of outstanding scenic views and pleasant vistas" and establishes a series of policies intended to protect scenic views in the county. In general, the policies state the need to address and mitigate adverse visual effects of development, and discuss programmatic steps to address potential scenic conflicts that might be associated with proposed changes in land use. In Chapter 8, Open Space, Scenic and Historic Areas, and Natural Resources, Policy 20(e) recognizes the Wallula Gap (a prominent physiographic feature along the Columbia River) as a significant scenic resource.

Based on the content of the plan, the Certificate Holder concludes that Wallula Gap is the only scenic resource that Umatilla County identified as important or significant. Wallula Gap is located outside the Analysis Area; therefore, the Umatilla County Comprehensive Plan does not identify any important or significant scenic resources within the Analysis Area, and no such features are addressed in this exhibit.

3.2 Municipalities

3.2.1 City of Lexington

The City of Lexington Comprehensive Plan (City of Lexington 2015) establishes a series of goals and policies corresponding to the applicable statewide planning goals. The plan includes Goal 5 "to conserve open space and protect natural and scenic resources", and an objective "to identify open spaces, scenic and historical areas, and natural resources which should be preserved from urban development." Section IV states "No scenic views, wilderness areas, recreational trails or scenic waterways were identified". The plan's implementing measures related to scenic resources include the use of an Open Space zoning district; however, there are no areas in the City of Lexington to which that designation has been applied.

Based on the content of the plan, the Certificate Holder concludes that no features within the City of Lexington have been identified as important scenic resources and no such features are addressed in this exhibit.

3.2.2 City of Heppner

Heppner is a community of approximately 1,187 residents located at the intersection of OR-74 and OR-207, near the center of Morrow County (Portland State University 2022). The City of Heppner initially developed a comprehensive plan in 1980; it was updated in 2015 (City of Heppner 2015). Chapter I, Goal 4, Open Spaces, Scenic and Historical Areas and Natural Resources of the plan identifies a goal "To conserve open space and protect natural and scenic resources," with an objective to identify "open spaces, scenic and historical areas and natural resources which should be preserved from urban development" (Code of Ordinance 10-1-5: Plan Goals and Policies, City of Heppner 2022).

Based on the content of the code of ordinance, the Certificate Holder concludes that there are no specific scenic views or resources that are identified as significant or important in the City of Heppner, and no such features are addressed in this exhibit.

3.2.3 City of Hermiston

Hermiston is a community of approximately 19,696 residents located along I-84 in the northwestern corner of Umatilla County (City of Hermiston 2022a). The City of Hermiston Comprehensive Plan (City of Hermiston 2021) and supporting technical report was adopted in 1984, and the plan has been updated through amendments to the city development code (City of Hermiston 2022b).

Chapter III of the plan identifies policies for the respective topical areas. Under the heading E. Resources (Goals 5, 6, 7 and 13), the plan states Policy 7 (p. III-10) as the "City of Hermiston will protect natural resources to the maximum degree possible." The subsequent discussion of implementing actions references the Open Space designation applied to the 100-year floodplain, wetlands in the northeastern part of the city, and the Oregon State University Agricultural Experiment Station. A footnote related to Policy 7 states that "[f]or other Goal 5 resources, see Policy 8: Surface and Groundwater Resources, Policy 9: Aggregate Resources, Policy 10: Historic Resources, and Policy 16: Parks, Recreation and Open Space." Policy 16 (p. III-18) indicates that Hermiston will acquire and develop additional parks, and will preserve as city-owned, open space land that possesses recreational, scenic, and other environmental qualities or is subject to natural hazards. However, no specific scenic sites or views are identified.

Based on the content of the comprehensive plan, the Certificate Holder concludes that no features within the City of Hermiston have been identified as important scenic resources, and no such features are addressed in this exhibit.

3.2.4 City of Stanfield

Stanfield is an incorporated community with a 2020 census population of approximately 2,144 residents located adjacent to I-84 in the northwestern part of Umatilla County (Portland State University 2022). The City of Stanfield Comprehensive Plan was adopted in 1983 and updated in 2003 (City of Stanfield 2003). The technical report supporting the comprehensive plan was updated in 1984, and a zoning ordinance was adopted in the same year. The plan and technical report include 14 goals corresponding to the 14 statewide planning goals; the applicable goal is Goal 5, Natural Resources, Open Spaces, Scenic and Historic Areas (City of Stanfield 2003). Comprehensive planning guidance and zoning are integrated into the City of Stanfield development code (City of Stanfield 2017). The land use districts defined in Chapter 2 of the development code correspond to the comprehensive plan designations; they include an Open Space (OS) District, but do not include any districts oriented to scenic resources. Chapter 3 of the development code establishes design standards that include landscaping and screening provisions that relate to the aesthetic aspects of development.

Based on the content of the comprehensive plan and development code, the Certificate Holder concludes that no features within the City of Stanfield have been identified as important scenic resources, and no such features are addressed in this exhibit.

3.2.5 City of Echo

The City of Echo Comprehensive Plan (City of Echo 2005) establishes goals and policies for a series of topical areas corresponding to the statewide planning goals. Section 7-1-5 of the plan states a Goal for Open Spaces, Scenic and Historic Areas, and Natural Areas to "conserve open space and protect natural scenic, historic, and cultural resources". This is followed with a list of seven policies, none of which specify any particular scenic resource. The city's Zoning Administrative Regulations (Ordinance 350-07 and 358-10) implement the goals and objectives of the comprehensive plan. The zoning regulations do not establish any scenic resource protection requirements or designate any scenic areas.

Based on the content of the comprehensive plan and zoning code, the Certificate Holder concludes that no features within the City of Echo have been identified as important or significant scenic and no such features are addressed in this exhibit.

3.3 State

3.3.1 Oregon Department of State Lands

ODSL manages its land-based assets through the strategy set out under the 2012 Real Estate Asset Management Plan (ODSL 2012, REAMP). The REAMP classifies the agency's lands into seven categories: Forestlands, Agricultural Lands, Rangelands, Industrial/Commercial/Residential lands, Special Stewardship Lands, Waterways, and Mineral and Energy Resources. Specific scenic source areas are not identified by the REAMP; however, Special Stewardship Lands are managed to ensure

the protection of "scenic, natural resource, cultural, educational and recreation values," (ODSL 2012). No other land classification is identified as having a scenic resource purpose.

In the Analysis Area, no Special Stewardship Lands are present. The five parcels within the Analysis Area are all designated as Agricultural Lands (ODSL 2012) and are currently in irrigated agricultural use (ODSL 2021). A single parcel is surrounded by the Amended Site Boundary but not a part of the Amended Site Boundary.

Based on the information provided through the REAMP (2012), the Certificate Holder concludes that ODSL does not identify any significant or important scenic resources for inclusion in this exhibit.

3.3.2 Oregon Natural Heritage Areas Program

The Oregon Natural Heritage Areas Program was established under the Natural Heritage Act of 1979 (Oregon Revised Statutes 273.561-.591), with the first Oregon Natural Heritage Plan published in 1981. A key goal of natural areas is to protect high-quality native ecosystems and rare plant and animal species. Private individuals or organizations are able to voluntarily designate their property as a natural area, with approval by the Parks Commission. The Lindsay Prairie Preserve, owned and managed by The Nature Conservancy (TNC), was registered as part of the Oregon State Register of Natural Heritage Resources in 1988 (Oregon Natural Heritage Areas Program 2020).

The purpose of the Lindsay Prairie Preserve as one of TNC's natural areas is "to conserve the lands and waters on which all life depends" (Oregon Natural Heritage Areas Program 2020). While there are scenic areas included in the Oregon Natural Heritage Areas Program, conserving scenic values within or around the Lindsay Prairie Preserve is not an identified purpose of that site. Furthermore, the Preserve is fenced, the access gated and locked, and there are no signs, trails, or facilities of any kind. TNC reports that the Preserve receives no known public use and is only occasionally visited by TNC staff (personal communication between Kristen Gulick, Tetra Tech, and the Dalles Field Office representative, The Nature Conservancy, January 24, 2022).

Based on the information available through the Oregon Natural Heritage Areas Program (2020) and from TNC, the Certificate Holder concludes that the State of Oregon does not identify any significant or important scenic resources for inclusion in this exhibit. However, the Lindsay Prairie Preserve is considered a protected area and potential visual impacts are evaluated in Exhibit L.

3.4 Tribes

There are no tribal lands located within the Analysis Area; therefore, this exhibit does not address any tribal land management plans.

3.5 Federal

This section includes an analysis of the federal land management plans that apply to lands within the Facility's Analysis Area, as listed in Table R-1 and displayed in Figure R-1. The plans pertain to several parcels of BLM-managed lands, the Oregon Trail and its significant sites, resources within

the Boardman Bombing Range, and interpretation associated with the Blue Mountain National Scenic Byway.

3.5.1 Bureau of Land Management

There are multiple, small, scattered parcels of lands managed by the BLM located within the Analysis Area, primarily in Umatilla County. Two of these are inholdings surrounded by the Facility's Amended Site Boundary but not included in the Amended Site Boundary. A third is located approximately 2.5 miles north of the Facility; this approximately 300-acre parcel is managed as the Oregon Trail Area of Critical Environmental Concern (ACEC), also known as Echo Meadows. The ACEC is also a protected area, as analyzed in Exhibit L. The remainder of the BLM parcels were determined are also located outside of the Amended Site Boundary, five located south of I-84 and west of OR-207, and two located southeast of the Amended Site Boundary. The locations of these BLM parcels are shown on Figure R-1.

The Federal Land Policy and Management Act of 1976 requires the BLM to protect the quality of scenic values on public lands (43 United States Code 1701). The BLM manages scenic resources on the federal lands under its jurisdiction through application of the Visual Resource Management (VRM) system (BLM 2010). BLM-administered lands in Morrow, Umatilla, Union, and Baker counties are within the Baker Resource Area of the Vale District; the current Resource Management Plan (RMP) for the Baker Resource Area was adopted in 1989 (BLM 1989). The RMP assigns the lands within the Baker Resource Area to 14 geographic areas, or planning units; the ACEC is within the Oregon Trail planning unit, and the two inholdings are managed as part of the Blue Mountain planning unit.

The RMP assigns VRM classifications to all BLM lands within its scope; lands are placed within VRM Classes I, II, III, or IV depending on their existing visual quality and the management objectives relative to the amount of visual change that would be allowed to occur within those lands. All lands within the Oregon Trail planning unit, including the Oregon Trail ACEC, are assigned to VRM Class III. The specific VRM classification for the two inholdings is unclear; however, it can be confirmed that neither is assigned to VRM Class I or II[1].

The Certificate Holder understands that ODOE considers BLM-administered lands managed as VRM Class I and II to be important scenic resources, based on the level of visual resource protection afforded to those lands. Based on the assignment of the BLM-managed lands within the Analysis Area to VRM Class III or IV, the Certificate Holder concludes that there are no scenic resources identified as significant or important by the BLM's Baker RMP located within the Analysis Area, for inclusion in this exhibit.

[1] GIS data obtained from BLM does not include VRM classifications for most of the northern half of the Vale District. The two inholdings are managed as part of the Blue Mountain planning unit. The Baker Resource Area RMP indicates that there are no areas within the Blue Mountain planning unit that are assigned to VRM Class I. Map 5 of the RMP identifies "areas of high visual quality" which are assigned to VRM Class II; none of these areas coincide with the location of the two inholding parcels. Because they are definitively not assigned to VRM Class I or II, the inholding parcels are managed either as VRM Class III or IV.

3.5.2 National Park Service

The Analysis Area includes a portion of the Oregon National Historic Trail (ONHT), which received federal designation as a "historic trail" under the National Trails System Act (NTSA) in 1978. The purpose of the historic trail designation on federal lands is to protect the historic route and any associated artifacts. Specifically, the purpose is described in Section 3(a)(3) of the NTSA as follows:

> *National historic trails shall have as their purpose the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment. Only those selected land and water based components of an historic trail which are on federally owned lands and which meet the national historic trail criteria established in this chapter are included as Federal protection components of a national historic trail….*(p. 209, NPS 1999)

Thus, the NTSA and its related protections apply only to where the ONHT is on federal lands. In addition, the focus of the NTSA is on historic preservation, not the management of scenic resources.

The NTSA indicates that specific locations along a historic trail can be identified as "high-potential" sites or trail segments. High-potential sites and trail segments are described as those locations that provide an opportunity to interpret the historic significance of the trail during its major use. As identified in the *Comprehensive Management and Use Plan – Oregon National Historic Trail and Mormon Pioneer National Historic Trail* (CMP, NPS 1999) the portion of the ONHT within the Analysis Area includes two high-potential sites, Echo Meadows and the Well Spring Interpretive Site, as well as a portion of the 12-mile-long, high-potential trail segment that passes through the southern end of the Boardman Bombing Range[2]. Echo Meadows is managed by the BLM as the Oregon Trail ACEC. The Well Spring Interpretive Site is located along the southern boundary of the Boardman Bombing Range.

The CMP was developed to comply with the requirements of the NSTA and to manage preservation of the ONHT. The CMP explains that the purposes of the ONHT are "to identify, preserve, and interpret sites, route, and history of the Oregon Trail" and "to commemorate the westward movement of emigrants to the Oregon country as an important chapter of our national heritage". Thus, the ONHT is managed for historical significance and not primarily as a scenic resource. The CMP's focus on the historic significance of the ONHT and not management of scenic resources is consistent with Energy Facility Siting Council findings in Section IV.3(d) of the Final Order on the Shepherds Flat Wind Farm, dated July 25, 2008 (ODOE 2008). The scenic value connected with the ONHT is focused on the view of visible trail remnants and ruts, along with the immediate surroundings. Therefore, the high-potential sites of the ONHT identified in the CMP and located in the Analysis Area are significant or important historic resources, but are not specifically identified as scenic resources (NPS 1999).

Although the ONHT and the two high-potential sites are important historic resources, they are neither considered nor managed as significant or important scenic resources. However, the

[2] The U.S. Navy recently renamed this installation as the Naval Weapons System Training Facility (NWSTF), Boardman. In recognition of conventional usage in the local area, this document employs the original Boardman Bombing Range term.

Certificate Holder provides an analysis below to demonstrate that the Facility will have limited impacts on the views from these locations. They are also further evaluated in Exhibit T as important recreational resources.

3.5.3 Department of Defense

Literature search activities conducted for the Facility's scenic resource assessment indicate the U.S. Navy has not prepared an overall land or resource management plan for the Naval Weapons Systems Training Facility (NWSTF) Boardman (formerly the Boardman Bombing Range). The Navy has developed an Integrated Natural Resources Management Plan for NWSTF Boardman (U.S. Navy 2012a, U.S. Navy 2012b). This plan addresses wildlife and plant species and their habitats but does not address scenery or other non-ecological natural resources. Similarly, the Navy has also developed an Integrated Cultural Resources Management Plan for the NWSTF Boardman (U.S. Navy 2012a, U.S. Navy 2012b). This plan addresses historic and archaeological resources; however, it does not address scenery or other non-cultural aspects of the human environment.

The Boardman Research Natural Area (RNA) is located entirely within NWSTF Boardman, and thus is not accessible to the public. Similarly, the adjacent Boardman/Willow Creek RNA is also not accessible to the public. It was established in September 1978 as part of the federal system of RNAs and falls under Navy administration (Mayfield and Kjelmyr 1984). The site is protected for preservation of native vegetation and wildlife and is visited only occasionally by The Nature Conservancy staff doing monitoring or maintenance activities (personal communication between Kristen Gulick, Tetra Tech and Kelly Wallis, The Nature Conservancy, July 18, 2022).

Based on the available documents for NWSTF Boardman and Boardman RNA, the Applicant concludes that the Navy does not identify any scenic resources as significant or important for inclusion in this exhibit.

3.5.4 U.S. Forest Service

Although it is a designated state scenic byway, the only management plan for this byway is the Blue Mountain State Scenic Byway Management Plan, prepared by the USFS (USFS 1993, USFS 2022) Umatilla National Forest (a significant portion of the route is along USFS roads; the portion in closest proximity to the Facility and within the Analysis Area is a segment of OR-74, located 5 miles southwest of the Facility). This management plan focuses on means to enhance wayfinding and visitor experience in the many towns along the tour route. It is not a land management plan, a transportation plan or a highway management plan, but is instead a plan for enhancing tourism. The management plan focuses largely on the towns, views, and historic sites located in the Blue Mountains, with little discussion of the portion of the route in the Columbia Plateau. In the vicinity of the Facility, the only scenic features noted in the management plan are the lava cliffs and outcrops, and no specific locations are identified. The plan does not grant or imply authority for land management outside of the Umatilla National Forest, which is outside of the Analysis Area.

In the area where the Facility would be near to, or visible from, OR-74, no specific scenic resources are identified. Therefore, this management plan does not identify important or significant scenic resources for the purposes of this analysis for inclusion in this exhibit.

Although not included in the scenic resources analysis of this exhibit, impacts to the Blue Mountain Scenic Byway are presented in Exhibit T.

4.0 Visual Resource Assessment – OAR 345-021-0010(1)(r)(C)(D)(E)

(C) A description of the methodology the applicant used to identify and assess visual impacts to the scenic resources identified in paragraph (A);

(D) Identification of potential visual impacts to the scenic resources identified in paragraph (A), including, but not limited to:

(i) Loss of vegetation or alteration of the landscape as a result of construction or operation;

(ii) Visual impacts of facility structures or plumes, including, but not limited to changes in landscape character or quality; and

(iii) Loss of visibility due to air emissions or other pollution resulting from the construction or operation of the proposed facility;

(E) An assessment of the significance of the visual impacts described under paragraph (D);

Although it has been determined that applicable land use plans do not identify significant or important scenic resources within the Analysis Area, the Certificate Holder acknowledges that there may be public concern over visual aspects of the Facility. To address that concern, the following section provides a review of existing visual resource conditions in the area surrounding the Facility and the potential changes to those conditions with the Facility as modified by RFA 1. The analysis methodology used for this exhibit builds on that used by the Council as the basis for its findings in the Final Order[3]; the review uses a series of seven Key Observation Points (KOP; see methods outlined in Section 4.2 below). When the Facility is visible from a KOP, visual simulations are used to demonstrate the visual effects of the Facility.

As wind turbines are the dominant element of a wind project, wind turbines are the focus of this exhibit. Ancillary Facility infrastructure such as the Intraconnection Line and substations are features that are not, by themselves, extraordinary features in a landscape and do not present the same level of visual impact as a wind turbine. The visibility analysis in this exhibit is primarily an analysis of wind turbine visibility and impact, unless otherwise noted.

[3] Final Order on Application for the Wheatridge Wind Energy Facility (April 2017), p. 100-102

4.1 Visual Assessment Overview

The visual assessment began with a zone of visual influence (ZVI) analysis, using ESRI ArcGIS software to identify the areas from which the proposed Facility turbines might be visible, as further described in Section 4.2.2. The ZVI analysis was used in conjunction with the information in the applicable land management plans, public comments from the Final Order[4], and consultation with local officials to choose a series of seven KOPs, which represent potentially visually sensitive viewing locations in the Analysis Area. In addition to KOPs, an assessment of visibility from several nearby cities is also provided. Figure R-2 shows the location of KOPs and nearby cities. Figure R-1 show the results of the visibility analysis for the Facility turbine layout.

The visual effects of the Facility at each KOP are described in Section 4.3 and are supported by visual simulations from the KOPs. Section 4.2 describes the simulation methodology; the simulations are provided as Figures R-3 through R-9.

4.2 Methodology

4.2.1 Identify KOPs

KOPs are viewing locations in the vicinity of the Facility that are considered representative of visually sensitive areas from which viewers may be affected by Facility-related changes in the landscape setting. Many candidate locations for KOPs were identified through review of federal, state, and local land use and resource plans; land use data available in Geographic Information Systems (GIS) format; protected areas identified by the State of Oregon; the Notice of Intent process; and in consultation with federal, state, and county agencies and organizations. Potential viewpoints were chosen based on visibility, sensitivity or protection of resource, and number of viewers (i.e., where there is a high concentration of potential sensitive viewers). Seven KOPs were chosen for the visual impact analysis and simulation; these are listed and described in Table R-2. The locations of KOPs are shown on Figure R-2.

Table R-2. KOP Descriptions

KOP No.	KOP Name	Location Description	Viewers Represented
1	Oregon Trail Well Spring Interpretive Site	On Immigrant Lane adjacent to south end of Boardman Bombing Range. Site associated with Oregon Trail.	Recreational/ Historic
2	Bombing Range Road	On OR-205, just north of intersection with Bombing Range Road and Strawberry Lane.	Local Residents, Highway Travelers
3	Near Oregon Trail ACEC/ Echo Meadows	On Oregon Trail Road (OR-320) just south of Oregon Trail ACEC.	Local Residents, Recreational/ Historic

[4] Final Order on Application for the Wheatridge Wind Energy Facility (April 2017), p. 100-102

KOP No.	KOP Name	Location Description	Viewers Represented
4	Pine City	Just north of intersection of Little Butter Creek Road and Big Butter Creek Lane.	Local Residents, Roadway Travelers
5	City of Echo	On South Thielsen Street, at the southern edge of the City of Echo.	Local Residents, Roadway Travelers
6	Heppner Highway	On Huges-Hirl Road, just north of the intersection with Heppner Highway (OR-74).	Highway Travelers
7	Willow Creek Terrace	In a residential area on high ground in south end of Heppner on Willow Creek Road.	Local Residents

4.2.2 Zone of Visual Influence Analysis

A ZVI analysis, also known as a visibility or viewshed analysis, was performed using GIS software and a bare-earth 10-meter digital elevation model to identify those areas from which the Facility's turbines would likely be visible, and the amount of the Facility potentially visible. Due to the siting of turbines on ridges to maximize the wind resource, the turbines are generally the most dominant visible feature compared to other facilities. To assess the potential visibility of the turbines, the ZVI analysis was performed for the Facility turbine layout (Figure R-1) assuming 110 percent maximum blade tip height (MBTH). This resulted in an assumed turbine MBTH of 167.3 meters.

It should be noted that this bare-earth modeling approach (based only on the effects of terrain on visibility) results in a highly conservative assessment of potential visibility for several reasons. First, a bare-earth analysis does not take into account the effects of vegetation or buildings, which will in practice block or screen views in some places. Second, by using a MBTH that is 10 percent taller than the turbine being analyzed, the ZVI analysis indicates potential visibility beyond what would actually occur. In addition, in some areas where the analysis indicates Facility structures would be visible, the only visible components might be the tips of the turbine blades at MBTH, which would likely be noticeable only at relatively close viewing distances. Finally, the model does not account for distance, lighting, weather, and atmospheric attenuation factors that diminish visibility under actual field conditions.

Figure R-1 shows the areas from which the turbines would likely be visible; the number of turbines or towers potentially visible is indicated by color-coding. Table R-1 presents the results of the visibility analysis for nearby cities.

Table R-3. Visibility Analysis Results for Cities Near the Facility

Jurisdiction	Assessment Results
Lexington	No visibility
Heppner	No visibility
Hermiston	Low potential visibility at a distance of 10 miles
Stanfield	Low to moderate potential visibility at a distance of at least 8 miles

Jurisdiction	Assessment Results
Echo	Low to moderate potential visibility at a distance of at least 7 miles

4.2.3 Depict the Visual Appearance of the Proposed Facility

In order to demonstrate how the constructed Facility turbines would look in the landscape to future viewers, photographic simulations were made for the seven KOPs. The visual simulations for the KOPs are provided as Figures R-3 through R-9. The constructed Facility turbines will not be visible from KOPS 5 and 7, (Figures R-7 and R-9).

The photographic simulations[5] were created using GIS software, three-dimensional modeling software, and digital photographic editing software. The software used to create the visual simulations includes:

- ESRI ArcMap – Used for Facility data mapping;
- Garmin GPS – Used for photo and modeling location accuracy;
- AutoDesk 3D Studio Max 2010 – Used for three-dimensional modeling, texturing, lighting, and rendering;
- PTGui – Used for digital photo panorama creation; and
- Adobe Photoshop CS4 – Used for photo editing and compositing.

The visual simulations were created representing the 106 GE 2.82-127 turbine layout. By using the actual turbine heights, this method provides an accurate assessment of the number of turbines visible, unlike the initial visibility assessment that used a maximum turbine height 10 percent taller than the tallest turbines under consideration.

4.3 Visual Assessment Results

Descriptions of the visual effects of the Facility at each KOP are provided below.

[5] To create the photo simulations, the location data captured by the GPS device are transferred to ArcMap, where they are combined with GIS data of the preliminary layouts of Facility turbines and facilities. A map showing this data was then exported at true scale and imported into 3D Studio Max. Using this scaled map as a base, a three-dimensional model of the Facility area was created to scale. Three-dimensional models of the proposed Facility turbines, previously modeled to scale in 3D Studio Max, were then added in their appropriate locations and elevations. The views from the existing photographs were then stitched together to create a panorama image and matched in the three-dimensional model using virtual cameras with the same focal length and field of view as the Nikon D90. After date and time-specific lighting was added to the three-dimensional model, renderings from the virtual cameras were created. These renderings were blended into the existing conditions photographs in Adobe Photoshop software. This process of creating a three-dimensional model at true scale and rendering images using the same specifications used by the camera ensures that the spatial relationships of the landscape, Facility features, and viewer perspective are accurate and match the existing site photographs.

4.3.1 KOP 1: Oregon Trail Well Spring Interpretive Site

KOP 1 is located at the Oregon Trail Well Spring Interpretive Site, which is located on Immigrant Lane adjacent to the southern boundary of the Boardman Bombing Range. This site was chosen for its importance as a historic site along the Oregon Trail. The information kiosk is located on the south side of the road and seems to be oriented southward; however, most of the trail-related interest (e.g., visible wagon ruts) is located to the north within the Bombing Range, in an area not accessible to the public.

Based on the visibility analysis, there would be limited visibility of some Facility turbines from a background distance of approximately 13 miles. As shown in the visual simulation for KOP 1 (Figure R-3), the tops of a couple of Facility turbines would be barely visible to the southeast from this location. While the rotating motion of the Facility turbine blades and the skylining effect (turbines seen silhouetted against the sky) could draw viewers' attention, the viewers' attention would more likely focus on the existing turbines visible in the middleground.

The site is managed to maintain the history and historic artifacts associated with the Oregon Trail, rather than for its scenic qualities; there is no management direction for preservation of views or scenic quality related to the lands on which the KOP or the Facility are located. Although the relatively undeveloped viewshed is said to provide an experience that enables visitors to relate to the emigrants, the viewshed is no longer in the nearly pristine condition that it was during the emigrants' time. The road is evident, much of the landscape is farmed and fenced, little of the tallgrass native prairie remains, and the turbines of existing wind facilities are visible to the east and west. The remaining evidence of the Oregon Trail at the Well Spring site would not be disturbed by the Facility, allowing visitors to continue their enjoyment of the site's history.

4.3.2 KOP 2: Bombing Range Road

KOP 2 is located on OR-205 just north of its intersection with Bombing Range Road and Strawberry Lane. This site represents views for local residents, as well as travelers along Bombing Range Road and OR-207. KOP 2 would provide views of the Facility, with the nearest Facility turbine approximately 6 miles to the southeast (Figure R-4). As shown in the visual simulation for KOP 2, several Facility turbines would be barely visible to the southeast from this location. While the rotating motion of the Facility turbine blades and the skylining effect could draw viewers' attention, the viewers' attention would more likely focus on the existing turbines visible in the middleground.

Although the turbines would be barely visible for both area residents and highway travelers, there is no management direction for preservation of views or scenic quality related to the private lands on which the KOP and Facility are located, or to the corridors for the state highway and county roads.

4.3.3 KOP 3: Oregon Trail ACEC

KOP 3 is located on Oregon Trail Road (also known as the Lexington-Echo Highway or OR-320), 0.5 miles south of an isolated parcel of BLM land within the Oregon Trail ACEC. This site was chosen to

represent views from the Echo Meadows interpretive site along the Oregon Trail. As shown in the visual simulation for this site (Figure R-5), viewers at KOP 3 would have low visibility of Facility turbines, to the south at middleground and background distances of 4.2 to over 6 miles from the KOP. Some of the turbines would be skylined, but with the long viewing distance the turbines would appear smaller than the existing man-made features evident in the view.

Despite the site's historic interest and potential use as a tourism resource, and its management as an ACEC, it is not identified or managed as an important scenic resource (i.e., assigned to VRM Class I or II). Regardless of its VRM classification, the BLM's VRM system does not apply outside the boundaries of the ACEC, thus there is no management direction for preservation of views or scenic quality related to the lands on which the Facility is located.

4.3.4 KOP 4: Pine City

KOP 4 is located on Big Butter Creek Lane just north of its intersection with Little Butter Creek Road. This KOP was chosen to represent views for local residents, as well as travelers along the two roadways. There would be low visibility of the Facility at this location, primarily because terrain would block views of most of the Facility turbines. The visual simulation (Figure R-6) demonstrates that only a few turbines would potentially be visible, at a distance of approximately 3.8 miles for the closest turbine and it is unlikely that they would draw the attention of a casual observer.

As with the other KOPs, there is no management direction for preservation of views or scenic quality related to the private lands on which either the KOP or the Facility is located.

4.3.5 KOP 5: City of Echo

KOP 5 is located on South Thielsen Street at the southern edge of the City of Echo. This KOP was chosen to represent views for local residents, as well as travelers along South Thielsen Street. There would be no visibility of the Facility at this location, as terrain and vegetation would block views of the Facility. The visual simulation (Figure R-7) demonstrates the lack of visibility of the Facility. As with the other KOPs, there is no management direction for preservation of views or scenic quality related to the private lands on which either the KOP or the Facility is located.

4.3.6 KOP 6: Heppner Highway

KOP 6 is located on Highway 74 (Heppner Highway or Blue Mountain Scenic Byway) near the intersection with Huges-Hirl Road. This KOP was chosen to represent views for travelers along the two roadways. There would be low visibility of the Facility at this location, primarily because terrain would block views of most of the Facility turbines. The visual simulation (Figure R-8) demonstrates that the turbines would be barely visible, at a distance of approximately 3.8 miles for the closest turbine and it is unlikely that they would draw the attention of a casual observer.

The Blue Mountain Scenic Byway Interpretive Management Plan does not identify any viewpoints within the Facility Analysis Area. In the area where the Facility would be near to, or visible from,

OR-74, no specific scenic resources are identified. Therefore, this plan does not identify important or significant scenic resources for the purposes of this analysis.

4.3.7 KOP 7: Willow Creek Terrace

KOP 7 is located in a residential area on high ground in south end of Heppner, on Willow Creek Road. This KOP was chosen to represent views for local residents, as well as travelers along Willow Creek Road. There would be no visibility of the Facility at this location, as terrain would block views of the Facility. The visual simulation (Figure R-9) demonstrates the lack of visibility of the Facility. As with the other KOPs, there is no management direction for preservation of views or scenic quality related to the private lands on which either the KOP or the Facility is located.

5.0 Avoidance, Reduction, and Mitigation – OAR 345-021-0010(1)(r)(F)

> *(F) A description of the measures the applicant proposes to avoid, reduce or otherwise mitigate any significant adverse impacts; and*

The following section discusses anticipated Facility design, engineering, and related measures to avoid, reduce, or otherwise mitigate adverse visual impacts from the Facility as described above.

5.1 Facility Planning and Design Measures

To avoid and minimize visual impacts, the Certificate Holder has sited the Facility in a remote area of Morrow and Umatilla Counties and designed the turbine array such that visibility will be minimal from the nearest towns. Turbines will be appropriately setback from project boundaries and surrounding land uses and rights-of-way of county roads, state and interstate highways (Conditions GEN-LU-01 and GEN-LU-06). Turbines will be painted with a grey, white, or off-white, low-reflectivity coating to minimize reflection and contrast with the sky; this reduces the visual impact of skylining as well as makes the turbines highly visible to daytime pilots. Similarly, the substations and the battery energy storage system will be designed/painted to be generally consistent with the surrounding landscape (Conditions GEN-LU-05, GEN-LU-07, and GEN-SR-02). Support towers for the Intraconnection Lines will be either wood, which will largely blend with the surroundings, or steel, which will have a low- reflectivity coating. Electrical collector lines will be placed underground. Lighting on the Facility will be minimal. Turbine exterior lighting, as required by the FAA, will consist of red flashing lights placed at the end of turbine strings and approximately every 0.5 miles within the Facility. Outdoor lighting at the Facility substations and battery energy storage system and the shared/existing operations and maintenance building will be kept to a minimum through the use of motion sensors and switches to reduce lighting to a minimum required for safety when not in use, and lighting will be directed downward and inward to prevent off-site glare (Condition GEN-SR-01).

Additional mitigation measures may include refinements to Facility siting during final design, particularly routing of access roads to reduce environmental and visual impacts.

5.2 Landscape Treatment Measures

Landscape treatment measures that are considered to reduce the potential visual impacts of the turbines and associated Intraconnection Line typically involve construction or post-construction actions that can help to screen facilities from view or soften their appearance. These measures can include vegetation clearing practices used in construction, landscape plantings in specific locations following construction, and practices used in long-term operation and maintenance of the wind energy facilities (Condition GEN-GS-07 and GEN-SR-02).

Options for the visual mitigation of wind turbine and Intraconnection Line tower construction are limited due to the height of the turbines and safety requirements that necessitate removal of vegetation. Notwithstanding such constraints, the Certificate Holder has adopted or will consider a number of landscaping or vegetation management measures that have been identified as potential means to reduce visual impacts from the Facility. Similar to design measures, some landscape treatment measures may be specific to a visual concern for a certain portion of the Facility area, while others will be applied on a Facility-wide basis. Landscape treatment measures that have been suggested and could be incorporated into the Facility are summarized as follows:

- The Certificate Holder will develop a Revegetation Plan (see Exhibit P for vegetation management measures for the rehabilitation of impacts related to vegetation clearing (Condition GEN-GS-07 and GEN-SR-02)). Among other provisions in the plan, vegetation clearing and ground disturbance will be limited to the area necessary to safely and efficiently install the Facility's infrastructure (Condition GEN-PS-04).
- Survey crews will remove all flagging from the construction area following construction (Condition CON-HC-01).
- Access roads and other areas of ground disturbance will be watered during construction, as needed, to avoid the generation of airborne dust (Condition GEN-SR-02).
- Prior to facility retirement, minimum restoration activities will take place including dismantling of facility infrastructure and revegetation of disturbed areas (Condition GEN-LU-06).

6.0 Monitoring – OAR 345-021-0010(1)(r)(G)

(G) The applicant's proposed monitoring program, if any, for impacts to scenic resources.

Monitoring for visual impacts is not proposed. Unlike some other types of impacts, such as potential impacts to biological resources, visual impacts typically do not change over time. Therefore, monitoring for visual impact would not provide meaningful information.

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Figures

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Wheatridge Renewable Energy Facility East

Figure R-1
Analysis and Viewshed

MORROW AND UMATILLA COUNTIES, OR

- Amended Site Boundary
- Analysis Area (10-mile Buffer)
- Turbine
- County Boundary
- State Boundary
- City/Town
- Interstate Highway
- US Highway
- State Highway

Viewshed

Number of Turbines Visible*

- 0-20 (Minimal)
- 21-50 (Low)
- 50-113 (Moderate)

*Potential turbine visibility calculated using a 10 meter bare-earth digital elevation model with turbine heights of 499 feet (152.09 meters) representing 110% Maximum Blade Tip Height and a viewing height of 6 feet (1.8 meters).

- National Register Historic Place
- Blue Mountain National Scenic Byway
- Oregon Trail
- BLM Research Natural Areas
- Boardman Bombing Range
- State Natural Heritage Area
- Bureau of Land Managment (BLM)
- State Lands

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NEXTera ENERGY RESOURCES

Reference Map

Alderdale
Boardman
Hermiston
Stanfield
Echo
Echo Meadows
Nolin
Rieth
Pilot Rock
Cecil
Ione
Lexington
Heppner
Boardman/Willow Creek Research Natural Area
Boardman Research Natural Area
Well Springs Interpretive Site
Umatilla Ordnance Depot
FINLEY BUTTES
SOCIAL RIDGE
Gilliam County
Morrow County
Umatilla County
OREGON
14
74
84
30
82
37
320
207
206
395

1:270,000 WGS 1984 UTM Zone 11N

0 2.5 5 10 15 20 Miles

NOT FOR CONSTRUCTION

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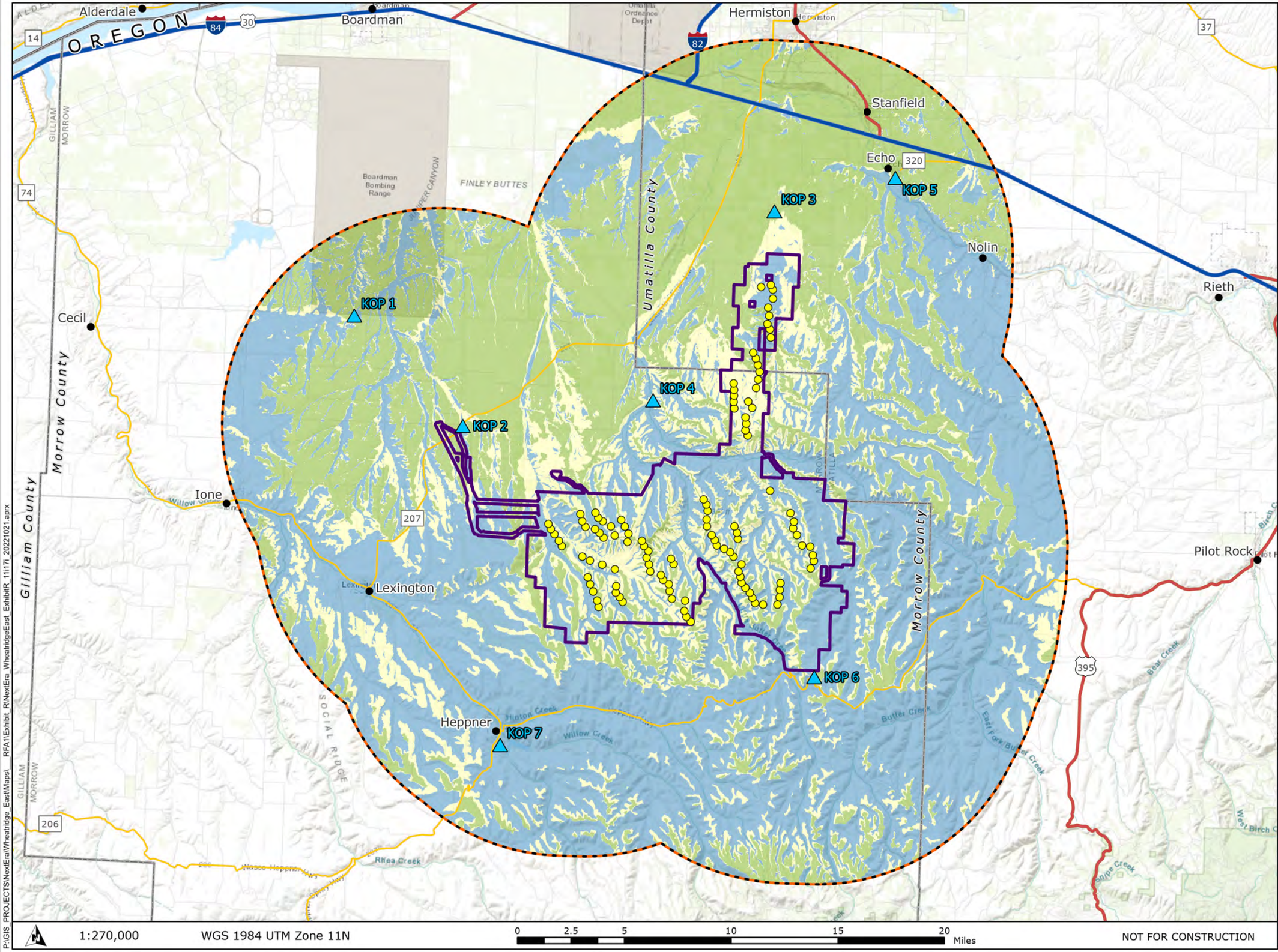
Wheatridge Renewable Energy Facility East

Figure R-2
KOP Locations

MORROW AND UMATILLA COUNTIES, OR



Amended Site Boundary
Analysis Area (10-mile Buffer)
Turbine
KOP Location
County Boundary
State Boundary
City/Town
Interstate Highway
US Highway
State Highway

Viewshed

Number of Turbines Visible*
- 0-20 (Minimal)
- 21-50 (Low)
- 50-113 (Moderate)

*Potential turbine visibility calculated using a 10 meter bare-earth digital elevation model with turbine heights of 499 feet (152.09 meters) representing 110% Maximum Blade Tip Height and a viewing height of 6 feet (1.8 meters).

TETRA TECH

NEXTera ENERGY RESOURCES

Reference Map

1:270,000

WGS 1984 UTM Zone 11N

0 2.5 5 10 15 20 Miles

NOT FOR CONSTRUCTION

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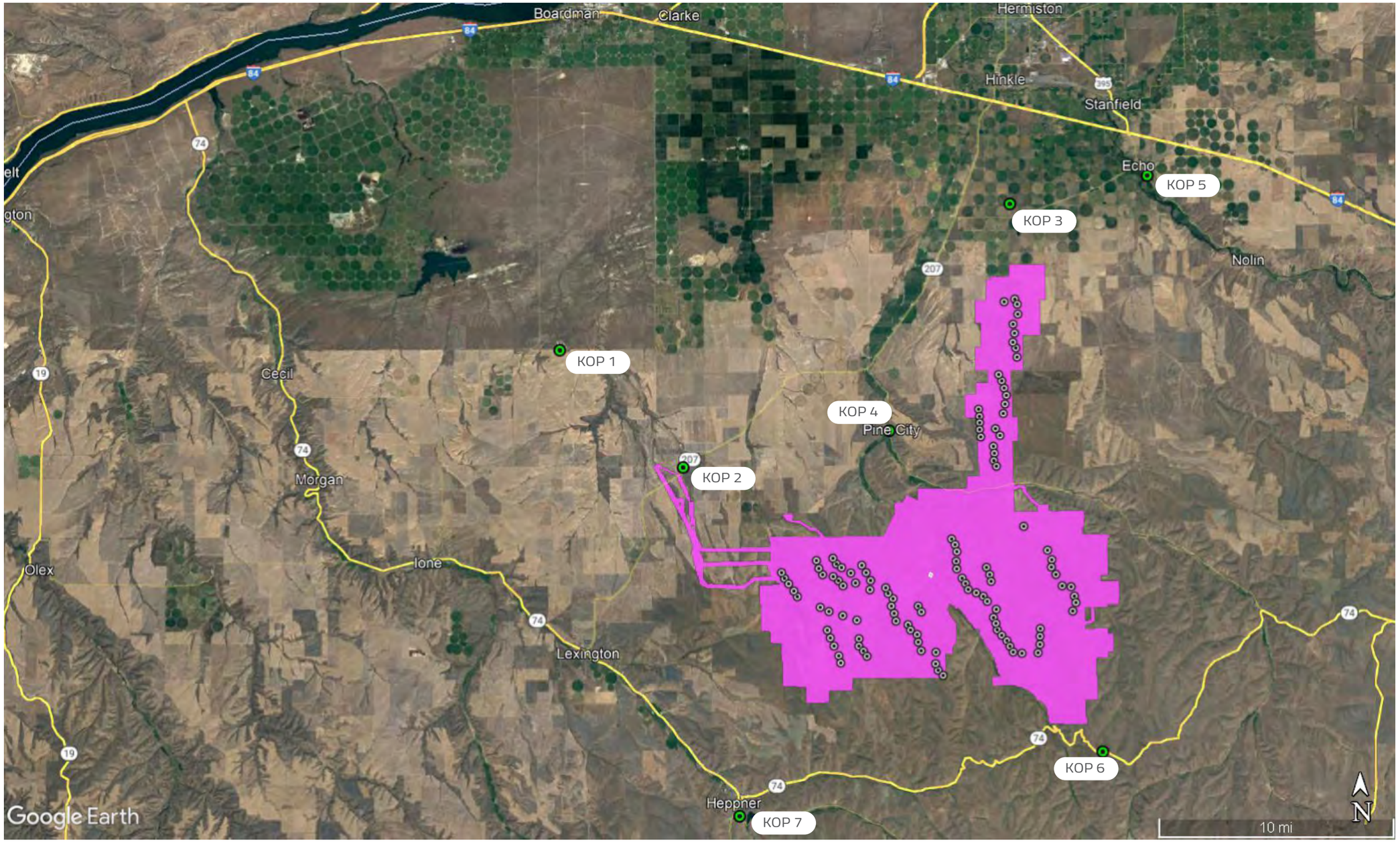

WHEATRIDGE EAST WIND ENERGY

Morrow County, OR

Figure R-2
KOP Locations

Key Observation Point (KOP) Locations

- KOP Location
- Proposed Turbine Location
- Site Area

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Preliminary visualizations are for reference only; Not for construction

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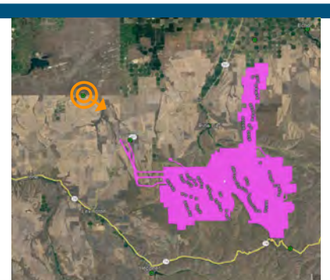
EXISTING CONDITIONS

SIMULATED CONDITIONS

WHEATRIDGE EAST WIND ENERGY

Morrow County, OR

Figure R-3
Visual Simulation from KOP 1



Photograph Information

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Date of photograph:	8/29/2022	Longitude:	-119.707218°
Weather condition:	Partly Cloudy	Distance to Project:	13.3 mi
Viewing direction:	Southeast		

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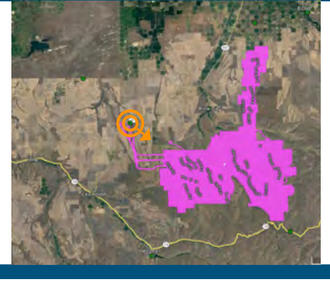
EXISTING CONDITIONS

SIMULATED CONDITIONS

WHEATRIDGE EAST WIND ENERGY

Morrow County, OR

Figure R-4
Visual Simulation from KOP 2



Photograph Information

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Date of photograph:	8/29/2022	Longitude:	-119.599174°
Weather condition:	Partly Cloudy	Distance to Project:	6.1 mi
Viewing direction:	Southeast		

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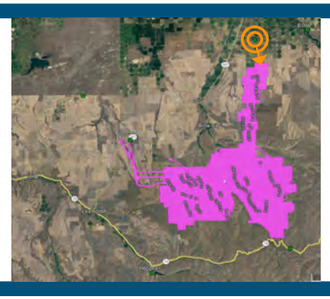
SIMULATED CONDITIONS

WHEATRIDGE EAST WIND ENERGY

Morrow County, OR

Figure R-5
Visual Simulation from KOP 3



Photograph Information

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Viewing direction:	Southeast		

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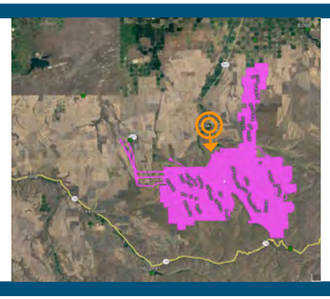
EXISTING CONDITIONS

SIMULATED CONDITIONS

WHEATRIDGE EAST WIND ENERGY

Morrow County, OR

Figure R-6
Visual Simulation from KOP 4



Photograph Information

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Date of photograph:	8/29/2022
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Latitude:	45.581258°
Longitude:	-119.417648°
Distance to Project:	5.2 mi

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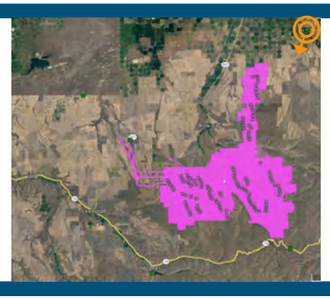
EXISTING CONDITIONS

SIMULATED CONDITIONS

WHEATRIDGE EAST WIND ENERGY

Morrow County, OR

Figure R-7
Visual Simulation from KOP 5



Photograph Information

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Date of photograph:	8/29/2022
Weather condition:	Partly Cloudy
Viewing direction:	Southwest

Latitude:	45.736564°
Longitude:	-119.187917°
Distance to Project:	7.7 mi

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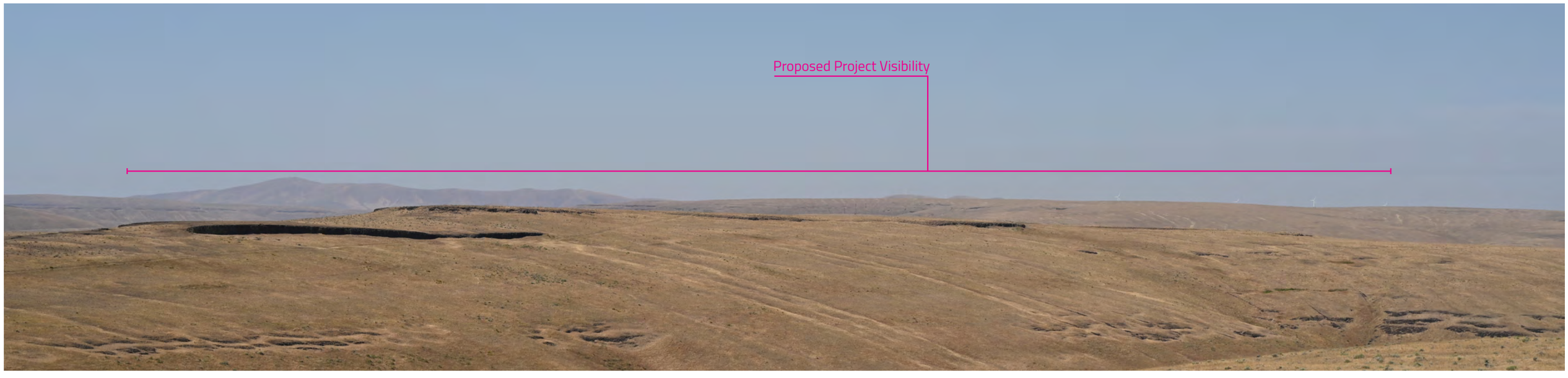
EXISTING CONDITIONS

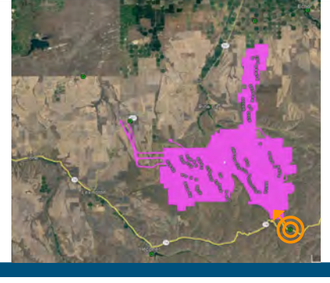


SIMULATED CONDITIONS

WHEATRIDGE EAST WIND ENERGY

Morrow County, OR

Figure R-8
Visual Simulation from KOP 6



Photograph Information

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Date of photograph:	8/29/2022	Longitude:	-119.235650°
Weather condition:	Clear	Distance to Project:	4.9 mi
Viewing direction:	Northwest		

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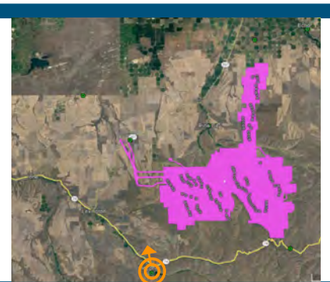
EXISTING CONDITIONS

SIMULATED CONDITIONS

WHEATRIDGE EAST WIND ENERGY

Morrow County, OR

Figure R-9
Visual Simulation from KOP 7



Photograph Information

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Date of photograph:	8/29/2022	Longitude:	-119.551940°
Weather condition:	Clear	Distance to Project:	7.7 mi
Viewing direction:	Northwest		

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Attachment R-1. Scenic Resource Plan Excerpts

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Morrow County

Gene Wood Creek	Private ownership. Natural Grassland. Additional information needed.	1B
Houselog Creek	Private ownership. Natural Grassland. Additional information needed.	ZZ
Rhea Creek	Sensitive stream. Western brook lamprey. Additional information needed.	1B
Scenic Views; 32 sites	Addressed in plan (p. 69) but none identified.	1B
Water Areas, 32 Watershed, Wetlands and Groundwater	Area specific (groundwater). Applicable policies: 3A, B, C (p. 81); E (p. 82). Critical groundwater area identified (Butter Creek area on Water Resource map).	3C/2A
Wilderness Areas	County does not contain wilderness areas.	N/A
Historic Sites, 36 Structures & Objectives		
Archeological	Information available for some sites (Map); other sites exist but not recorded. Applicable policies: 7A, B, C, D (p. 83); 7E F (p. 84).	3A;1B
Historical Oregon Trail	Wells spring segment. Public land. National Register. Bombing Range (Note discussion of Boardman Bombing Range).	2A
Willow Creek Campground	Private property. EFU zone.	2A
Cayuse Battlefield	Fenced monument and plaque. Public land.	2A
Willow Creek Bridge	Co. Rd. 546. Eligible for National Register (5-2-85).	3A
Rhea Creek Bridge	Co. Rd. 705. Eligible for National Register (5-2-85). Applicable Historic Resource policies: 1A, B, E (p. 79); 11 (p. 80); 7A, F (pp. 83-84).	3A
Emigrant Graveyard	Protected within Boardman Bombing Range.	2A
Stage Station Ruin	Range (Public land).	

Boardman Bombing Range - 2A

References: County resource maps.

Location; Quality/Quantity: The 73 square mile Boardman Bombing Range is unique in several respects: (1) The range contains relict grassland communities (i.e., native grasses undisturbed by agricultural practices); (2) The range contains the only known colony of Washington Ground Squirrels in Oregon; and (3) The range contains a portion of the Oregon Trail and an historic cemetery. The US Navy administers the range; part is used for bombing practice, part leased for grazing and part (3 separated parcels; A, B and C) managed as a Natural Research Area (NRA).

Goal 5 Designation: The Boardman Bombing Range is administered by the federal government. It has been accorded a 2A designation (no conflicting use).

Federal/State Wildlife Areas - 2A

References: Plan, p. 76; Map of Wildlife Resources; Map of Identified Natural Areas (The Nature Conservancy); Morrow County Natural Resources (The Nature Conservancy). Applicable plan policies: (General Policies) pp. 79-80; (Fish and Wildlife) pp. 82-83.

Location; Quality/Quantity: There are three protected wildlife areas in Morrow County: Umatilla National Wildlife Refuge, Coyote Springs WMA and Irrigon WMA. Coyote Springs and Irrigon wildlife management areas are owned by the federal government but leased to the Oregon State Department of Fish and Wildlife. All three areas provide a habitat for waterfowl. In addition, the Umatilla National Wildlife Refuge contains a Great Blue Heron rookery and a variety of raptors, including bald and golden eagles.

Goal 5 Designation: The three wildlife areas are administered by federal or state government. They have been accorded a 2A designation (no conflicting use).

Scenic Views and Sites - 1B: Morrow County contains a variety of landscapes, many of which may be considered to be scenic. The County has not, however, designated any sites or areas as being particularly high in scenic-resource value.

Water Resources (General)

Morrow County's water resources include groundwater (3C), streams (3C), and ponds (2A). These resources are utilized for domestic, industrial, and agricultural purposes. In addition, streams and ponds are fish and wildlife habitats. Water requirements often result in conflicts. Problems which must be addressed by governing bodies include quality and quantity. Efforts to resolve or alleviate the problems are usually approached in the form of a project. Two projects would enhance the county's water resources: Snipe Creek and Stanfield-Westland.

The Snipe Creek and Stanfield-Westland projects are proposals to augment water resources in specific areas of Morrow and Umatilla counties. The Snipe Creek project would transmit water from John Day basin streams to the Butter Creek critical groundwater area. Stanfield-Westland is comprised of several projects designed to replenish water now

Umatilla County

Chapter 8. OPEN SPACE, SCENIC AND HISTORIC AREAS, AND NATURAL RESOURCES

This section includes those areas that, if managed wisely, will protect, conserve, and enhance the natural and cultural elements of the county.

Land Needed or Desirable for Open Space
Umatilla County has considerable amounts of open space. In fact, of its 2.06 million acres of land, less than five percent is urbanized. Pasture, range, forest, and crop lands provide most of the open space in the county.

This amenity is desirable for many reasons. It serves as a buffer between conflicting land uses, permits the logical expansion of urban areas, provides recreational opportunities, contributes to the aesthetic quality of the landscape, and enhances the social and economic value of the community.

Fish and Wildlife Areas and Habitats
A variety of fish and wildlife species reside in Umatilla County. Because of the aesthetic, recreational, and economic benefits they provide, this resource is important to both county residents and visitors.

Waters in Umatilla County serve as valuable harvesting, spawning, and rearing areas for migratory fish, resident trout, and warm-water fish. However, increased fishing pressures, inadequate stream flows, man-made barriers, and unscreened water diversions have contributed to fish population declines in many streams and rivers.

Elk and deer are the two major big game species found in the county. Although relatively abundant, changes in land uses and poor land use practices have destroyed some of their habitat. But, they are not the only wildlife species affected.

Ecologically and Scientifically Significant Natural Areas
Wildlife refuges and sites inhabited by rare or endangered plant or animal species are found in the County. Ownership of these lands are federal, state, county, and private. Various agencies and organizations are working to identify and protect these areas.

Wilderness Areas
Although there are over 250,000 acres of forest and over 376,000 acres of U.S. Forest Service land in Umatilla County, none of it is currently or potentially wilderness areas as defined by Goal 5.

Outstanding Scenic Views and Sites
There are areas and views which are commonly recognized as striking in their effect on those who experience them. Geological features, green vegetation, and water are major scenic features; human works and dry, shrub-steppe landscape are other attractions. So that areas do not lose their eye-catching attributes, plans attempt to identify "commonly recognized" scenic features, and suggest uses for these areas that minimize conflicts with the valuable features.

Potential and Approved Federal Wild and Scenic Waterways and State Scenic Waterways
There are no state-designated scenic waterways or potential scenic waterways in Umatilla County. However, the North Fork of the John Day River, a portion of which

flows through Umatilla County, is included in the U.S. Department of Interior's "Nationwide Rivers Inventory" for possible inclusion in the national wild and scenic rivers program.

Historic Areas. Sites. Structures and Objects
Much of the county's historical and archeological significance dates back to various Indian tribes that resided in the area, and to the early passage and eventual settlement of white settlers using the Oregon Trail. Unfortunately, natural processes and man-related activities have destroyed or altered many remnants. Historical site and building inventories are provided in the Technical Report.

Cultural Areas
In some ways all of Umatilla County should be considered a "cultural area" under the Goals 5 definition since it is within the original territory of the Umatilla Indians. Areas throughout the county have cultural significance to the Indians, but discussion of cultural sites is difficult since the Tribe is reluctant to identify them.

There are no approved or potential Oregon or national recreation trails in Umatilla County as designated by the National Trails System Act of 1968 or the Oregon Recreation Trails System Act of 1971.

Water Areas. Woodlands. Watersheds and Groundwater Resources
Water supply is a critical factor for development. In some places, the delicate balance of supply and demand has been upset and groundwater tables are decreasing.

The County is subjected to extremes in surface water availability. Shortages of rainfall in summer months bring near-drought conditions to many parts of the county while flash floods and heavy spring snowmelt threaten low lying floodplains. Water impoundments help store, control, and distribute water throughout the year.

Mineral and Aggregate Resources
Although no minerals of commercial value are known to exist in the county, aggregates are relatively common. Aggregates include sand, crushed and uncrushed gravel, and stone.[10] They are primarily used for the construction of new homes, streets, sewers, churches, businesses, etc. Since long truck hauls are costly, local sources must remain available.

Energy Sources
Of the three major commercial components of Oregon's present energy picture—electricity, petroleum, and natural gas—only electricity is generated in the county.

McNary Dam, located on the Columbia River north of Hermiston, has fourteen power generators capable of producing seven million watts of electricity per year. A second powerhouse with more generators will be built during this decade.

FINDINGS	POLICIES
1. Having only a sparse rural population, Umatilla County is predominately open	1. (a) The County shall maintain this

space.	resource by limiting development mainly to existing built up areas, (b) The County shall cooperative with the many public agencies which manage open land in the County. Special contracts will be sought when development proposals are in the vicinity of large tracts of public land.
2. Umatilla County has a relative abundance of fish and wildlife habitat.	2. (a) The County shall preserve habitat by encouraging 208 Best Management Practices and proper Forest Management Act procedures. (b) The County will complete the Goal 5 process, which includes the ESEE consequence analysis of conflicting uses for all identified natural areas, species occurrence and wetlands. For all IB sites identified in the Technical Report adopted on June 12, 1985, the Goal 5 process will be completed prior to the next plan update (Sept. 30, 1987). For all "3A" sites, the County shall apply the NA Overlay Zone and if necessary, develop a management plan to protect the resource. For all "3C" sites, the County shall apply its 100 ft. riparian setback and Sections 4.600 and 4.700 of the Development Ordinance. (c) The State Department of Fish and Wildlife will be specifically consulted when proposed land use actions may affect significant or critical fish or wildlife habitats. (d) The County recognizes and supports the March, 1984, Agreement between the State Board of Forestry and the State Fish and Wildlife Commission as an effort to protect Goal 5 resources. [See also policies 49 and 50] (e) The County Development Ordinance shall include conditional use

standards, overlay zones, and/or other provisions to limit or mitigate conflicting uses between rare, threatened and endangered species habitat areas and surrounding land use.

(f) With the availability and/or addition of adequate information of heron rockeries locations, the County shall complete Goal 5 analysis process for them (OAR 660-16-000).

3. Umatilla County land use classifications most compatible with sensitive big game habitats and in specially identified migration corridors are those that maintain the natural rural environment (i.e. agriculture, forestry, grazing, open space, floodplain, dispersed recreational uses).
(NOTE: Additional Big Game Findings and Policies are located in the Multiple Use Plan Map Section).

3.

(a) Developments that are allowed on sensitive big game habitats shall be of low density while still allowing for normal agricultural, grazing and forested uses,

(b) The County shall develop and apply an appropriate overlay zone to critical deer and elk winter range areas as determined by the Technical Report or subsequent action by the Planning Commission.

(c) Developed densities within identified big game corridors shall comply with other policies within this plan and the standards in the Development Ordinance.

(d) The County shall notify the Department of Fish and Wildlife of any quasi-judicial request for permission to engage in activities which may conflict with designated critical winter range, elk migration corridors or significant natural areas.

(e) New roads shall be located to avoid sensitive areas whenever possible. Forest harvest system requiring the least amount of roads should be favored. Seasonal roads would be closed to reduce harassment to animals during the stress periods of winter and early spring. Roads that are no longer necessary for fire

	protection or logging should be clocked off permanently. (f) Off-road vehicles use should be controlled during winter and early spring when it could affect survival of animals or cause excessive soils damage
4. Private landholders have suffered financial losses because of wildlife foraging on their agricultural land.	4. The County shall cooperate with the US Forest Service, Oregon Department of Fish and Wildlife, and property owners to resolve this problem.
5. Umatilla County land use classifications most compatible with upland game habitat are agriculture, forestry, open space, and floodplain.	5. (a) The County shall maintain rural agricultural lands, Development shall be of low density to assure retention of upland game habitat, (b) Land uses should maintain the vegetation along stream banks, fence rows, woodlots, etc. Research ways to reduce harassment and loss of upland game by free roaming dogs and cats.
6. Umatilla County land use classifications most compatible with waterfowl are those that maintain the natural rural environment (i.e. agriculture, forestry, grazing, open space, hazardous area or floodplain).	6. (a) Developments or land uses that require drainage, channelization, filling or excessive removal of riparian vegetation in sensitive waterfowl areas should be identified. (b) Residential, commercial or industrial developments shall not be placed on or adjacent to sensitive waterfowl habitat unless design review or conditions mitigate conflicts with waterfowl use. (c) Public access should be maintained or secured to appropriate waterfowl recreational areas whenever possible.
7. Umatilla County land use classifications most compatible with furbearers and non-game wildlife are agriculture, forestry, floodplain, hazardous areas or open spaces.	7. (a) Residential, commercial or industrial development in urban and suburban areas should incorporate an

Recommendations listed for big game, upland game and waterfowl will also benefit both aquatic and terrestrial forms of these animals.	appropriate amount of open space. (b) Native species (trees, shrubs and grasses) should be left in open space areas whenever possible. (c) Supplemental planning of ornamental species is encouraged when conditions are favorable. (d) Any required landscaping should incorporate a large variety of native plant species supplemental with ornamental. (e) Parks should be managed to leave natural vegetation. (f) Existing ponds, wetlands, and riparian vegetation in the urban areas should be protected. (g) Leave non-hazard snags along streams, sloughs and in forested areas.
8. Umatilla County contains a number of water land areas important for wildlife. Some of these are "significant wetlands."	8. (a) Setbacks shall be established to protect significant and other wetlands. (b) Development and timber practices in and adjacent to significant and other wetlands shall be allowed only when such precipices are in accordance with the rules and regulations of the Forest Practices Act.
9. "Significant Wetlands" are identified in Table D-ZI (a) of the Technical Report.	9. (a) The County shall encourage land use practices which protect and enhance significant wetlands.
10. Umatilla County land use classifications most compatible with river and stream fish resources are those that maintain the natural rural environment (i.e. the agriculture, forestry, grazing, open space, hazardous areas).	10. (a) Residential Development along streams shall be low density and require appropriate setbacks. (b) Commercial or industrial use along navigable waterways should be water-oriented. (c) Compatible land use shall maintain the riparian vegetation along streams

in the floodplain. Stream bank vegetation shall be maintained along streams outside of the floodplain by utilizing appropriate setbacks.

(d) Development or land use that requires channelization, excessive removal of streamside vegetation, alteration of stream banks and filling into stream channels shall be restricted in order to maintain streams integrity.

(e) New roads, bridges and access rights-of-way shall be designed to avoid channel capacity, and minimize removal of shoreline vegetation.

(f) Developments that require surface water appropriation or diversion shall be located where stream flows are not reduced below the recommended minimums.

(g) Projects which provide for additional in- stream flows to help meet the recommended minimums should be supported.

(h) Docks, log storage, houseboats and other water surface developments which preclude permanent use of public waters should be cluster-type developments.

(i) Public access should be maintained or secured to appropriate river and stream areas.

(j) Point and non-point pollution programs (including the DEQ 208 Programs) shall be supported to insure water quality maintenance and enhancement.

(k) Forest Practices Act rules and fish habitat management policies established by state and federal agencies shall be utilized by the County as guidelines.

11. Umatilla County land use classification most compatible with lake and reservoir fish resources are agriculture, forestry, grazing,

11.

(a) Major residential, Commercial or industrial development on lakes and

open space, and hazardous areas.	reservoirs shall be conditional or non-conforming uses. (b) Residential or recreational developments that incorporate construction of an artificial lake as a major attraction shall be conditional uses. (c) Encroachment on or destruction of shoreline fringe, particularly terrestrial and semi-aquatic vegetation should be restricted. (d) Setbacks or buffer zones shall be incorporated into lake and reservoir developments. (e) Docks and other surface water developments should be minimal. (f) Dredging and filing of shallow areas should be discouraged. (g) Future environmentally acceptable multi-purpose reservoir sites should be identified and appropriate land use restrictions applied if development appears imminent. (h) Public access should be maintained or secured to appearance lakes and reservoir areas. (i) Forest Practices Act rules and fish habitat management policies established by state and federal agencies should be utilized by the County as guidelines.
12. Umatilla County land use classifications most compatible with headwater areas are agriculture, forestry, grazing, open space and hazardous areas. (Headwater streams are those defined as Class II streams by the Forest Practices Act [OAR 629-24-101 (3)] and/or Class III and IV by the US Forest Service). [Note: Additional fish findings and policies are located in the Multiple Use Plan Map Section.]	12. (a) Residential, commercial or industrial development in unstable headwater areas shall be minimal, and shall require appropriate setbacks. (b) The County should identify unstable areas and geological hazards. (c) New roads should be located to avoid unstable headwater areas. (d) Forest Practices Act rules and fish habitat management policies established by state and federal agencies shall be utilized by the

	County as guidelines.
13. The Oregon Natural Heritage Program and the County have identified a number of verified and potential ecologically and scientifically significant natural areas (as defined in LCDC Goal 5).	13. (a) Umatilla County shall work with the Oregon national Heritage Program to development criteria by which to identify and evaluate potential scientifically and ecologically significant areas within the County. (b) When conflicting uses are proposed for sites identified as having high potential as scientifically and ecologically significant natural areas, Umatilla County shall determine and evaluate the environmental, energy, economic and social consequences of allowing the conflicting uses and of retaining the area in the existing state. (c) With the availability and/or addition of adequate information, the County shall complete the Goal 5 analysis process (OAR 660-16-000) for potential significant natural areas.
14. A portion of "Darr Flats" is a significant natural area, as determined b the Oregon Natural Heritage Program (ONHP) and defined by Goal 5 ("BA"). Conflicting uses should be limited on other adjacent and surrounding areas ("30").	14. (a) The NW1/4 of Section 36, T2S, R30E., W.M. (160 acres) is a significant natural area ("3A") that shall be protected by the NA – Natural Area Overlay Zone of the Umatilla County Development Ordinance. (b) On adjacent and surrounding areas of approximately 1,300 acres, which compose the remainder of Darr Flat, conflicting uses shall be limited ("3C") by provocations of the Umatilla County Development Ordinance. Also, the property owner has agreed in writing not to change the use of the area (limited grazing) and will notify the County if changes in uses or ownership contemplated.

15. "Albee Area" may be a significant natural area by ONHP (see Technical Report).	15. Umatilla County shall study this area to determine what special protective land use measures are necessary, if any, to protect and preserve "Albee Area."
16. "Stage Gulch Rangeland" may be a significant natural area (see Technical Report).	16. Umatilla County shall study this area to determine what special protective land use measures are necessary, if any, to protect and preserve "Stage Gulch Rangeland."
17. The County and BLM have prepared a management plan for Harris County Park and the adjacent BLM land (south Fork Walla Walla River, UM-20, see Technical Report).	17. Umatilla County should work towards implementation of the recommendation of the Management Plan prepared for this property.
18. "Kamela Area" may be a significant natural area (see Technical Report).	18. Umatilla County shall study this area to determine what special protective land use measures are necessary, if any, to protect and preserve "Kamela Are."
19. An area near Rieth (described in the Technical Report) has been determined to be an area of occurrence of a rare or endangered species (Mimulus jungermannioides).	19. Special protective land use measures shall be enacted if necessary to protect the species,
20. Umatilla County has a number of outstanding scenic views and pleasant vistas. [Note: Additional scenic findings and policies re located in the Multiple Use Plan Map Section.]	20. (a) Developments of potentially high visual impacts shall address and mitigate adverse visual effects in their permit application, as outlined in the Development Ordinance standards. (b) It is the position of the County that the Comprehensive Plan designations and zoning already limit scenic and aesthetic conflicts by limiting land uses or by mitigating conflicts through ordinance criteria. However, to address any specific, potential conflicts, the County shall insure special consideration of the following when reviewing a proposed change of land use: 1. Maintaining natural

vegetation whenever possible.

2. Landscaping areas where vegetation is removed and erosion might result.
3. Screening unsightly land uses, preferably with natural vegetation or landscaping.
4. Limiting rights-of-way widths and numbers of roads interesting scenic roadways to the minimum needed to safely and adequately serve the uses to which they connect.
5. Limiting signs in size and design so as not to distract from the attractiveness of the area.
6. Siting Developments to be compatible with surrounding area developments and recognizing the natural chrematistics or the location.
7. Limiting excavation and filling only to those areas where alteration of the natural terrain is necessary and re-vegetating such areas as soon as possible.
8. Protection vistas and other views which are important to be recognized because of their limited number and importance to the visual attractiveness of the area.
9. Concentrating commercial developments in area where adequate parking and public services are available and discouraging strip commercial development.

(c) Publicly owned lands which provide outstanding scenic views shall be developed where appropriate.
(d) The "Elephant Rock" site shall be studied to determine if there is any

	scenic significance. (e) The Wallula Gap has been recognized as a significant scenic (as well as historic and wildlife) area. The County shall enact special land use measures; i.e., overlay zone to protect and preserve this area (see Technical Report).
21. Currently there are no designated state or federal scenic waterways in Umatilla County.	21. (a) Umatilla County will cooperate with any future designation of a state or federal scenic waterway. (b) Proposals for development within any future designated recreational or scenic river areas will be coordinated with the administrative staff of the Scenic Waterways Program.
22. Important archeological, historic, cultural, and scientific sites need protection.	22. The County shall cooperate with state agencies and other historical organizations to preserve historic buildings and sites, cultural areas, and archeological sites and artifacts.
23. Many historical and archeological sits in Umatilla County have not been recognized or cataloged.	23. (a) Umatilla County shall encourage and cooperate in developing a detailed county-wide historic site inventory. (b) Over time, as money and assistance and available, the Umatilla County Historical Society, with County assistance, will mark these sites to increase their value to the public. (c) With the availability and/or addition of adequate information on possible historic, archeological or cultural sites, the County shall complete the Goal 5 analysis process (OAR 660-16-000). (d) The County and the Historical Society will cooperate in an effort to locate and document the historic cemeteries and family burial plots.
24. Protective land use measures will be	24.

required to preserve historic, cultural and archeological sites.	(a) Umatilla County shall protect significant historical and cultural sites from land use activities which diminish their value as historical resources. (b) The County shall assist property owners who wish to preserve historic sites under their ownership. (c) Until such a time as the County assumes the issuance of building permits, the County shall notify the State Department of Commerce, Building Codes Division, of those sits and structures determined to be significant historical resources.
25. A county historical museum would help preserve the history culture of the area.	25. The County shall continue to assist the Historical Society in development of and a County historical museum.
26. Protection of Indian archeological and cultural sites (root digging, berry hunting, fishing, and campgrounds) are of great [importance] to the Tribes of the Umatilla Reservation and to others concerned about the county's history and heritage.	26. The County shall cooperate with the Tribe, Oregon State Historic picking, Preservation Office, and others involved in concern identifying and protecting Indian cultural areas and archeological sites.
27. While the Oregon Trail has been included into the National Trails System, only those portions on federal lands having a high potential for public use and historical interest are protected by law.	27. The County shall assist in identifying other segments of Oregon Trail that may warrant protection.
28. The Department of Interior has prepared a master plan for the Oregon Trail.	28. The County shall adopt the recommendations of the Oregon Trail Plan that are pertinent to Umatilla County.
29. Albee Town site contains several buildings of historical significance.	29. The County shall inventory Albee Town site to determine if preservation or restoration is possible or warranted.
30. Hideaway Hot Springs and Lehman Hot Springs have been used as recreation resorts for decades.	30. (a) The County shall support the redevelopment of Hideaway Hot Springs and Lehman Hot Springs as

	destination resorts in a manner compatible to the surrounding resource lands. (b) The County shall adopt protective land use measures (i.e. historic overlay zone) for the protection and preservation of the Hideaway Hot Springs dance Hall.
31. Meacham Town site has a long and important history.	31. (a) The County shall adopt the recombination's of the Oregon Trail Plan for Meacham. (b) Since the Meacham Hotel is on the State historic inventory (1976), the County should determine if protective measures are warranted to insure its preservation if recent (last 8 years) modifications have destroyed its historic character.
32. The Technical Report recognizes a number of potentially important historical sites that should be studied further to determine what protection measures, if any, are needed or warranted.	32. The following historic sites shall be studied by the County to determine significance and necessary protection measures: Albee Town site, Beamer House, Birch Cree/Grande Ronde Road, Buttercreek Crossing, Cold Springs Landing/Junction, Dorian Park, Echo Meadows, Finnish Cemetery, Fort Henrietta, Frazer Road, German Cemetery, Clicker Springs, Lewis & Clark Trail, Locust Tree Campground, Marcus Whitman Trail, Meacham Cemetery, Mumm Ranch, "Old Log Cabin," Olinger Monuments, Oregon Trail, Oregon Orange Tree, Picket Rock, Pine Grove, Pioneer Lookout Tree, Prospect Farm, Ten Mile House, Tollgate Road, Upper McKay School, Walla Walla Trail, Westland School, Willow Springs, and the Wooden Flume.
33. A number of farms in the county are registered as "Century Farms."	33. The County should support the "Century Farm" Program.
34. Timber harvesting, including especially upper reaches of Umatilla wastes, and	34. The County shall promote road construction through the 208 Water County

industrial wastes are contributors in the lower reaches; leakage from septic tanks is a major cause of groundwater contamination.	Streams.
35. Surface water, especially along the Umatilla River, is over used and has an impact on water quality, fish and wildlife habitat, and water rights.	35. (a) The County shall seek and request assistance from state and federal agencies to resolve water issues where the County lacks the jurisdiction. (a) (b) In the future, Umatilla County shall coordinate with the State Water Resource Department and other appropriate agencies to determine to what extent, based on the most recent information available, surface and groundwater resources are able to support future irrigation requirements for agriculture and projected population and industrial needs in the rural and urban areas of the County. Based upon the results of this coordination, the County also shall amend this plan and the Development ordinance regulating water availability as necessary, and insure that future updates of this plan remain consistent with the availability of water resources.
36. Additional small volume surface impoundments to store spring runoff are desirable to control flooding and provide additional irrigation water.	36. The County shall work with state and federal agencies to increase water impoundment capacities.
37. Areas specifically set aside for natural resource exploitation, future development of reservoirs, energy generation and transmission facilities and industry will lower the cost of eventual use, as compared to allowing incompatible development on the same lands before such eventual use.	37. The County shall ensure compatible interim uses provided through Development Ordinance standards, and where applicable consider agriculturally designated land as open space for appropriate and eventual resource or energy facilities use.
38. Extraction of non-renewable aggregate and mineral resources requires ongoing	38. (a) The County shall encourage mapping

exploration, reclamation, separation from adjacent incompatible land uses.	of future agencies sites, ensure their protection from conflicting adjacent land uses, and required reclamation plans. (b) Aggregate and mineral exploration, extraction, and reclamation shall be conducted in conformance with the regulations of the Department of Geology and Mineral Industries. (c) The County Development Ordinance shall include conditional use standards and other provisions to limit or mitigate conflicting uses between aggregate sites and surrounding land uses.
39. Aggregate extraction/processing activities in the densely developed Orchards District has created some land use compatibility problems in the past; yet, this region provides some unique sources of and excellent opportunities to supply area gravel needs.	39. (a) The County shall strictly enforce state and county development standards pertaining to gravel extraction/processing uses through appropriate agencies; whether new operations or expansions of existing sites. (b) To reduce the possibility of small, numerous gravel pit operations that could indiscriminately locate throughout the Orchards District, new gravel extraction proposals must have a minimum site area of 20 acres. This policy is intended to considerations as well as economics associated with this activity. (c) The County will work with the Corps of Engineers, State Fish and Wildlife Department, and other applicable entities to encourage the appropriate and safe removal of important and self-renewing aggregate sources in the Walla Walla Rive within the Orchards District.
40. The County owns and/or operates a number of small aggregate and rock extraction sites around the county that are	40. Some long-established, County owned and/or operated gravel pits which are located in resource zones shall be allowed periodic

used periodically exclusively for road maintenance and construction.

operation, based upon the issuance of a zoning permit under the following conditions:

(1) Extraction is for County road maintenance or, construction only;
(2) Crushing operations are for limited time periods not to exceed 90 days.
(3) Scale or extent of operation remains limited to the acreage area listed on the table below.
(4) The Planning Director may refer zoning permit request to the Hearings Officer or the Planning Commission.
(5) Operations will still be required to meet the standards and criteria of the Development Ordinance and Reclamation Ordinance. The County gravel pit sites listed on the following table shall apply under tis policy:

Existing Gravel Pits Exempted from Obtaining Conditional Use Permits

LOCATION	NAME	APPROX. SIZE
T IS R 30 Sec. 1-2	Nelson-Murray	1 Acre or less
T IS R 32 Sec. 13	Hoeft	1 Acre or less
T 5S R 31 Sec.(12) 13 TL 1500	Leverenz-Ukiah	1 Acre or less
T 5S R 31 Sec. 36	Soap Hill	1 Acre or less
T IN R 30 Sec. 12, TL 400	Coombs Canyon	1 Acre or less
T 2N R 30 Sec. 32-33, TL 1100	Alkali	1 Acre or less
T 3N R 30 Sec. 6, TL TL 500	Ransier	1 Acre or less
T 4N R 36 Sec. 36	Pine Creek	1 Acre or less
T 4N R 34 Sec. 31, TL 11500	McConttmach	1 Acre or less
T 4N R 30 Sec. 23, TL 2300	Despain-Terney	1 Acre or less
T 5N R 32 Sec. 5, TL 700	Juniper	1 Acre or less
T 5N R 34 Sec. 8, TL 1390	Wayland	1 Acre or less
T 5N R 34 Sec. 1-2	Shubert-Barrett	1 Acre or less
T 6N R 35-36 TL 101	Eastside	1 Acre or less
T 6N R 36 Sec.(34 -36), TL 5100	Casper	1 Acre or less

41. Several aggregate sites were determined

41. In order to protect the aggregate resource,

to be significant enough to warrant protection from surrounding land uses in order to preserve the resource (see Technical Report).

the County shall apply an aggregate resource overlay zone to the following existing sites:

(1) ODOT quarry, T5N, R35E, Section 35, TL 6200, 5900.
(2) ODOT quarry, T5N, R29E, Section 22, TL 800 ("Sharp's Corner")
(3) Private, commercial pit, T4N, R38E, Section 27, TL 1100.
(4) Upper Pit, T4N, R28E, Sections 28, 29, TL 4000.
(5) ODOT quarry, T3N, R33E, Section 23, TL 100, 600, 700
(6) Several quarries, T2N, R31E, Section 15, 16, 17, TL 400, 800, 3100. (See Technical report for specific site information).
(7) ODOT quarry, T3S, R30 1/2, Section 12, 13, TL 503.
(8) ODOT quarry, T4N, R35, TL 7303.
(9) Private, commercial pit, T4N, R28E, Sections 30, 31, TL 300, 2200, 2202, 2203.
(10) ODOT quarry, T1N, R35, Section 34, TL 800, 900, 1000, and T1S, R35, Section 03, TL 100.
(11) ODOT quarry, T1S, R30, TL 1901.
(12) ODOT quarry, T2N, R27, TL 2700.
(13) Private, commercial pit, T4N, R27E, Section 25, TL 900, Section 36, TL 400, 500, 600, 700, 800, 1400, 1500.

42. Alternative energy resources should be explored more fully in Umatilla County.

42.

(a) Encourage development of alternative sources of energy.
(b) The County will develop a file of alternative energy literature which will be available to the public.
(c) The County will refer people to agencies or private sources of energy conservation or development information when such information is not locally available.
(d) With the availability and/or addition

	of adequate information on wind, solar and other alternate energy resources, the County shall complete the Goal 5 analysis process for those resources (OAR 660-16-000).
43. Some potential exists for development of subsurface energy resources.	43. (a) The County should provide for exploration for and development of subsurface energy resources. (b) The County shall institute land use categories which protect the land base upon which subsurface energy sources may occur. (c) The Resource oriented land use categories shall provide for control of access to and development of subsurface energy resources. Such exploration and development shall be in conformance with requirements of the Oregon Department of Geology and Mineral Industries. (d) With the availability and/or addition of adequate information on oil, gas and other subsurface energy resource, the County shall complete the Goal 5 analysis process for those resources (OAR 660-16-000).
44. Lease agreements to explore and extract subsurface resources of soil, gas, shale oil, and coal have increased significantly in the last several years. Negative impacts will be lessened by reclamation and separation from uses not compatible with mining these subsurface resources.	44. The County shall establish review criteria during a public review process to ensure compatible with adjacent land use. Regulations will include capping or filling of test holes, reclamation or restoration and discouragement of such activities in areas designated residential in the Comprehensive Plan.
45. Land use regulations can be developed that will promote wise use of local energy resources.	45. The County shall encourage and assist individuals to site and situate development in a manner which will provide the most energy efficient placemat, within the setback requirements of the various land use zones.
46. The “Open Space, Scenic and Historic	46. In order to provide substantive

Areas and Natural Resources" chapter of the Umatilla County Technical Report provides the basic background data and justification for the policies established in this section of the Comprehensive Plan.

information and justification for the policies adopted in this section of the Comprehensive Plan and resulting implementing ordinances, the County hereby adopts the following specific portions of the Technical Report as part of this Plan:

(a) Goal 5 process, p. D-2.
(b) Elk winter range as portrayed on map D-14, as clarified by text on p. D-17a.
(c) Significant Wetlands table D-31 and accompanying maps.
(d) Habitats of Rare, Threatened and Endangered Species table D-62 and accompanying maps.
(e) Sensitive areas for fish production, p. D-66-69 and map D-71.
(f) Definition of "headwaters", p. D-70.
(g) Definition of "significant natural area", p. D-74.
(h) Significant natural areas species occurrence and wildlife areas table p. D-88 and accompanying maps
(i) Outstanding sites and views table p. D-105-106.
(j) Significant scenic area – Wallula Cap map D-108 and accompanying text p. D-109.
(k) Inventory of Umatilla County Historic Sites and Buildings, table p. D-116-117, and accompanying maps.
(l) Water areas watershed and groundwater resources "conclusions", pp. D-165, 166.
(m) Significant ("3A") aggregate sites, p. D-189, and accompanying maps.
(n) County gravel pits qualified for simplified permit system, p. D-96-97.

47. The County has developed, adopted and implemented several "overlay zones" within the Development Ordinance with the purpose of providing additional protective and preservation measures for the significant historic and natural resources of the County

47. Any proposed modification to the text or areas of application (maps) of the AR, HCA, CWR or NA overlay zones shall be processed as an amendment to this plan.

which are covered by Statewide Planning Goal 5. These overlay zones are the Aggregate Resource Overlay Zone (AR), the Historic, Archeological or Cultural Site/Structure Overlay Zone (HAC), the Critical Winter Range Overlay Zone (CWR) and the Natural Area Overlay Zone (NA).	
48. The County has determined, through its environmental, social, energy and economic (ESEE) analysis of conflicting uses, that Goal 5 resource sites and the conflicts identified do not justify prohibiting Commercial forestry in light protection provided by the Forest Practice Act (FPA) and cooperative agreements between the Board of Forestry and the Fish and Wildlife Commission.	48. After thorough ESEE analysis and recognizing that land use conflicts exists, the County shall not relegate its commercial forest industry to an incidental or insignificant status as would be required by the FPA.
49. The County has determined that notwithstanding some conflicts, commercial forestry should not be prohibited or relegated to an incidental or insignificant land use status. Having made that decision, whether or not the EPA is an adequate "3C" program as required by OAR 660-160-010 (3), the County is preempted by ORS 527.722 from adopting additional measures to control forest practices.	49. The County shall rely upon the FPA and any supplemental agreements between the Board of Forestry and the Fish and Wildlife Commission to resolve confects between forest management activities and fish and wildlife habitat (See also Policy 2 (d)).

NOTE: See Technical Report, Section D for background data

City of Lexington

and its residents, affected governmental units, and County administration of the Urban Growth Area. Lexington's policy framework was developed in the early stages of the planning process (personal communication, city planner, 9/20/79). Opportunity for citizen and agency review during plan amendment are provided (Plan, Appendix E-6,7).

Conclusion: The City of Lexington complies with Goal 2.

New information developed during the planning process has not, in all cases, been reflected in plan policies and specific requirements of Lexington's well-drafted ordinances do not always have a solid policy base.

Suggestion for Plan and Implementing Measure Improvement:

Lexington should review its plan policies in future plan updates to ensure their responsiveness to changing conditions and to provide a stronger policy base for implementing ordinance requirements.

3. Open Spaces, Scenic and Historic Areas, and Natural Resources: (Goal 5)

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Technical Report Chapters II (Summary of Findings), V (Natural Environment), and VI (Socio-Economic Environment (6.37)

Plan Policies: Technical Report, Chapter IV (Goals and Policies), and Appendix E, City and County Plan Ordinance

Implementing Measures: Zoning Ordinance, Article 3.50 (Permanent Open Spaces Zone, O) and 5.10 (Conditional Use Criteria); Subdivision Ordinance, Sections 4.1.4 (Character of Land), 4.3 (Drainage and Storm Sewers), and 4.9 (Preservation of Natural Features)

Lexington has prepared Goal 5 inventories for open space and water areas (Plan, 6.37 city and county recreational areas and 5.10 city flood plain), mineral and aggregate resources in the Lexington area (Plan, 5.2), fish and wildlife (Plan, 5.12-5.14), energy resources (Plan, 5.1 and 5.17) and natural areas, historic areas, sites and structures and cultural areas (Plan, 5.15). Two historic structures are identified. The results of these inventories are summarized in Chapter II, "Summary of Findings (Plan, 2.2).

No scenic views, wilderness areas, recreational trails or scenic waterways were identified.

Plan Policies:

Plan policies relative to Goal 5 are listed below (Plan, 4.2-4.3):

> "GOAL: To conserve open space and protect natural and scenic resources.
>
> Objectives
>
> To identify open space, scenic and historical areas, and natural resources which should be preserved from urban development.
>
> To examine any publicly owned lands including street rights-of-way for their potential open space use before their disposition.
>
> To protect archaeological and historic sites, structures, and artifacts.
>
> To conserve the area's natural resources.
>
> To administer areas of flood hazard according to the City's Flood Area Management Ordinance to be adopted by the City upon completion of the final plain study."

Implementing Measures:

The City of Lexington has made a policy commitment to adopt a Flood Area Management Ordinance upon completion of the final flood plain study in late 1979 (Plan, 5.10).

The Subdivision Ordinance also requires the maintenance of existing drainways, and restricts development in areas with flood plain or drainage problems (Section 4.2 (f)).

There is an "Open Space Zone" listed in the Zoning Ordinance, although no land within the City is designated under this zone.

Conditional use standards in the Zoning Ordinance require the retention of "features of historic significances" in project design (Article 5.10.4). The Subdivision Ordinance requires the preservation of natural features, including historic sites, in the design of partitions and subdivisions (Section 4.9).

Conclusion: The City of Lexington complies with Goal 5.

Although Lexington has not adopted a Flood Area Management Ordinance, it does have a policy commitment to do so upon completion of the Corps of Engineer's flood plain study. This is the primary mechanism whereby Lexington's open space, water areas, and fish and wildlife habitats will be preserved from urban development.

Update Item:

The City shall, at its next plan update and upon completion of the Corps of Engineer's flood plain study, carry out plan policy to adopt a Flood Area Management Ordinance.

4. Air, Water and Land Resources Quality: (Goal 6)

The acknowledgment request contains the following to comply with this Goal:

Factual Information: Technical Report, Chapter V (Natural Environment: Air, Water and Land Quality) and II (Summary of Findings)

Plan Policies: Technical Report, Chapter IV (Goal and Policies) and Appendix E, City and County Plan Ordinance

Implementing Measures: Zoning Ordinance, Sections 3.50 (Permanent Open Space Zone, O), 3.43 (Limitations on Use in Light Industrial Zone, M) 3.62 (Ground Cover Requirements), 3.32 and 3.42 (Dimensional Standards in Light Industrial and Commerical Zones); and Subdivision Ordinance, Section 4.3 (Drainage and Storm Sewers) and 4.5 (Sewerage Facilities)

Air and water quality in Lexington currently meets all applicable DEQ standards. Solid waste facilities in Heppner are adequate to meet future needs (Plan 2.2).

Plan policies commit Lexington to meeting applicable state and federal environmental quality standards. Industrial development is discouraged if it has a "...significant detrimental effect on the environmental resources of the area" (Plan, 4.2-4.3).

The Zoning and Subdivison Ordinances contain provisions to carry out plan policies (see references above).

D.E.Q. has noted in its comments a need for additional work on noise control (see attached letter).

Conclusion: The City of Lexington complies with Goal 6.

City of Heppner

10-1-5: PLAN GOALS AND POLICIES:
The following statement of goals and policies provide a general long-range basis for decision making relative to the future growth and development of the City. The goals are patterned after and are in direct response to applicable Oregon Statewide planning goals. The policy statements set forth a guide to courses of action which are intended to carry out the goals of the plan. The policy statements present a clear picture of the City's position on matters pertaining to physical improvements and development.

1. Citizen Involvement:

Goal: To develop a citizen involvement program that ensures opportunity for citizens to participate in all phases of the planning process.

It Shall be City Policy:

To conduct periodic community surveys to ascertain public opinion and collect information; survey results should be distributed.

To encourage people to attend and participate in Planning Commission and City Council meetings and hearings.

To establish advisory committees as necessary to study community problems and make recommendations for their solution.

To distribute the draft Comprehensive Plan for public review and comment.

To make technical reports available for public inspection.

To distribute the adopted Comprehensive Plan to the public for the use as a reference in making future land use decisions.

2. Land Use Planning:

Goal: To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.

It Shall be City Policy:

To prepare data inventories on natural resources, man-made structures and utilities, population and economic characteristics, and the roles and responsibilities of affected governmental units.

To identify lands suitable for development and areas where development should be restricted.

To develop economic and population projections.

To determine the land requirements for projected economic development and population growth.

To determine the public facilities and services required to accommodate existing unmet public needs and expected economic and population growth.

To prepare a Comprehensive Plan and establish an urban growth boundary based on the above information, citizen input, coordination with affected governmental units and the goals and objectives adopted herein.

To establish policies for the implementation of the Comprehensive Plan.

To revise the Zoning and Subdivision Ordinances and develop a capital improvement program based on the Comprehensive Plan.

To establish a policy for revising or amending the Comprehensive Plan.

3. Agricultural Lands:

Goal: To preserve and maintain agricultural lands.

Objectives:

To identify agricultural lands which should be preserved and protected from urban development.

To encourage residential, commercial and industrial development within the City limits and urban growth boundary.

To encourage the Morrow County Planning Commission and County Court to restrict residential, commercial and industrial development outside the urban growth boundary.

Land zoned agriculturally shall remain so until such time as the property owner requests a zone change. At that time, the zone change shall comply with the Comprehensive Plan.

4. Open Spaces, Scenic and Historical Areas and Natural Resources:

Goal: To conserve open space and protect natural and scenic resources.

Objectives:

To identify open spaces, scenic and historical areas and natural resources which should be preserved from urban development.

To preserve open space through public acquisition of suitable land and by encouraging provisions for open space in private developments.

To examine any publicly-owned lands, including street rights of way for their potential open space use before their disposition.

To encourage multiple use of open space land; provided, that the uses are compatible.

To protect archaeological and historic sites, structures and artifacts.

To conserve the area's natural resources.

5. Air, Water and Land Resources Quality:

Goal: To maintain and improve the quality of the air, water and land resources of Heppner.

It Shall be City Policy:

To limit all discharges from existing and future development to meet applicable State or Federal environmental quality statutes, rules and standards.

To discourage industries which would have a significant detrimental effect on the environmental resources of the area.

6. Areas Subject to Natural Disasters and Hazards:

Goal: To protect life and property from natural disasters and hazards.

It Shall be City Policy:

To administer areas of flood hazard according to the City Flood Area Management Ordinance, to be adopted by the City upon completion of the final flood plain study.

To require site specific information clearly determining the degree of hazard present from applicants who seek approval to develop residential, commercial or industrial uses within known areas of natural disasters and hazards. (Ord. 419, 7-3-78)

To assure that adequate landfill facilities are available for its residents. (Ord. 466, 5-4-87)

7. Recreational Needs:

Goal: To satisfy the recreational needs of the citizens of Heppner and visitors.

It Shall be City Policy:

To develop public meeting places and indoor recreational facilities for all age groups.

To develop neighborhood parks and outdoor recreational facilities in order to meet the needs of residents and visitors as the community grows.

To encourage the dedication of park land as a part of the review and approval of large subdivisions and planned unit developments.

To plan community recreation facilities in conjunction with existing and planned school facilities so that they complement each other in function.

To encourage tourist commercial uses such as motels, restaurants, gas stations, gift shops and other noise and traffic generators to cluster in or adjacent to other commercial areas.

8. Economic Development:

Goal: To diversify and improve the economy of Heppner.

It Shall be City Policy:

To protect those areas suitable for industrial development from encroachment of incompatible land uses.

To encourage diversified, nonpolluting industrial development.

To minimize high noise levels, heavy traffic volumes and other undesirable effects of heavy commercial and industrial developments.

To encourage the expansion of job opportunities and reduce unemployment, reduce out-migration of youth and accommodate the growth of the local labor force.

To maximize the utilization of local manpower as job opportunities increase.

To cooperate with and encourage the use of local manpower training agencies and programs to provide critically needed skills or education to train or retrain the unemployed, underemployed and economically disadvantaged of the area.

To cluster commercial uses intended to meet the business needs of area residents and highway travelers only in designated areas to prevent the undesirable effects of a strip commercial area.

9. Housing:

Goal: To increase the supply of housing to allow for population growth and to provide for the housing needs of the citizens of Heppner.

Objectives:

To encourage a moderate rate of growth and a mixed population of varying age groups, incomes and lifestyles. (Ord. 419, 7-3-1978)

To encourage residential development which provides prospective buyers with a variety of residential lot sizes, a diversity of housing types, including manufactured homes and multi-family housing, and a range in prices. (Ord. 419, 7-3-1978; amd. Ord. 517-96, 10-14-1996)

10. Public Facilities And Services:

Goal: To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban development.

Objectives:

To develop, maintain, update and expand police and fire services, streets and sidewalks, water and sewer systems and storm drains, as necessary, to provide adequate facilities and services to the community.

It Shall Be City Policy:

To take into consideration the eventual need to serve higher elevation lands with water and sewer facilities in the design of new facilities or improvement of existing systems.

To encourage underground installation of utilities in all new developments and as major improvements are made to areas with aboveground utilities except where severe cost differential is proven.

To cooperate with agencies involved in providing and coordinating social services and consider pooling of City resources with social agencies to provide needed services within the community.

To cooperate in the development of programs for senior citizens.

To encourage the development of health services.

To work with Morrow County to ensure adequate provision for and control of solid waste disposal sites.

To plan public facilities, services and utilities to be maintained by the City to meet expected demand.

To provide City water and sewer services only after the area to be served has been annexed to the City or at the discretion of the City Council. (Ord. 419, 7-3-1978)

11. Transportation: Goals and policies associated with transportation planning are found in the City of Heppner Transportation System Plan, adopted October, 2018. The Transportation System Plan is a supporting, ancillary document to the Comprehensive Plan. (Ord. 582-18, 10-8-2018)

12. Energy Conservation:

Goal: To conserve energy and develop and use renewable energy resources.

Objectives:

To consider revising the Zoning Ordinance to protect sun rights.

To encourage the design of streets, buildings and landscaping in subdivisions to allow for utilization of solar energy.

To design the extension and upgrading of water and sewer lines and facilities to minimize energy use.

13. Urbanization:

Goal: To provide for an orderly and efficient transition from rural to urban land use.

Objectives:

To establish an urban growth boundary to identify and separate urbanizable land from rural land.

To develop a cooperative process between Heppner and Morrow County for the establishment and change of the urban growth industry.

To encourage development to occur within a relatively compact urban area with controlled outward growth.

To consider only those areas that are within the urban growth boundary for annexation to the City.

To establish a policy for revising or amending the urban growth boundary.

To work with Morrow County to develop policies and regulations to manage land development within the urban growth boundary and outside City limits. (Ord. 419, 7-3-1978)

To establish a Downtown District Zone that protects and maintains the historic "Main Street" character of downtown Heppner through dimensional standards, site plan requirements and architectural guidelines. (Ord. 542, 8-11-2003)

City of Hermiston

Will undertake detailed planning for remainder to urbanizable area at the time of the next major plan update in 1989, after completion of a comprehensive city/county transportation plan and state study and report of the extent and characteristics of the shallow water aquifer.

E. RESOURCES (GOALS 5, 6, 7 AND 13)

POLICY 7: NATURAL RESOURCES

The Hermiston area contains no unique fish and wildlife species or natural vegetation. There also are no wilderness areas, potential or approved Oregon trails, aggregate and mineral resources, ecologically/scientifically significant areas, or federal and state wild and scenic waterways within the UGB.[7]

However, the Oregon Department of Fish and Wildlife have identified two critical habitats: the eastern bank of the Umatilla River and a three-acre pond in northeast Hermiston. These two areas and the Oregon State University agricultural research station have been designated as open space (OS), which protects them from incompatible development. Furthermore, the city's commitment to protect the shallow water aquifer is likely to result in improved future surface and subsurface water quality, which also will protect and enhance fish and wildlife resources in the Hermiston area.

7. THE CITY OF HERMISTON WILL PROTECT NATURAL RESOURCES TO THE MAXIMUM DEGREE POSSIBLE

Implementing Actions

Has adopted an Open Space (OS) comprehensive plan designation to be applied to the 100-year floodplain, the wetlands area in the northeast portion of Hermiston and the OSU Agricultural Experimentation Station. It also has adopted a special open space zone to serve as the city's interim floodplain ordinance, until the Federal Emergency Management Agency (FEMA) publishes an official floodplain map for the area. In areas of the city to which it is applied,[8] the OS zone prohibits all but agricultural and public recreational activity. The remainder of the floodplain, which lies in unincorporated territory, is protected by the county's floodplain ordinance.

POLICY 8: SURFACE AND GROUNDWATER RESOURCES

Protection of the area's surface and groundwater resources is one of the most important concerns of Hermiston officials. Umatilla and Morrow Counties lie above an immense underground aquifer, that is, water reservoir, trapped several hundred feet below the surface in layers of Columbia River

[7] For other Goal 5 resources, see Policy 8: SURFACE AND GROUNDWATER RESOURCES, Policy 9: AGGREGATE RESOURCES, Policy 10: HISTORIC RESOURCES, and Policy 16: PARKS, RECREATION AND OPEN SPACE.

[8] Currently, a small portion of the site on which the city's sewage treatment plant is located is located within the 100-year floodplain.

- Will insure compliance to state Uniform Building Code to withstand effects of moderate earthquakes.

POLICY 15: ENERGY CONSERVATION

There are no indigenous non-renewable energy sources in the immediate Hermiston area. However, the city is located near two major energy generators: McNary Dam, one of 11 federally-owned dams on the Columbia River located at nearby Umatilla, and the PGE coal-fired electrical generating plant at Boardman. City officials recognize the importance of conserving finite energy resources both in public and private sectors.

15. THE CITY OF HERMISTON WILL ENCOURAGE THE CONSERVATION OF ENERGY RESOURCES WHEREVER POSSIBLE THROUGH CAREFUL LAND USE PLANNING, COMMUNITY EDUCATION AND ADOPTION OF CONSERVATION-ORIENTED POLICIES.

Implementing Actions

- Has adopted planned unit developments provisions which encourage the use of energy-efficient siting, design and construction techniques including clustered development, southern exposure, shared wall construction and adequate insulation.

- Will make energy conservation and waste reduction a regular practice in purchasing, operating and maintaining its buildings, vehicles, equipment and facilities and, where possible, will utilize renewable resources.

- Will encourage residents and businesses to practice energy conservation and utilize renewable sources of energy. To this end, the city will coordinate its education activities with local private utilities, state and federal agencies and other organizations.

- Will revise all land development standards by the next plan update to provide and protect solar access, establish criteria for approval of energy facilities, remove obstacles to energy-efficient design and require energy-efficient development when ownership is to be transferred to the city upon completion.

- May encourage establishment of facilities to recycle newspaper, glass, cans, lubricating oil and other reusable materials. For more information, see Policy 24: SOLID WASTE.

- Has encouraged development of small neighborhood stores within walking distance of residences, and construct additional bicycle and pedestrian facilities to reduce dependence on the automobile. For more information, see Policy 19: COMMERCIAL DEVELOPMENT, and Policy 32: ALTERNATIVE TRANSPORTATION.

F. PARKS AND OPEN SPACE (GOAL 8)

POLICY 16: PARKS, RECREATION AND OPEN SPACE

The availability of active and passive recreational opportunities is an important component to the quality of life in any community. Currently, the City of Hermiston has 60 acres of parkland and an additional 60 acres of recreational facilities available for community use at local schools. Using the Oregon State Parks and Recreation Division's ratio of 10 acres of urban parkland for ever 1,000 residents, the city has sufficient acreage to accommodate 12,000 residents, its anticipated population in the mid-1980s. To accommodate anticipated year 2003 population growth, the city must acquire and develop about 200 additional acres for public parks and related recreation facilities.

Providing visual relief and passive recreational activities, there are a number of open space areas within the UGB including the 100-year floodplain of the Umatilla River, numerous irrigation canals, and the Oregon State University Agricultural Experimentation Station. In addition, Cold Springs Wildlife Refuge, McNary Wildlife Recreation Area and Hat Rock State Park are all easily accessible from the city.

16. THE CITY OF HERMISTON WILL ACQUIRE AND DEVELOP ADDITIONAL PARKS AND RECREATIONAL FACILITIES THROUGHOUT THE COMMUNITY AND PRESERVE AS OPEN SPACE CITY-OWNED LAND WHICH POSSESSES RECREATIONAL, SCENIC AND OTHER ENVIRONMENTAL QUALITIES OR IS SUBJECT TO NATURAL HAZARDS.

Implementing Actions

- May identify, acquire and develop additional parks needed after 1985 to insure compliance with the state's recommended parkland/population ratio. Utilize the capital improvements plan to prepare an orderly program for acquisition and development.

- May participate in the planning of new school facilities to insure the inclusion of such important community recreational facilities as tennis courts, playing fields, running tracks and playground equipment. If necessary, assist in financing these activities.

- May collaborate with the school district to provide afterschool and summer recreational activities; for more information, see Policy 25: SCHOOLS.

- May explore feasibility of constructing pedestrian and bicycle facilities along the eastern bank of the Umatilla River and irrigation canals; for more information see Policy 32: ALTERNATIVE TRANSPORTATION.

G. LOCAL ECONOMY (GOAL 9)

POLICY 17: AGRICULTURE AND AGRICULTURE-RELATED ECONOMY

The Columbia Basin, including Umatilla County, is one of the most productive agricultural areas in the State of Oregon. Umatilla is the top wheat producing county in the state, in addition to producing significant crops of potatoes, alfalfa, hay, corn, melons, mint, beets, asparagus and onions. Because of its size and location, Hermiston serves as one of the main hubs in Northeast Oregon for agriculture-related businesses, such as businesses providing goods and services to surrounding agricultural producers, as well as related industries such as food processing and packaging, and farm

City of Stanfield

17. To provide a safe, clean and attractive community.

18. To ensure that some of the unique rural character of the community is retained as it grows.

19. To prepare neighborhood plans for growing areas of the community and to establish a detailed future land use map outlining necessary access and public facilities improvements.

C. AGRICULTURAL LANDS (GOAL 3)

Goal: To preserve and maintain agricultural lands.

It shall be City policy:

1. To provide for adequate residential, commercial, and industrial development within the urban growth boundary.

2. To encourage restriction of non-farm development outside the urban growth boundary.

3. To ensure compatibility of urban areas with nearby agricultural activity by requiring recommended setbacks from farmland and a vegetative buffer along the perimeter of the urban growth boundary where farmlands adjoin.

4. To prevent fragmentation of farmable land within the city and urban growth area prior to conversion to urban development.

5. To support and protect continued agricultural activities within the city and urban growth area, while also mitigating conflicts between urban and agricultural uses.

D. NATURAL RESOURCES, OPEN SPACES, SCENIC AND HISTORIC AREAS (GOAL 5)

Background and Findings:

Wetland and riparian areas provide numerous and complex functions that affect both aquatic and terrestrial systems. Many ecological functions of riparian areas are also provided by wetlands, flood plains, and vegetated upland areas. Riparian areas provide a buffer zone between upland uses and water resources, protecting or enhancing water quality, preventing erosion, and moderating flood flows. Riparian areas often provide important wildlife habitat and contribute to in-stream habitat for fish.

The Umatilla River forms a section of the City's western boundary. Stage Gulch Ditch flows through the City to join the Umatilla River. Both are protected by Comprehensive Plan Policy D2 and in the Development Code regulations for floodways, flood plains and open space.

Stanfield has elected to use the "safe harbor" process to comply with Riparian Corridor requirements of Goal 5, as outlined in OAR 660-023-0090. The safe harbor process identifies a riparian corridor boundary of 75 ft. upland from the top of bank for fish-bearing streams with an average stream flow of greater than 1,000 cubic feet per second (cfs). The riparian corridor boundary is 50 ft. upland from the top of bank for fish-bearing streams with an average stream flow of less than 1,000 cfs. Where the riparian corridor includes all or part of a significant wetland (as defined in OAR 660-023-0100), the riparian corridor boundary is measured from, and includes, the upland edge of the wetland. Where the top of bank is not clearly defined, or when the surrounding terrain consists predominately of steep cliffs, local governments must determine the riparian corridor boundary using the standard inventory process from OAR 660-023-0030.

Stanfield's significant riparian areas are adjacent to Stage Gulch Ditch or the Umatilla River. A 1998 letter from the Oregon Department of Fish and Wildlife to the Department of Land Conservation and Development identified the Umatilla River as one that "supports a diverse assemblage of anadromous and resident fish." The National Marine Fisheries Service (NOAA Fisheries) confirms on its website that the Umatilla River provides habitat for both the Mid-Columbia River Spring Run Chinook Salmon and the Middle Columbia River Steelhead. Stage Gulch Ditch provides an important ecological function within the Umatilla River watershed and is identified in Attachment A to the Stanfield Comprehensive Plan Technical Report Update as being home to resident rainbow trout.

Per the "safe harbor" regulations described above, the Umatilla River is identified as a fish-bearing stream with a discharge of more than 1,000 cubic feet per second (CFS), and has a riparian corridor width of 75 ft. upland from the top of the stream bank or intersecting wetland. Stage Gulch Ditch is identified as a fish-bearing stream with a discharge of less than 1,000 CFS, and has a riparian corridor width of 50 ft. upland from the top of the stream bank or intersecting wetland.

Wetland areas are located in the Floodway Sub-District, along the Umatilla River and Stage Gulch Ditch, and a marsh in the southeastern part of the City, according to a 1984 technical study by the Oregon Department of Fish and Wildlife *(and as verified by DSL Wetlands Planner Dana Field in 2002).* These areas are shown on Comprehensive Plan Map C, "Significant Natural Resources." The Wetlands Overlay District applies to locally significant wetlands as identified in the City of Stanfield Local Wetlands Inventory map (to be developed by the Oregon Division of State Lands). In addition to any measures applying to riparian areas and flood plains, wetlands are also subject to a notification process required by the State of Oregon and set forth in the Development Code.

The Stanfield urban growth area is within the Stage Gulch Critical Ground Water Area (CGWA), which is identified as a significant resource site pursuant to the Goal 5 rules in OAR 660-023. This is one of six CGWA's that have been identified by the State Water Resources Commission as areas where the pumping of ground water exceeds the long-term natural replenishment of an underground water reservoir. This designation was applied in 1991 to a 183-square-mile area to the southeast of Hermiston, including all of Stanfield, to address excessive ground water level declines, substantial interference between wells, and overdraft of

the ground water resource in the area's confined basalt aquifers. Detailed information about the Stage Gulch CGWA is contained in the Oregon Department of Water Resources report, "Ground Water Supplies in the Umatilla Basin," April 3, 2003.

Goal: To conserve open space and protect natural, scenic, historic and cultural resources.

It shall be City policy:

1. To identify open spaces; scenic, cultural and historic areas; and natural resources which should be preserved from urban development.

2. To preserve the floodways of the Umatilla River and Stage Gulch as permanent open space and protect fish, wildlife and vegetation.

3. To preserve the existing ecological pattern of open space and drainageways through land use and public acquisition of suitable land and by requiring dedication of adequate open spaces as part of residential development approval, either via land donation or payment-in-lieu.

4. To examine any publicly owned lands including street rights-of-way for their potential open-space use before their disposition.

5. To encourage multiple uses of open space land provided that the uses are compatible.

6. To conduct a thorough, community-wide inventory and amend the Zoning Ordinance to protect identified archeological and historic sites, historic structures, and artifacts.

7. To conserve the area's natural resources, including native vegetation.

8. To promote and protect scenic views in public and private development.

9. To preserve hillside areas between the present western city limits and the Union Pacific mainline as Permanent Open Space, to serve as a buffer between residential development and railroad operations.

10. To preserve and protect the old Foster Cemetery.

11. To preserve and protect the Stanfield-Westland Irrigation District Office (old Bank of Stanfield) and ensure that any remodeling or additions be designed and accomplished without destroying the architectural and historic integrity of the structure.

12. To discourage the demolition of or incompatible alteration of the following initially-identified historic structures unless and until it is determined that the structure in question is not of significant historic value or does not possess sufficient architectural integrity to warrant preservation or renovation.

a. Stanfield Grange Hall

b. Stanfield Moose Lodge (old Tum-a-lum Lumber Co.)

c. Two old wooden grain elevators along the rail line.

d. Residences at 315, 350 and 355 SW Barbara, 235 S. Main, 305 NW O'Brian, 415, 430 and 460 Coe., 150 SE Page, 345 SE Dunne, and old Rachel Jackson house.

e. Curly's museum.

f. Stanfield Junior High School.

g. Commercial buildings on NE and SW corner of Main and Coe (Jesse James Club, and Ralston's Market).

13. To designate wetlands and marshes as permanent Open Space, in order to protect them from destruction and incompatible uses and to preserve their hydrologic and ecological functions, including wildlife habitat.

14. To encourage the Oregon Division of State Lands (DSL) to thoroughly inventory the marshes, riparian areas and other wetlands and advise the City if further protection measures are necessary, and to adopt such measures.

15. To actively work with the Water Resources Department (WRD), Umatilla County, neighboring cities, and affected agencies and organizations to address local and regional water supply problems and basalt aquifer decline.

16. To control growth of the community in keeping with water availability for municipal purposes per the Public Facilities Plan and review of neighborhood plan proposals, rezonings, and large new developments.

17. To cooperate with WRD, Umatilla County, and neighboring cities to secure alternate municipal water supplies as economically feasible.

18. To protect the basalt aquifer by encouraging the conservation of the valuable groundwater resource, particularly in the WRD-established Critical Groundwater Areas, and requiring new development within 300' of a municipal water line to connect to the city's municipal water system.

E. AIR, WATER AND LAND RESOURCES QUALITY (GOAL 6)

Background and Findings:

Protecting the quality of air, water and land resources is important to maintain the health and quality of life for the residents of Stanfield.

2.6 Open Space District (OS)

Sections

2.6.100 Purpose of the Open Space District

The OS District is designed to accommodate existing and future agricultural activities while preserving as open land the hazardous floodplain areas in the eastern part of town and the vast hillside buffer area between the Union Pacific RR Mainline and existing and potential residential and industrial development north and west of the city center. The OS District is an "Exclusive Farm Use Zone" designed in accordance with ORS 215.203 through 215.213 to provide qualifying farmland with the benefits of farm value tax assessment under the provision of ORS 308.370.

2.6.200 Permitted Land Uses

Table 2.6.200
Land Uses and Building Types Permitted in the Open Space District

1. Farming Uses*: a. Farming and farm uses, per ORS 215.203 including: (1) Crop cultivation and livestock grazing except livestock feedlots and sales yards, hog or poultry farms and the commercial raising of fur-bearing animals. (2) Shelters, fencing and corrals for livestock, designed in a manner to prevent obstruction of flood flows and to minimize obstruction of the permanent open space concept. **2. Transportation Facilities and Improvements** a. Normal operation, maintenance; b. Installation of improvements within the existing right-of-way; c. Projects identified in the adopted Transportation System Plan not requiring future land use review and approval; d. Landscaping as part of a transportation facility;	e. Emergency Measures; f. Street or road construction as part of an approved subdivision or partition; g. Transportation projects that are not designated improvements in the Transportation System Plan ** (CU); and h. Transportation projects that are not designed and constructed as part of an approved subdivision or partition** (CU) **3. Farm-Related Uses: (CU)** a. Boarding of horses for profit. b. Commercial activities in conjunction with farm use, that do not require structural development other than as allowed in 1 of this Table. c. Hunting and fishing preserves and campgrounds, with required permit.	**4. Recreational Uses *** (CU):** a. Public or private golf courses, b. Parks, playgrounds and related accessory structures

Land uses with (CU) shall require a Conditional Use Permit in accordance with Chapter 4.4. Uses marked with an asterisk (*) are subject to the standards in Section 2.2.180 Special Use standards, "Special Standards for Certain uses)" **Uses marked with 2 asterisks are subject to the standards in Section 4.4.400D. *** Uses marked with three asterisks are subject to the standards in 2.6.300.D. Temporary uses are subject to the standards in Section 4.9.

2.6.300 Standards

A. Parcel Size: A minimum of 2 acres in the eastern floodplain; minimum of 10 acres in the northwestern buffer area

B. Setbacks: All structures shall be at least 20 feet from all property lines. All livestock shelters, corrals and pastures shall comply with the standards of the City's livestock ordinance.

C. Additional Standards. All development shall follow the standards in Chapter 3, Design Standards as well as the permitting procedures in Chapter 4.

D. Recreational Uses. Recreational uses shall only be location within the zone only if necessary, and situated in a manner so as not to obstruct flood flows or the open space concept.

Chapter 3 — Design Standards

Chapter 3.0 — Design Standard Administration

Sections:

3.0.100 Applicability.

All developments within the City must comply with the provisions of Chapters 3.1 through 3.6. Some developments, such as major projects requiring land division and/or site design review approval, may require detailed findings demonstrating compliance with each chapter of the code. For smaller, less complex projects, fewer code provisions may apply. Though some projects will not require land use or development permit approval (e.g., building of single family houses on platted lots, that are not subject to Chapter 3.7 – Flood Plain Design Standards), they are still required to comply with the provisions of this Chapter.

3.0.200 Types of Design Standards.

The City's development design standards are contained in both Chapter 2 and Chapter 3. It is important to review both chapters, and all relevant code sections within the chapters, to determine which standards apply. The City may prepare checklists to assist property owners and applicants in determining which sections apply.

A. **Chapter 3.** The design standards contained within the following chapters apply throughout the City, for all land use types:

3.1 - Access and Circulation
3.2 - Landscaping, Street Trees, Fences and Walls

3.0.200 Types of Design Standards. *(continued)*

3.3 - Automobile and Bicycle Parking
3.4 - Public Facilities Standards
3.5 - Surface Water Management
3.6 - Other Design Standards
3.7 – Flood Plain Design Standards

B. **Chapter 2.** Each land use district (Chapter 2) provides design standards that are specifically tailored to the district. For example, the Residential District contains building design guidelines that are different than those provided in the Downtown District, due to differences in land use, building types, and compatibility issues. In addition, each district provides special standards that are meant to address the impacts or characteristics of certain land uses.

Chapter 3.2 — Landscaping, Street Trees, Fences and Walls

Sections:

3.2.100 Purpose.

The purpose of this chapter is to promote community health, safety and welfare by protecting natural vegetation, and setting development standards for landscaping, street trees, fences and walls. Together, these elements of the natural and built environment contribute to the visual quality, environmental health and character of the community. Trees provide climate control through shading during summer months and wind screening during winter. Trees and other plants can also buffer pedestrians from traffic. Walls, fences, trees and other landscape materials also provide vital screening and buffering between land uses. Landscaped areas help to control surface water drainage and can improve water quality, as compared to paved or built surfaces.

The chapter is organized into the following sections:

Section 3.2.200 - Landscape Conservation prevents the indiscriminate removal of significant trees and other vegetation, including vegetation associated with streams, wetlands and other protected natural resource areas. This section cross-references Chapter 3.7, which regulates development of sensitive lands.

Section 3.2.300 -New Landscaping sets standards for and requires landscaping of all development sites that require Site Design Review. This section also requires buffering for parking and maneuvering areas, and between different land use districts. Note that other landscaping standards are provided in Chapter 2 - Land Use Districts, for specific types of development.

Section 3.2.400 - Street Trees sets standards for and requires planting of trees along all streets for shading, comfort and aesthetic purposes.

Section 3.2.500 - Fences and Walls, sets standards for new fences and walls, including maximum allowable height and materials, to promote security, personal safety, privacy, and aesthetics.

3.2.200 Landscape Conservation.

A. Applicability. All development sites requiring a Site Design Review containing Significant Vegetation, as defined below, shall comply with the standards of this Section. The purpose of this Section is to incorporate significant native vegetation into the landscapes of development. The use of mature, native vegetation within developments is a preferred alternative to removal of vegetation and re-planting. Mature landscaping provides summer shade and wind breaks, and allows for water conservation due to larger plants having established root systems.

B. Significant Vegetation. "Significant vegetation" means:

1. Significant Trees and Shrubs. Individual trees and shrub with a trunk diameter of 6 inches or greater, as measured 4 feet above the ground (DBH), and all plants within the drip line of such trees and shrubs, shall be protected. Other trees may be deemed significant, when nominated by the property owner and designated by the City Council as "Heritage Trees" (i.e., by virtue of site, rarity, historical significance, etc.)

2. Exception: Protection shall not be required for plants listed as non-native, invasive plants by the Oregon State University Extension Service in the applicable OSU bulletins for Umatilla County.

C. Mapping and Protection Required. Significant vegetation may be mapped as required by Chapter 4.2 - Site Design Review *and Chapter 3.7 - Sensitive Lands*. Significant trees shall be mapped individually and identified by species and size (diameter at 4 feet above grade, or "DBH"). A "protection" area shall be defined around the edge of all branches (drip-line) of each tree (drip lines may overlap between trees). The City also may require an inventory, survey, or assessment prepared by a qualified professional when necessary to determine vegetation boundaries, building setbacks, and other protection or mitigation requirements.

D. Protection Standards. All of the following protection standards shall apply to significant vegetation areas:

1. Protection of Significant Trees (Section B.1) Significant trees identified as meeting the criteria in Section B.1 shall be retained whenever practicable. Preservation may become impracticable when it would prevent reasonable development of public streets, utilities, or land uses permitted by the applicable land use district. If these trees are removed, then they shall be replaced as per Section 3.2.300.D, New Landscaping.

3.2.200 Landscape Conservation. *(continued)*

3. Conservation Easements and Dedications. When necessary to implement the Comprehensive Plan, the City may require dedication of land or recordation of a conservation easement to protect sensitive lands, including groves of significant trees.

E. Construction. All areas of significant vegetation shall be protected prior to, during, and after construction. Grading and operation of vehicles and heavy equipment is prohibited within significant vegetation areas, except as approved by the City for installation of utilities or streets. Such approval shall only be granted after finding that there is no other reasonable alternative to avoid the protected area, and any required mitigation is provided in conformance with Chapter 3.7 - Sensitive Lands.

F. Exemptions. The protection standards in "D" shall not apply in the following situations:

1. Dead, Diseased, and/or Hazardous Vegetation. Vegetation that is dead, diseased, invasive, or poses a hazard to personal safety, property or the health of other trees, may be removed. Prior to tree removal, the applicant shall provide a report from a certified arborist or other qualified professional to determine whether the subject tree is diseased or poses a hazard, and any possible treatment to avoid removal, except as provided by subsection 2, below.

2. Emergencies. Significant vegetation may be removed in the event of an emergency without land use approval pursuant to Chapter 4, when the vegetation poses an immediate threat to life or safety, as determined by the City Manager. The City Manager shall prepare a notice or letter of decision within five days of the tree(s) being removed. The decision letter or notice shall explain the nature of the emergency and be on file and available for public review at City Hall.

3.2.300 New Landscaping.

A. Applicability. This Section shall apply to all developments requiring Site Design Review, and other developments with required landscaping.

B. Landscaping Plan Required. A landscape plan is required. All landscape plans shall conform to the requirements in Section 4.2.500.B (Landscape Plans).

C. Landscape Area Standards. The minimum percentage of required landscaping equals:

1. Residential Districts. 20 percent of the site.

2. Downtown District. 10 percent of the site.

3. General Industrial District. A minimum of 10 percent of the site shall be landscaped.

3.2.300 New Landscaping. *(continued)*

4. Light Industrial District. 20 percent of the site.

D. Landscape Materials. Landscape materials include trees, shrubs, ground cover plants, non-plant ground covers, and outdoor hardscape features, as described below:

1. Natural Vegetation. Natural vegetation shall be preserved or planted where practicable.

2. Plant Selection. A combination of deciduous and evergreen trees, shrubs and ground covers shall be used for all planted areas, the selection of which shall be based on local climate, exposure, water availability, and drainage conditions. As necessary, soils shall be amended to allow for healthy plant growth.

3. "Non-native, invasive" plants, as per Section 3.2.200.B, shall be prohibited.

4. Hardscape features (i.e., patios, decks, plazas, etc.) may cover up to 15% percent of the required landscape area; except in the Downtown and Main Street District where hardscape features may cover up to 25% percent of the landscape area. Swimming pools, sports courts and similar active recreation facilities may not be counted toward fulfilling the landscape requirement.

5. Non-plant Ground Covers. Bark dust, chips, aggregate or other non-plant ground covers may be used, but shall cover no more than 50 percent of the area to be landscaped. "Coverage" is measured based on the size of plants at maturity or after 2 years of growth, whichever comes sooner.

6. Tree Size. Trees shall have a minimum caliper size of 2 inches or greater, or greater at time of planting.

7. Shrub Size. Shrubs shall be planted from 1-gallon containers or larger.

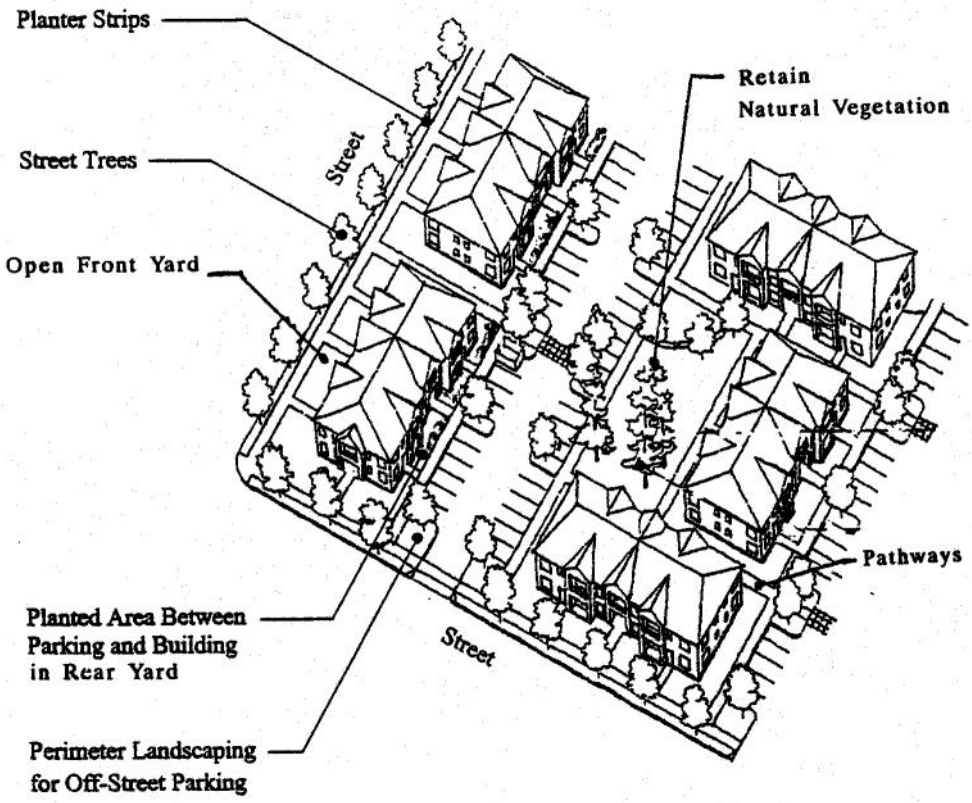
8. Ground Cover Size. All of the landscaped area that is not planted with trees and shrubs must be planted in ground cover plants, including grasses. Mulch (as a ground cover) must be confined to areas underneath plants and is not a substitute for ground cover plants. Ground cover plants shall be sized and spaced in the following manner: Planted at a rate of one plant per 12 inches on center, in triangular spacing.

9. Significant Vegetation. Significant vegetation preserved in accordance with Section 3.2.2 may be credited toward meeting the minimum landscape area standards. Credit shall be granted on a per square foot basis. The Street Tree standards of Section 3.2.4 may be waived when trees preserved within the front yard provide the same or better shading and visual quality as would otherwise be provided by street trees.

10. Storm Water Facilities. Storm water facilities (e.g., detention/retention ponds and swales) shall be landscaped with water tolerant, native plants.

3.2.300 New Landscaping. (*continued)*

Figure 3.2.300 – Landscape Areas in a Multiple Family Development (Typical)



3.2.300 New Landscaping. (*continued)*

E. Landscape Design Standards. All yards, parking lots and required street tree planter strips shall be landscaped in accordance with the provisions of this Chapter (Sections 3.2.100 through 3.2.500). Landscaping shall be installed with development to provide erosion control, visual interest, buffering, privacy, open space and pathway identification, shading and wind buffering, based on the following standards:

1. Yard Setback Landscaping. Landscaping shall satisfy the following criteria:

   a. Provide visual screening and privacy within side and rear yards; while leaving front yards and building entrances mostly visible for security purposes;

   b. Use shrubs and trees as wind breaks, as appropriate;

   c. Retain natural vegetation, as practicable;

   d. Define pedestrian pathways and open space areas with landscape materials;

   e. Provide focal points within a development, such as signature trees (i.e., large or unique trees), hedges and flowering plants;

   f. Use trees to provide summer shading within common open space areas, and within front yards when street trees cannot be provided;

   g. Use a combination of plants for year-long color and interest;

   h. Use landscaping to screen outdoor storage and mechanical equipment areas, and to enhance graded areas such as berms, swales and detention/retention ponds.

2. Parking areas. A minimum of 5 percent of the combined area of all parking areas, as measured around the perimeter of all parking spaces and maneuvering areas, shall be landscaped. Such landscaping shall consist of an evenly distributed mix of shade trees with shrubs and/or ground cover plants. "Evenly distributed" means that the trees and other plants are distributed around the parking lot perimeter and between parking bays to provide a partial canopy. At a minimum, one tree per 10 parking spaces total shall be planted to create a partial tree canopy over and around the parking area. All parking areas with more than 30 spaces shall include landscape islands with trees to break up the parking area into rows of not more than 15 contiguous parking spaces. All landscaped areas shall have minimum dimensions of 4 feet by 4 feet to ensure adequate soil, water, and space for healthy plant growth.

3.2.300 New Landscaping. (*continued)*

3. Buffering and Screening Required - Buffering and screening are required under the following conditions:

   a. Parking/Maneuvering Area Adjacent to Streets and Drives. Where a parking or maneuvering area is adjacent and parallel to a street or driveway, a decorative wall (masonry or similar quality material), arcade, trellis, evergreen hedge, or similar screen shall be established parallel to the street or driveway. The required wall or screening shall provide breaks, as necessary, to allow for access to the site and sidewalk by pedestrians via pathways. The design of the wall or screening shall also allow for visual surveillance of the site for security. Evergreen hedges used to comply with this standard shall be a minimum of 36 inches in height at maturity, and shall be of such species, number and spacing to provide the required screening within one year after planting. Any areas between the wall/hedge and the street/driveway line shall be landscaped with plants or other ground cover. All walls shall be maintained in good condition, or otherwise replaced by the owner.

   b. Parking/Maneuvering Area Adjacent to Building. Where a parking or maneuvering area, or driveway, is adjacent to a building, the area shall be separated from the building by a raised pathway, plaza, or landscaped buffer no less than 2 feet in width. Raised curbs, bollards, wheel stops, or other design features shall be used to protect buildings from being damaged by vehicles. When parking areas are located adjacent to residential ground-floor living space, a landscape buffer is required to fulfill this requirement.

   c. Screening of Mechanical Equipment, Outdoor Storage, Service and Delivery Areas, and Automobile-Oriented Uses. All mechanical equipment, outdoor storage and manufacturing, and service and delivery areas shall be screened from view from all public streets and residential districts. Screening shall be provided by one or more the following: decorative wall (i.e., masonry or similar quality material), evergreen hedge, non-see through fence, or a similar feature that provides a non-see through barrier. Walls, fences, and hedges shall comply with the vision clearance requirements and provide for pedestrian circulation, in accordance with Chapter 3.1 - Access and Circulation. (See Section 3.2.500 for standards related to fences and walls.)

F. Maintenance and Irrigation. The use of drought-tolerant plant species is encouraged, and may be required when irrigation is not available. Irrigation shall be provided for plants that are not drought-tolerant. If the plantings fail to survive, the property owner shall replace them with an equivalent specimen (i.e., evergreen shrub replaces evergreen shrub, deciduous tree replaces deciduous tree, etc.). All other landscape features required by this Code shall be maintained in good condition, or otherwise replaced by the owner.

G. Additional Requirements. Additional buffering and screening may be required for specific land uses, as identified by Chapter 2, and the City may require additional landscaping through the Conditional Use Permit process (Chapter 4.4).

3.2.400 Street Trees.

Street trees shall be planted for all developments that are subject to Land Division or Site Design Review. Requirements for street tree planting strips are provided in Section 3.4.100 - Transportation Standards. Planting of unimproved streets shall be deferred until the construction of curbs and sidewalks. Street trees shall conform to the following standards and guidelines:

A. Growth Characteristics. Trees shall be selected based on growth characteristics and site conditions, including available space, overhead clearance, soil conditions, exposure, and desired color and appearance. The following should guide tree selection:

1. Provide a broad canopy where shade is desired.
2. Use low-growing trees for spaces under utility wires.
3. Select trees that can be "limbed-up" where vision clearance is a concern.
4. Use narrow or "columnar" trees where awnings or other building features limit growth, or where greater visibility is desired between buildings and the street.
5. Use species with similar growth characteristics on the same block for design continuity.
6. Avoid using trees that are susceptible to insect damage, and avoid using trees that produce excessive seeds or fruit.
7. Select trees that are well adapted to the environment, including soil, wind, sun exposure, and exhaust. Drought-resistant trees should be used in areas with sandy or rocky soil.
8. Select trees for their seasonal color, as desired.
9. Use deciduous trees for summer shade and winter sun.

B. Caliper Size. The minimum caliper size at planting shall be 2 inches at four feet high, based on the American Association of Nurserymen Standards. If this caliper is not available the City Manager may accept replacement trees.

C. Spacing and Location. Street trees shall be planted within existing and proposed planting strips, and in sidewalk tree wells on streets without planting strips. Street tree spacing shall be based upon the type of tree(s) selected and the canopy size at maturity. In general, trees shall be spaced no more than 30 feet apart, except where planting a tree would conflict with existing trees, retaining walls, utilities and similar physical barriers.

D. Soil Preparation, Planting and Care. The Developer shall be responsible for planting street trees, including soil preparation, ground cover material, staking, and temporary irrigation for two years after planting. The developer shall also be responsible for tree care (pruning, watering, fertilization,

3.2.400 Street Trees. *(continued)*

and replacement as necessary) during the first two years after planting.

E. Assurances. At the time of building permit application submittal, the City staff shall choose one of the following assurances:

1. The developer shall pay a fee to the City, in accordance with the adopted fee schedule, for each required street tree. The fee shall cover the City's expense for planting and the first two years of care.

2. The City shall require the developer to provide a performance and maintenance bond in an amount determined by the City Engineer, to ensure the planting of the tree(s) and care during the first two years after planting.

3.2.500 Fences and Walls.

The following standards shall apply to all fences and walls:

A. General Requirements. All fences and walls shall comply with the standards of this Section. The City may require installation of walls and/or fences as a condition of development approval, in accordance with Chapter 4.2 - Conditional Use Permits or Chapter 4.4 - Site Design Review. Walls built for required landscape buffers shall comply with Section 3.2.300.

B. Dimensions.

1. The maximum allowable height of fences and walls is 6 feet, as measured from the lowest grade at the base of the wall or fence, except that retaining walls and terraced walls may exceed 6 feet when permitted as part of a site development approval, or as necessary to construct streets and sidewalks. A building permit is required for walls exceeding 6 feet in height, in conformance with the Uniform Building Code.

2. The height of fences and walls within a front yard setback shall not exceed 4 feet (except decorative arbors, gates, etc.), as measured from the grade closest to the street right-of-way.

3. Walls and fences to be built for required buffers shall comply with Section 3.2.300.

4. Fences and walls shall comply with the vision clearance standards of Section 3.1.200.

C. Materials.

1. Fences may consist of wood, metal, bricks, masonry, other permanent material or natural growth.

3.2.500 Fences and Walls. *(continued)*

a. Prohibited materials include concrete blocks, straw bales, barbed/razor wire and landscaped hedges greater than 6 feet in height.

b. Fence material shall not include materials inappropriate for fencing, such as scrap lumber, scrap metal or similar materials;

c. Fences constructed of bricks, masonry or concrete over 3½ feet tall shall be approved by the City Engineer.

D. Maintenance. For safety and for compliance with the purpose of this Chapter, walls and fences required as a condition of development approval shall be maintained in good condition, or otherwise replaced by the owner.

City of Echo

CHAPTER 1

ECHO COMPREHENSIVE PLAN

SECTION:

7-1-1 *AUTHORITY:*

Pursuant to Oregon Revised Statutes, chapters 92, 197, 215 and 227, the Statewide Planning Goals, and in coordination with Umatilla County and other affected governmental units, the City hereby adopts the City of Echo Comprehensive Plan including plan goals and policies as enumerated herein and the plan map attached to Ordinance 232-78 as Attachment "A".

7-1-2 *PLAN TECHNICAL REPORT:*

The technical report provides the background information, facts and considerations that the City's Comprehensive Plan goals, policies and map are based on. The technical report is not adopted as part of the Plan but remains the supporting document that is subject to revision as new technical data becomes available. When new data indicates that the City's Plan should be revised, amendments shall be made as provided in Section 7--1--8 of this Chapter.

7-1-3 *PLAN IMPLEMENTATION MEASURES:*

All plan implementation measures including but not limited to the Zoning Ordinance, Subdivision Ordinance, Mobile Home Park Ordinance, and Urban Growth Area Joint Management Agreement between the City and County, shall be consistent with and subsequent to the City Comprehensive Plan.

7-1-4 *AVAILABILITY OF PLAN:*

After the City Comprehensive Plan receives acknowledgment of compliance from the Oregon Land Conservation and Development Commission, the Comprehensive Plan, technical report and implementation measures shall be available for use and inspection at City Hall, Umatilla County Planning Department office in Pendleton, East Central Oregon Association of Counties, and the Department of Land Conservation and Development office in Salem.

7-1-5 *PLAN GOALS AND POLICIES:*

The following statement of goals and policies provide a general long-range basis for decision making relative to the future growth and development of the City. The goals are patterned after and are in direct response to applicable Oregon Statewide Planning Goals. The policy statements

set forth a guide to courses of action, which are intended to carry out the goals of the Plan. The policy statements present the City's position on matters pertaining to physical improvements and community development.

A. Citizen Involvement

GOAL: To develop a citizen involvement program that insures opportunity for citizens to participate in all phases of the planning process.

It shall be City policy:

1. To conduct periodic community surveys to ascertain public opinion and collect information; tabulated survey results shall be distributed.
2. To encourage people to attend and participate in City Council meetings and hearings.

B. Land Use Planning

GOAL: To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.

It shall be City policy:

1. To prepare data inventories on natural resources, man-made structures and utilities, population and economic characteristics, and the roles and responsibilities of affect governmental units.
2. To identify lands suitable for development and areas where development should be restricted.
3. To develop economic and population projections.
4. To determine the land requirements for projected economic development and population growth.
5. To determine the public facilities an services required to accommodate existing unmet public needs and expected economic and population growth.
6. To revise the Comprehensive Plan and urban growth boundary for the City of Echo as necessary based on available information, citizen input, coordination and affected governmental units, and the goals and policies adopted herein.
7. To prepare, adopt and revise as necessary Zoning, Subdivision and Mobile Home Park Ordinances.
8. To establish additional policies and implementation measures consistent with the Comprehensive Plan as necessary.

C. Agricultural Lands

GOAL: To preserve and maintain agricultural lands.

It shall be City Policy:

1. To identify agricultural lands which should be preserved and protected from urban development.
2. To encourage residential, commercial an industrial development within the urban growth boundary.
3. To restrict non-farm development outside the urban growth boundary.

4. To retain land within the urban growth area presently zoned for exclusive farm use for farming until rezoning is requested.

D. **Open Spaces, Scenic and Historic Areas, and Natural Resources**

GOAL: To conserve open space and protect natural scenic, historic, and cultural resources.

It shall be City policy:

1. To identify open spaces; scenic, cultural and historic areas; and natural resources which should be preserved form urban development.
2. To preserve the floodway of the Umatilla River as permanent open space and protect fish, wildlife and vegetation.
3. To preserve open space through public acquisition of suitable land and by encouraging provisions for open space in private developments.
4. To examine any publicly owned lands including street rights of way for their potential open-space use before their disposition.
5. To encourage multiple uses of open space land, provided that the uses are compatible.
6. To protect archaeological and historic sites, structures and artifacts.
7. To conserve the area's natural resources.

E. **Air, Water and Land Resources Quality**

GOAL: To maintain and improve the quality of the air, water, and land resources of Echo.

It shall be City policy:

1. To encourage development to locate outside floodplains, natural drainage ways, steep slopes, and other hazardous areas. (Ord. 232-78, 10-18-78)
2. To limit the use of land in the 100-year floodplain and floodway of the Umatilla River to open space, recreation or other appropriate uses, which minimize obstruction of floodwaters and the potential loss to life or property and which comply with Federal and State regulations. (Ord. 232-78, 10-1-8-7; 1986 Code)
3. To investigate alternative ways to reduce the flood hazard within the City limits.
4. To protect the City from possible overflow from or damage to the Feed Canal and Furnish Ditch.
5. To preserve the land between the Feed Canal and furnish Ditch as permanent open space with the exception of the area adjacent to the Lexington-Echo Highway.
6. To preserve the land between the Union Pacific rail line and the Feed Canal north and south of the sewage lagoons as permanent open space.
7. To require site specific information clearly determining the degree of hazard present from applicants who seek approval to develop residential, commercial or industrial uses within known areas of natural disasters and hazards. (Ord. 232-78, 10-18-78)
8. To participate in and comply with the National Food Insurance Program.
9. To apply flood hazard regulations to the 500-year floodplain of the Umatilla River and to the channels, borders and potential floodplains of the various creeks, draws, and gullies which extend from higher land to the north and east. (Ord. 256-84, 5-8-84)

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Oregon Department of State Lands

Table 1: Asset Inventory, January 2012

Land Classification	Total Acres	% of Total CSF Lands
Forestlands	129,530	4.60
Agricultural Lands	5,860	0.21
Rangelands	625,510	22.24
ICR lands	7,010	0.25
Special Stewardship Lands	11,005	0.39
Waterways	1,260,000	44.79
Mineral and Energy Resources[1]	774,110	27.52
Totals	**2,813,025**	**100**

The CSF's real property asset portfolio consists of approximately 2.8 million acres of forestlands, agricultural lands, rangelands, industrial/commercial/residential (ICR) lands, special stewardship lands, waterways, mineral and energy resources, and unclassified lands. Table 1 details the land distribution of this current asset base

Note

1 The mineral resource acres indicated above occur in "split estates" in which DSL owns the mineral rights but not the land surface associated with those rights. In addition to this acreage, DSL also manages 410,000 acres of mineral rights underlying DSL land (which are included in other land asset classes) and 2.1 million acres of mineral rights underlying surface acreage owned by other state agencies such as the Department of Forestry.

Special Stewardship Lands

These lands are managed primarily to ensure the protection of scenic, natural resource, cultural, educational and recreation values. This class may include both Trust and Non-Trust lands. The majority of lands classified as special stewardship are CSF lands managed by and currently designated by the Oregon Department of Forestry as special stewardship lands. These lands are generally managed for uses other than income production, e.g. aquatic and riparian habitat, threatened and endangered species, or visual quality.

The South Slough National Estuarine Research Reserve was the first reserve designated under the National Estuarine Sanctuary Program. Under this program, healthy estuarine ecosystems that typify different regions of the country are designated and managed as sites for long-term research, and are used as a base for estuarine education and interpretation programs. The Reserve is administered as a partnership between the National Oceanic and Atmospheric Administration (NOAA) and the Department. NOAA provides funding, national guidance and technical assistance. A 2006 management plan guides the work of the Reserve. Administrative operations are overseen by the Department with direction from the South Slough

NERR Management Commission. The Department holds title to the lands within the NERR and manages them as CSF assets.

Waterways

Approximately 1,260,000 acres of submerged and submersible lands are classified as waterways. These include submerged and submersible land under the Territorial Sea (i.e., oceanward to the three-mile limit), tidally influenced land, and the non-tidally influenced bed and banks of 12 waterways and a number of lakes in the state. Waterways are Non-Trust lands.

State ownership of waterways is established by the Oregon Admission Act and federal common law, including the Equal Footing Doctrine. Public rights of fishing, navigation and commerce are "public" interests that apply to all tidelands, shorelines and underlying beds. The extent of public waterway ownership is determined by tidality or by title navigability. Most of the submerged and submersible lands subject to the ebb and flow of the tides are publicly owned. In some cases, lands between the ordinary high and low tide on tidelands have been sold to private interests. Since 1995, state ownership of waterways (except meandered lakes, which are navigable by statute) is based on a determination by the Land Board that they are title navigable, i.e., they were used or susceptible to use as a highway of commerce at time of statehood (ORS 274.402).

Mineral and Energy Resources

The dominant use of lands in the mineral and energy resources class is the exploration for and development of mineral and energy resources; however, other uses, such as agricultural or rangeland uses, will typically also occur.

Mineral Resources

For minerals, the classification is applied to: (1) all state-owned parcels of subsurface mineral ownership interest, and (2) lands where the dominant use is associated with mineral resource development or exploration. (See Appendix A - Glossary - for a definition of mineral resources.)

The Department is responsible for the management, leasing and sale of state-owned mineral rights on approximately 3 million acres throughout Oregon. ORS 273.780 gives the Land Board authority for mineral and geothermal rights on most lands owned by the State of Oregon. These mineral rights occur on both the lands managed by the Department, as well as on lands owned by other state agencies. Approximately 774,000 acres occur in "split estates," in which the Department owns the mineral rights but not the land surface associated with those rights. In addition to this acreage, the Department also manages 410,000 acres of mineral rights underlying DSL land (which are included in other real property asset classifications), and 2.1 million acres of mineral rights underlying surface acreage owned by other state agencies, such as ODF. The Department receives compensation from the production of minerals from these lands in the form of royalties on the value of the minerals mined, as prescribed by statute and/or administrative rule.

Energy Resources

Energy resources include solar, geothermal, hydropower, wave energy, and wind energy sites. To date, hydropower resources have been developed on state land and lands are currently leased in Eastern Oregon for solar and geothermal energy projects that could result in significant revenue to the CSF. Investigations are also underway for wind and ocean wave energy projects.

The Nature Conservancy

CHAPTER 3. NATURAL AREA CONSERVATION

Vision

Federal agencies, state agencies, local governments and conservation organizations working together to designate a network of natural areas representing the full diversity of ecosystems in Oregon.

Oregon's natural areas are conserved when landowners or land managers choose to establish a natural area on lands they own or manage. Natural areas can also be permanently protected if a conservation group, state or federal agency buys private land to conserve it. More commonly, it occurs when a state or federal agency designates a site as a natural area in an agency plan. The federal and state agencies rely on different mechanisms, depending on the laws and rules that guide their actions. Descriptions of the agency designations and natural area programs are included in this chapter. In addition, this chapter discusses different mechanisms for establishing natural areas and outlines various public and private land management designations which together create the statewide system of natural areas.

Natural areas can be conserved voluntarily on private lands, either on a short-term basis by an interested landowner, or through a conservation agreement or easement, which has a set time span. Efforts to make it easier for landowners to conserve habitats on their lands and to provide incentives for landowners to restore habitats on private lands have been increasing and are an important focus for the conservation efforts outlined in the Oregon Conservation Strategy. A comprehensive list of incentives for voluntary protection of private lands is in the 2015 update of the strategy, available at: http://www.dfw.state.or.us/conservationstrategy/. While these are important for conservation overall, the history of the natural area program in Oregon has shown that voluntary conservation by private landowners has not been an effective method for establishing natural areas.

In Oregon, the majority of natural areas have been established by the Bureau of Land Management and the U.S. Forest Service on federal lands. So, the primary partner in establishing and managing natural areas is the Pacific Northwest Interagency Natural Area Committee which works with the federal agencies to establish federal Research Natural Areas (RNAs) on public lands.

The Pacific Northwest Interagency Natural Areas Committee works with the Natural Area programs in Oregon and Washington to help implement the states' natural area plans and cooperatively create vision and momentum for the use of natural areas.

The process for establishing natural areas is different for federal, state and private lands in Oregon, and are described below. Regardless of the owner, for a site to be designated as a natural area in the state, three steps need to be taken:

1. Search databases and literature at the Oregon Biodiversity Information Center, university libraries, herbaria and other information sources, and contact experts in the scientific and professional community to determine if the site contains species or plant associations needing representation.
2. Visit the site to evaluate the size and quality of the ecosystem types present.
3. Make a recommendation to the appropriate oversight group that the area be designated.

Oregon State Agency Natural Area Establishment and Designation

Dedication is the primary way natural areas are protected on state lands. The Natural Areas Act states that "the Oregon Transportation Commission, the State Fish and Wildlife Commission, the State Board of Forestry, the State Board of Higher Education, the State Parks and Recreation Commission and the State Land Board shall, with the advice and assistance of the department, establish procedures for the dedication of state natural areas on land, the title of which is held by the State of Oregon, and which is under that agency's management and control." These established or dedicated sites would be called State Natural Areas.

State agencies can choose to conserve a natural area based on internal staff recommendations, or they can proceed from a recommendation from the Biodiversity Information Center or the Interagency RNA Committee. Model dedication procedures or guidelines for dedication are included as Appendix 1 to assist natural resource state agencies in establishing natural areas on their lands. Agencies may wish to further refine these guidelines.

In addition to dedication, state agencies can either receive gifts of private property or acquire private property to be managed as natural areas. The Natural Areas Act clearly states that whenever feasible, areas selected for protection "shall be located on lands which have been allocated primarily to special non-commodity uses." Only properties that have ecosystems, species or geologic features or formations included in this plan, and that are suitable for dedication should be dedicated as a state natural area.

While natural areas that are dedicated on state lands are assumed to be permanently protected, there are procedures that allow for the Natural Area designation to be removed, or "terminated". In order to terminate a dedication, the agency must first hold a public hearing. There must be adequate public notice and a finding from the hearing that either: (1) there is an "imperative or unavoidable necessity;" or (2) the dedication of the site is no longer needed according to the guidelines of the Natural Areas Plan. Reasons to remove dedication might be that the ecosystem types or species that were the basis for designation are no longer present, or another larger or better quality site has been found which better represents them. Or if compelling reasons exist to no longer manage the lesser site as a natural area. To date, no state dedicated natural areas have been terminated, although a portion of one BLM RNA was removed when a landslide from upstream mine tailings buried the riparian vegetation the site was designated to protect, and other properties changed hands, at which time the designation was dissolved.

Federal Agency Natural Area Establishment and Designation

Federal agencies have different protocols for establishing natural areas (Research Natural Areas or RNAs) on their lands. Generally federal agencies identify areas which contain unrepresented plant associations, species or geologic types identified in the Oregon Natural Area Plan. These areas are evaluated by staff, boundaries are proposed, alternatives are examined, and a site and site boundaries are selected through the agency's planning process.

The U.S. Forest Service requires each RNA to be part of formal National Forest Management Plans, either through plan revisions or amendments to existing plans. In addition, Establishment Records are created for each RNA. These records include the justification for establishment, legal boundary descriptions, maps, distinguishing ecological features, environmental analyses, and management issues and guidelines. RNAs become officially established once an Establishment Record is completed and signed by the Region 6 Regional Forester with concurrence by the U.S. Forest Service Pacific Northwest Research Station Director, on behalf of the Chief of the U.S. Forest Service and Secretary of Agriculture.

In Oregon, the Bureau of Land Management (BLM) generally establishes RNAs during updates to their resource management plans (RMPs). The RNA is established when the RMP is approved by the Oregon/Washington BLM State Office. The U.S. Fish and Wildlife Service, the National Park Service, and the Army Corps of Engineers each follow similar protocols to establish RNAs on their lands.

Natural Area Protection on Private Lands in Oregon

The register is an official list of areas that contain significant natural heritage resources and/or special species. Private individuals or organizations may voluntarily designate all or part of their property as a natural area. To include a site on the register, the Parks Commission must determine that an area is predominantly natural, or has an example of an ecosystem type or species needing conservation.

For any privately-owned site to be included on the register, the Parks and Recreation Commission needs the written consent of the owner and a completed summary form (Appendix 1). After staff reviews the data on the form for accuracy, they recommend the site for inclusion on the register. The Commission then acts on this recommendation.

A private site can be removed from the register if OPRD receives a letter from the property owner indicating they no longer wish it registered or if the ecosystems or species for which it was registered are no longer present at the site.

As of June 30, 2015, the Register of Natural Heritage Resources included 113 sites found on both state and private lands. State agencies may choose to register sites, if they want recognition that their management plans are conserving identified ecosystems or species. The list of all sites on the register is found in Appendix 2. More information on these sites is available from the Oregon Biodiversity Information Center.

If a private landowner of a site on the Registry wishes to pursue dedication, the process follows the same outline for state agency dedications. Until 2009, to do so, the property needed to be first included on the Oregon Register of Natural Heritage Resources. This is no longer required. If a private parcel is dedicated by the Commission or was previously dedicated by the State Land Board, an Instrument of Dedication is provided to the landowner, and is recorded in the office of the clerk of the county in which the property exists. This Instrument may be highly variable in nature.

Private landowners may terminate the dedication at any time in accordance with the procedures outlined in the dedication agreement.

Natural Area Designations

Designations are how most public and some private landowners determine how their lands will be managed. This section outlines the management designations, the level of protection they provide and the consistency of their management objectives with the goals of Oregon's Natural Areas Program.

There are many agencies and organizations not included in the ecoregional lists that play a role in the identification and conservation of natural areas even though they may not manage lands. The Oregon Watershed Enhancement Board provides funding for watershed groups, as well as for easements and acquisitions, both of which can lead to important protections for species and habitats. Federal agencies such as the U.S. Natural Resources Conservation Service and local Soil and Water Conservation Districts help protect lands and water and maintain close contact with the agricultural community. Together, these agencies have a very important role to play in conserving nature in Oregon.

In evaluating the level of protection that various agency management designations provide, Oregon has adopted criteria from a national effort to develop a protected areas database, called the PAD-US. The project recognizes three main areas which describe how well sites or designations work at protecting diversity. These standard definitions and the spatial database build using them in Oregon represent the most comprehensive criteria and data developed to date.

1. **Management Intent:** What is the goal or objective of the designation as it relates to the conservation of biodiversity, and is it compatible if not identical with those for managing natural areas? Most sites are designated as 1- conservation focus, 2- conservation compatible, 3- conservation neutral and 4- unknown.
2. **Permanence:** What is the length of time the designation is in place. These include permanent, long-term, temporary and unknown.
3. **Effective Management Potential:** The ability of the land management entity to implement the intent of the designation. This has to do with agencies having the governance structure, the planning framework and the resources to manage the property as intended. This was created to address “paper parks” from Central and South America, but can be applied to some private, state and even federal natural areas. This criterion has not been applied to all natural areas in this plan, but will be soon.

State Agency Designations

State Natural Area (SNA)

Purpose: (1) To protect examples of terrestrial and aquatic ecosystems; (2) to serve as gene pool reserves; (3) to serve as benchmarks against which the influences of human activities may be compared; and (4) to provide outdoor laboratories for research and education.

Administering Agencies: State Parks and Recreation Department, Department of Forestry, Department of Fish and Wildlife, Oregon Military Department and Conservation Organizations.

Management Intent: Natural Area focused

Permanence: Permanent. While state natural areas can be terminated, none have been and they are not likely to be.

Comments: Ten sites have been dedicated on state lands to date and several others are currently under consideration.

National Estuarine Research Reserve (NERR)

Purpose: The NERR System is a national network of reserves established for long-term research, education and stewardship. This partnership program between the National Oceanic and Atmospheric Administration (NOAA) and the coastal states protects more than a million acres of estuarine land and water, providing essential habitat for fish and wildlife, offers educational opportunities for students, teachers and the public and serves as living laboratories for scientists.

Administering Agency: State Land Board via Department of State Lands, supported by NOAA.

Management Intent: Natural Area focused

Permanence: Permanent

Comments: Variable, some lands are adequately protected, others are not.

Marine Garden or Marine Education Area (MG)

Purpose: To provide intertidal areas for enjoyment of or learning about intertidal resources. Marine life in these areas will be protected by prohibiting the taking of shellfish and other marine invertebrates.

Administrative Structure: Marine Gardens are a management designation for rocky shores listed in Rocky Shore Management Strategy of the Oregon Territorial Sea Plan. The Oregon Fish and Wildlife Commission designates Marine Garden sites through regulation, which includes regulations for taking marine invertebrates, shellfish and finfish pursuant to designation. The most current ODFW designations are described in the 2011 Sport Fishing Regulations document (ODFW, 2010). OPRD could adopt complementary regulations to protect marine algae for rocky intertidal areas within the Ocean Shore State Recreation Area.

Designation: Secure for seven sites: Otter Rock, Haystack Rock, Cape Perpetua, Yaquina Head, Cape Kiwanda, Yachats and Harris Beach.

Protection: Fair, not because of regulations but rather because the regulations are not well known or enforced, and because clear rules are needed to prohibit taking of intertidal marine algae.

Marine Habitat Refuge (HR)

Purpose: To ensure that various representative areas of marine life in Oregon's rocky shores will be managed to protect natural habitat values and to maintain viable populations of marine plants and animals.

Administrative Structure: Marine Habitat Refuges are a management designation for rocky shores listed in Rocky Shore Management Strategy of the Oregon Territorial Sea Plan. The Oregon Fish and Wildlife Commission designates Marine Habitat Refuge sites through regulation of collecting or harvesting marine animal life. The Department of Fish and Wildlife administers regulations pursuant to designation. Oregon Parks and Recreation Department could adopt complementary regulations to protect marine algae for rocky intertidal areas within state park boundaries.

Designation: Secure for Whale Cove.

Protection: Variable, uncertain, due to lack of access control or on-site monitoring for compliance with regulations by either ODFW or OPRD.

Marine Priority Rock and Reef (PRR)

Purpose: To designate offshore rocks, islands, or reefs determined to need study or management action.

Administrative Structure: Ocean Policy Advisory Council of the Ocean Program of the Department of Land Conservation and Development (OPAC).

Management Intent: Natural Areas focused

Permanence: Permanent

Comments: These are inherently protected, there is no management category designated for these sites. However, fishing and collection can occur in these sites under existing laws.

Marine Research Area (RR)

Purpose: To protect and manage areas suitable or being used for scientific study or research including baseline study, monitoring, or applied research.

Administrative Structure: Marine Research Areas (previously Marine Reserves) are a management designation for rocky shores listed in Rocky Shore Management Strategy of the Oregon Territorial Sea Plan. The Oregon Fish and Wildlife Commission has designated some Marine Research Reserve sites (subtidal and intertidal) through regulation of collecting or harvesting marine animal life. The Department of Fish and Wildlife administers regulations pursuant to designation. Oregon Parks and Recreation Department could adopt complementary regulations to protect intertidal algae within the Ocean Shore State Recreation Area.

Designation: Secure for Boiler Bay Research Reserve, Pirate Cove Research Reserve, Neptune State Park Research Reserve, Gregory Point Subtidal Research Reserve, Cape Arago Research Reserve and Brookings Research Reserve.

Protection: Variable, uncertain, due to lack of access control or on-site monitoring for compliance with regulations by either ODFW or OPRD.

Marine Reserve (MR)

Purpose: To protect areas of Oregon's seas or adjacent rocky intertidal areas from all extractive activities except as necessary for monitoring and research

Administrative Structure: Marine Reserves are recommended by the Ocean Policy Advisory Council, approved by the state legislature and designated by state agencies, including ODFW and DSL.

Management Intent: Natural Area compatible; takes an ecosystem approach to conserving marine resources.

Designation: Five reserves have been established to date.

Permanence: Objectives are to provide lasting protection, but as this is a new designation these details are yet to be worked out

Scenic Waterway (SW)

Purpose: To provide examples of wild and scenic rivers.

Administering Agency: Parks and Recreation Department and the Department of Water Resources.

Management Intent: Natural Area compatible, but variable, depending on landowner actions, commitment and land management goals.

Permanence: Short term only on private lands; the designation is permanent, but no protection implied on state lands.

Comments: State, federal, municipal, county or private landowners may register lands upon approval of the Natural Heritage Advisory Council. A few areas have been registered to date.

Federal Agency Designations

Area of Critical Environmental Concern (ACEC)

Purpose: An area within the Bureau of Land Management (BLM) public lands where special management attention is required to protect and to prevent irreparable damage to important historic, cultural or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

Administering Agency: USDI Bureau of Land Management

Management Intent: Natural Area focused, in general. A few culturally focused ACECs might not be characterized as Natural Area compatible.

Permanence: Variable. Generally permanent on non-forested lands. Forested, O&C lands remain in question, due to uncertainty as to their long-term management.

Comments: Not all ecosystems and species contained within ACECs are considered adequately protected in this Plan. However, if an individual site has a management plan which protects natural area values, they can be evaluated separately under this designation. BLM RNA's represent a subcategory of an ACEC.

National Natural Landmark (NNL)

Purpose: To encourage the preservation of areas that illustrate the ecological and geological character of the United States; to enhance the educational and scientific values of the areas thus preserved; to strengthen cultural appreciation of natural history; and to foster a wider interest and concern in the conservation of the Natural Landmarks Program's natural heritage.

Administering Structure: The National Park Service is responsible for the NNL designation, although the management is dependent on the individual private or public land owner/manager.

Management Intent: Natural Area focused.

Permanence: Temporary. There is no long-term protection for any NNL, although publicly owned sites with this designation are likely to remain protected, given the recognition they receive.

Comments: Designation of a National Landmark carries with it no binding restrictions on management or use of the site. It is the equivalent of a national registry program, national recognition of the importance of the site.

National Parks (NP) and National Park Service National Monuments (NM)

Purpose: To preserve the outstanding natural, historical and recreational resources of the United States.

Administering Agency: USDI National Park Service

Management Intent: Natural Area focused.

Permanence: Permanent.

Comments: By and large, all species and ecosystem types within National Parks are considered adequately protected unless they are in an area developed for recreation.

U.S. Forest Service and Bureau of Land Management National Monuments (NM)

Purpose: To preserve the outstanding natural, historical and recreational resources of the U.S.

Administering Agency: USDI Bureau of Land Management and USDA Forest Service

Management Intent: Variable – either natural area focused or natural area compatible.

Permanence: Permanent.

Comments: Recreation, and occasionally livestock use occur in BLM or FS National Monuments. As a result, Research Natural Areas will likely be proposed to protect important plant associations present in them.

National Wildlife Refuges (NWR)

Purpose: To provide, preserve, restore, and manage a national network of lands and waters sufficient in size, diversity and location to meet society's needs for areas where the widest possible spectrum of benefits associated with wildlife and wild lands is enhanced and made available.

Administering Agency: USDI Fish and Wildlife Service

Management Intent: Variable. Some refuges, and parts of other refuges, are Natural Area focused. Others are Natural Area compatible, and still others are not compatible, with areas farmed or altered to support specific wildlife species.

Permanence: Permanent.

Comments: Establishment of Research Natural Areas with specific management plans within Refuges is considered adequate protection for species and ecosystems in this plan. There are large areas in wildlife refuges such as Hart Mountain NWR, where the management plan restricts disturbances enough to support long-term research and education, and therefore are effective natural areas.

Outstanding Natural Areas (ONA)

Purpose: An area of unusual natural characteristics where management of recreation activities is necessary to preserve those characteristics.

Administering Agency: USDI Bureau of Land Management

Management Intent: Natural Area compatible

Permanence: Long-term. These are established in local Resource Management Plans, and can be changed, but they rarely have been.

Comments: These are all designated as ACECs as well as ONAs. The designation in the list of ecosystems could read ONA/ACEC for these sites.

Research Natural Areas (RNA)

Purpose: (1) To preserve examples of all significant natural ecosystems for comparison with those influenced by man; (2) to provide educational and research areas for ecological and environmental studies; and (3) to preserve gene pools of typical and endangered plants and animals.

Administering Agencies: US Forest Service, Bureau of Land Management, Department of Defense (Navy and Army Corps of Engineers), National Park Service, and US Fish and Wildlife Service.

Management Intent: Natural Area focused

Permanence: Permanent

Comments: Federal agencies have different protocols for establishing Research Natural Areas (RNAs) on their lands. The Forest Service requires every RNA to be part of formal Forest Management Plans, either through plan revisions or amendments. In addition, an Establishment Record is created for each RNA, which include the justification for establishment, legal boundary descriptions, maps, distinguishing ecological features, environmental analyses and management issues and guidelines. RNAs become officially established once an Establishment Record is completed and signed by the Region 6 Regional Forester with concurrence by the Pacific Northwest Research Station Director, on behalf of the Chief of the Forest Service and Secretary of Agriculture.

In Oregon, the BLM generally establishes RNAs during updates to their resource management plans (RMPs). Sites are identified as containing plant associations or species identified in the Natural Areas Plan. These areas are evaluated by staff, boundaries are proposed, alternatives are examined and a recommended alternative is selected. The RNA is established when the RMP is approved by the Oregon/Washington BLM State Office. The National Park Service and the U.S. Fish and Wildlife Service follow similar protocols to establish RNAs on their lands.

Special Interest Areas (SIA)

Purpose: To protect, and where appropriate, foster public use and enjoyment of areas with scenic, historical, geological, botanical, zoological, paleontological or other special characteristics. To classify areas that possess unusual recreational and scientific values, so that these values are available for public study, use or enjoyment.

Administering Agency: USDA Forest Service.

Management Intent: Natural Area focused.

Permanence: Long-term, to potentially permanent. These are established in a Forest Plan, but can be changed in a Forest Plan update. The existing plans were to be updated each decade, but have been in place for 25 years.

Comments: These areas are managed for various uses substantially in natural condition, which varies protection of species or ecosystems. For example, salvage logging may be allowed in SIAs in certain instances. As a result, SIAs are not always considered optimal designations for a natural area.

Wild and Scenic Rivers (WSR)

Purpose: To protect the river's aesthetic, scenic, historic, archaeological and scientific features.

Administering Agencies: Several agencies, especially the U.S. Department of the Interior

Management Intent: Natural Area compatible.

Permanence: Permanent

Comments: Management plans result in varying degrees of protection of ecosystems or species based on the special attributes of the area. Salvage logging and grazing are not necessarily excluded from sites with this designation.

Wilderness Areas (WA)

Purpose: Wilderness Areas are devoted to the public purposes of recreational, scenic, scientific, educational, conservation and historical use.

Administering Agencies: USDA Forest Service, USDI Bureau of Land Management

Management Intent: Natural Area compatible or occasionally focused.

Permanence: Permanent

Comments: Certain activities not compatible with natural area uses may be permitted in Wilderness Areas, such as heavy recreation, domestic livestock grazing or mining. For this reason, the Natural Areas Program and the PNW Natural Area Committee continue to try to designate Research Natural Areas within established Wilderness Areas.

Wilderness Study Areas (WSAs) are areas under study for inclusion in the wilderness system. These are usually managed as Wilderness Areas. In Oregon, grazing or mining rarely occur in WSAs, so parts of these areas can represent an ecosystem or species, if recreation is not likely to impact the site, although these are not permanent.

Tribal Designations

Tribal Wildlife Conservation Lands

Purpose: To conserve for present and future use the diversity and integrity of biotic communities of plants and animals within natural ecosystems and to safeguard the genetic diversity of species on which their continuing evolution depends.

Administering Agency: Sovereign nations of the Burns-Piaute Tribe, Confederated Tribes of the Grand Ronde, Confederated Tribes Umatilla Indian Reservation, and the Confederated Tribes of the Warm Springs have lands identified in this plan.

Management Intent: Focused on conserving and restoring fish and wildlife habitats.

Permanence: Permanent

Comments: The sites included in this plan are properties that have been acquired by the the Tribes as part of the Bonneville Mitigation Program, to restore lost fish and wildlife habitat. The lands included have significant natural area value. The tribes have individual designations for these lands.

International Designations

Biosphere Reserves

Purpose: To conserve the diversity and integrity of biotic communities of plants and animals within natural ecosystems and to safeguard the genetic diversity of species.

Administering Agency: UNESCO, United Nations

Management Intent: Natural Area focused.

Permanence: Permanent

Local Designations

Metro Natural Areas (MNA)

Purpose: To protect and enhance habitat for fish, wildlife and water quality. The natural areas protect natural lands now in urban areas or in areas where development is likely to occur.

Administering Agency: Metro Regional Government, City of Portland, other Metro local governments

Management Intent: Natural Area focused.

Permanence: Permanent

Comments: These are generally in urban settings, which while adequately protected are often influenced by the significant human disturbances surrounding them. As a result, these urban natural areas are rarely used to protect plant associations or species in the plan.

Private Organizations

Columbia Land Trust (CLT)

Purpose: To conserve and care for important places in the lower Columbia River region.

Administering Agency: Columbia Land Trust.

Management Intent: Natural Area focused.

Permanence: Permanent

Comments: These areas are privately owned equivalents of State Natural Areas.

Blue Mountain Land Trust (BMT)

Purpose: To work cooperatively with landowners to conserve land for wildlife, scenic views and local communities.

Administering Agency: Deschutes Land Trust.

Management Intent: Natural Area focused.

Permanence: Permanent

Comments: These areas are privately owned equivalents of State Natural Areas.

Deschutes Land Trust (DLT)

Purpose: To work cooperatively with landowners to conserve land for wildlife, scenic views and local communities.

Administering Agency: Deschutes Land Trust.

Management Intent: Natural Area focused.

Permanence: Permanent

Comments: These areas are privately owned equivalents of State Natural Areas.

Greenbelt Land Trust (GLT)

Purpose: To protect in perpetuity native habitats, working lands, and lands of natural beauty, which provide a connection to the natural world for residents of the mid-Willamette Valley.

Administering Agency: Greenbelt Land Trust.

Management Intent: Natural Area focused.

Permanence: Permanent

Comments: These areas are privately owned equivalents of State Natural Areas.

McKenzie River Trust (MRT)

Purpose: To protect and care for lands in western Oregon and the rivers that flow through them.

Administering Agency: McKenzie River Trust.

Management Intent: Natural Area focused.

Permanence: Permanent

Comments: These areas are privately owned equivalents of State Natural Areas.

Southern Oregon Land Conservancy (SOC)

Purpose: Protecting and enhancing precious land in the Rogue River region to benefit our human and natural communities.

Administering Agency: Southern Oregon Land Conservancy

Management Intent: Natural Area and recreationally focused.

Permanence: Permanent

Comments: These areas are privately owned equivalents of Natural Areas.

The Nature Conservancy (TNC)

Purpose: To conserve the lands and waters on which all life depends.

Administering Agency: The Nature Conservancy

Management Intent: Natural Area focused.

Permanence: Permanent

Comments: These areas are privately owned equivalents of Natural Areas.

North Coast Land Conservancy (NCC)

Purpose: To conserve and connect the landscape of Oregon's coastal lands.

Administering Agency: North Coast Land Conservancy.

Management Intent: Natural Area focused.

Permanence: Permanent

Comments: These areas are privately owned equivalents of Natural Areas

The Wetlands Conservancy (TWC)

Purpose: To protect examples of high priority wetlands and aquatic ecosystems.

Administering Agency: The Wetlands Conservancy

Management Intent: Natural Area focused.

Permanence: Permanent

Comments: These areas are privately owned equivalents of Natural Areas.

Wild Rivers Land Trust (WRT)

Purpose: Working together to keep the irreplaceable lands and waters of the southern Oregon coast forever wild and abundant.

Administering Agency: Wild Rivers Land Trust

Management Intent: Natural Areas and Working Lands.

Permanence: Permanent

Comments: These areas are privately owned equivalents of Natural Area

Bureau of Land Management

Chapter 2—Baker Resource Management Plan Decisions

Introduction

Chapter 2 describes the Resource Management Plan, which is essentially the same as the Baker Proposed Resource Management Plan and Final Environmental Impact Statement (Final RMP/EIS) published in October 1986. The RMP provides for a balanced level of resource development, conservation and protection. It also best resolves issues raised during the planning process, satisfies the planning criteria, responds to public input, and mitigates the adverse environmental consequences.

This Resource Management Plan establishes the priority of all resource allocations identified in the planning area. Table 3 ranks each resource by order of importance as established by federal and state statutes, federal regulations and manuals, executive orders, planning criteria and public comment. Map 10 reflects this ranking.

Table 3-Priority Ranking for Management of Resource Values

1. Threatened or Endangered Species
2. Cultural Resources
3. Paleontological Resources
4. Areas of Critical Environmental Concern
5. VRM – Class I & II
6. Riparian Areas
7. Crucial Wildlife Habitat
8. Soils/Watershed
9. Recreation
10. Forestry
11. Grazing
12. Wildlife/Fisheries
13. Off Road Vehicle Use
14. Salable Minerals
15. Leasable Minerals
16. Locatable Minerals
17. Fire Management

Assigning management priority for a resource value in a particular portion of the Planning Area does not necessarily exclude other resource *uses* from those areas. Managing more than one resource in each priority area is the essence of multiple-use management. However, the management priority does indicate which resource value would be considered most important when resolving resource use conflicts. This should be kept in mind when viewing Map 10 because lower priority resource allocations are not shown, even though there may be no conflict with resources of higher priority ranking. Valid existing rights are recognized, such as oil and gas leases, mining claims, grazing leases, and rights-of-way grants.

The Resource Area has been divided into 14 smaller geographic units for the purpose of identifying site specific resource condition objectives, allocations and management actions (refer to Table 4A and Map 9). An Activity Plan will be prepared by resource for many of the resources that occur within each geographic unit, and these plans may then be integrated into Coordinated Activity Plans (CAPs). A CAP will be prepared when two or more important resources occur and overlap and when the basic management objectives of each are dependent upon or conflict with the associated resources.

Criteria

The following criteria was used to determine seven geographic units that will require the integration of individual Resource Activity Plans into a CAP, and also to determine the priority for CAP preparation.

1. Are there critical and fragile resource values present and do they include:
   A. Threatened and endangered plants and animals?
   B. Critical watershed values?
   C. ACECs, ONAs, RNAs, and wilderness?
2. Are there highly conflicting values and/or uses and do they include:
   A. Cultural values?
   B. ACEC designations?
3. Are surface disturbing actions required to implement RMP decisions?
4. Is there multi-activity use, i.e., two or more important resource activities overlapping?

The seven geographic units are listed in the order of importance of resource values and the priority for CAP preparation, Resource values shown for each geographic unit are categorized by major and minor values. Future CAPS in other geographic units will be ranked and prioritized in a similar fashion.

Table 4A—Geographic Units (GUs)

Unit Number	Name	Acres
1	Big Lookout Mtn.	23,502
2	Burnt River	42,914
4	Keating	24,238
5	Pedro Mtn.	23,969
	Grande Ronde River	16,456
6		
7	Homestead Pritchard Cr.	12,431 13,587
8	Oregon Trail	3,378
9	Unity Reservoir	360
10	Sheep Mtn.	8,418
11	Hunt Mtn.	2,409
12	Powder River Canyon	5,946
13	Blue Mtn.	33,541
14	Baker County Misc.	218,605
	Total	429,754

Table 4B -Priority for Coordinated Activity Plan (CAP) Preparation by Geographic Units

Priority Order	Geographic Unit/ Number	Major Resource	Minor Resource
1	Big Lookout Mountain/l	. Range .Watershed .Minerals .Forest .Wildlife/Fisheries . Recreation	.Cultural
2	Grande Ronde River/5	.Forest .Cultural .Recreation (National Priority) .Grande Ronde ACEC .Joseph Creek ONA/ACEC .Wildlife/Fisheries .T/E Species Bald Eagle .Scenic	. Range .Watershed .Mineral
3	Burnt River Canyon/2	.Watershed .Minerals . Forest .Wildlife .Cultural .Range	.Recreation
4	Keating Valley/3	.Range .Watershed .Minerals . Forest .Keating Riparian RNA/ACEC .Cultural .Wildlife	.Recreation
	Pedro Mountain Area/4	.Minerals . Forest .Wildlife	.Range .Watershed .Recreation .Cultural
	Homestead/G	.Homestead ACEC .Recreation .Watershed .Wildlife .Minerals	.Forest .Range .Minerals .Cultural
7	Pritchard Creek/7	.Watershed .Wildlife . Range	. Recreation

The preparation of Coordinated Activity Plans may be required when individual resource activity plans are prepared and additional uses/needs are identified or additional inventory data is developed. Existing approved resource activity plans or the affected portions of plans will be integrated into each additional CAP. Single resource Activity Plans will be prepared as identified later in this chapter.

General Management Direction and Action for the Resources

This section is **a** summary of the planned actions, priorities and criteria for implementing those actions. Management direction in this chapter is displayed first in a general way for each resource value over the resource area as a whole, and then in a site specific way for each resource by geographic unit.

Livestock Grazing Management

Livestock grazing management described in this section, and in the geographic units, is a combination of valid existing management direction previously recorded in the lronside Rangeland Record of Decision, subsequent rangeland program summary updates and the grazing plans for the Section 15 lease areas of the RMP.

Terms such as the lronside ROD, Section 15 and Section 3 will no longer be referred to in the description of grazing management in this plan. Future rangeland program summary updates will include both Section 3 and Section 15 rangeland, and be referred to as the Baker Resource Management Plan Rangeland Program Summary Update.

Management Direction

Continue to authorize grazing permits/leases for approximately 55,000 Animal Unit Months (AUMs) on 374 allotment/lease areas for livestock grazing. The level of authorized grazing will depend on future requirements of the associated resources for the land, including disposal, acreage being grazed and the results of monitoring.

All grazeable lands upon which grazing is not currently authorized, will be considered for authorization upon receipt of an application.

Continue to restrict and exclude grazing in areas where the livestock grazing results in significant resource damage.

Continue with categorization of all livestock grazing allotments and lease areas. As rangeland conditions and objectives change and other resource uses develop, a shift from one category to another will be considered. The planning area presently has 44 I (Improve), 53 M (Maintain), and 277 C (Custodial) grazing management allotment/lease areas.

The "I" areas usually have a potential for resource improvement and BLM controls enough land to implement changes. The "M" areas are usually where satisfactory management exists and major resource conflicts have been resolved. Most "C" areas are small tracts intermingled with larger acreages of non-BLM lands, thus limiting BLM management opportunities.

Allow rangeland users to develop range improvement projects as long as they are consistent with BLM objectives and are subject to environmental analysis and approval by BLM.

Protect relict vegetation areas identified by the Soil Conservation Service (SCS) to preserve these areas. Evaluate each site individually to identify the management necessary for protection. Management action could include fencing or grazing system adjustments.

Livestock grazing will not be allowed on areas where vegetation manipulation occurs. Livestock will be deferred either by fencing treated areas, or by resting the treated pasture for 2 to 5 growing seasons (that is, if a pasture is rested for 3 growing seasons, cattle use would not be allowed until fall of the third year).

Implementation

To implement grazing management systems on the 44 "I" category allotments, range improvement projects include vegetative conversion on approximately 21,000 acres, 30 miles of fencing, 50 new spring developments, 10 reservoirs and 10 miles of pipeline.

Allotment Management Plans (AMPs) are not scheduled for the M and C Category allotments in the Baker Resource Area.

support

Each AMP will be prepared in cooperation with the allotment users, and where appropriate with the Forest Service, Oregon Department of Fish and Wildlife, land owners and other interested user groups. The preparation will be coordinated with all affected resource activities. Close coordination with the Soil Conservation Service will continue in the identification and evaluation of relict areas.

Monitoring

Grazing will continue to be monitored in accordance with the Oregon/Washington Rangeland Monitoring Plan and the District and Resource Area Rangeland Monitoring Plans. These documents are available in the Vale and Baker BLM offices. Category C grazing lands will be monitored at least once every 10 years to assure overuse is not occurring and that rangeland improvements are being maintained. In all areas where the impacts of grazing cannot be mitigated, grazing will be excluded.

Grazing in areas covered by other resource activity plans will be monitored in accordance with these plans. Relict vegetation areas will be monitored annually to ensure authorized uses are not adversely affecting the resource. The SCS will continue data gathering.

Priority

1. Continue to authorize grazing on all grazeable land and implement grazing management systems. The priority will be dictated by the resource values, uses, user cooperation and ease and cost of implementation.

2. Develop AMPs (activity plans) on I Category allotments, and develop Coordinated Activity Plans (CAPs) as needed by other resource activities by priority area as shown on Map 9 and discussed under the section on CAPs. Map 11 shows the established grazing allotments.

3. Evaluate and implement protection measures for identified relict vegetation areas in cooperation with the SCS.

4. Monitor I Category allotments.

5. Monitor all other allotments. Search for, identify and evaluate additional non-represented relict vegetation areas.

Standard Design Features

An allotment management plan (AMP) contains the following: (1) statement of the present situation, (2) specific objectives, (3) grazing system designed to reach the objectives, (4) monitoring, studies, and schedules for the evaluation of progress toward objectives, (5) signature of the parties involved. An AMP is prepared with consultation and coordination among all involved parties.

Allotment management plans inventory all resources within an allotment, documenting the condition, potential and present uses of these resources. Specific objectives are set based on the potential of the area and a grazing system is designed to accommodate other uses of the area while achieving the long range objectives. Monitoring studies are implemented to evaluate the grazing systems effect on the resources, and to indicate whether or not objectives are met. A study schedule and evaluation schedule are implemented.

Riparian Area Management

Management Direction

Management actions within riparian areas will include measures to protect or restore natural functions, as defined by Executive Orders 11988 and 11990 and the Oregon/Washington Riparian Enhancement Plan (1987).

The Oregon/Washington Riparian Enhancement Plan 1987 provides overall guidance and direction for management of riparian areas within the planning area. The overall goal of this plan is to maintain, restore or improve riparian areas to achieve a healthy and productive ecological condition for maximum long-term multiple use benefits and values. The plan details several goals and objectives for the planning area including management and implementation strategies, proposed projects and monitoring. The plan meets or exceeds all goals and decisions set forth in this document.

Implementation

Implement the Oregon/Washington Riparian Enhancement Plan (1987) for the hydrologic units within the planning area.

The following riparian areas have been identified for habitat recovery implementation over the next 7 to 10 years. In order of priority, these are: Morgan Creek, Burnt River, Dark Canyon, Deer Creek, Pritchard Creek, Fox Creek, Dixie Creek, Sisley Creek, Benson Creek, and Lawrence Creek.

Habitat recovery projects, including livestock exclusion fences, have been recently initiated on segments of the first four of these riparian areas.

Of approximately 240 miles of riparian areas along perennial streams in the planning area, 70 percent have been inventoried and rated for condition and trend (refer to Table 5 for status, revised by recent inventories). The remaining 71 miles of riparian areas will be inventoried and rated (refer to Appendix F for an example of data gathered in riparian condition inventory). Inventories will be performed as funding is available.

Table 5—Condition and Trend for Inventoried Riparian Areas

Riparian Condition (Miles)[1]				Riparian Trend (Miles)[2]			Miles of Riparian Inventoried
Excellent	Good	Fair	Poor	Up	Static	Down	
18	64.5	60.5	26.1	22	127.5	19.6	169
	169				169		

Baseline data obtained from inventories will be applied to the development of enhancement, or recovery, management plans which meet the goals and objectives of the Oregon/Washington Riparian Enhancement Plan. Management actions will be designed to restore natural riparian functions.

Recovery plans will include but not be limited to riparian shrub plantings, instream structures, and riparian fencing; and may include major adjustments in grazing allotment management plans. Riparian areas will also be enhanced or maintained through less intensive methods, depending upon resource values and public concern. Less intensive management actions to improve or maintain riparian areas through constraints on other programs will include control of livestock through grazing systems, seasons of use, adjustment of numbers, and fencing; and design features for timber harvests such as buffer strips, overstory removal, salvage removal, and selective cutting and specialized logging systems.

The following criteria will be considered for establishing needs and priorities for riparian recovery implementation in management plans:

1. Location, size and significance of a riparian area relative to the watershed.

2. Ecologic and scenic condition relative to its potential to recover.

3. Classification as to potential to support anadromous fish.

4. Classification as to perennial or intermittent flows,

5. Other resource values.

Monitoring

Riparian monitoring and evaluations will be scheduled to determine the effectiveness of grazing, forestry, and wildlife management plans and actions toward achieving the goals and objectives established in the Oregon/Washington Riparian Enhancement Plan.

Riparian recovery plans and actions will be monitored to assure an upward trend in stream riparian condition, and to evaluate the effectiveness of stream improvements. Monitoring will include trend photographs, biotic condition index, vegetation studies, and fish census.

support

Riparian recovery, enhancement and maintenance plans will be developed in cooperation with private landowners, ODFW, and the Forest Service for riparian areas, particularly those on anadromous fish streams in the planning area. Support and cooperation from these groups, and public interest groups, is an integral part of the riparian program.

Priorities

1. Develop and implement recovery plans for riparian areas specifically identified in the Oregon/Washington Riparian Enhancement Plan.
2. Develop and implement recovery plans for inventoried riparian areas presently classified in poor or fair condition. Inventory remaining riparian areas and develop and implement recovery plans, according to availability of funding.
3. Develop and implement management plans for riparian areas currently in good or excellent condition, to maintain or enhance natural riparian conditions.

Wildlife and Fisheries Habitat Management

Management Direction

Objectives for wildlife and fisheries habitat management will be consistent with BLM policy identified in the 1988 nationwide "Fish and Wildlife 2000" plan.

Habitat Management Plans (HMP) will be developed for economically important wildlife species, including mule deer, antelope, bighorn sheep, and grouse. Primary emphasis of many of the plans will be to ensure the availability of palatable shrubs and thermal cover for deer on crucial winter ranges in Baker County. Benefits will also accrue to many nongame species as a result of these habitat enhancement projects.

Transplants of endemic wildlife and fisheries species, including bighorn sheep, antelope, and beaver into suitable habitats will be allowed in cooperation with the affected state wildlife agencies (i.e. Oregon Department of Fish and Wildlife - ODFW and Washington Department of Wildlife - WDW). Wild turkeys and brown trout which are not native to Oregon, may also be transplanted into suitable habitat.

Maintain enclosures that benefit wildlife habitat. Additional enclosures will be built as needed and as funds are available to meet site-specific needs or objectives.

Continue identification of wildlife habitat requirements as other resource activity plans are prepared. Develop additional Cooperative Management Agreements with Washington Department of Wildlife and Oregon Department of Fish and Wildlife. Conduct inventories of isolated tracts of public land to determine wildlife resource values.

Maintain or enhance important anadromous and resident fisheries; increase habitat productivity; and emphasize coordinated management with other agencies and landowners. Restore, maintain or enhance fish habitat on 155 miles of stream that have anadromous or resident fish or the potential to support fish. Approximately 83 miles of fishery habitat have been inventoried. A summary of fish habitat condition and trend in the planning area is displayed in the geographic unit descriptions.

Implementation

The Wildlife Exclosure HMP and the Burnt River HMP were completed in FY 1986. Project implementation was begun in FY 1987.

Habitat Management Plans (HMPs) will be written for six crucial deer winter range areas - Keating, Powder River Canyon, Daly Creek, Durkee, Homestead-Sheep Mtn, Immigrant Gulch, and Pedro Mountain. Prepare and implement an HMP for Big Lookout Mountain deer summer range and bighorn sheep habitat.

Prepare and implement habitat management plans for antelope, sage grouse, raptors, and bighorn sheep: including Virtue Flat-Pritchard Creek and Unity.

An HMP will be written for an Isolated Tracts Wildlife Program that will address scattered lands in Wallowa, Union, Umatilla, and Morrow Counties.

Upon successful establishment of transplanted wildlife species, specific management plans will be written and incorporated into broader Habitat Management Plans.

Complete inventory of fishery habitat conditions. Improve fish habitat by a combination of projects and livestock grazing management; including adjustments in grazing seasons or systems to protect banks and vegetation, and to reduce soil erosion. Wildlife habitat management plans will include implementation of specific actions for improvement of important fisheries habitat.

support

All Habitat Management Plans for wildlife and fisheries will be coordinated with ODFW, WDW and sportsmen's groups and other interested parties. Cooperative Mgmt Areas (CMAs) will continue to be developed with ODFW, WDW and/or other affected individuals and organizations.

Monitoring

Monitoring schedules and objectives will be developed through habitat management plans. Monitoring will include photographs, vegetation transects, macro invertebrate samples and population studies to document condition and trend.

Priority

1. Implement projects and plans to achieve objectives established by the "Fish and Wildlife 2000" Plan.

2. Continue implementation of projects on existing habitat management plans.

3. Prepare and implement HMPs on crucial deer winter ranges or any other habitats for a featured wildlife species.

4. Begin five-year program to inventory wildlife habitat values of isolated tracts in northern counties.

5. Complete inventories on resident fishery streams.

6. Develop specific management plans for successful established populations of bighorn sheep, turkeys, or other transplanted species (including beaver, Columbian sharp-tailed grouse).

Standard Design Features

Consult with ODFW and WDW prior to undertaking major construction, and/or surface disturbing activities in high value wildlife and fisheries habitats.

Vegetation manipulation and revegetation projects in crucial wildlife areas will be designed to create a vegetation mosaic. Areas where major vegetation manipulation or conversion occurs will be rested from livestock grazing for at least two to five growing seasons following treatment.

In crucial wildlife habitats major construction and maintenance work will be scheduled to avoid or minimize disturbance to wildlife. Areas disturbed during project construction will be reseeded with a mixture of grasses, forbs and shrubs to meet site specific needs or habitat requirements. All new fences will be built to standard Bureau wildlife specifications. Wildlife escape devices will be installed and maintained in water troughs.

BLM will not undertake action that would reduce stream flows below minimum instream flows as recommended by ODFW and WDW on Class I fishable streams.

Threatened, Endangered, Candidate, State Listed and Sensitive Species Management

Management Direction

No action will be taken by the BLM that could jeopardize the continued existence of any federally listed threatened or endangered plant or animal species. The US. Fish and Wildlife Service will be consulted regarding actions that affect habitat of these species. State sensitive species will be managed as though they were officially listed pursuant to the Endangered Species Act of 1973.

Avoid management actions which may result in disturbance and adverse impacts on crucial habitat for threatened, endangered, candidate, state listed and sensitive species. Conduct inventories, determine habitat needs, develop and implement HMP and monitoring on these species (refer to Appendix A for listing and status of state and federal species).

implementation

Continue inventories initiated on sage grouse to determine nesting, brood rearing and wintering habitat areas. Maintain and monitor the existing platforms for ferruginous hawks and install new platforms. Inventory suitable habitat for Columbian sharp-tailed grouse. Reintroduce the species in cooperation with ODFW.

Continue implementation of the cooperative Bald Eagle Management Plan for Unity Reservoir Nesting Bald Eagles. Continue winter and spring inventories on bald eagles, Swainson's and ferruginous hawks.

Maintain and protect population localities of *Haplopappus radiatus* under Oregon State Office BLM policy for T&E candidate species. Continue to identify locations and size of dispersed populations and potential threats to *Haplopappus radiatus.* Continue to inventory plants listed in Appendix A.

Develop a habitat management plan for Columbian Sharp-tailed grouse introductions in areas where populations become reestablished. Develop a habitat management plan for sage grouse to maintain or enhance breeding, nesting and wintering areas.

support

ODFW, WDW and/or the U.S. Fish and Wildlife Service (USFWS) will be consulted before implementing projects that could affect habitat for T&E or sensitive species. Should potential adverse impacts on T&E species be determined through the BLM's biological assessment process, formal consultations with the USFWS will be initiated under Section 7 of the Endangered Species Act of 1973, as amended. Technical assistance will be requested from the U.S. Fish and Wildlife Service for Candidate 1 and 2 species and for Bureau sensitive species. Coordinate with the Oregon Department of Agriculture and state listed or candidate plant species, and with ODFW on state listed wildlife species.

Monitoring

Project implementation will be monitored to ensure that HMP objectives and project mitigation are being met. Monitoring actions will be similar to those described for Wildlife and Fisheries Management.

Federal candidate wildlife species will be monitored to determine condition, trend and habitat requirements for species management.

Continue to inventory and monitor plant species that have been documented to determine geographical subpopulations and abundance within the planning area. Identify potential threats to these species.

Priority

1. Continue inventories and monitoring for T&E, candidate, state listed and sensitive plant species.

2. Develop and implement the sage grouse HMP.

3. Maintain existing active nest platforms for ferruginous hawks. Inactive nest platforms will be relocated.

4. Locate suitable habitat for the reintroduction by transplant of Columbian sharp-tailed grouse: develop and implement the sharp-tailed grouse HMP.

5. Inventory *Haplopappus radiatus* populations and initiate studies to identify condition and trend..

Lands

Land Tenure Adjustment

Management Direction

Lands in the planning area have been placed into two land tenure classification zones. Refer to Map 7 for mapping of zones under this plan. The zones categorize the public lands for potential land tenure adjustments.

Zone 1 Retention/Acquisition lone. A total of 409,153 acres are in this zone. These are lands that best serve the management missions of the BLM and have higher public values; including multiple use, management efficiency and public access to resources; or that have national, statewide or regional resource values. For example, lands that have significant values for threatened or endangered species, cultural resource sites, wildlife habitat, timber resources, riparian zones, recreation resources or mineral production were placed in this zone.

Lands within Wild and Scenic River boundaries, wilderness areas, wilderness study areas, ACECs, ONAs and RNAs will be retained in public ownership. In the remainder of Zone 1 no land sales or desert land entries will occur, however, the following actions will be permitted where disposal of the tract will serve an important public objective. They are, in order of preference:

1. BLM/Other Federal agency jurisdictional transfers
2. Transfers to State and local agencies (R&PP and other actions)
3. State exchanges
4. Private exchanges to acquire other Zone 1 lands that would enhance resource management or improve public service.

Emphasize acquisitions through donation, exchange or purchase to increase public land holdings in these areas.

Zone 2 Disposal Zone. A total of 20,601.42 acres are in this zone. These are lands that are inefficient to manage because of their small size or isolated location, or that have no known or lower resource values. These lands appear to meet the disposal criteria cited in section 203 (a) of FLPMA. These lands will be available for disposal actions pending a site-specific environmental analysis. If the site-specific analysis determines that national, statewide or regional resource values exist, the land will be placed in Zone 1 for future management. The preferred order for disposal actions is:

1. BLM/Other Federal agency jurisdictional transfers
2. Transfers to State and local agencies (R&PP and other actions)
3. State exchanges
4. Private exchanges to acquire lands in Zone 1 that would enhance resource management programs or improve public service.
5. Public sales
6. Desert land entries

This plan utilizes certain criteria for categorizing public land for retention or disposal, and for identifying acquisition priorities. This list is not considered all inclusive, but represents the major factors evaluated. They include:

Public resource values that will benefit and enhance the range management, wildlife habitat, watershed, recreation, forestry, mineral, cultural resource, endangered, threatened, or sensitive plant and animal, and wilderness programs;

Access to public lands should be enhanced by acquiring key tracts or easements that would assure the public legal access to blocks of public lands. Improved access will generally increase recreational use in areas where an intermingled ownership pattern now restricts public use;

Amount of public monetary investments in facilities or improvements on public land and the potential for recovering those investments;\

Difficulty or costs in time and money in the effective managerial administration of the lands;

Suitability or desirability of the land for management by another governmental agency;

Significance of any subsequent land use decisions in stabilizing, enhancing, or hindering existing or potential businesses, social and economic conditions, and/or lifestyles;

Need for future mineral development;

Encumbrances on the land, including, but not limited to, Recreation and Public Purposes and small tract leases and other leases and permits, rights-of-way, and withdrawals;

Consistency of the decision with cooperative agreements and officially approved or adopted plans, programs or policies of other agencies;

Suitability and need for change in land ownership or use for purposes including, but not limited to, community expansion or economic development, such as residential, commercial, industrial, or agricultural (other than grazing) development; and

State and local governmental requests and recommendations for retention or disposal of BLM administered public land.

Exchanges

Exchanges of public land are conducted under Section 206 of FLPMA which requires that:

A determination that the public interest will be well served by making an exchange.

Lands to be exchanged are located in the same state.

Exchanges must be for equal value, although under certain conditions, the lands or interests in lands may be approximately equal value or cash payments to equalize values may be waived.

Make exchanges only when they will enhance public resource values and only when they improve land patterns and management capabilities of both private and public lands within the planning area by consolidating ownership and reducing the potential for conflicting land use.

Evaluate all exchange and other land acquisition proposals to determine if the acquired lands will:

Facilitate access to areas retained for long term public use.

Enhance Congressionally designated areas, rivers or trails.

Be primarily in the Retention Zone. Acquisition in the Disposal Zone will only be considered if the action leads to and/or facilitates long term needs or program objectives.

Facilitate national, state and local BLM priorities or mission statement needs.

Stabilize or enhance local economics or values.

Meet long term public land management goals as opposed to short term.

Be of sufficient size to improve use of adjoining lands, or resource management programs or improve public service.

Allow more diverse use, more intensive use, or a change in uses to better fulfill the Bureau's mission.

Maintain or enhance important and recognized public land values. Especially noteworthy are identified, designated, special or high interest value areas.

Enhance the opportunity for new or emerging public land uses or values.

Contribute to a wide spectrum of uses or large number of public land users.

Facilitate management practices, uses, scale of operations or degrees of management intensity that are viable under economic program efficiency standards.

Secure for the public significant water related land interests. These interests will include lake shore, river front, stream, pond or spring sites.

Sales

Public land to be sold must meet one or more of the criteria cited in Section 203 (a) of the Federal Land Policy and Management Act: (1) such tract because of its location or other characteristics is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another Federal department or agency; or (2) such tract was acquired for a specific purpose and the tract is no longer required for that or any other Federal purpose; or (3) disposal of such tract will serve important public objectives, including but not limited to, expansion of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values, including, but not limited **to,** recreation and scenic values, which would serve by maintaining such tract in Federal ownership.

Sell public land when the following criteria are met: (1) it is required by national policy; (2) it will achieve disposal objectives on a timely basis and where disposal through exchange would cause unacceptable delays; or (3) it is determined that disposal through exchange is not feasible.

The preferred method of selling public land is by competitive bidding at public auction to qualified purchasers. However, modified competitive bidding procedures may be used when there is **not** legal public access to a tract, when necessary to avoid jeopardizing an existing use on adjacent land, or to avoid dislocation of existing public land users.

Public land may be sold by direct sale when:

Such land is needed by state or local governments; or

Direct sale is needed to protect equities arising from authorized use; or

Direct sale is needed to protect equities resulting from inadvertent, unauthorized use that was caused by surveying errors or title defects; or

There is only one adjacent landowner and no legal public access.

No public land will be sold for less than fair market value.

Implementation and Priority

All land tenure adjustment actions will be preceded by field inventories, environmental assessments and public notification procedures.

Acquisition of lands by donation, exchange or purchase, in priority order, are:

1. Within Wild and Scenic River corridors, Wilderness Areas and WSAs and ACECs.
2. Within critical wildlife habitat areas
3. Within high recreation use areas
4. Within high scenic areas

Realty Management

Management Direction

Assure that all uses of the public land are authorized.

Authorize by permit or lease existing or potential use, such as agricultural use, of the public lands if the following criteria are met:

(1) The use does not conflict with riparian area management, important wildlife habitat, recreational use of public lands, or other significant resource values.
(2) The use is compatible with historical use on adjacent private lands.
(3) The use would maintain or enhance other resource values, such as providing habitat requirements for game and non-game wildlife species.

Implementation

Prior to granting or renewing a lease or permit, the applicant must submit plans, maps or other information related to the use of the proposal for evaluation by the BLM. Each lease or permit shall be limited to the area necessary, will consider the protection of public safety and ensure that the use authorized will do no unnecessary damage to the environment.

Each lease or permit shall contain terms and conditions requiring compliance with environmental quality standards applicable under Federal or State law. Such terms and conditions are intended to provide efficient management of the lands subject to the lease or permit and to protect the interest of individuals living in the area as well as the public interest in the Federal lands.

Install signs on public land boundaries in areas of high public use or that have high potential to incur unauthorized use.

Monitoring

Leases and permits will be monitored to insure that development is consistent with the terms and conditions of the grant.

Priority

Lease and permit applications will be processed on case by case basis using the adequacy of the application to determine priority. Projects or applications of national and regional significance will be emphasized.

Rights-Of-Way

Management Direction

All utility/transportation corridors identified by the Western Regional Corridor Study are currently occupied and will be designated without further review. The corridors are displayed on Map 6. Corridor widths vary depending on the number of parallel facilities, but are a minimum of 2,000 feet (1,000 feet either side of existing centerlines, unless adjacent to exclusion/avoidance areas described below). Applicants will be encouraged to locate new facilities (including communication sites) adjacent to existing facilities and sites to the extent technically and economically feasible.

Public lands are available for local rights-of-way, including multiple use and single use utility/transportation corridors following existing routes, communication sites and roads, unless within the exclusion/avoidance areas described below.

Right-of-way exclusion areas:
- Wilderness Areas
- Wild river segments

Right-of-way avoidance areas:
- Wilderness study areas (WSAs)
- Areas of Critical Environmental Concern ACECs)
- Scenic and recreation river segments

All right-of-way applications should follow existing corridors wherever practical and will avoid proliferation of separate rights-of-way.

Implementation

Prior to granting or renewing a right-of-way, the applicant must submit plans, maps or other information related to the use of the proposal for evaluation by the BLM. Each right-of-way shall be limited to the area necessary for operation and maintenance, will consider the protection of public safety and ensure the use authorized will do no unnecessary damage to the environment.

Each right-of-way shall contain terms and conditions requiring compliance with environmental quality standards applicable to Federal or State law. Such terms and conditions are intended to provide efficient management of the lands subject to the right-of-way and **to** protect the interest of individuals living in the area as well as the public interest in the Federal lands.

Monitoring

Right-of-way grants will be monitored to insure that development is consistent with the terms and conditions of the grant. A prework conference will be conducted with the grantee, contractor and BLM authorized officer to discuss the stipulations of the grant and plans for construction. Monitoring is performed during and after construction.

Priority

Right-of-way applications will be processed on case by case basis using the adequacy of the application to determine priority. Projects or applications of national and regional significance will be emphasized.

Access

Management Direction

Acquire additional legal access as required to meet management objectives. Negotiated purchase of an agreement is the preferred method to acquire needed access. Generally acquire permanent access to lands within land tenure Zone 1. Acquire the minimum rights needed, for public and administrative access and right-of-way width, to meet management objectives.

Implementation

Specific access needs will be identified during the preparation of resource activity plans and the area transportation plan. Activity plans will address the desired level of rights needed (public vs. administrative) and the desired location of access routes.

Mineral Resource Management

Management Direction

Encourage and facilitate the development of public land mineral resources by private industry in a manner that satisfies national and local needs; and provides for economically and environmentally sound exploration, extraction, and reclamation practices. Mineral exploration and development can occur concurrently or sequentially with other resource uses.

General mineral resource management objectives are:

(1) Public lands will remain open and available for mineral exploration and development, unless withdrawal or other administrative action is clearly justified in the national interest;

(2) Ensure that mineral resource exploration and development does not cause unnecessary or undue degradation of the public lands;

(3) Process permits, operating plans, leases, mineral patent applications, mineral exchanges and other mineral use authorizations for public lands in a timely and efficient manner;

(4) Ensure receipt of fair market value for mineral commodities unless otherwise provided for by statute.

Management direction for specific mineral resource programs is based upon projected mineral exploration and development likely to occur over the next 10 to 15 years, the general mineral resource management objectives, and other resource objectives and allocations.

Oil and Gas Leasing

More than 100,000 acres, of the total 936,354 acres of federal mineral estate within the planning area presently are leased for oil and gas. Qualified applicants will continue to be issued oil and gas leases with standard and special protective stipulations. Leasing is expected to continue primarily on federal mineral estate located north of Baker County. Minor exploration and no production is anticipated over the next 10 to 15 years.

Approximately 919,823 acres of federal mineral estate are open for oil and gas leasing with standard protective stipulations (refer to Tables 6 and 7, and Map 12). Of this mineral estate open for leasing, approximately 703,884 acres are open, with standard protective stipulations only: 64,960 acres are open, with an additional summer season stipulation (restricting operations during the period May 15 to June 15); 132,029 acres are open for lease, with an additional winter season stipulation (restricting operations on the lease during the period November 1 to April 15); and 18,950 acres are open for lease, with a "no surface occupancy" stipulation. Approximately 16,531 acres of federal mineral estate are closed to leasing (non-discretionary).

Table 6—Summary of Oil and Gas Leasing Categories

Category	Acres	Percent
Public Domain Open to Leasing with Standard Stipulations	191,169*	20
Reserved Mineral Estate (Split Estate) Open to Leasing with Standard Stipulations	512,715*	55
Public Domain Open to Leasing with Restrictions Seasonal Stipulations (Summer, 1 month)	64,960*	7
Public Domain Open to Leasing with Restrictions, Seasonal Stipulations (Winter, 5.5 months)	132,029*	14
Public Domain Open to Development with "No Surface Occupancy" Stipulation	18,950*	2
Public Domain Closed to Leasing	16,246*	2
Reserved Mineral Estate (Split-Estate Closed) to Leasing	285*	<1
Totals	936,354*	100

* Estimate

Table 7—Oil and Gas Leasing Categories by Geographic Unit

Geographic Units	Open to Leasing With Protective Stipulations								Closed to Leasing	
	Standard		Summer		Winter		NSO'			
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
1. Lookout Mountain	12,152'	52	9,000	38	2,350'	10	0	0	0	0
2. Burnt River	12,424'	29	0	0	29,560'	69	0	0	0	0
3. Keating	7,238'	30	0	0	17,000'	70	0	0	0	0
4. Pedro Mountain	17,969'	75	5,840'	24	0	0	0	0	0	0
5. Grande Ronde River[3]										
A. Wild River'	0		0		0		0		1,500**	0
B. Grande Ronde ACEC[5]	0		0		0		8,215'		0	0
C. Joseph Cr. ACEC	0		0		0		3,360'		0	0
D. Remainder of GU[6]	3,281*		0		100*		0		0	0
All Grande Ronde	3,281*	20	0	0	100*	<1	11,575'	70	1,500"	9
6. Homestead'										
A. McGraw Cr. Wilderness	0		0		0		0		968"	
B. McGraw Cr. WSA[7]	0		0		0		0		497'	
C. Homestead WSA[7]	0		0		0		0		6,241	
D. Remainder of GU	1,465*		0		2,500*		0		0	
All Homestead	1,465*	12	0	0	2.500*,	20	0	0	7.706**,	62
7. Pritchard Creek	11,587*	85	0	0	2,000*	15	0	0	0	0
8. Oregon Trail	1,813*	54	0	0	0	0	1,495'	44	0	0
9. Unity Reservoir	0	0	360'	100	0	0	0	0	0	0
10. Sheep Mountain[3]										
A. Sheep Mtn. WSA[7]	0		0		0		0		7,040"	
B. Remainder of GU	1,218*		0		160*		0		0	
All Sheep Mountain	1,218*	14	0	0	160*	2	0	0	7,040**	84
11. Hunt Mountain	409'	17	0	0	2,000'	83	0	0	0	0
12. Powder River Canyon[3]										
A. Powder River ACEC	0		0		0		5,880'		0	
B. Remainder of GU	0		0		66*		0		0	
All Powder River	0	0	0	0	66'	1	5,880'	99	0	0
13. Blue Mountain	25,721'	77	2,300	7	5,520*	16	0	0	0	0
14. Baker	95,892'	44	47,460'	22	70,773	32	0	0	0	0
ALL PUBLIC SURFACE	191,169'	45	64,960'	15	132,029'	31	18,950*	4	16,246**	4
ALL PUBLIC DOMAIN[9]	191,169*	45	64,960*	15	132,029'	31	18,950*	5	16,246"	4
ALL RESERVED MINERAL ESTATE"'	512,715'	<100	0	0	0	0	0	0	285""	<1
ALL FEDERAL MINERAL ESTATE[12]	703,884"	75	64,960'	7	132,029*	14	18,950"	2	16,531"	2

Geographic Units	Public Surface/ Private Min. Est.* Acres	%	Total Acres
1. Lookout Mountain	0	0	23,502
2. Burnt River	930'	2	42,914
3. Keating	0	0	24,238
4. Pedro Mountain	160'	1	23,969
5. Grande Ronde River[3]			
A. Wild Rive?	0		[1,500]
B. Grande Ronde ACEC[5]	0		[8,215]
C. Joseph Cr. ACEC	0		[3,360]
D. Remainder of GU[6]	0		[3,381]
All Grande Ronde	0	0	16,456
6. Homestead[3]			
A. McGraw Cr. Wilderness	0		[968]
B. McGraw Cr. WSA[7]	0		[497]
C. Homestead WSA[7]	760'		[6,241]
D. Remainder of GU	0		[3,965]
All Homestead	760*	6	12,431
7. Pritchard Creek	0	0	13,587
8. Oregon Trail	70'	2	3,378
9. Unity Reservoir	0	0	360
10 Sheep Mountain[3]			
A. Sheep Mtn. WSA[7]	0		[7,040]
B. Remainder of GU	0		[1,378]
All Sheep Mountain	0	0	8,418
11. Hunt Mountain	0	0	2,409
12. Powder River Canyon[3]			
A. Powder River ACEC	0		[5,880]
B. Remainder of GU	0		[66]
All Powder River	0	0	5,946
13. Blue Mountain	0	0	33,541
14. Baker	4,480'	2	218,605
ALL PUBLIC SURFACE	6,400[8]	1	429,754
ALL PUBLIC DOMAIN[9]	0	0	423,354'
ALL RESERVED MINERAL ESTATE[10]	0	0	513,000"
ALL FEDERAL MINERAL ESTATE[12]	0	0	936,354'

*Estimate.
**Acreage estimate of non-discretionary "no leasing" areas.
[ ]Figures in brackets represent estimated acres for geographic subunits.
[1]NSO means "no surface occupancy."
*Min. Est. means "Mineral Estate."
[3]Geographic Unit divided into subunits.
[4]Area within a quarter mile of the mean high water mark on either side of Grande Ronde River designated by Congress as a Wild River; this area has been withdrawn fom mineral laws and the mineral leasing laws by act of Congress.
[5]ACEC means "area of critical environmental concern" (refer to special management areas).
[6]Remaining portion of a Geographic Unit after the other subunits have been delineated.
[7]WSA means "wilderness study area"; WSAs are not available for oil and gas leasing, however.
[8]Estimated total acreage of BLM administered surface where the mineral estate is not owned by the federal government; potential oil and gas resources can not be leased by BLM.
[9]Public domain is public land where both the surface and mineral estates are administered by BLM.
[10]Reserved Mineral Estate is land where the surface estate is privately owned but the mineral estate is administered by BLM.
[11]Reserved Mineral Estate withdrawn from mineral entry under the mining and mineral leasing laws by Wild River designation.
[12]Includes both public domain and reserved mineral estate.

Geothermal Leasing

Presently there are no geothermal leases within the planning area and no known interest in leasing. No large lease applications are anticipated during the next 10 to 15 years. If applications are received, they most likely will be for small areas with potential for space heating applications.

Approximately 919,823 acres of federal mineral estate, of the 936,354 acres within the resource area, are open for leasing with standard and/or special protective stipulations, as will be determined by a site specific environmental analysis completed prior to the issuance of a lease. As a general rule, the same types of restrictions as those shown on Map 12 for oil and gas leasing will apply. However the anticipated small size of lease applications, if any, emphasizes the need for a site specific environmental analysis of the impacts from any proposed developments. Approximately 16,531 acres of federal mineral estate are closed to leasing (non-discretionary).

Coal Leasing

No interest in coal leasing on the scattered tracts of federal mineral estate located within the Troy basin (see Map 4) is expected during the next 10 to 15 years.

The planning area is not in a coal production area and no federal coal leasing will result from this plan. Any potential federal coal leasing will be guided by the federal coal management regulations (43 CFR 3425). Under these regulations, interested parties apply for a coal lease to the BLM Oregon-Washington State Office in Portland. The application area will be studied for acceptability utilizing four planning screens: (1) verification of coal development potential; (2) application of 20 unsuitability criteria; (3) surface owner consultation for split-estate lands; and (4) multiple-use trade-offs involving other resource values compared to coal.

Application of these screens would constitute an amendment to this RMP and would be subject to gubernatorial and public review. Areas studied would be designated as acceptable or nonacceptable for further consideration for leasing. Assuming that some areas were found to be acceptable (with or without additional stipulations on mining and reclamation), the applicant maintains interest, and evidence of surface owner consents were provided, then these lands could be offered for competitive lease by the Secretary of the Interior. Any resulting operations must comply with all federal and state laws and regulations dealing with coal mining and reclamation.

Locatable Mineral Resources

Exploration and development for precious metals and industrial minerals under the U.S. mining laws is expected to increase within the planning area over the next 10 to 15 years. Most of the present exploration and development, and the anticipated increase, is likely to occur primarily within the 13 Mineral Priority Management Areas (MPMAs) shown on Map 4. Surface management under the U.S. mining laws (43 CFR 3809) presently constitutes the largest mineral resource management work load within the resource area.

An estimated 392,222 acres of public domain and 512,715 acres of split-estate (private surface with federal mineral estate) are presently available for location under the mining laws or Public Law 359. Acreage under power site classifications and withdrawal are only available for location under Public Law 359 filing. An estimated 6,400 acres of public land with privately owned mineral estate could be developed at the discretion of the owner.

A withdrawal from mineral entry under the mining laws on 907.31 acres of mineral estate in the Keating and Oregon Trail geographic units will be pursued, subject to valid existing rights.

Ensure that locatable mineral resource exploration and development does not cause unnecessary or undue degradation of the public lands.

Mineral Materials

Demand for aggregate from federal mineral estate is projected to increase over the next 10 to 15 years. Most of the increase will probably occur along the major highway systems and near smaller communities.

Mineral material production will be maximized consistent with demand and protection of other resource values. Mineral material sales and free use permits will be authorized to qualified applicants for removal of common varieties of sand, gravel, stone, and cinders from the existing community pit and other existing quarry sites. New community pits will be developed in response to demand, if compatible with protection of other resource values.

Implementation

Update the automated oil and gas lease stipulation files (ORCA) to implement leasing decisions. All exploration applications will receive environmental review prior to authorization.

Process geothermal lease applications on a case by case basis. Complete a site specific environmental analysis prior to the issuance of a lease.

Inventory for coal on BLM tracts having lignite potential, contingent on funding. The coal inventory information should be considered during development of the Grande Ronde Wild and Scenic River Plan and the Grande Ronde and Joseph Creek ACEC management plans.

Evaluate proposed withdrawals from mineral entry, according to criteria and procedures outlined in Section 204 of the Federal Land Policy and Management Act, as amended (PL 94-579).

Continue to implement monitoring plans for three Wilderness Study Areas. Prepare additional monitoring plans, contingent on funding, shall be developed on any designated wilderness areas, ACECs and mineral priority management areas.

Increase monitoring of active mining operations to 2 or more compliance inspections per year, contingent on increased funding.

Develop site specific mining and reclamation plans for all new pits and quarries. Periodically review mining and reclamation plans on existing pits and quarries. Prepare an overall monitoring plan for mineral material development.

support

All mineral resource management actions and plans will be coordinated with other Federal agencies, regional, state, and local governments, tribal entities, and other appropriate individuals and groups. Extensive coordination of mining compliance monitoring, reclamation, inspection and enforcement of leasable mineral developments, and mineral resource inventories in Oregon occurs with the Oregon Department of Geology and Mineral Industries under the existing memorandum of understanding. Mineral resource inventories will be coordinated with the Washington State Division of Geology and Earth Resources.

Monitoring

Monitoring activities will be implemented through the previously described monitoring plans, policy, management guidance, regulations, and site specific environmental analysis.

The Federal Land Policy and Management Act (PL 94-579) provides the standard for mitigation of adverse impacts from mineral resource exploration and development. It states that no unnecessary or undue degradation of the public lands shall be allowed. Failure to initiate and complete reasonable mitigating measures, including reclamation, constitutes unnecessary or undue degradation. Mitigation includes standard design features and mitigating measures developed from site specific environmental analysis.

Priority

"On demand" work, especially from the public, usually has the highest priority. Priorities change according to demand. Generally, management emphasis is given as follows to (1) surface management under the mining laws; (2) support work for other resource management programs or for other Federal agencies; (3) mineral material management program; (4) oil and gas leasing and development; (5) geothermal leasing and development; and (6) mineral resource inventory.

Priorities for compliance inspections are: 1.) Active operations located within wilderness areas, wilderness study areas, areas with habitat for T&E species, or areas with National Register-eligible cultural sites; 2.) Active operations in areas with resource values such as riparian zones and fragile watersheds.

Priorities for development of monitoring plans are: 1.) Coordinated activity plan areas (CAPs) which encompass the Conner Creek, Snake River, Mormon Basin/ Burnt River, Balm Creek, and Lime MPMAs; and the Homestead MPMA. 2.) Prepare monitoring plans for the following MPMAs not included in coordinated activity plans: (a) Pine Creek, (b) Elk Creek, (c) Virtue Flat, (d) Hunt Mountain, (e) Magpie Peak, (f) Bay Horse, and (g) Hereford.

Standard Design Features

I. *General*

No "unnecessary or undue degradation" of Federal lands will be allowed. "Unnecessary or undue degradation" means surface disturbance greater than would normally result when an activity is being accomplished by a prudent operator in a usual, customary, and proficient manner. The evaluation of "unnecessary or undue degradation" takes into consideration the effects of operations on other resources and land uses, including resources and uses outside the area of operations. Failure to initiate and complete reasonable mitigation measures, including reclamation of disturbed areas or creation of

a nuisance, may constitute unnecessary or undue degradation. Failure to comply with applicable environmental protection statutes and regulations will constitute unnecessary or undue degradation.

II. Locatable Mineral Development under the Mining Laws (43 CFR 3809 and 3802)

A. All Operations

1. All operations, whether casual, under a notice, or by a plan of operations, shall be reclaimed.

2. All operations, including casual use and operations under either a notice or a plan of operations, shall be conducted to prevent all unnecessary or undue degradation of the federal lands and shall comply with all pertinent Federal and State laws, including but not limited to the following:

a. Air Quality. All operators shall comply with applicable Federal and State air quality standards, including the Clean Air Act (42 U.S.C. 1857 et seq.).

b. Water Quality. All operators shall comply with applicable Federal and State water quality standards, including the Federal Water Pollution Control Act, as amended (30 U.S.C. 1151 et seq.).

c. Solid Wastes. All operators shall comply with applicable Federal and State standards for the disposal and treatment of solid wastes, including regulations issued pursuant to the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.). All garbage, refuse or waste shall either be removed from the affected lands, or disposed of or treated to minimize, so far as is practicable, its impact on the lands.

d. Fisheries, Wildlife and Plant Habitat. The operator shall take such action as may be needed to prevent adverse impacts to threatened or endangered species, and their habitat that may be affected by operations.

e. Cultural and Paleontological Resources.

Operators shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains of any historical or archaeological site, structure, building or object on Federal lands.

Operators shall immediately bring to the attention of the authorized officer any cultural and/or paleontological resources that might be altered or destroyed on federal lands by his/her operations, and shall leave such discovery intact until told to proceed by the authorized officer. The authorized officer shall evaluate the discoveries brought to his/her attention, take action to protect or remove the resource, and allow operations to proceed within 10 working days, after notification to the authorized officer of such discovery.

The Federal Government shall have the responsibility and bear the cost of investigations and salvage of cultural and paleontology values discovered after a plan of operations has been approved, or where a plan is not involved.

3. Maintenance and Public Safety

During all operations, the operator shall maintain his structures, equipment and other facilities in a safe and orderly manner. Hazardous sites or conditions resulting from operations shall be marked by signs, fenced, or otherwise identified to alert the public in accordance with applicable Federal and State laws and regulations.

4. Applicability of State Law

Nothing shall be construed to effect a preemption of State laws and regulations relating to the conduct of operations or reclamation on federal lands under the mining laws.

B. Notice of Operations, Disturbance of 5 Acres or Less

The following standards govern activities conducted under a notice:

1. Access routes shall be the minimum width needed for operations and shall follow natural contour, where practicable, to minimize cut and fill.

2. All tailings, dumps, deleterious materials or substances, and other waste produced by the operation shall be disposed of to prevent unnecessary or undue degradation in accordance with applicable Federal and State Laws.

3. At the earliest feasible time, the operator shall reclaim the area disturbed, except to the extent necessary to preserve evidence of mineralization, by taking reasonable measures to prevent or control on-site and off-site damage to the Federal lands.

4. Reclamation shall include, but shall not be limited to:

a. Saving of topsoil for final application after reshaping of disturbed areas have been completed;

b. Measures to control erosion, landslides, and water runoff;

c. Measures to isolate, remove, or control toxic materials;

d. Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and

C. Plan of Operations, Disturbance of More Than 5 Acres-Prevention of Unnecessary or Undue Degradation

1. When an operator files a plan of operations of a significant modification that encompasses land not previously covered by an approved plan, the authorized officer shall make an environmental assessment or a supplement to identify the impacts of the proposed operations on the lands, and to determine whether an environmental impact statement is required.

2. In conjunction with the operator, the authorized officer shall use the environmental assessment to determine the adequacy of mitigating measures and reclamation procedures included in the plan to insure the prevention of unnecessary or undue degradation of the land. If an operator advises he/she is unable to prepare mitigating measures, the authorized officer, in conjunction with the operator, shall use the environmental assessment as a basis for assisting the operator in developing such measures.

3. If, as a result of the environmental assessment, the authorized officer determines that there is "substantial public interest" in the plan, the authorized officer shall notify the operator, in writing, that an additional period of time, not to exceed the additional 60 days provided for approval of a plan is required to consider public comments on the environmental assessment.

III. Oil and Gas and Geothermal Resources Leasing

A. Standard Stipulations

Standard stipulations are listed in Sec. 6 of "Offer to Lease and Lease for Oil and Gas" (Form 3100-l 1) and "Offer to Lease and Lease for Geothermal Resources" (Form 3200-24). They are:

Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee shall **take** reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee.

Prior to disturbing the surface of the leased lands, lessee shall contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short term special studies under guidelines provided by lessor. If in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects.

B. Special Stipulations

Special stipulations are attached to oil and gas or geothermal leases to provide additional protection for fragile areas or critical resource values. Examples of special stipulations are seasonal restrictions for critical wildlife habitat and "No Surface Occupancy" to protect special values or fragile areas.

Soil, Water and Air Management

Management Direction

Soils will be managed to maintain productivity and minimize erosion. Those watersheds, or portions of watersheds where potential for either significant improvement or further degradation exists will be intensively managed to improve the soil, water and air resources. Priority will be given to meeting emergency watershed needs due to flooding, drought, or fire.

Under the Clean Air Act, (as amended, 1977), BLM administered lands were given Class II air classification, which allows moderate deterioration associated with moderate population and industrial growth. BLM will manage all public lands as Class II unless they are reclassified under provisions of this Act.

Comply with EPA and DEQ requirements on water quality monitoring and non-point source pollution reductions as those regulations become established. Manage for water quality improvement to meet riparian objectives.

Continue to provide for recreational ORV use in areas designated as open, only to the extent that maximum protection for soil and watershed is achieved through standard design features.

Implementation

Continue to inventory and evaluate soil, water and air resources on public lands.

Coordinate soil, water and air concerns and activities with other resources in all phases of management actions, from the planning stage to final monitoring of the results. Review all proposed resource projects, and surface disturbing activities to ensure that soils and watersheds are protected, rehabilitated or improved.

Continue implementation of the Morgan Creek watershed plan.

Develop watershed management plans for areas identified as having potential for either significant improvement or further degradation, Prepare watershed activity plans for integration into coordinated planning for geographic units.

Monitoring

Monitor projects to ensure that stipulations and specifications for soil and water protection achieve the desired results. Monitor conditions that exist or develop as a result of current on-going man caused and natural soil, water, and air influencing activities.

Monitoring activities currently include photo points, erosion bridges and pans, stream cross sections, stream gauging stations, and water quality sampling in selected areas. Monitoring develops base-line data, erosion and sediment causing factors, determines effectiveness of mitigating measures and stipulations incorporated in surface disturbing activity plans and authorizations, and permits better analyses of environmental impacts associated with these activities.

Standard Design Features

Standard design features normally incorporated as needed into specific surface disturbing activity plans and authorizations include: scalping, saving, and respreading available top soil; regrading and reslop-ing to natural contours; reestablish appropriate stabilizing vegetation; and water erosion and runoff prevention measures, such as waterbars, benches, and drainage systems. Management activities in riparian areas will be designed to maintain or improve riparian values; roads and utility corridors will avoid riparian zones to the extent practical.

Priority

Actions and watershed management priorities for major hydrologic groups and primary watersheds (refer to Map 8) are displayed in Table 8. Management priorities are only assigned to those areas designated to be managed for soil, watershed, and/or air benefits. Management actions include:

Review/Monitor-Areas where the Bureau has a significant interest in watersheds and/or soils and will provide input into other activities, and monitor the results and effects of those activities on the watershed and/or soils.

Jntensivelv Manage-Areas where watershed management plans, either individually or as a Coordinated Plan, will be developed and work will be done primarily for the benefit of watersheds and/or soils.

Watershed management plans can be written either as a supplement to an existing plan, such as an AMP, or as a specific plan emphasizing watershed as the principle consideration. Plans include stated objectives, specific projects and treatments proposed, site specific environmental analyses, and monitoring requirements. If adjustments in grazing, ORV, or any other uses are proposed, the watershed plan would become a coordinated management plan with those affected activities.

Site Specific Concerns Only -Areas of low concern, where watershed or soils concerns are either low or not critical, or where Federal ownership is negligible. In these areas, soils or watershed protection will be emphasized on specific sites; for example, gravel pits, rights-of-way, and very small timber sales.

Table 8-Watershed Management Actions and Priorities

Major Hydrologic Group	Watershed Subdivision	Watershed Management Action	Watershed Management Priority
A. Upper Burnt River	1. Higgens	Review/Monitor	
	2. Bridgeport-Unity Res.	Site Specific Concerns Only	
B. Burnt River Canyon	1. Auburn Cr.	Review/Monitor	–
	2. Dark Canyon-Deer Cr.	Intensively Manage	5
	3. Hooker Gulch	Intensively Manage	6
	4. Woods Gulch	Intensively Manage	10
	5. Clarks Cr.	Review/Monitor	–
	6. Miller Gulch-Cave Creek	Intensively Manage	10
	7. True Blue	Review/Monitor	–
	8. Shirttail	Intensively Manage	10
C. North Burnt River	1. Alder Creek	Site Specific Concerns Only	–
	2. Unity Creek-Lawrence Cr.	Intensively Manage	3
	3. Durkee Creek	Site Specific Concerns Only	–
D. Manning-Sisley Cr.	All Watersheds	Site Specific Concerns Only	–
E. Dixie Creek	All watersheds	Review/Monitor	–
F. Lime Complex	1. Jordan-Chimney Cr.	Intensively Manage	4
	2. Remainder of Watersheds	Review/Monitor	–
G. Upper Powder River	All Watersheds	Review/Monitor	–
H. Middle Powder River	1. Crews Creek	Intensively Manage	10
	2. Ritter Creek	Intensively Manage	8
	3. Clover Creek	Intensively Manage	10
	4. Remainder of Watershed	Review/Monitor	–
I. Lower Powder River	All Watersheds	Review/Monitor	–
J. Eagle Creek	1. Immigrant-Foster Gulch	Intensively Manage	7
	2. Remainder of Watersheds	Review/Monitor	–
K. Pine Creek	1. Deer-Four Mile Creel	Intensively Manage	9
	2. Remainder of Watersheds	Review/Monitor	–

Table 8-Watershed Management Actions and Priorities (continued)

Major Hydrologic Group	Watershed Subdivision	Watershed Management Action	Watershed Management Priority
L. Snake River	1. Morgan Creek	Intensively Manage	1
	2. Soda-Hibbard Creek	Intensively Manage	2
	3. Remaind Watersheds	Review/Monitor	–
M Upper Grande Ronde	All Watersheds	Site Specific Concerns Only	–
N. Lower Grande Ronde	All Watersheds	Review/Monitor	–
0. Wallowa River	All Watersheds	Site Specific Concerns Only	
P. lmnaha River	All Watersheds	Site Specific Concerns Only	–
Q. Walla Walla River	All watersheds	Site Specific Concerns Only	–
R. Umatilla-Willow Creek	All Watersheds	Site SpecifConcerns Only	
S. John Day	All Watersheds	Site Specific Concerns Only	–

Note: * – Watersheds not requiring intensive management or lower in priority than 10 are unranked.

Forest Management

Management Direction

Harvest approximately 24,000 Mbf of timber in a 1 0-year period from a commercial forest land base of 25,353 acres. If the results of a recent forest inventory, or any subsequent inventories, indicate a change in annual productivity, this sustainable harvest level would be adjusted accordingly.

Exclude timber harvest on approximately 3,304 acres which are economically non-operable and on 673 acres which are within ACECs. This area will contribute to the need for old-growth habitat.

Adjust intensity of management for timber production on 25,353 acres to accommodate other significant resources. Restrict harvest on 3,914 acres to emphasize important wildlife, watershed, riparian, and recreational values. This includes approximately 1,300 acres that will be maintained in stands containing all timber age classes to improve old-growth distribution for wildlife. Even-aged management would generally be practiced on the remaining 21,439 acres through the use of clearcutting or shelterwood harvest systems.

Approximately 37,273 acres of woodlands will be managed to produce an estimated lo-year harvest of posts, poles and other woodland products equivalent to approximately 9,800 cords. Activity would be concentrated in areas where cutting would benefit other resources.

About 4,000 acres of suitable woodlands would be excluded from harvest to protect mule deer winter range.

Implementation

Develop site specific Forest Management Plans (FMPs) on each of the 20 areas shown on Map 2. Forest Management Plans (FMPs) include a description of the current condition of forest stands within an area, define the desired future condition of those stands, set treatment priorities, and assess the environmental effects of practices which could be used to achieve the desired results. Other significant resources will be identified, and measures for protection or enhancement will be specified.

Forested tracts which are identified in the FMPs as high priority for treatment by timber harvest actions will be selected for five-year and annual timber sale plans. Other short range plans will include areas requiring treatments such as precommercial thinning, prescribed burning, and artificial reforestation. Timber sale contracts will contain provisions to require site preparation measures most likely to result in adequate natural regeneration. Areas with inadequate natural seed sources, or where natural regeneration is insufficient, will be artificially reforested (hand planted). Precommercial thinning and other cultural practices, will be performed, as funding permits, to maintain the allowable cut and to benefit other resources, particularly wildlife and watershed values.

Areas classified as woodlands which are within a Forest Management Plan boundary will be included in the plan. Management of other woodlands will continue to be custodial until all commercial forest was included in a plan, or unless concerns over a particular woodland area indicated a priority greater than an identified FMP area.

support

Forest management activities, including timber sale and road development actions, will be coordinated with other federal, state, and local government agencies and adjacent private landowners.

Monitoring

Established forestry activity monitoring and mitigation programs include close supervision of active timber sale and land treatment contracts, and regular follow-up surveys of affected areas. Other agencies also provide periodic information relevant to monitoring such as progress of insect or disease activity and water and air quality.

The Oregon State Manual Supplement H-l 734-1, *Monitoring Western Oregon Records of Decision,* contains all the necessary guidance and specified monitoring procedures for planned actions.

Priority

Highest priority has been assigned to areas with the greatest concentrations of commercial timberland and where conflicts with other uses are anticipated. Areas of concern to adjacent property owners, and areas of known public interest are also assigned higher priority. Priorities for forest management planning are identified in Table 9.

Table 9—Forest Management Plan Areas

Map 2 Reference Key	Name	Priority for FMP Development
A	Big Lookout Mountain	1
B	Sutton Cr/Elk Cr	7
C	Dooley Mtn/Burnt River	4
D	Bridgeport/Unity	10
E	Pedro Mtn/Mormon Basin	6
F	Little Lookout Mountain	17
G	Hunt Mountain	11
H	South Eagle Fringe	5
	Snake River Breaks	8
J	Union Co. Scattered Tracts	13
K	Meacham	16
L	West Wallowa/Minam River	9
M	Doughnut Hole	12
N	Lower Grande Ronde	3
0	Upper Grande Ronde	2
P	Walla Walla River	20
Q	Cable Creek	15
R	N. Fk. John Day River	18
S	West Ukiah	14
T	Morrow Co. Scattered Tracts	19

Standard Design Features

Sale of Forest Products

A. *Timber.* Planning for a timber sale must precede actual field layout of the sale. General needs and goals for a particular area are established years in advance through the Resource Management Plan, Forest Management Plans, the five-year timber sale plan and other long-range plans. Such plans are more sharply focused as certain tracts are selected for inclusion in short-range plans, such as the annual timber sale plan, and environmental assessments (EAs) are prepared for specific sale areas. Once an area has been selected and approved for inclusion in the annual sale plan, the field forester, with the aid of resource specialists, translates management plans and objectives into reality on the ground, making adjustments as necessary to best meet the stated plans and objectives, and environmental protection requirements. Planning and preparation for all sales shall consider the following:

1. Long-Range & Short-Range Planning. Prior to field layout of a proposed sale, the Area Manager reviews, with the foresters assigned to the sale layout task, the following:

a. Resource Management Plan.

b. Management plans for special use areas and other activities, e.g., FMPs, CRMPs, etc.

c. Five-year timber sale plan.

d. Annual timber sale plan including EA for proposed action.

e. Road transportation plan for area, including planned design standards.

f. Public access plan for area and current status of access.

g. Terms and conditions of right-of-way agreements and easements for area involved.

h. Condition and status of cadastral surveys in area.

i. Status of inventories for or occurrence of sensitive, threatened, or endangered plants and animals; status of inventories of cultural resources.

j. Notification requirements of Corps of Engineers under Sec. 404 of Federal Water Pollution Control Act if work involves discharge of dredged or fill material in navigable waters; applicability of any general permit issued pursuant to Sec. 404.

k. Applicability of coastal zone management programs pursuant to the Coastal Zone Management Act.

2. Silvicultural Practices. Silvicultural practices must be used that best meet the management goals and related land-use prescriptions and assure prompt regeneration of the forest. Selection cutting, shelterwood cutting, clearcutting or their various modifications are available options.

a. Clearcutting should not be used as a cutting practice where:

(1) Soil slope or other watershed conditions are fragile and subject to unacceptable damage.

(2) There is no assurance that the area can be adequately restocked within five years after harvest.

(3) Aesthetic values outweigh other considerations.

b. Clearcutting should be used only where:

(1) It is silviculturally essential to accomplish the relevant forest management objectives.

(2) The size of clearcut blocks, patches, or strips are kept at the minimum necessary to accomplish siivicuitural 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.

3. Sale Design. 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.

4. Roads. Keep roads and other facilities to a minimum. When needed to meet short and long term management objectives, they should be located, designed and constructed to the standards necessary for the total land use and resource values involved.

a. Location of Logging Roads. Locate roads to minimize the risk of material entering adjacent streams or other waters.

(1) Roads should fit the topography so that a minimum alteration of natural features will be necessary.

(2) Locate roads on stable terrain such as moderate sideslopes or ridgetops wherever possible. When roads must cross potential unstable terrain, design the road to the extent necessary to prevent unacceptable damage. Where sidecasting of waste material during road excavation will cover the downslope soil with rock and subsoil incapable of supporting productive vegetation, consider end-hauling waste material to stable areas of more moderate topography.

(3) Locate logging roads away from wet or marshy areas and other wetlands, meadows, riparian areas, and stream banks. Otherwise, provide necessary drainage and streambank protection.

(4) Minimize the number of stream crossings. When it is practical, cross streams at right angles to the main channel.

(5) Areas of vegetation should be left or established between roads and streams.

(6) Avoid locating roads through crucial deer and elk winter range, when feasible.

(7) Roads should avoid being located through non-forest or non-commercial forest habitats with high wildlife values.

b. Road Design. 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.

(1) Use a flexible design to minimize damage to soil and water quality.

(2) Design roads no wider than necessary to accommodate the immediate anticipated use.

(3) Design cut and fill slopes at the normal angle of repose or less.

(4) 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.

(5) Design water crossing structures to provide for adequate fish passage, minimum impact on water quality, and the 25-year frequency storm. Increases in water yield and peak flows resulting from vegetation removal would be kept in mind when designing structures.

(6) Design roads to drain normally by outsloping and by grade changes whenever possible. Where outsloping is not feasible, use roadside ditches and culverts to drain roads onto undisturbed ground.

(7) Provide dips, waterbars, and cross-drainage on all temporary roads.

(8) Place drainage diversions above stream crossings so that water may be filtered through vegetative buffers before entering the stream.

(9) Provide drainage where groundwater causes slope instability.

c. Road Construction. Road construction represents a principal source of sedimentation. 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.

5. Harvest Techniques. 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.

a. Felling. 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.

b. Logging Systems. Logging systems that least disturb the soil mantel and streamside buffer strips are preferred to those methods that contribute to soil movement.

c. Landings. Landings will be of minimum size commensurate with safety and equipment requirements and located on stable areas to minimize the risk of material entering adjacent streams and waters. Landings should be located on firm ground above the high-water level of any stream. Avoid landing locations on unstable areas, steep side hills or areas which require excessive excavation.

6. Soil Protection. Preserving the upper soil strata for the subsequent growing of future forest crops depends in large part on the care, planning, and professional judgment exercised in sale layout. Allow no more than 12 percent of the area, excluding permanent roads, to become compacted during initial stand entry. Reentry of previously compacted stands will include mitigation (ripping, tilling, etc.) to reduce compaction to acceptable levels.

a. Protection of Watershed. Plan each sale to reduce to a minimum the amount of soil erosion resulting from road construction, logging, or slash disposal commensurate with practical logging procedures and reasonable costs.

b. Revegetation. Plan for prompt revegetation of roadway cut and fill slopes, and other areas where soil has been seriously disturbed and constitutes an erosion and sedementation hazard. Revegetation and erosion prevention measures may include mulching, seeding to grass or legumes and forbs, planting of rapid-growth species of plants, seeding or planting of trees, hydromulching, and other appropriate soil stabilization practices.

7. 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 continuous presence of water is indicated, protect soil and vegetation from disturbance that could cause adverse effects on water quality and water quantity, wildlife and aquatic habitat. Give special consideration around sources that supply domestic water. Use streamside buffer strips along perennial and intermittent streams to reduce the quantity of sediment and logging wastes that might reach the stream, to help prevent stream water temperature increases, and to protect aquatic life, riparian zones and natural streamside beauty. Review decisions concerning management of riparian areas and wetlands made during the planning process regarding management objectives, vegetative composition, planned management actions, etc. If guidelines for making buffer strips are not listed in the planning documents, observe the following guidelines:

a. Leave all hardwood trees critical to stream protection and shrubs, grasses, rocks and natural “down” timber that afford shade over a perennial stream or maintain stream bank protection. Where insufficient nonmerchantable tree species exist to provide up to a minimum 75% of original shade over the stream, a fringe of undisturbed merchantable trees may be required. These trees are also the future source of large woody debris for the stream and riparian areas.

b. Leave all natural-occurring, large woody debris and tree boles in streams to provide habitat structure, unless blocking migrations of fish, or recommended for removal by a hydrologist or biologist.

c. Neither an optimum nor a minimum width can be arbitrarily established for buffer strips. The necessary width varies with steepness of the terrain, the nature of the undercover, the kind of soil, the size of the stream, the width of the riparian area, and the amount of timber that is to be removed.

d. For effective filtering of sediment, buffer strips should be wide enough to entrap the material that erodes from upslope road construction or from adjacent logging areas. Under some conditions, and with careful control in adjacent logging areas, a relatively narrow buffer strip may suffice. Where excessive soil movement may occur, the buffer strip may have to be much wider and other precautions taken to eliminate adverse effects on stream water quality.

e. A modification of the buffer strip plan may involve removal of some merchantable trees from buffer strips as decided by an interdisciplinary team during sale planning. Buffer strips may be protected by leaving stumps high enough to prevent upslope trees from rolling or sliding through the strips into the streams; by parallel felling, or by tree pulling or jacking.

f. 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 reestablish 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.

g. Intermittent streams in some areas may, during the wet season, produce enough flow to provide spawning areas for trout or anadromous fish, and to carry slit loads to perennial streams. intermittent streams with this potential will receive the same consideration as perennial streams for use of buffer strips.

8. Wildlife Considerations. Take special care during sale planning to protect or preserve important wildlife and aquatic habitat. Identified crucial habitats may include big game winter ranges, migration routes, calving grounds, strutting grounds, nesting areas, and riparian zones. Certain habitat considerations must be a part of every sale layout plan.

a. Legislated Action. Take positive action to preserve sensitive threatened or endangered species and their habitat, in accordance with the mandates of the Endangered Species Act of 1973, the Bald Eagle Protection Act of 1940, Sikes Act of 1960, and existing Bureau policy.

b. Wildlife Tree (Snag) Management. Provide evenly distributed wildlife trees and snags for cavity dwellers on managed forest lands without creating logging safety hazards and without violating the decisions on which the allowable cut plan is based. Maximum use should be made of existing withdrawals to manage snags. These areas can be managed to contribute to the snag requirement while recently cut units may contain few or no snags. To meet the snag policy, wildlife trees/snags will be retained, as feasible, on each acre of managed forest land. Snag management in areas that are devoid of snags, or have limited existing snags, may require that an adequate number of green trees or culls be left per acre to maintain a 60-70% viable population level of cavity dependent wildlife.

(1) Specific wildlife tree/snag diameters (DBH) to be retained will be based on wildlife species requirements. When snag management is not directed at specific species habitat requirements, then wildlife tree/snag diameter selection should be divided approximately equally between snags 25 inch DBH and larger, ranging to 50 feet in height, and snags 10-25 inches DBH over 6 feet in height. In all cases leave ail the soft snags and the largest available hard snags when a choice exists. In selecting wildlife trees, give special attention to snags and culls exhibiting heart rot, broken tops, external fungal conks, dead branch stubs, and signs of existing wildlife use.

c. Down Log Management. Attempt to leave at least 5 to 10 down logs per acre on sale areas. Each log should have a minimum dimension of 12" - 17"X20'.

d. Opening (Forage)/Cover Ratio. Evaluate the opening (forage) and cover ratio in a proposed timber sale area when the sale involves big game habitat. Consult a wildlife biologist to determine how to obtain maximum benefits of timber harvest on the maintenance of optimum forage/cover ratios on deer and elk summer and winter ranges.

(1) On land currently unsuited for the production of wood fibre, such as lakes, bogs, springs, swamps, wet meadows, or grasslands, strive to maintain thermal, hiding and survival cover for wildlife species.

(2) Clearcutting operations will be planned so that adequate wildlife escape cover is available within one-eighth mile.

e. Access. The effect of accessibility and human disturbance on wildlife will be considered in road location and design. Closure of unneeded roads would take place upon completion of logging and, if necessary, seasonal closures of operations would take place during critical wildlife periods. The cumulative effects of the road transportation network will be considered on key areas that are crucial for big game winter survival and fawning/calving habitat.

9. Cultural Resources. Special consideration must be given during sale layout to protection and preservation of cultural resources as required by the Antiquities Act of 1906 and the National Historic Preservation Act of 1966.

10. Utilization, Slash Disposal and Site Preparation. Consideration of the following will be included in the sale planning efforts:

a. Utilization. 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.

b. Slash Disposal and Site Preparation. 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.

11. Reforestation. 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.

13. Other Vegetative Resources. Preparation for sales of other vegetation resources or for small sales of minor forest products, may be somewhat less detailed than preparation for a regular timber sale. As a minimum, consider the following:

1. Opportunity for sale and potential competitive interest.
2. Land use plans and multiple-use relationships in the area, including FMP recommendations and decisions.
3. EA for proposed action.
4. Access to area.
5. Land status.
6. Property lines.
7. Effect of sale on other forest products.
8. Protection of reserved resources.
9. Site protection.
10. Erosion control.
11. Preservation of water quality.

Fire Management

Historically, fires have played a large role in rangeland and forest ecosystems of the planning area. Fires have a significant and direct impact on plant succession, habitat diversity and nutrient cycling, and are related to the occurrence of plant disease and insect infestations. Since the beginning of the century, fires have been suppressed and excluded from their natural role.

This exclusion has resulted in an increase in the amount of sagebrush with a corresponding reduction in rangeland habitat diversity. in forest stands, fire exclusion has caused a shift to climax ecosite stage; true firs are increasing at the expense of ponderosa pine and western larch. As timber stands progress toward climax, more ground and ladder fuels exist, increasing the risk and potential intensity of future fires.

Management Direction

Full suppression will be implemented on fires that threaten high values at risk, such as private property, improvements, and areas with unique and/or special resource values. Modified suppression, through escaped fire analysis, will be implemented on areas with lower values at risk, and which are not covered by prescribed fire plans.

Prescribed fire, planned or unplanned ignitions, will be used to meet other resource objectives, for example: to manipulate plant succession, increase habitat diversity, promote nutrient cycling, reduce fuel loads, control insect and disease infestations, control unwanted vegetation/weeds, and to reintroduce fire into a natural role.

implementation

Prepare and implement prescribed burn plans for the planning area to meet other resource objectives in the RMP. Emphasize reduction of fuels to natural levels and conformance with the State Smoke Management Plan.

Pending revision of the Elkhorn Fire Management Plan, all unplanned ignitions will be managed as a wildfire.

Priority

Implement an aggressive prescribed fire program

Monitoring

Monitor prescribed burn actions for compliance with the parameters identified in the standard design features; and to evaluate success in achieving resource objectives.

support

All prescribed fire plans will be coordinated with the Oregon Department of Forestry and adjacent landowners. Coordinate fire suppression efforts with other federal, state and local agencies and affected land users.

Standard Design Features:

1. Fuel mapping will be based on intermountain Fire Sciences Laboratory fuels models.

2. All prescribed burns will have specific, measurable objective. Monitoring to determine if objectives are met will be the responsibility of the benefitting activity.

3. Prescribed burns will not be conducted when duff moisture is below 35 percent.

4. Fire management activities will be conducted so that surface disturbance is minimized. Heavy equipment will not be allowed for the construction of fire trails in the planning area unless approved by the Area Manager/Representative.

5. High value resource areas, developed areas, and areas where fire might pose a life threatening situation will be protected through intensity of attack.

6. All burn areas will be rested from livestock grazing for two to five growing seasons after burning. Additional rest may be prescribed if resource objectives have not been met.

7. Prescribed burn areas will receive appropriate deferment from livestock grazing prior to burning to allow fine fuels to accumulate so that resource objectives can be met.

8. All wildfires will be evaluated for multi-resource rehabilitation needs.

Cultural Resource Management

Management Direction

Protect and enhance cultural resources through management of cultural properties for information potential, public values, and conservation in ten management areas identified for high cultural values; including the Snake River National Register District; and sites in the Grande Ronde, Powder River, Keating, Burnt River, and Baker County geographic units.

Manage properties in the Snake River National Register District for conservation or information potential. Manage multiple and single component site types representing prehistoric and protohistoric upland/riverine occupation, primarily for information potential. Manage complex multiple component rock shelters and open sites, and the Auburn townsite for conservation or information potential. Historic mining and settlement sites, intact 1860-l 890 mining complexes and engineering features, and the El Dorado Ditch will be managed primarily for information potential and public values. Intact portions of the Oregon Trail will be managed for public values, with restrictions to preserve the historic resource.

Protect and maintain all National Register or National Register eligible cultural properties; implement cultural resource management plans for priority management areas, ACECs and important properties; preserve important cultural properties through protection projects and actions; and evaluate potential areas or districts for National Register eligibility.

Comply with federal laws, regulations and Bureau directives for considering the effect on cultural resources of all ground disturbing projects or activities on public land.

implementation

Prepare and implement a cultural resource management plan for ten areas with high cultural values; identifying management allocations, protection objectives, monitoring, and protection plans. Allocate cultural resource properties to current and potential scientific uses, management use, socio-cultural use, public use (educational, recreational), conservation for future use, and discharged use. As additional data becomes available, identify new areas for cultural resource activity plans, and evaluate sites for nomination to the National Register.

Evaluate twelve sites and two potential archaeological districts for eligibility to the National Register of Historic Places.

Continue information and education programs for protection of cultural resources.

support

Coordinate management and protection plans for cultural resources with the State Historic Preservation Office, Advisory Council on Historic Preservation, Native American tribes and groups, the Wallowa-Whitman National Forest, National Park Service, public interest groups, and State Advisory groups.

Law enforcement support and cooperative agreements will be required for surveillance; identification and investigation of violations of laws which protect cultural properties; and protection of properties from theft, vandalism, and damage. Volunteers may be used to assist in inventory, monitoring, patrol, protection and enhancement projects. Cooperative agreements with academic institutions may be used to support inventories, protection plans, and investigations.

Monitoring

Cultural resource properties are protected primarily through monitoring and patrol to discourage vandalism.

Monitor the Oregon Trail and all National Register District sites annually using photo documentation, records of deterioration or disturbance, and measurements or estimates of observed condition change.

Monitor other important sites as funding becomes available. Develop agreements for surveillance and patrol to provide protection for cultural resources.

Priority

1. Protect, maintain and annually monitor all National Register or National Register eligible sites, highly vulnerable or threatened important sites, and Oregon Trail sites. Prepare and implement management plans for sites managed for conservation and information potential.

2. Complete inventories on the Grande Ronde River; prepare and implement a cultural resource management plan for the Grande Ronde ACEC and Joseph Creek ACEC areas.

3. Complete inventories for the Powder River ACEC; prepare cultural resource management plans for the Powder River/Keating areas.

4. Prepare and implement a management plan for historic mining settlement properties, including historic townsites, and the El Dorado Ditch.

5. Prepare and implement protection project plans for cultural properties as identified in management plans.

6. Evaluate twelve sites and two potential archaeological districts for eligibility to the National Register. Nominate eligible properties to the National Register of Historic Places.

Standard Design Features

in accordance with the National Historic Preservation Act of 1966, as amended, Executive Order 11593 and BLM policy, appropriate measures (such as inventory and existing data review) would be taken to identify, protect, preserve and determine the significance of cultural properties prior to implementation of any project or plan. Prior to any activity plan or project that may adversely affect these properties, the appropriate State Historic Preservation Office (SHPO) will be consulted to determine effects upon the cultural resource. Sites within the project area determined eligible for the National Register of Historic Places, and determined to be adversely effected by the activity plan or project, will be avoided or mitigated. Appropriate mitigating measures and evaluation of effect on properties are determined in consultation with the State Historic Preservation Officer and National Advisory Council on Historic Preservation. Usually, project avoidance, redesign, or cancellation will be employed where practical and compatible with management objectives. Mitigation measures include, but are not limited to: 1) adjusting project boundaries to avoid impacting sites; 2) intensive documentation of the cultural resource before proceeding with project implementation; 3) adopting methods or techniques that would minimize direct and indirect disturbance to the site and its environmental setting; 4) removing and relocating historic cultural properties to another location after documentation and development of a management plan to maintain the values of the property; or 5) excavating the archaeological properties with the goal of preserving the information value (data content) of the properties.

Inventory or mitigation will be directed by cultural resource specialists or through contracts with individuals or institutions meeting professional standards. Management plans will be developed for all National Register properties and others determined to need comprehensive management.

Special stipulations in contracts and leases, and acknowledgement of mining notices will be included to protect undiscovered or sub-surface cultural resources not identified during inventory. In all cases, cultural resources discovered during an operation or activity on BLM land will be left intact and operations in the area suspended. Operations will not be resumed until written permission is received from the authorized officer; and the cultural resources are evaluated and protected in accordance with federal laws and regulations.

Special stipulations on fuelwood (firewood cutting) permits: Standing dead trees within 100' of any historic building or structural remains (for example cabins, barns, outbuildings, historic mining structures) must be felled away from the structure or remains.

Recreation Management

Management Direction

Provide or enhance recreational opportunities for hunting, fishing, swimming, floating, boating, hiking, and sightseeing.

Implement and develop site specific management plans for Special Recreation Management Areas; and the Extensive Recreation Management Area that contains high recreational values (refer to Map 5).

implementation

The lower segment of the Grande Ronde River from the Oregon-Washington State line to the Snake River, and portions of the Snake River and Joseph Creek, have been identified by the National Park Service in its Nationwide Rivers inventory as suitable for study for wild and scenic values. The Bureau of Land Management recommends that these rivers be established as study rivers under Section 5(a) of the Wild and Scenic Rivers Act. Following establishment, BLM recommends that a study be authorized and completed to determine the suitability of these streams for inclusion in the National Wild and Scenic Rivers System. Should the study indicate the rivers, or segments thereof, to be suitable, Congress may designate them as wild, scenic or recreations rivers as appropriate.

A 33-mile segment of the Snake River, from the Forest Service boundary to Asotin, Washington, is a Section 5(a) Study River under the Wild and Scenic Rivers Act. The study for this river segment was completed by the National Park Service and submitted to Congress on April 26, 1985.

Provide interim protection of the natural character of BLM lands along these rivers, pending determination of the rivers' suitability for designation.

Continue cooperative management of the Wallowa and Grande Ronde rivers with the U.S. Forest Service. BLM will have an active role in managing public lands along the river from a few miles upstream of Wildcat Creek to the confluence of the Snake River.

Recreation Area Management Plans will be developed or implemented for Special Recreation Management Areas (SRMAs), and thirteen recreation areas within the Baker Extensive Recreation Management Area (refer to Map 5). Continue implementation of the Oregon Trail management plan. Designated management areas and the primary associated recreational attractions are:

Special Recreation Management Areas
Oregon Trail-National Historic Trail
Grande Ronde River—
National Wild & Scenic Study River in Washington
National Wild & Scenic River (Oregon Segment)
Powder River-National Wild & Scenic River

Baker Resource Area Extensive Recreation Management Areas
Spring Recreation Site-Campground, water base facility
S.F. Walla Walia-Campsite, water base facility
Bassar Diggins-Campsite, trail head Snake River Breaks
Burnt River-Fishing, Hunting -Water base
Sheep Mtn.-Hunting, Sightseeing – Primitive setting
Homestead-Hunting, Sightseeing – Primitive setting
Lookout Mtn.-Hunting, Sightseeing – Primitive setting
Virtue Flat-Off-road vehicles
Denny Flat-Off-road vehicles
Snake River Breaks-Hunting, Sightseeing – Primitive setting
John Day River-Fishing, Hunting – Water base
Brownlee Reservoir-Fishing -Water base
Hells Canyon Reservoir-Fishing – Water base

support

Coordinate recreation management plans with interested user groups, private land owners, and county, state and federal governmental agencies to ensure balanced management of recreation resources.

Monitoring

Intensity of management depends on the availability of a given recreation resource, stability of the resource, and the public value of that resource. Monitoring and mitigation are integral components of the RAMP and guide the management activities that are identified within the plan.

Priorities

Recreation priority management areas are:

1. Special Recreation Management Areas (nationally identified areas)
   a. Oregon Trail
   b. Grande Ronde River
   c. Powder River
2. Extensive Recreation Management Areas (local/regional identified areas)
   a. Spring Recreation Site
   b. S.F. Walla Walla Recreation Site
   c. Bassar Diggins Recreation Site
   d. Burnt River
   e. Sheep Mountain
   f. Homestead
   g. Lookout Mountain
   h. Virtue Flat
   i. Denny Flat
   j. Snake River Breaks
   k. John Day River
   l. Brownlee Reservoir
   m Hells Canyon Reservoir

Special Recreation Management Areas
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   d. Burnt River
   e. Sheep Mountain
   f. Homestead
   g. Lookout Mountain
   h. Virtue Flat
   i. Denny Flat
   j. Snake River Breaks
   k. John Day River
   l. Brownlee Reservoir
   m Hells Canyon Reservoir

Off Road Vehicle Use

Management Direction

Ensure the use of off road vehicles (ORV) on public lands is in accordance with the authority and requirements of Executive Orders 11644 and 11989 and regulations contained in 43 CFR 8340.

Approximately 287,611 acres of public land are designated as "open" to off road vehicle use.

Off road vehicle use is designated as "limited" on 138,042 acres of public land. Vehicle travel is restricted in the following areas to existing road and trails, year long:

West Fork Burnt River (Map 5)—560 acres.
Denny Flat (Map 5)—1,260 acres.
Burnt River Canyon (Map 5)—44,340
Lookout Mountain/Soda Lake (Map 5)—34,850 acres
Virtue Flat (Map 5)—3,560 acres
South Virtue Flat (Map 5)—700 acres
McGraw Creek/Homestead/Sheep Mountain (Map 5)—24,059 acres
Powder River Canyon (Map 5)—6,230 acres
Deer Creek (Halfway) (Map 5)—3,460 acres
Joseph Creek (Map 6)—3,210 acres
Grande Ronde River (Map 6)-9,715
Keating Riparian (Map 6)-2,173 acres
Unity Reservoir Bald Eagle Habitat (Map 6)-200 acres
Hunt Mountain (Map 6)—2,230 acres
Oregon Trail (Map 6)—1,495 acres

Off road vehicle use is designated "closed" on 3,594 acres of public lands. Public lands (507 acres) at the proposed National Historic Oregon Trail Interpretive Center area have been previously designated as "closed" to vehicle use except for administrative and approved uses. Vehicle travel will not be allowed in the following areas, to protect unique natural values and riparian habitat, and to minimize soil erosion:

Grande Ronde River (Map 6)-3,444 acres
Joseph Creek (Map 6)—150 acres

ORV use in wilderness study areas is guided by the Bureau's "Interim Management Policy and Guidelines for Lands Under Wilderness Review." Areas designated as wilderness through legislation would have ORV use restricted by the specific legislation and/or Bureau's "Wilderness Management Policy."

Implementation

All public lands in the planning area are designated as identified by this Record of Decision; and publication of the designation order in the Federal Register.

Install off road vehicle designation signs in areas that have high potential for unauthorized use.

Monitoring

Monitoring will be conducted in conjunction with studies established by resource monitoring needs of those activities responsible for the ORV designation. Other resource activity plans that include the designated sixteen areas will also include monitoring provisions to be used to determine the effectiveness of ORV designations.

Priority

Monitor the sixteen designated areas in accordance with needs established in other resource activity plans.

Areas of Critical Environmental Concern

Management Direction

Nine areas totalling 38,988 acres are designated as Areas of Critical Environmental Concern. A management plan will be prepared for each ACEC which will provide a comprehensive management prescription. Portions of the nationally designated Grande Ronde Wild and Scenic River and Powder Wild and Scenic River are within the boundaries of the Grande Ronde ACEC and Powder River Canyon ACEC, respectively.

Joseph Creek ***ONA/ACEC:*** Public lands on Joseph Creek (3,360 acres), between Tamarack and Cottonwood Creeks are designated and will be managed as an Outstanding Natural Area/ACEC primarily to protect the natural riparian plant communities of Joseph Creek; and to protect wildlife habitat, high scenic qualities, and outstanding geologic system values for educational and recreational purposes. Natural riparian and upland vegetation in the canyon will be maintained. Cooperation with the Washington Department of Wildlife will continue to maintain and improve wildlife habitat in the Chief Joseph Wildlife Management Area. Wildlife habitat will be managed for deer, elk, bighorn sheep, eagles and other raptors. Aquatic habitat for anadromous fish will be maintained in a natural condition. Recreational use would be limited to fishing, hiking, and observational activities along Joseph Greek. Camping locations will be restricted to protect riparian habitat. Land immediately adjacent to Joseph Creek will be closed to off-road vehicle use (150 acres); remaining lands will be limited to designated roads for off-road vehicle use. A "no surface occupancy" restriction for all gas exploration and development will be applied. Timber harvest will be excluded on 80 acres. Livestock grazing will be restricted through fencing and seasons of use. Adjacent or private lands on Joseph Creek may be acquired to benefit natural riparian and wildlife values.

Grande Ronde ***ACEC:*** Public lands on the Grande Ronde River (9,715 acres) in Oregon and Washington, and on the Snake River in Washington, are designated and will be managed as an ACEC. Within the ACEC, approximately 2,570 acres of BLM lands are tentatively included within the boundaries of the Grande Ronde Wild and Scenic River. Final boundaries will be developed as part of the Congressionally required river management plan, which will be completed by 1992. The ACEC is managed to promote protection of the area's unique natural, scenic, geologic, ecologic, and cultural resource values; and to protect wildlife habitat and enhance recreation opportunities. Geologic system values of the Goosenecks National Natural Landmark will be protected. The visual resource will be protected within the viewshed corridor along the rivers; only those uses compatible with maintaining visual resource classifications will be allowed. Habitat for bald eagles, raptors, game and non-game species, and anadromous fish will be maintained or improved in cooperation with federal and state agencies. An ACEC management plan will be developed to protect natural, scenic, cultural and recreational values. Adjacent lands or inholdings may be acquired to enhance wildlife habitat, cultural resources, and recreational opportunities. A "no surface occupancy" restriction will be applied to oil and gas exploration or development. Off-road vehicle use will be limited to designated roads and trails. Commercial timber harvest will be restricted to prescriptions that protect or enhance natural, visual, and cultural values.

Keating *Riparian* ***RNA/ACEC:*** BLM lands on Balm, Clover, and Sawmill Creeks (2,173 acres), in the Keating Valley area, are designated and will be managed as an ACEC to protect riparian values and wildlife habitat. To protect and maintain natural riparian ecologic systems for research and educational purposes, a combination of 80 acres of Balm, Clover and Sawmill Creeks within the ACEC will be managed as a Research Natural Area (RNA). Livestock grazing, commercial timber harvest, and camping will be excluded in the RNA. Recreational use in the RNA will be limited to observational activities. A withdrawal from mineral entry will be pursued on 185 acres to protect the RNA. Commercial timber harvest will be restricted in the ACEC to prescriptions that protect or enhance riparian and wildlife values. Riparian habitat and potential Columbian sharp-tailed grouse reintroduction habitat in the ACEC will be maintained or improved through restrictions on livestock grazing (seasons of use, numbers, or fencing). Off-road vehicle use will be limited to designated roads and trails.

Powder River Canyon ***ACEC:*** Public lands in the Powder River Canyon (5,880 acres), between Thief Valley Reservoir and Highway 203 in the Keating Valley, are designated and will be managed as an ACEC. Within the ACEC, 2,385 acres of BLM land are included in the Powder Wild and Scenic River. The ACEC will be managed to protect raptor habitat, wildlife habitat, cultural resources and to maintain scenic qualities while allowing for compatible recreational uses. Forage and habitat needs for big game, bald eagles, golden eagles and other raptors will be maintained or improved. Incompatible uses, including new road development, within the canyon and adjacent upland will be excluded to protect natural and cultural values. Riparian conditions will be maintained or improved by restricting livestock grazing through seasons of use, numbers, or fencing. A "no surface occupancy" restriction will be applied to mineral leasing and development. Off-road vehicle use will be limited to designated roads and trails. Adjacent lands or inholdings may be acquired to protect identified values.

Unity Reservoir Bald Eagle Nest Habitat ACEC: BLM lands on the North Fork of the Burnt River (360 acres), a potential bald eagle nest area, will be managed to protect habitat consistent with the Endangered Species Act and Pacific States Bald Eagle Management Plan. To protect the bald eagle habitat, 200 acres of the area is designated and will be managed as an ACEC. The remaining 160 acres are under a Bureau of Reclamation project withdrawal for Unity Reservoir, and will also be managed to protect bald eagle habitat. Firewood cutting, commercial timber harvest, and major development actions will be excluded. Off-road vehicle use will be limited to designated roads and trails and seasonal road closure restrictions will be applied. No new roads will be developed. Seasonal restrictions will be applied to oil and gas exploration and development.

Hunt Mountain ***ACEC:*** BLM lands on Hunt Mountain (2,230 acres) are designated and will be managed as an ACEC to protect and maintain habitat for mountain goats and big game, and to protect habitat for sensitive plant species identified by the Oregon National Heritage Program. Livestock grazing will continue to be excluded. Timber harvest will be restricted to prescriptions that protect wildlife and sensitive plant habitat. Off-road vehicle use will be limited to designated roads and trails.

Oregon Trail ***ACEC:*** Seven parcels of public lands with remnants of the Oregon National Historic Trail (1,495 acres) are designated and will be managed as an ACEC to preserve the unique historic resource and visual qualities of these areas. A management plan for preservation, public information and interpretation will be implemented. New uses incompatible with maintaining visual qualities or providing public interpretation will be excluded in a 1/2 mile corridor. No campgrounds will be developed within 1/4 mile of the Oregon Trail in the ACEC. Rights-of-way will avoid the Oregon Trail. Commercial timber harvest is excluded on 5 acres and restricted on 75 acres. Livestock grazing will be excluded on 770 acres. No new road access will be developed. Off-road vehicle use will be limited to designated roads and trails. No surface occupancy restrictions will be applied to oil and gas leases and development, no mineral material development will be allowed. A withdrawal from mineral entry under the mining laws will be sought for 721.81 acres of public land for Trail sites at Flagstaff Hill, Straw Ranch, and Echo Meadows. Adjacent lands, or lands in the Oregon Trail geographic unit, may be acquired to protect intact segments of the Oregon National Historic Trail; these lands would be incorporated into the ACEC, and the same special management prescriptions or restrictions will be applied.

Sheep ***Mountain*** *ACEC:* BLM lands in the Sheep Mountain area (5,398 acres between Pine Creek and Brownlee Reservoir), including a portion of the Sheep Mountain WSA, are designated and will be managed as an ACEC to protect outstanding scenic qualities, and maintain or improve wildlife and crucial bald eagle winter habitat. Commercial timber harvest will be excluded on 200 acres. Seasonal restrictions for oil and gas exploration and development will be applied. Adjacent lands or inholdings may be acquired to benefit bald eagle habitat. Off-road vehicle use will be limited to designated roads and trails.

Homestead ACEC: BLM lands on the Snake River Breaks near Homestead (8,537 acres between Pine Creek and Nelson Creek) are designated and will be managed as an ACEC to protect outstanding scenic qualities, and wildlife, bald eagle and sensitive plant habitat. The area will be managed to meet forage and habitat requirements for game and non-game species, as recommended by the Oregon Department of Fish and Wildlife. Seasonal restrictions will be applied to oil and gas exploration and development. Off-road vehicle use will be limited to designated roads and trails. Commercial timber harvest will be excluded on 600 acres.

Evaluate areas identified in the draft Baker RMP/EIS as needing study for special management, to determine if they meet the criteria for ACEC designation.

Implementation

Management plans for the Grande Ronde ACEC, Joseph Creek ONA/ACEC, and Powder River ACEC will be prepared within four years of completion of the RMP/ROD. Continue implementing management prescriptions and actions for the Oregon Trail ACEC, as addressed in the existing Vale District Oregon National Historic Trail Management Plan.

Monitoring

ACECs will be monitored for changes in the condition of special resource values to determine if the protection management objectives are being met. Specific monitoring studies and schedules will be developed through the management plans. An interim monitoring program using photo documentation points and biannual examination of each ACEC will be implemented to provide protection against incompatible, inadvertent or unauthorized resource uses within the ACECs.

Management plans will be evaluated every five years to determine if objectives are being met; and will be updated if needed.

Interim protection measures and monitoring schedules would be implemented for study areas that meet ACEC criteria, until formal designation can be addressed.

support

Management activity plans for each ACEC will be developed in cooperation with public interest groups, resource users, state and federal agencies and organizations, and tribal entities.

Ongoing evaluations and identification of new proposed special management areas will be conducted in cooperation with state and federal agencies and natural heritage programs. Areas with the potential to fill needs for Research Natural Areas, as identified and prioritized in statewide natural heritage programs, would be inventoried and evaluated for special management.

Fire management support will be needed for management of natural fire in meeting resource objectives. Acquisition of legal access to public land will be needed for administrative purposes in wildlife habitat management, and for recreation public access.

Cooperation with state wildlife management agencies and the U.S. Forest Service will be required for plan development, resource protection, implementation of habitat and riparian improvement projects, and habitat and ecosystem monitoring.

Priority

1. Protect and monitor resources in the nine designated ACECs. Provide interim protection for these resources, until management plans are completed.

A. Monitor, maintain or improve riparian habitat, habitats for federally-listed threatened or endangered species, federal listing candidate species, and National Register District and Oregon Trail properties in ACECs designated for the protection of these values.

B. Monitor, maintain or improve wildlife and fisheries habitat, and sensitive habitat for state threatened or endangered species, in areas designated for the protection of these values.

C. Provide protection of the natural character of BLM segments of Joseph Creek and the Grande Ronde River in Washington pending determination of suitability for National Wild and Scenic River status.

D. Protect the natural character of the BLM segments of the Snake River which have been determined suitable for National Wild and Scenic River designation.

2. Continue implementation of management actions for the Oregon Trail ACEC.

3. Prepare and implement a management plan for the Joseph Creek ONA/ACEC and Grande Ronde ACEC with emphasis on natural riparian and geologic systems and scenic values, recreation, cultural resources, wildlife habitat, and forest management. Determine the suitability of BLM segments of the Grande Ronde River in Washington, and Joseph Creek, for inclusion in the National Wild and Scenic Rivers system.

4. Prepare and implement a management plan for the Powder River ACEC, emphasizing raptor, fisheries, game and nongame habitat, cultural resources and recreation.

5. Prepare and implement a management plan for the Keating Riparian RNA/ACEC as part of a larger coordinated activity plan for the Keating Valley.

Pursue the proposed withdrawal from mineral entry under the 1872 mining laws on specific lands identified within the Keating Riparian RNA/ACEC.

6. Implement special management actions for the Unity Reservoir Bald Eagle Habitat ACEC in cooperation with the U.S. Forest Service and Bureau of Reclamation.

7. Prepare a management plan for the Hunt Mountain ACEC.

8. Prepare management plans for the Sheep Mountain ACEC, and Homestead ACEC.

Visual Resources

Visual resources in the planning area have been classified according to BLM's visual resource management criteria. These criteria include scenic quality, visual sensitivity and viewing distance, and have resulted in four Visual Resource Management (VRM) classifications which are shown on Map 5 and listed in Table 10. Each classification defines management objectives and the degree of visual change that will be acceptable within a landscape.

Visual Resource Management (VRM)

1. Class I-Primarily for WSAs, RNAs, ACECs, ONAs, and Wild & Scenic Rivers.

No projects will be allowed within these areas.

2. Class II-Primarily for areas of high scenic quality.

   Any project work within a Class II area cannot be visible to a casual visitor from any travel route.

3. Class III-Primarily for areas considered important from an aesthetic view point. Not necessarily outstanding scenery.

   Project work can be seen within a Class III area from travel routes. However, projects cannot be a focal point on the landscape.

4. Class IV-Primarily for general scenic landscapes throughout much of BLM.

   Project work within a Class IV area can be a focal point on the landscape to the casual visitor.

5. Class V-Primarily for sites requiring reclamation (landfills, timber cuts, mining operational, etc.).

Although no VRM Class I Areas were identified from previous inventories, lands in the McGraw Creek Wilderness Area are managed as VRM Class I lands. Lands within river corridors on the Grande Ronde and Powder Wild and Scenic Rivers will be inventoried and classified appropriately for the protection of high scenic values.

Before the BLM initiates or permits any major surface disturbing activities on public land, an analysis will be completed to determine adverse effects on visual qualities. Activities that will result in significant, long term adverse effects in areas of high visual quality such as the Burnt River, Powder River or Snake River (canyons) shown on Map 5 will not be permitted.

Activities within other areas of high visual quality that may be seen might be permitted if they do not attract attention or leave long term visual changes on the land. Activities in other areas may change the landscape but will be designed to minimize any adverse effect on visual quality.

Table 1 O-Visual Resource Management Class Inventory

Class	Acreage	Percent of Planning Area
I	0	0
II	151,711	35
III	75,156	17
IV	202,887	48
Total	429,754	100

Wilderness Resources

The Bureau's Interim Management Policy for Wilderness Study Areas will continue to guide management in the three WSAs in the planning area: the McGraw Creek WSA, Homestead WSA, and Sheep Mountain WSA. The possibility that these areas may be designated as wilderness will be recognized in all affected land and resource use decisions.

In 1984,968 acres of the McGraw Creek WSA were designated as Wilderness Area. The McGraw Creek Wilderness Area is presently managed by the U.S. Forest Service under cooperative agreement.

Paleontological Resources

Paleontological localities will be protected through review of all surface disturbing proposals. Collecting of important vertebrate fossils will be allowed subject to existing restrictions and permitting requirements. Commercial or hobby collection of common fossils will be allowed subject to existing federal regulations.

A regional data review and evaluation of the importance of known paleontological resources will be completed. Inventories for paleontological resources will be conducted in connection with individual project proposals. Important paleontological localities will be patrolled periodically to detect unauthorized uses or determine threats to the resource. Evaluation and protection of paleontological resources will be accomplished through coordination with professional paleontologists and the Oregon State Department of Geology and Mineral Industries. Volunteers may be used to assist in monitoring and inventories.

Localities containing vertebrate fossils, and paleontological resources which may provide important scientific information, will receive priority for protection and evaluation; in comparison to common invertebrate or common plant fossil localities which are not ordinarily the focus of protection measures.

Grasshopper Control

Cooperation with the Animal and Plant Health Inspection Service (APHIS) of the U.S. Department of Agriculture will continue in the control of outbreaks of grasshoppers on public lands in the planning area. Site specific environmental analyses will be prepared when needed to identify and evaluate impacts not adequately considered in broader environmental documents, including district-wide environmental assessments and the Rangeland Grasshopper Cooperative Management Program Environmental Impact Statement (1987).

Noxious Weed Control

Infestations of noxious weeds are known to occur on some public lands in the planning area (refer to Figures 2 and 3). The most common noxious weeds are diffuse, spotted and Russian knapweed, yellow starthistle, Canadian thistle, whitetop and yellow leafy spurge. Control methods will be proposed and subject to site specific environmental analyses consistent with the Record of Decision on BLM's Northwest Area Noxious Weed Control Program EIS and EIS Supplement. Control methods will not be considered unless the weeds are confined to public lands or control efforts are coordinated with owners of adjoining infested non-public lands. Proper grazing management will be emphasized after control to minimize possible reinfestation. Coordination and cooperation with county weed control officers will continue on a regular basis.

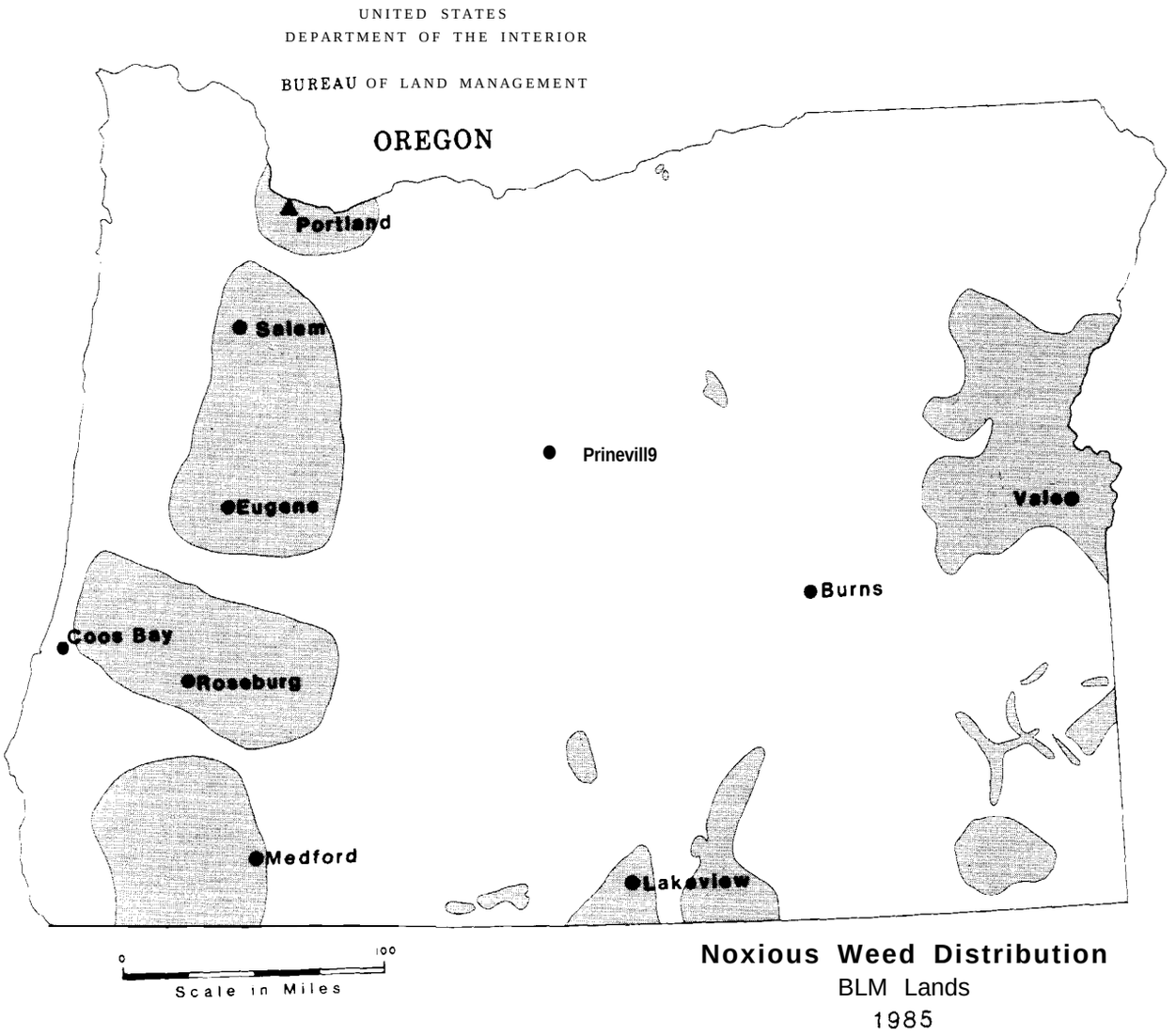


Figure 2—Distribution of Noxious Weeds on BLM Lands in Oregon, 1985

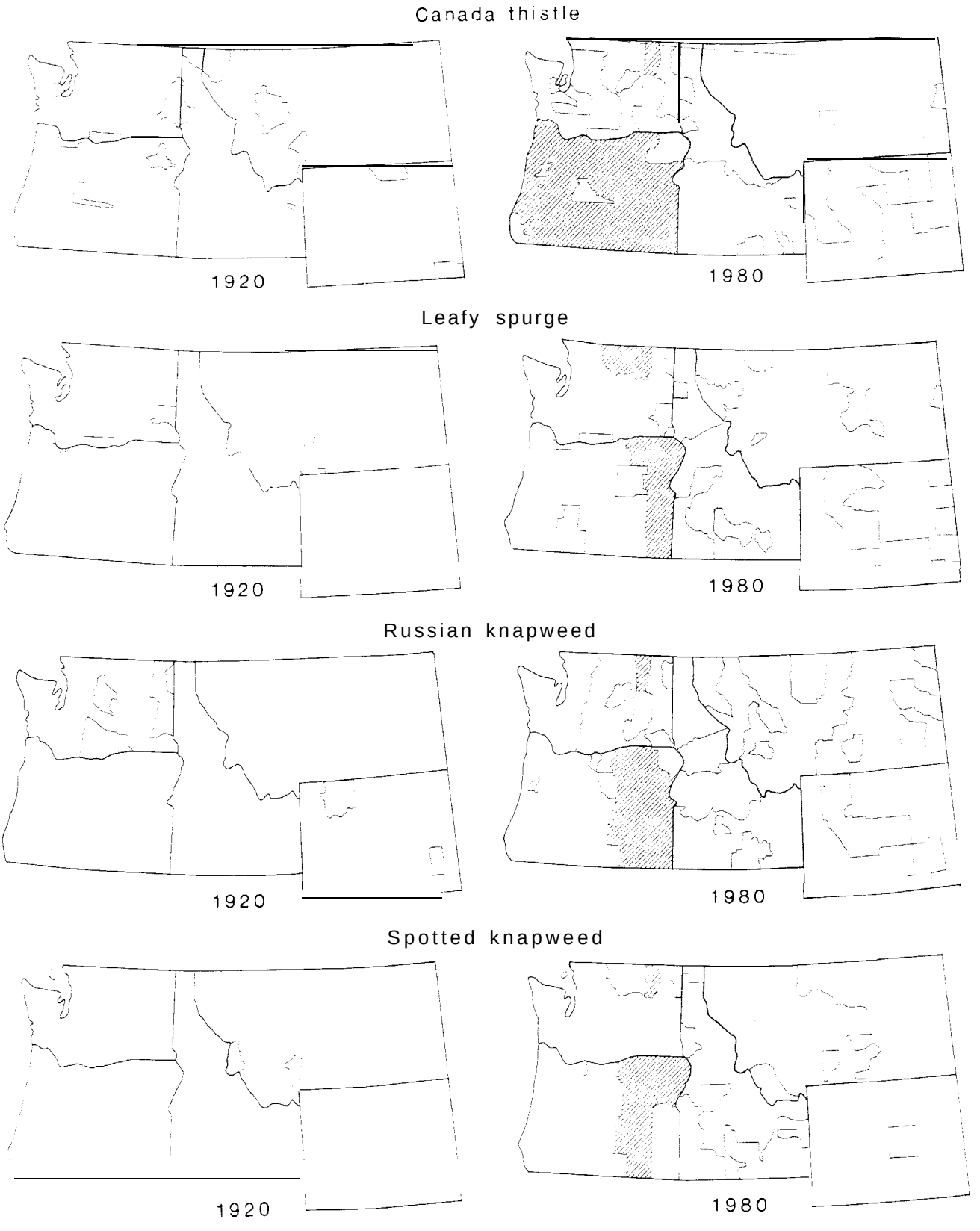


Figure 3a—Distribution and Spread of Selected Noxious Weeds, 1920-1980

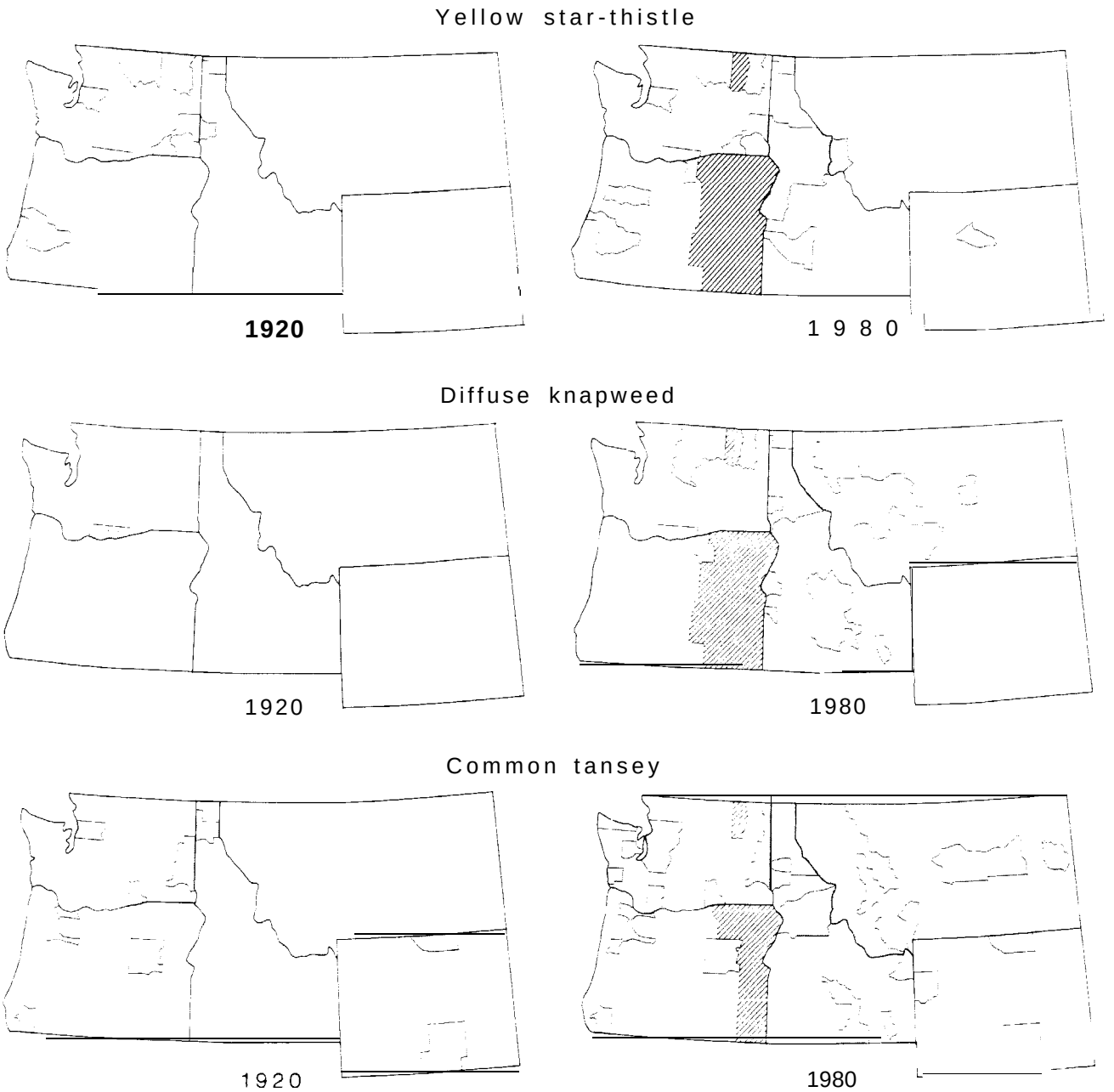


Figure 3b—Distribution and Spread of Selected Noxious Weeds, 1920-1980

Withdrawal Review

Review of other agency withdrawals will continue and is expected to be completed in 1991, as required by the Federal Land Policy and Management Act of 1976, Section 204 (1). These withdrawals will be continued, modified or revoked. Upon revocation or modification, part of all of the withdrawn land may revert to BLM management. Current BLM policy is to minimize the acreage of public land withdrawn from mining and mineral leasing, and, where applicable, to replace existing withdrawals with rights-of-way, leases, permits or cooperative agreements. Approximately 140,000 acres of land administered by other federal agencies will be involved in this withdrawal review.

Management of Newly Acquired Lands

Lands may come under BLM administration after this RMP is approved. This could occur through exchange, donation, purchase, revocation of withdrawals to other Federal agencies, or relinquishment of Recreation and Public Purpose leases. Discretionary acquisitions (such as exchanges) would be guided by approved RMP "lands acquisition criteria" based on resource values of high public interest. Newly acquired lands would be managed for the highest potential purpose for which they were acquired. For example, lands acquired within special management areas with specific Congressional mandates (such as Wild and Scenic Rivers, National Trails, Wilderness Areas) would be managed in conformance with established guidelines for those areas. If lands with unique or fragile resource values are acquired, those values would be protected and managed on an interim basis until the next plan amendment or revision was completed.

Lands acquired without identified special values or management goals would be managed in the same manner as comparable BLM lands. This implies typical livestock grazing, recreation management or timber harvest opportunities, and related management practices, management of the mineral estate, standard operating procedures and precommitted mitigation measures. Exchanges of lands resulting in net adjustments in the livestock grazing program will be reported to the public in periodic Rangeland Program Summary Updates or RMP evaluation or progress reports.

Geographic Unit Management Guidance

This section provides specific management direction by Geographic Unit. Resource Condition Objectives, Resource Allocations, and Management Actions are described for each resource that is discussed in the general section of this chapter.

Lookout Mountain Geographic Unit-l

This area contains 23,502 acres of public land.

Vegetation

Resource Condition Objective

1. Upland
   - Manage upland grass-shrub vegetation to achieve a mid-seral stage plant community.

2. Forestland
   - Establish and maintain healthy and diverse forestlands in all age classes and stocking levels with at least 10% of the acreage in well-distributed old-growth habitat.

3. Riparian
   - Reestablish, improve and/or maintain riparian habitat in or adjacent to seeps, springs, wet meadows and perennial streams.

Allocation

1. Upland
   - Restrict livestock grazing through seasons of use, levels of utilization and/or livestock numbers.
   - Restrict livestock grazing for 3-5 growing seasons on range rehabilitation project areas.

2. Forestland – contains approximately 2200 acres of commercial forest and 2000 acres of woodlands.
   - Restrict timber harvest on approximately 2,000 (90%) acres of commercial forestland to maintain watershed, wildlife, and recreational values. This will reduce the total amount of forest products by approximately 10%.
   - Exclude from timber harvest approximately 200 acres (10%) or commercial forestland which are economically non-operable. (This acreage is not included in the allowable harvest base.)
   - Restrict harvest of posts, poles, juniper boughs and other forest products on approximately 1500 acres (75%) of woodlands to protect critical mule deer habitat.
   - Exclude harvest of forest products on approximately 500 acres (25%) of woodlands.

3. Riparian
   - Restrict livestock grazing in riparian habitat in poor or fair condition through season of use, utilization levels, and livestock numbers.
   - Exclude livestock grazing in selected riparian areas with exclosure fences.

Lookout Mountain Grazing Allotments –
Livestock Management, Forage Allocations and Implementation Status

ALLOTMENT NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
0	UNALLOTTED	160	0	I	NONE		
1001	SNAKE RIVER	10953	1056	I	DEF-ROT	YES	5/1-11/7
1070	WELLS BASIN	1490	428	I	DEF.	YES	7/15-9/30
3015	DALY CREEK	1610	224	C	SEASONAL	NO	6/15-10/14
3026	SODA CREEK	9289	1278	I	DEF-ROT	YES	4/16-11/15

Management Action

1. Upland

- Continue approved grazing management systems and implementing allotment management plans.
- Monitor and evaluate grazing systems and adjust the systems and stocking levels as appropriate to achieve the mid-seral plant community objective.
- Defer livestock grazing for 3-5 growing seasons on range rehabilitation project areas.

2. Forestland

- Continue routine inventories and surveys.
- Monitor forestland activities to prevent timber theft and other unauthorized uses.

Restricted Commercial Forest (2,000 acres)

- Adjust timber stocking rates by precommercial and commercial thinning and by use of prescribed fire.
- Control competing vegetation and conditions that lead to catastrophic damage by insects and disease.
- Prepare sites for reforestation and artificially reforest (plant seedlings or apply tree seed) if natural reforestation is inadequate.
- Protect plantations from damage by wildlife or livestock.
- Harvest fuelwood and other minor forest products.

Excluded Commercial Forest (200 acres)

- Maintain old-growth habitat types primarily for the benefit of wildlife.
- Harvest trees killed or damaged by natural disasters, such as wildfire, insect epidemic, flooding, wind and landslides, when salvage operations are economically feasible (i.e., when included with salvage of adjacent public timber).

Restricted Woodlands (1,500 acres)

- Harvest forest products when compatible with other uses.

Excluded Woodlands (500 acres)

- Exclude harvest of woodland products in order to preserve critical mule deer winter range.

3. Riparian

- Continue to implement Morgan Cr. watershed plan - which includes but is not limited to construction of instream structures, fences and plantings.
- Implement grazing systems that will provide for rest and rejuvenation of riparian vegetation on selected streams. Continue to monitor habitats and to inventory where base data is lacking.
- Continue riparian surveys on 6.5 miles of streams within this geographic unit. Existing and potential riparian habitat will be established or improved on the following streams:

Lookout Mountain Riparian Areas, Condition and Trend

Riparian Areas	BLM Miles	Riparian Condition	Potential	Trend	Comments
*Morgan Creek	**3.0**	Poor	Medium	Stable	
*Pole Gulch	**2.5**	Poor	High	Stable	--
*Spring Creek	**2.5**	Poor	High	Stable	--
*Sisley Creek	**4.5**	Poor	High	Stable	--
'Fox Creek	**6.0**	Poor	High	Down	--
*Connor Creek	4.5	Fair	Medium	Stable	Mining on lower portion
Total	**23.0****				

* - Inventoried since 1985

- *6.5 miles to be inventoried

Wildlife and Fisheries Habitat

Resource Condition Objective

- Provide suitable habitat for reintroducing native wildlife species, including bighorn sheep, beaver, and pronghorn antelope.
- Maintain/improve habitat for fisheries.

Allocation

- Maintain snags for cavity-dependent species.
- Increase and enhance aspen forest types.
- Maintain not less than 10% of the forestland in an "old growth" habitat.
- Maintain the current low density road network on the Public Land.

Develop and maintain a well-distributed cover/forage (shrub and trees) ratio of 40/60.

Provide suitable habitat for potential reintroduction of native species, including Bighorn Sheep, beaver and pronghorn antelope.

Management Action

- Closely coordinate with forest management on practices to assure adequate dead trees (standing and down), and an increase in aspen forest types.
- Cooperate with the Oregon Department of Fish and Wildlife (ODFW) to reintroduce bighorn sheep and beaver in suitable habitat.
- Continue to monitor habitats and inventory where habitat data is lacking.
- Monitor fish habitat conditions and trend on the following streams:

Cultural Resources

Resource Condition Objective

- Protect and preserve the information potential and public values of cultural resources.

Allocation

- Identify uses for specific cultural properties in activity plans. Surface-disturbing activities will avoid impacts to cultural properties.

Management Action

- Inventory and evaluate cultural properties in response to other resource project proposals and management actions.
- Conduct periodic patrols to discourage vandalism.

Coordinate management of cultural properties with other resource activity plans.

Recreation

Resource Condition Objective

- Maintain scenic quality.
- Enhance recreation opportunities for hunting, sightseeing and hiking.

Allocation

- Maintain VRM classifications:

Class I 0 acres Class III 0 acres
Class II 23,502 acres Class IV 0 acres

- Limit camping to a 14 day stay.

Managemenf Action

- Develop identified trail systems.
- Prepare a site plan for Bassar Diggins and develop as use warrants.
- Maintain VRM Class values.

Lookout Mountain Fisheries

Stream	Public Stream Miles	Present Conditlon	Estimated Trend	Species	Comments
Connor Cr.	2.0	Poor	Down	Rainbow Trout	Mining activities have reduced water flow and spawning success.

Off Road Vehicles

Resource Condition Objective

· Maintain ORV designations.

Allocation

· Maintain ORV designations:
Open 4,302 acres
Limited 19,200 acres
Closed 0 acres

Management Action

· Implement and maintain ORV designations.
· Identify designated roads/trails (through maps and signs).
· Install ORV signs.

Lands

Resource Condition Objective

· Consolidate ownership patterns in order to improve resource management of both public and private land.
· Assure legal/physical access to public lands having important resource values.
· Maintain the availability of public lands for utility and transportation corridors and local rights-of-way.
• Assure that all uses of the public lands are properly authorized.

Allocation

· Restrict Lookout Mt. communications site to current users.

• Land tenure adjustment:
Zone 1 – retention 23,002 acres;
Zone 2 – disposal 480 acres.

The following are the lands within Zone 2:

T. 11 S., R. 45 E.	
Sec. 12: S1/2NE1/4, N1/2SE1/4	160.00
T. 11 S., R. 46 E.	
Sec. 7: Lots 1, 2, 3 & 4, E1/2SW1/4, N1/2SE1/4	320.96

Management Action

· Develop and implement a communications site plan for Lookout Mt.
• Acquire trail access easements for the proposed trail system addressed under Recreation.
· Resolve unauthorized use of the public lands through termination of the use or authorization by lease or permit, exchange or sale.

Minerals

Resource Condition Objective

· Maintain the availability of lands for mineral leasing and mineral material production consistent with watershed and other resource objectives.
· Maintain the availability of lands for locatable mineral exploration and development consistent with the "unnecessary or undue degradation" standard (43 CFR 3809).

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)

• Allow leasing on 12,152 acres of public domain with standard protective stipulations.
• Restrict leasing on 9,000 acres of public domain with critical mule deer summer habitat by adding a summer season, protective stipulation which shall restrict operations on the lease during the period May 15 to June 15.
· Restrict leasing on 2,350 acres of public domain with critical winter habitat for bald eagles and mule deer by adding a winter season, protective stipulation which would restrict operations on the lease during the period November 1 to April 15.

Geothermal

• Allow leasing on 23,502 acres of public domain with standard protective stipulations and/or seasonal and other protective stipulations as determined from site specific environmental analysis prior to issuance of a lease.

Locatable Minerals

· Allow exploration and development on 23,502 acres of public domain consistent with the "unnecessary or undue degradation" standard (43 CFR 3809).

Mineral Materials

· Allow exploration and development on 23,502 acres of public domain as long as other resource objectives are met.

Management Action

· Update the automated oil and gas lease stipulation files to implement the leasing decisions for this area.
· In order to improve compliance inspections on recent mining operations establish base-line surface disturbance that existed prior to the implementation of the 43 CFR 3809 regulations.
· Increase monitoring of active mining opera-

tions to 2 or more compliance inspections per year, contingent on funding.

· Prepare "model" placer mine operating plans for Connor Creek as a way to encourage operating practices that over the long term will impact other resource objectives the least.

Burnt River Geographic Unit-2

Vegetation

Resource Condition Objective

1. Upland
   · Manage upland grass-shrub vegetation to achieve a mid-seral stage plant community.

2. Forestland
   • Establish and maintain healthy forestlands in diverse age classes and stocking levels. At least 10% of the acreage shall be maintained in well-distributed old growth habitat.

3. Riparian
   • Maintain or enhance the condition of riparian habitat on Burnt River and its perennial tributaries.
   . Maintain or enhance trout habitat on Burnt River and selected tributaries.

Allocation

1. Upland
   · Restrict livestock grazing through seasons of use, levels of utilization and livestock numbers and distribution.
   · Restrict livestock grazing for 3-5 growing seasons on rangeland rehabilitation project areas.

2. Forestland -- contains approximately 3,400 acres of commercial forest and 6,000 acres of woodlands.
   • Restrict timber harvest on approximately 3,200 acres (94%) of commercial forestland to maintain watershed, wildlife aesthetics, and recreational values. This will reduce the total amount of forest products available for harvest by approximately 5%.
   · Exclude from timber harvest approximately 200 acres (6%) of commercial forestland which are economically non-operable. (This acreage is not included in the allowable harvest base .)
   · Allow harvest of posts, poles and other forest products on approximately 3,000 acres (50%) or woodlands.
   • Restrict harvest of forest products on approximately 2,000 acres (33%) of woodlands.
   • Exclude harvest of forest products on approximately 1,000 acres (17%) of woodlands.

3. Riparian

- Restrict livestock grazing through seasons of use, utilization levels and livestock numbers in riparian habitat on Deer Creek, Upper Dark Canyon and Cave Creek.
- Continue to exclude livestock grazing along 7 miles of Burnt River, 3/4 mile of Dark Canyon and 1/4 mile of Deer Creek.

Management Action

1. Upland

- Continue present grazing management plans.
- Monitor and evaluate grazing systems and adjust the systems and stocking levels as appropriate to maintain the vegetation objective.
- Defer livestock grazing for 3-5 growing seasons on range rehabilitation areas.
- Construct range improvements where needed to achieve the mid-seral plant community objective.

2. Forestland

- Continue routine inventories and surveys.
- Monitor forestland activities to prevent timber theft and other unauthorized uses.

Restricted Commercial Forestland (3,200 acres)

- Adjust timber stocking rates by precommercial and commercial thinning and by use of prescribed fire.
- Control competing vegetation and conditions that lead to catastrophic damage by insects and disease.
- Prepare sites for reforestation. Seed and/or plant trees if natural reforestation is inadequate.
- Protect plantations from damage by wildlife or livestock.
- Harvest fuelwood and other minor forest products.

Excluded Commercial Forestland (200 acres)

- Maintain old-growth habitat primarily for the benefit of wildlife.
- Harvest trees killed or damaged by natural disasters, such as wildfire, insect epidemic, flooding, wind, and landslides when salvage operations are economically feasible (i.e., when included with salvage of adjacent public timber).

Allowed Woodlands (3,000 acres)

Harvest posts, poles, fuelwood, juniper boughs. and other forest products. Construct low class roads if demand and economics permit.

Restricted Woodlands (2,000 acres)

- Harvest of woodland products when compatible with mule deer use.

Excluded Woodland (1,000 acres)

- Maintain woodland habitat for the benefit of wildlife and to preserve visual characteristics of steep slopes in the Burnt River Canyon.

Burnt River Grazing Allotments -
Livestock Management and Forage Allocations and Implementation Status

ALLOTMENT NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
1003	CAVE CREEK	4873	795	I	DEF-ROT	YES	4/20-10/31
1004	DURKEE	9154	1027	I	DEF-ROT	YES	4/16-10/31
1301	SOUTH BRIDGEPORT	17192	3240	I	DEF-ROT	YES	5/1-9/30
1302	NORTH BRIDGEPORT	11402	825	I	DEF-ROT	YES	5/16-10/15
1329	PINE CREEK	520	60	C	SEASONAL	NO	5/1-9/30

3. Riparian

- Maintain livestock exclosure fences on 3 1/2 miles of Burnt River, 3/4 mile of Dark Canyon and 1/4 mile of selected bogs and seeps on Deer Creek.
- Continue to implement Burnt River HMP.
- Install in-stream structures and plant shrubs at selected sites on Burnt River, and associated streams.

Continue riparian surveys on 2.0 miles of streams within this geographic unit. Existing and potential riparian habitat will be established or improved on the following streams:

- Inventory potential and existing habitat on intermittent streams, seeps and bogs.
- Establish monitoring studies on riparian habitat.

WILDLIFE AND FISHERIES HABITAT

Resource Condition Objective

- Meet forage requirements for big game as recommended by ODF&W.
- Maintain/improve habitat for bighorn sheep and turkey populations.
- Maintain/improve habitat for fisheries.

Allocation

Allow wildlife transplants such as turkey, bighorn sheep, etc.

- Restrict bighorn sheep populations to 125 animals.

Management Action

- Increase bighorn sheep and turkey populations through supplemental transplants as needed.

Use prescribed burning to enhance forage for bighorn sheep.

- Monitor habitat use area of bighorn sheep.
- Monitor fish habitat condition and trend on the following streams:
- Maintain exclosure fences on Burnt River and

Burnt River Riparian Areas - Condition and Trend

Riparian Areas	BLM Miles	Riparian Condition	Potential	Trend	Comments
Burnt River	4.0	Fair	High	Stable	Mining, Grazing
Burnt River	3.0	Good	Medium	UP	
Cave Creek	2.0	Poor	Low	Down	Mining, Grazing
Reagan Creek	.7	Poor	Low	Down	Mining, Grazing
Rattlebrain	1.0	Fair	Low	UP	
McElroy	1.0	Fair	Low	UP	
Hooker Gulch	1.9	Fair	Medium	Stable	
Deer Creek	3.1	Fair	High	Stable	
Dark Canyon Gulch	2.0	Fair	Medium	Down	
French Gulch	1.2	Fair	Low	Stable	
Mullen Sp.	2.0	Fair	Medium	Stable	
Cottonwood Sp.	1.5	Fair	Medium	Stable	
Burnt River Sp.	.7	Fair	Medium	Stable	
Big Fir Sp.	2.0	Fair	Medium	Stable	
White Rock Sp.	1.4	Fair	Medium	Stable	
Mitchell Gulch	1.5	Fair	Medium	Stable	Mining, Grazing
Campbell Gulch	1.5	Fair	Medium	Stable	Mining, Grazing
Clarks Creek	3.3	Fair	Medium	Down	Mining
Total	**33.8***				

'2 miles to be surveyed

Dark Canyon.

- Increase water quality monitoring and macroinvertebrate sampling efforts to determine limiting factors for fisheries.
- Install in-stream structures at selected sites on Burnt River and its tributaries.

CULTURAL RESOURCES

Resource Condition Objective

- Protect and preserve cultural resources for their information potential and public values. Maintain specific historic properties for interpretation of mining and settlement.

Allocation

- Identify uses for specific cultural properties in activity plans. Surface-disturbing activities will avoid impacts to cultural properties.

Management Action

- Inventory and evaluate a representative sample of cultural properties in the geographic unit.
- Develop and integrate a CRMP with other resource activity plans.
- Evaluate historic mining properties for National Register nomination.
- Conduct periodic patrols to discourage vandalism.
- Periodically monitor condition of cultural properties.

RECREATION

Resource Condition Objective

- Maintain scenic quality.
- Enhance recreation opportunities for hunting, fishing, swimming, floating, and hiking.

Allocation

- Maintain VRM Classes:

Class I	0 acres
Class II	15,393 acres
Class III	236 acres
Class IV	27,285 acres

- Limit camping to a 14-day stay.

Burnt River Fisheries

Stream	Public Stream Miles	Present Condition	Estimated Trend	Species	Comments
Burnt R.	10.0	Poor	Up	Rainbow Trout, Bridgelip Sucker, Dace, Redside Shiner	Irrigation depletes minimum flows, return flow degrades water quality. Mining.
Clarks Cr.	1.0	Poor	Down	Rainbow Trout	Mining.
Cave Cr.	2.0	Poor	Static	Rainbow Trout	Mining activities and a lack of aquatic insects, pools and streamside cover limit trout production.
Dark Canyon	2.0	Poor		Rainbow Trout	Spring trout migration spawn in the streams. Subject to frequent cloud bursts.
Deer Cr.	.5			Rainbow Trout	Topographic obstruction.
Total	**15.5 miles**				

Management Action

- Inventory recreation resources.
- Develop recreation facilities for overnight and day use.
- Maintain current VRM class values.

OFF ROAD VEHICLES

Resource Condition Objective

- Maintain the ORV designations.

Allocation

- Maintain ORV designations:

Open	*3,026* acres
Limited	39,888 acres
Closed	0 acres

Management Action

- Maintain ORV designations.

LANDS

Resource Condition Objective

- Consolidate ownership patterns in order to improve resource management of both public and private land.
- Assure legal/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.
- Assure that uses of the public lands are properly authorized.

Allocation

- Land tenure adjustment:

Zone 1 - retention 42,914 acres;
Zone 2 - disposal 0 acres.

Management Action

- Emphasize acquisition of private lands within critical wildlife habitat areas.
- Conduct cadastral survey of T. 11 S., R. 42 E. and T. 10 S., R. 42 E. to identify public land boundaries.
- Acquire conservation easement on private land along Cave Cr. for fishery improvement projects.
- Resolve unauthorized uses of the public lands through termination, authorization by lease, permit, exchange or sale.

MINERALS

Resource Condition Objective

- Maintain the availability of lands for mineral leasing and mineral material production consistent with watershed and other resource objectives.
- Maintain the availability of lands for locatable mineral exploration and development consistent with the "unnecessary or undue degradation" standard (43 CFR 3809).

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)

- Allow leasing on 12,424 acres of public domain with standard protective stipulations.
- Restrict leasing on 29,560 acres of public domain with critical winter habitat for turkey, bighorn sheep, mule deer and elk by adding a winter season protective stipulation which would restrict operations on the lease during the period November 1 to April 15.

Geothermal

- Allow leasing on 41,984 acres of public domain with standard protective stipulations and/or seasonal and other protective stipulations as determined from site specific environmental analysis prior to issuance of a lease.

Locatable Minerals

- Allow exploration and development on 42,984 acres of public land consistent with the "unnecessary or undue degradation" standard (43 CFR *3809).*

Mineral Materials

- Allow exploration and development on 41,984 acres of public domain as long as other resource objectives are met.

Management Action

- Update the automated oil and gas lease stipulation files to implement the leasing decisions.
- In order to improve compliance inspections on recent mining operations establish base-line surface disturbance that existed prior to the implementation of the 43 CFR 3809 regulations.
- Increase monitoring of active mining operations to 2 or more compliance inspections per year, contingent on funding.
- Prepare "model" placer mine operating plans for Burnt River as a way to encourage operating practices that over the long term will impact other resource objectives the least.

Keating Geographic Unit - 3

This area contains 24,238 acres of public land, including the Keating Riparian RNAJACEC (2,173 acres).

VEGETATION

Resource Condition Objective

1. Upland
   - Manage uplands grass-shrub to achieve a mid-seral stage plant community.
   - Improve quality and quantity of deer winter habitat.

2. Forestland
   - Establish and maintain healthy, diverse forestlands in all age classes and stocking levels. At least 10% of the acreage shall be maintained in well-distributed old-growth habitat.

3. Riparian
   - Maintain or enhance the native riparian plant community in Balm, Clover and Sawmill Creeks within the Keating RNAJACEC.

Alloca tlon

1. Upland
   - Restrict livestock grazing through seasons of use, utilization levels and livestock numbers and distribution.
   - Restrict livestock grazing for 3-5 growing seasons on all range rehabilitation projects areas.

2. Forestland -contains approximately 350 acres of commercial forest and 3500 acres of wood lands.
   - Restrict timber harvest on approximately 250 acres (71%) of commercial forest to maintain watershed, wildlife, and recreation

Keating Grazing Allotments - Livestock Management, Forage Allocations and Implementation Status

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
2023	UPPER PITTSBURG	350	36	M	DEF-ROT	YES	6/15-9/30
2024	TABLE ROCK	2117	286	I	DEF-ROT	YES	4/16-1/15
2025	UPPER SPRING CR.	555	80	M	DEF-ROT	YES	4/16-1/15
2026	EAST SPRING CR.	206	25	C	SEASONAL	NO	4/16-12/31
2027	WEST BALM CREEK	175	25	C	SPRING	YES	5/1-5/8
2028	SAWMILL CREEK	180	35	C	DEF-ROT	YES	5/1-6/30
2032	GOOSE CREEK	3886	387	M	REST-ROT	YES	4/16-12/31
2036	TABLE MOUNTAIN	600	52	M	REST-ROT	YES	5/1-10/31
2037	BALM CREEK	3945	262	I	REST-ROT	YES	5/1-7/15
2038	WEST GOOSE CR.	155	4	C	SEASONAL	NO	4/16-5/15
2040	SPRING CREEK	1432	83	M	REST-ROT	YES	4/16-10/31
2041	COTTONWOOD CREEK	280	40	M	DEF-ROT	YES	5/16-10/31
2042	LOWER HOUGHTON CR.	319	117	M	ROTATION	YES	4/10-8/10
2048	UPPER CLOVER CREEK	847	110	I	DEF-ROT	YES	4/16-1/15
2055	CLOVER CREEK	1061	84	I	SEASONAL	YES	4/16-12/15
2071	McCANN SPRINGS	1785	450	M	DEF-ROT	YES	4/16-1/15
2081	UPPER HOUGHTON CR.	340	87	M	ROTATION	YES	4/10-8/10
2085	WEST CLOVER CREEK	545	450	M	DEF-ROT	YES	4/16-1/15
2086	WHITE SWAN MINE	475	65	C	SPRING	NO	4/16-5/15
2094	NORTH BACHER	135	33	C	SPR-FALL	NO	4/16-10/31
2105	LOVEPASTURE	1260	317	M	DEF-ROT	YES	4/16-1/15
2106	CHRISTY SPRINGS	200	31	C	SEASONAL	NO	4/16-12/31
2111	BACHER CREEK	831	116	M	DEF-ROT	YES	4/16-1/15
2115	TUCKER CREEK	1475	260	I	ROTATION	YES	4/16-7/1
2116	EAST BALM CREEK	1103	192	M	DEF-ROT	YES	4/1-1/15
2118	FRUIT SPRINGS	456	30	C	SEASONAL	NO	4/16-9/30

values. This will reduce the total amount of forest products available for harvest by approximately 25%.

· Exclude from timber harvest approxi - mately 100 acres (29%) to preserve natural riparian values. This area is not included in the allowable harvest base acreage.

• Allow harvest of forest products consis tent with the full productive capability of 3000

· Restrict harvest of forest products on 500 (14%) acres of woodlands to preserve riparian values and critical wildlife habitat.

3. Riparian

· Exclude livestock grazing in the Keating RNA and other stream segments, selected bogs and overflows where incompatible with riparian management objectives.

Management Action

1. Upland

. Continue approved grazing management plans and implement new plans where needed.

· Monitor and evaluate grazing systems and adjust the systems and stocking levels as appropriate to maintain the upland vegetation objective.

· Plant or seed vegetation on crucial deer winter ranges.

· Defer livestock grazing 3-5 growing seasons on all range rehabilitation project areas.

2. Forestland

. Continue routine inventories and surveys.

· Monitor forestland activities to prevent timber theft and other unauthorized uses.

Restricted Commercial Forest (250 acres)

• Adjust timber stocking rates through precommercial and commercial thinnings and by use of prescribed fire.

• Control competing vegetation and conditions that permit catastrophic damage by insects and disease.

· Prepare sites for reforestation. Seed and/ or plant trees when natural reforestation is in adequate.

· Protect plantations from damage by wildlife and livestock.

• Harvest fuelwood and other minor forest products.

Excluded Commercial Forest (100 acres)

· Maintain existing forest cover in Keating Riparian RNA.

· Harvest trees killed or damaged by natural disasters, such as wildfire, insect epidemic, flooding, wind and landslides when salvage operations benefit RNA/ACEC values.

Allowed Woodlands (3,000 acres)

· Harvest available forest products. Construct minimum roads necessary to remove available forest products.

Restricted Woodlands (500 acres)

• Harvest woodland products when com patible with riparian and wildlife values.

3. Riparian

· Develop grazing systems that will enhance riparian habitat.

Keating Riparian Areas - Condition and Trend

Riparian Areas	BLM Miles	Riparian Condition	Potential	Trend	Comments
Clover Cr.	.5	Poor	High	Stable	
Clover Cr.	1 .0	Excellent	Low	Stable	
Balm Cr.	4.0	Excellent	Low	Stable	
Sheep Cr.	2.0	Good	Low	Stable	
Slide Cr.	1.2	Fair	Low	Stable	
Crystal Palace Cr.	.5	Good	Medium	UP	
Pittsburg Gulch	.5	Fair	Medium	Stable	
Sawmill Cr.	.3	Excellent	Low	Stable	-
Total	**1 0.0***				

● 8 miles to be inventoried

- Inventory.
- Develop projects for planting, fencing and in-stream structures.
- Conduct monitoring.
- Conduct riparian surveys on 8 miles of streams within this geographic unit. Existing and potential riparian habitat will be established or improved on the following streams:

WILDLIFE AND FISHERIES HABITAT

Resource Condition Objective

- Improve habitat for wintering deer.
- Maintain/improve habitat for resident trout species.
- Provide suitable habitat for reintroduction of Columbia sharp-tailed grouse.

Allocation

- Designate areas for big game habitat management.
- Allow Columbian sharp-tailed grouse transplants in suitable habitat on Clover, Balm, and Sheep Creeks.
- Restrict livestock grazing on big game crucial winter range.
- Restrict livestock where necessary to establish suitable habitat for sharp-tailed grouse in the Keating RNA/ACEC.

Management Action

- Develop and implement habitat improvement projects, including plantings, for deer.
- Implement grazing systems that will enhance the sharp-tailed grouse and fishery habitat.
- Maintain current vegetation study plots and wildlife protective areas.
- Inventory and monitor wildlife habitats for high value species.
- Designate and manage through livestock grazing systems and exclosures portions of crucial winter ranges primarily for deer.
- Monitor fish habitat condition and trend on the following streams:

CULTURAL RESOURCES

Resource Condition Objective

- Protect and preserve cultural resources for their information potential and public values. Maintain a representative sample of prehistoric resources for future scientific use.

Allocation

- Identify uses for specific cultural properties in activity plans. Restrict or exclude surface-disturbing activities that are not compatible with conserving prehistoric resources for scientific and public uses.

Management Action

- Develop and integrate a CRMP with other resource activity plans.
- Evaluate archaeological properties for national Register nomination.
- Conduct periodic patrols and install protection signs to discourage vandalism.
- Annually monitor the condition of cultural properties.
- Prepare and implement protection projects (fencing) for threatened cultural resources.

Keating **Fisheries**

Stream	Public Stream Miles	Present Condition	Estimated Trend	Species	Comments
Clover Cr.	1.0	Poor	Up	Rainbow Trout, Bridgelip Sucker, Dace	Not surveyed
Balm Cr.	3.5	Fair	Static	Bridgelip Sucker, Rainbow Trout, Dace	Lack of pools and log jams limits, trout production. Excellent riparian vegetation.

RECREATION

Resource Condition Objective

· Maintain Class II scenic quality on Powder River Corridor. Maintain current classifications throughout remainder of area.

· Maintain quality opportunities for hunting, sightseeing and fishing.

Allocation

• Camping use will not be allowed in Keating Riparian RNA.

• Construct no new roads in the Keating Riparian RNA/ACEC.

· Maintain VRM classes:

Class I	0 acres
Class II	4,830 acres
Class III	19,408 acres
Class IV	0 acres

Management Action

· Sign public access roads and trails in ACEC.

• Coordinate with RNA/ACEC management plan to identify allowed/compatible recreation uses.

· Maintain current VRM Class values.

OFF ROAD VEHICLES

Resource Condition Objective

· Maintain the ORV designations.

Allocation

• Limit ORV to designated roads and trails in the Keating Riparian RNA/ACEC.

• Season ORV restrictions in crucial deer winter range.

· Maintain ORV designations:

Open	20,222 acres
Limited	4,015 acres
Closed	0 acres

Management Action

· Implement and maintain the ORV designations.

LANDS

Resource Condition Objective

· Consolidate ownership patterns in order to improve resource management of both public and private land.

· Assure legal/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.

· Assure that uses of the public lands are properly authorized.

Allocation

· Land tenure adjustment:
Zone 1 - retention 23,240 acres;
Zone 2 - disposal 998 acres.

• The following are lands within Zone 2:

T. 8 S., R. 42 E.
Sec. 24: E1/2E1/2 160.00

T. 8 S., R. 43 E.
Sec. 19: Lots 1, 2, & 3, W1/2NE1/4, E1/2NW1/4,NE1/4SW1/4, NW1/4SE1/4 381.15
30: Lots 2, 3, & 4, E1/2SW1/4, W1/2SE1/4, NE1/4NE1/4 337.50
29: W1/2NW1/4, NW1/4SW1/4 120.00

• Avoidance area for new rights-of-way within the Keating Riparian RNA/ACEC (2,173 ac.)

Management Action

• Emphasize acquisition of private lands adjacent to the Keating Riparian RNA/ACEC.

· Emphasize acquisition of private lands within critical deer winter range and sharptail grouse habitat areas.

· Resolve unauthorized uses of the public lands through termination, authorization by lease, permit, exchange or sale.

MINERALS

Resource Condition Objective

· Maintain the availability of lands for mineral leasing and mineral material production consistent with RNA/ACEC designation and other resource objectives.

· Maintain the availability of lands for locatable mineral exploration and development consistent with the "unnecessary or undue degradation" standard (43 CFR 3809) except for the Keating Riparian RNA/ACEC.

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 24 and Map 12)

· Allow leasing on 7,238 acres of public domain with standard protective stipulations.

· Restrict leasing on 17,000 acres of public domain with critical winter habitat for mule deer by adding a winter season, protective stipulation

which would restrict operations on the lease during the period November 1 to April 15.

Geothermal

- Allow leasing on 24,238 acres of public domain with standard protective stipulations and/or seasonal and other protective stipulations as determined from site specific environmental analysis prior to issuance of a lease.

Locatable Minerals

- Allow exploration and development on 24,053 acres of public land consistent with the "unnecessary or undue degradation" standard (43 CFR 3809).
- Exclude exploration and development, subject to valid existing rights, on 185 acres of public land within the Keating Riparian RNA/ACEC. The following described lands are proposed for withdrawal from mineral entry under the mining laws to protect remnant, native plant communities:

Balm Creek - 75 Acres

T. 7 S., R. 43 E., WM
Sec. 31: S1/2SE1/4NE1/4SE1/4;
W1/2NE1/4SE1/4SE1/4;
E1/2NW1/4SE1/4SE1/4;
SW1/4SE1/4SE1/4

T. 8 S., R. 43 E., WM
Sec. 6: E1/2NE1/4NW1/4NE1/4;
SE1/4NW1/4NE1/4;
W1/2NE1/4SW1/4NE1/4;
E1/2NW1/4SW1/4NE1/4;
SW1/4SW1/4NE1/4
NW1/4NW1/4NW1/4SE1/4;
E1/2NE1/4NE1/4SW1/4;
SW1/4NE1/4NE1/4SW1/4;
N1/2SE1/4NE1/4SW1/4

Sawmill Creek - 80 Acres

T. 8 S., R. 43 E., WM
Sec. 1: S1/2SW1/4NE1/4SW1/4;
SW1/4NE1/4NW1/4SW1/4;
NW1/4NW1/4SW1/4;
NE1/4SW1/4NW1/4SW1/4;
SE1/4NW1/4SW1/4;
SW1/4SW1/4SE1/4;
SW1/4SE1/4SW1/4SE1/4
Sec. 12: SW1/4NW1/4NE1/4NE1/4;
NW1/4SW1/4NE1/4NE1/4;
S1/2SW1/4NE1/4NE1/4;
N1/2NE1/4NW1/4NE1/4;
SE1/4NE1/4NW1/4NE1/4;
S1/2NE1/4SE1/4NE1/4;
E1/2NW1/4SE1/4NE1/4;
SE1/4SE1/4NE1/4

Clover Creek - 30 Acres

T. 7 S., R. 42 E., WM
Sec. 25: NE1/4NW1/4NW1/4;
E1/2SW1/4NW1/4NW1/4;
W1/2SE1/4NW1/4NW1/4;
N1/2NW1/4SW1/4NW1/4;
SW1/4NW1/4SW1/4NW1/4;
NW1/4SW1/4SW1/4NW1/4

Mineral Material

- Allow exploration and development on 24,053 acres of public domain as long as other resource objectives are met.
- Exclude exploration and development on 185 acres of public domain within the Keating Riparian RNA/ACEC.

Management Action

- Update the automated oil and gas lease stipulation files to implement the leasing decisions.
- in order to improve compliance inspections on recent mining operations establish base-line surface disturbance that existed prior to the implementation of the 43 CFR 3809 regulations.
- Increase monitoring of active mining operations to 2 or more compliance inspections per year, contingent on funding.
- Initiate and complete withdrawal from entry under the general land laws and mining laws for 185 acres within the Keating Riparian RNA/ACEC.

Pedro Mountain Geographic Unit - 4

This area contains 23,969 acres of public land.

VEGETATION

Resource *Condition Objective*

1. Upland
   - Manage upland grass-shrub vegetation to achieve a mid-seral plant community.
   - Improve habitat quality for deer, elk, grouse, turkey.

2. Forestland
   - Maintain or establish healthy, diverse forestlands in all age classes and stocking levels. At least 10% of the acreage shall be maintained in well-distributed old-growth habitat.

3. Riparian
   - Enhance the riparian habitat along Dixie Creek and tributary streams by stabilizing the stream banks and by increasing the vegetation structure.

Allocation

1. Upland
   - Restrict livestock grazing through seasons of use, utilization levels, and livestock numbers and distribution.
   - Restrict livestock grazing for 3-5 growing seasons on all range rehabilitation projects.

2. Forestland - contains approximately 1200 acres of commercial forest and 5500 acres of woodlands.
   - Restrict timber harvest on approximately 1,000 acres (83%) or commercial forest to maintain watershed, wildlife, and recreation values. This will reduce the total amount of forest products available for harvest by approximately 10%.
   - Exclude from timber harvest approximately 200 acres (17%) which are economically non-operable. This area is not included in the allowable harvest acreage.
   - Allow harvest of forest products on 4,000 acres (72%) consistent with full productive of the area.
   - Restrict harvest of forest products from 1500 acres (28%) of woodlands to protect mule deer range.

Pedro Mountain Grazing Allotments - Livestock Management, Forage Allocations and Implementation Status

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
1020	DIXIE CREEK	2933	404	I	DEF-ROT	YES	6/1-11/30
1021	PEDRO MTN.	2700	552	I	DEF-ROT	YES	7/1-10/31
1022	BOWMAN FLAT	245	65	M	SPRING	YES	4/1-5/31
1023	RATTLESNAKE GULCH	402	92	I	DEF-ROT	YES	6/1-11/30
1024	UPPER SHIRTTAIL CR.	501	111	M	FALL	YES	9/1-9/30
1025	BALDY MTN.	80	10	C	FALL	NO	10/1-10/31
1026	NORTH DIXIE CR.	980	195	I	DEF-ROT	YES	6/1-11/30
1027	LOST BASIN	1337	282	C	SEASONAL	NO	4/16-10/31
1028	UPPER CAVE CR.	105	27	C	SEASONAL	NO	4/10-10/31
1030	HOLLOWFIELD CANYON	301	42	M	SUMMER	YES	6/22-8/21
1031	SHIRTTAIL CREEK	806	152	I	DEF-ROT	YES	4/16-11/30
1032	FRENCH CREEK	954	143	C	SEASONAL	NO	4/1-11/30
1034	CLOUGH GULCH	18	2	C	FALL	NO	11/1-11/30
1035	UPPER CLOUGH GULCH	95	35	C	SEASONAL	NO	5/1-11/30
1037	RYE VALLEY	2740	668		DEF-ROT	YES	4116-I 1/30
1053	SPRING GULCH	38	7	C	DEF-ROT	YES	6/1-11/30
1318	MORMON BASIN	9734	1295		REST-ROT	YES	5/1-9/15

3. Riparian
   - Restrict livestock use through seasons of use, utilization levels and livestock numbers.
   - Exclude livestock grazing along identified stream segments, bogs and spring overflows where use is incompatible with riparian management objectives.

Management Action

1. Upland
   - Continue to restrict livestock numbers and seasons of use through grazing management systems and allotment management plans.
   - Monitor and evaluate grazing systems and adjust the systems and stocking levels as appropriate to maintain the upland vegetation objective.
   - Defer livestock grazing for 3-5 growing seasons on all range rehabilitation project areas.

2. Forestland
   - Continue routine inventories and surveys.
   - Monitor forestland activities to prevent timber theft and other unauthorized uses.

   Restricted Commercial Forest (1000 acres)
   - Adjust timber stocking rates through precommercial and commercial thinnings and by use of prescribed fire.
   - Control competing vegetation and conditions that lead to catastrophic damage by insects and disease.
   - Prepare sites for reforestation. Seed and/or plant trees when natural reforestation is inadequate.
   - Protect plantations from damage by wildlife and livestock.
   - Harvest fuelwood and other minor forest products.

   Excluded Commercial Forest (200 acres)
   - Maintain existing forest cover in riparian habitat.
   - Harvest trees killed or damaged by natural disaster, such as wildfire, insect epidemic, flooding, wind and landslides, only if salvage operations benefit other resource values.

     Harvest posts, poles, fuelwood, juniper boughs, and other forest products. Construct minimum roads necessary to remove available forest products.

   Restricted Woodlands (1500 acres)
   - Harvest forest products when compatible with mule deer use.

3. Riparian
   - Construct exclosure fences along Dixie Creek and tributary streams and around selected bogs and springs.
   - Rip-rap the banks of identified stream segments.
   - Plant shrubs in current riparian enclosures.
   - Conduct riparian inventories on 3.0 miles of stream in this geographic unit. 1.2 miles of existing riparian habitat on Dixie Creek will be improved.
   - Establish monitoring studies on riparian vegetation in Dixie Creek.

WILDLIFE AND FISHERIES HABITAT

Resource Condition Objective

- Meet forage requirements for big game as recommended by ODFW.
- Improve habitat for fisheries.
- Maintain/enhance the fishery habitat for trout on Dixie Creek.

Allocation

- Allow turkey transplants on Pedro Mtn.
- Allow Columbian sharp-tailed grouse transplants in suitable habitat in Mormon Basin.
- Develop grazing systems that enhance fishery habitat.
- Restrict livestock use through seasons of use, utilization levels and livestock numbers.
- Restrict development of additional roads.

Pedro Mountain Riparian Areas - Condition and Trend

Riparian Areas	BLM Miles'	Riparian Condition	Potential	Trend	Comments
Dixie Creek	1.2	Fair	Medium	Down	-

- 3 miles to be inventoried.

Management Action

- Provide suitable habitat for transplanting turkey and Columbian sharp-tailed grouse.
- Inventory 5.2 miles of fishery habitat.
- Use prescribed burning to create habitat diversity.
- Plant/seed deer winter range.
- Monitor fishery habitat condition and trend on the following streams:

CULTURAL RESOURCES

Resource Condition Objective

- Protect and preserve cultural resources for their information potential and public values. Maintain historic properties for interpretation of mining and settlement.

Allocation

- Identify uses for specific cultural properties in activity plans. Restrict the location of surface-disturbing activities to avoid impact to cultural properties.

Management Action

- Inventory and evaluate cultural properties in response to project proposals and management actions.
- Evaluate historic mining properties for National Register nomination.
- Coordinate with other resource activity plans.

RECREATION

Resource Condition Objective

- Maintain scenic quality.
- Enhance recreation opportunities for hunting, sightseeing, hiking, camping and day use.

Allocation

- Limit vehicle use to identified roads and trails.
- Limit camping to a 14-day stay.
- Maintain VRM classes:

Class I	0 acres
Class II	0 acres
Class III	197 acres
Class IV	24,041 acres

Management Action

- Develop identified day use and overnight recreation facilities.
- Maintain current VRM class values.

OFF ROAD VEHICLES

Resource Condition Objective

- Maintain the ORV designations.

Allocation

- Maintain ORV designations:

Open	**22,539** acres
Limited	1,430 acres
Closed	0 acres

Management Action

- Implement and maintain the ORV designations.

LANDS

Resource Condition Objective

- Consolidate ownership patterns in order to improve resource management of both public and private land.
- Assure legal/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.
- Assure that uses of the public lands are properly authorized.

Allocation

- Land tenure adjustment:
  Zone 1 - retention 23,654 acres;
  Zone 2 - disposal 315 acres.

Pedro Mountain Fisheries

Stream Stream	Public Present Miles	Estimated Condition	Trend	Species	Comments
Dixie Cr.	1.5	Poor	None	None	Cattle grazing removes vegetative cover.

- The following are lands within Zone 2:

T. 12 S., R. 42 E.
Sec. 13: Portions of Golden Horseshoe Lode, Freegold No. 4 Lode, CKC Lode 32.02
24: Portions of Mary Lode, Freegold No. 1, No. 2 & No. 4 Lodes 44.22
T. 12 S., R. 43 E.
Sec. 18: Lots 7, 9, 10, 11 & 12, Little Bess Lode, Freegold No. 8 and portions of Golden Horseshoe, Freegold No. 4 & No. 5 Lodes 137.00
19: Lot 4, Freegold No. 3, portions of Freegold No. 2 and Mary Lode 101.27

Management Action

· Emphasize acquisition of private lands within critical wildlife habitat and high value recreation areas.

· Acquire public access easements to enhance recreation opportunities.

· Resolve unauthorized uses of the public lands through termination, authorization by lease, permit, exchange or sale.

MINERALS

Resource Condition Objective

· Maintain the availability of lands for mineral leasing and mineral material production consistent with watershed and other resource objectives.

· Maintain the availability of lands for locatable mineral exploration and development consistent with the "unnecessary or undue degradation" standard (43 CFR 3809).

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)

· Allow leasing on 17,969 acres of public domain with standard protective stipulations.

- Restrict leasing on 5,840 acres of public domain with critical deer summer habitat by adding a summer season, protective stipulation which shall restrict operations on the lease during the period May 15 to June 15.

Geothermal

- Allow leasing on 23,809 acres of public domain with standard protective stipulations and/or seasonal and other protective stipulations as determined from site specific environmental analysis prior to issuance of a lease.

Locatable Minerals

- Allow exploration and development on 23,809 acres of public land consistent with the "unnecessary or undue degradation" standard (43 CFR 3809).

Mineral Materials

- Allow exploration and development on 23,809 acres of public domain as long as other resource objectives are met.

Management Action

. Update the automated oil and gas lease stipulation files to implement the leasing decisions.

· In order to improve compliance inspections on recent mining operations establish base-line surface disturbance that existed prior to the implementation of the 43 CFR 3809 regulations.

· Increase monitoring of active mining operations to 2 or more compliance inspections per year, contingent on funding.

Grande Ronde Geographic Unit - 5

This area contains 16,456 acres of public land, including the Grande Ronde ACEC (9,715 acres) and the Joseph Creek ONA/ACEC (3,360 acres).

VEGETATION

Resource Condition Objective

1. Upland
   - Manage upland grass-shrub vegetation to achieve a late seral plant community.
2. Forestland
   - Maintain or establish healthy, diverse forestlands in all age classes and stocking levels, including cottonwood stands in riparian areas. Maintain at least 10% of the forestland in well-distributed old-growth habitat.
3. Riparian
   - Improve riparian habitat condition.
   - Maintain good and excellent anadromous fish habitat. Improve fair and poor habitat.
   - Maintain or enhance the natural riparian plant community in the Joseph Creek ONA/ACEC.

Grande Ronde Grazing Allotments - Livestock Management, Forage Allocations and Implementation Status

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
3	WASH.ST.GAME DEPT.	2385	239	C	NONE	NO	NONE
4	ORE.ST.GAME DEPT.	544	54	C	NONE	NO	NONE
6503	LARRY BACON	162	15	C	SEASONAL	NO	4/1-5/1
6504	FRED WILSEY	600	28	C	SEASONAL	NO	6/1-6/30
6506	JOE BEACH	120	17	C	SEASONAL	NO	4/1-5/1
6507	NORMAN BEACH	239	34	C	SEASONAL	NO	8/15-12/1
6510	JACK BEZONA	69	10	C	SEASONAL	NO	4/1-8/31
6514	CARROLL BOGGAN	178	11	C	SEASONAL	NO	3/1-4/1
6516	IVAN BOTTS	210	30	C	SEASONAL	NO	4/1-11/30
6517	IVAN BOTTS	166	30	C	SEASONAL	NO	6/1-10/31
6518	D.C.BRITTON	376	55	C	SEASONAL	NO	4/1-6/30
6536	FOUR 0 CATTLE CO.	386	48	C	SEASONAL	NO	4/1-11/31
6539	VERN ZIEGLER	120	17	C	SEASONAL	NO	3/1-2/28
6542	MARK HEMSTREET	442	47	C	SEASONAL	NO	8/1-9/30
6543	LARRY HARSHFIELD	607	72	C	SEASONAL	NO	5/1-11/30
6544	FRED HABERMAN	1932	161	C	SEASONAL	NO	4/1-1/31
6546	HAFER BROS.	390	58	C	SEASONAL	NO	3/1-5/31
6548	ROBERT HAWKINS	120	19	C	SEASONAL	NO	5/1-10/31
6551	JAMES HENDERSON	456	48	C	SEASONAL	NO	4/1-10/30
6554	STEVE HEITSTUMAN	508	5	C	SEASONAL	NO	3/1-4/30
6557	GRACE HORTON	280	19	C	SEASONAL	NO	4/15-5/20
6559	DAVID JACKMAN	240	36	C	SEASONAL	NO	4/1-12/30
6564	WILD CAN.CATTLE CO.	397	57	C	SEASONAL	NO	4/1-12/31
6567	CHARLES SINGER	582	132	C	SEASONAL	NO	3/1-2/28
6572	BOB GRAY	322	26	C	SEASONAL	NO	4/1-10/31
6575	GUY McCORMACK	520	24	C	SEASONAL	NO	4/1-1/31
6576	JOE & NORMAN BEACH	349	27	C	SEASONAL	NO	7/1-10/31
6578	ORVILLE McKENZIE	440	42	C	SEASONAL	NO	4/1-1 l/l
6583	WILLARD MALLORY	120	9	C	SEASONAL	NO	4/1-2/28
6592	WALTER PURCELL	182	14	C	SEASONAL	NO	4/1-5/31
6593	ERCIL RICHMAN	50	7	C	SEASONAL	NO	6/1-10/15
6594	ROCKING RT RANCH	375	9	C	SEASONAL	NO	4/1-10/31
6602	E.C.SWANK	212	16	C	SEASONAL	NO	10/15-2/15
6603	E.C.SWANK	1395	106	C	SEASONAL	NO	4/1-12/31

Unleased Lands:

T.	R.	SEC.	1/4SEC	ACRES
5N	42E	23	LOTS 6&7	69
5N	42E	24	LOTS 8&9	45
5N	42E	24	S1/2SE1/4	80
5N	42E	24	SE1/4SW1/4	40
5N	42E	27	LOTS 5&8	58
5N	42E	27	NW1/4SW1/4	40
5N	42E	27	S1/2NE1/4	80
5N	43E	9	NE1/4SE1/4	40
5N	45E	15	NE1/4SW1/4	40
6N	45E	5	LOTS 1&2	53
6N	45E	5	NW1/4SW1/4	40
6N	45E	5	SW1/4NW1/4	40
6N	45E	12	SE1/41/4	160
6N	45E	13	LOTS 1&2	89
6N	46E	4	N1/2NW1/4	80
6N	46E	4	NW1/4NE1/4	40
6N	46E	4	S1/2NW1/4	45
6N	46E	4	SW1/4NE1/4	10
7N	45E	31	N1/2SE1/4	37
7N	45E	31	SE1/4SW1/4	15
7N	45E	32	W1/2SW1/4	20
7N	45E	35	SE1/4NW1/4	40
7N	46E	2	NW1/4SE1/4	40
7N	46E	28	E1/2NE1/4	80
7N	46E	29	SE1/4SE1/4	40
7N	46E	34	LOT 1	11
7N	47E	5	LOT 2	9

Allocation

1. Upland
   - Restrict livestock grazing through seasons of use, utilization levels and livestock numbers.
   - Restrict livestock grazing for 3-5 growing seasons on all range rehabilitation project areas.

2. Forestland - contains approximately 1900 acres of commercial forest and 500 acres of woodlands.
   - Restrict timber harvest on approximately 1,500 (78%) of commercial forestland to maintain watershed, wildlife, and recreation values. This will reduce the total amount of forest products available for harvest by approximately 60%.
   - Exclude from timber harvest approximately 400 acres (22%) of commercial forestland which are economically non-operable or within the Grande Ronde ACEC. This area is not included in the allowable harvest acreage.
   - Exclude 500 acres (100%) of woodlands from harvest.

3. Riparian
   - Restrict livestock grazing through seasons of use, utilization levels and livestock numbers.
   - Exclude livestock grazing on the segments of Joseph Creek within the Joseph Creek ONA/ACEC.

Management Action

1. Upland
   - Restrict livestock grazing by setting the season of use through the grazing lease licensing process.
   - Defer livestock grazing 3-5 growing seasons on all range rehabilitation project areas.

2. Forestland

Continue routine inventories and surveys.
- Monitor forestland activities to prevent timber theft and other unauthorized uses.

Restricted Commercial Forest (1,500 acres)
- Adjust timber stocking rates through precommercial and commercial thinnings and by use of prescribed fire.
- Control competing vegetation and conditions that lead to catastrophic damage by insects and disease.
- Prepare sites for reforestation, seed or plant trees if natural reforestation is inadequate.
- Protect plantations from damage by wildlife and livestock.
- Harvest fuelwood and other minor forest products.

Excluded Commercial Forest (400 acres)
- Maintain old-growth habitat for the primary benefit of wildlife and to enhance ACEC values.
- Harvest trees killed or damaged by natural disaster, such as wildfire, insect epidemic, flooding, wind and landslides when salvage operations are economically feasible (i.e., included with salvage of adjacent public timber) and when removal is essential to protect or enhance ACEC values or for safety.

Excluded Woodlands (500 acres)
- Exclude 500 acres (100%) of woodlands from harvest of forest products.
- Perform operations which would enhance wildlife habitat (e.g.,. create snags for bald eagle roosting).
- Plant trees on flats and floodplains along the Grande Ronde River.

3. Riparian

- Continue riparian inventories on 4.5 miles of stream within this geographic unit.

- Exclude livestock grazing by fencing where grazing prevents achievement of riparian objectives.
- Enter into cooperative agreements when needed with ODFW and WDW for anadromous fish management.

WILDLIFE AND FISHERIES HABITAT

Resource Condition Objective

- Maintain or improve bald eagle winter habitat.
- Maintain big game winter habitat within the Grande Ronde River corridor.
- Maintain or improve habitat for fisheries.

Allocation

- Provide snags within 1/2 mile each side of the river to accommodate winter roosting needs of bald eagles.
- Minimize new road development on public land within the river canyon.

Management Action

- Minimize human impacts in the winter ranges.
- Maintain cooperative agreements with ODFW and WDW.
- Maintain fishery habitat condition and trend on the following streams:

CULTURAL RESOURCES

Resource **Condition Objective**

- Protect and preserve the information potential and public values of cultural resources. Maintain a representative sample of prehistoric resources for future scientific and public use. Protect and maintain cultural resources in the Snake River National Register District.

Allocation

- Identify uses for specific cultural properties in activity plans. Restrict or exclude development projects where incompatible with conserving cultural resources for scientific and public uses.

Management Action

- Inventory and evaluate a representative sample of cultural properties in the geographic unit.
- Develop and integrate a CRMP with other resource activity plans.
- Conduct periodic patrols and install protection signs to discourage vandalism of cultural properties.
- Annually monitor the condition of cultural properties in the National Register district.
- Evaluate cultural properties for National Register nomination.
- Develop cooperative agreements for protection of National Register properties.
- Develop an information and education program for the protection of cultural resources.

RECREATION

Resource Condition Objective

- Maintain suitability for wild/scenic river status (as per Act).
- Maintain scenic quality.
- Enhance facilities/opportunities (e.g., hunting, fishing, and sightseeing).

Grande **Ronde Riparian Areas - Condition and Trend**

Riparian Areas	BLM **Miles**	**Riparian Condition**	**Potential**	**Trend**	**Comments**
Grande Ronde R.	2.0	Excellent	Medium	Stable	-
Grande Ronde R.	17.0	Good	Medium	Stable	-
Grande Ronde R.	2.0	Fair	Medium	Stable	-
Sickfoot Creek	2.0	Fair	Medium	Stable	-
Wallupa Creek	2.5	Good	Low	Stable	-
Wildcat Creek	2.0	Excellent	Low	Stable	-
Wallowa River	1.0	Good	Medium	Stable	-
Joseph Creek	5.0	Excellent	Medium	Stable	-
Wenaha Creek	1.5	Good	Medium	Stable	-
Total	**35.0***				

'(4.5 miles to be inventoried)

Grande Ronde Fisheries

Public Stream	Present Miles	Estimated Condition	Trend	Species	Comments
Wallowa R.	1	Good	Static	Rainbow or Redband Trout, Steelhead	-
Ronde R.	21	Good	Static	Rainbow or Redband Trout, Steelhead, Bull Trout	
Sickfoot Cr.	2	Poor	Static	Rainbow or Redband Trout, Steelhead	-
Wildcat Cr.	2	Excellent	Static	Rainbow or Redband Trout, Steelhead	-
Wallupa Cr.	25	Good	Static	Rainbow or Redband Trout, Steelhead	-
Wenaha Cr.	1.5	Excellent	Static	Rainbow or Redband Trout, Steelhead	-
Joseph Cr.	9.5	Excellent	Static	Rainbow or Redband Trout, Steelhead	4.5 miles not surveyed.
Total	**39.5 miles**				

Allocation

- Designate VRM classifications:

Class I	0 acres
Class II	*5084* acres
Class III	9272 acres
Class IV	2100 acres

- Limit camping to a 14-day stay.

Management Action

- Maintain VRM classifications.
- Develop a Recreation Area Management Plan and integrate with a Coordinated Activity Plan for all resources in area.
- Develop an education and information program for the prime recreation uses in area (e.g., floating, hiking, dispersed recreation, and sightseeing).
- Conduct visitor use surveys.
- Develop recreation facilities on identified key parcels of public land.

OFF ROAD VEHICLES

Resource Condition Objective

- Maintain ORV designations.

Allocation

- Maintain ORV classifications:

Open	3499 acres
Limited	9513 acres
Closed	3594 acres

Management Action

- Implement and maintain ORV designations.
- Install ORV signs where appropriate.

LANDS

Resource Condition Objective

- Consolidate ownership patterns in order to improve resource management of both public and private land.
- Assure legal/physical access to public lands
- Maintain the availability of public lands for utility and transportation corridors and local rights-of-way.
- Assure that all uses of the public lands are properly authorized.

Allocation

- Land tenure adjustment:

Zone 1 - retention 15,956 acres;
Zone 2 - disposal 500 acres.

The following are the lands within Zone 2:

T. 7 N., R. 46 E.	
Sec. 2: NW1/4SE1/4	*40.00*
11: SW1/4NE1/4	*40.00*
15: SE1/4SW1/4	*40.00*
22: NE1/4NW1/4	*40.00*
T. 6 N., R. 44 E.	
Sec. 17: Lot 4	19.66

T. 5 N., R. 45 E.
Sec. 3: Lots 2,3, NE1/4NW1/4 120.86
Sec. 10: SE1/4NW1/4 *40.00*
Sec. 11: NE1/4NW1/4 *40.00*

T. 6 N., R. 45 E.
Sec. 34: SE1/4SW1/4. S1/2SE1/4 120.00

- Avoidance area for new rights-of-way:
  1. Grande Ronde ACEC 9,715 acres.
  2. Joseph Creek ACEC 3,360 acres.
  3. Grande Ronde Wild and Scenic River Corridor 2,570 acres.

Management Action

- Acquire public access easements for identified recreation sites.
- Emphasize acquisition of private lands within or adjacent to the Grande Ronde ACEC, Joseph Creek ACEC, and the Wild and Scenic River corridor.
- Conduct cadastral surveys to identify public land boundaries.
- Resolve unauthorized use of the public lands through termination, authorization by lease or permit, exchange or sale.
- Evaluate all lands actions to assure consistency with other resource objectives,

MINERALS

Resource Condition Objective

- Maintain the availability of lands for mineral leasing and mineral material production consistent with the Wild and Scenic River designations and other resources objectives.
- Maintain the availability of lands for locatable mineral exploration and development consistent with the "unnecessary or undue degradation" standard (43 CFR 3809) and the Wild River designation.

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)

- Allow leasing on 3,281 acres of public domain with standard protective stipulations.
- Restrict leasing on 100 acres of public domain with critical winter habitat for bald eagles, mule deer and elk by adding a winter season, protective stipulation which shall restrict operations on the lease during the period November 1 to April 15.
- Restrict leasing on 11,575 acres of public domain within the Grande Ronde and Joseph Creek ACECs by adding a "no surface occupancy" stipulation to the lease.
- Exclude leasing on 1,500 acres of public domain and 285 acres of private surface with federal mineral estate due to non-discretionary withdrawal from mineral entry associated with Wild River designation under the Wild and Scenic Rivers Act (PL 90-542) as amended.

Geothermal

- Allow leasing on 14,956 acres of public domain with standard protective stipulations and/or seasonal and other protective stipulations, as determined from site specific environmental analysis prior to issuance of a lease.
- Exclude leasing on 1,500 acres of public domain and 285 acres of private surface with federal mineral estate due to non-discretionary withdrawal from mineral entry associated with Wild River designation under the Wild and Scenic Rivers Act (PL 90-542) as amended.

Solid Mineral Leasing - Coal

- No allocation without amending this RMP.

Locatable Minerals

- Allow exploration and development on 14,956 acres of public domain consistent with the "unnecessary or undue degradation" standard (43 CFR 3809), and Wild and Scenic River and Grande Ronde and Joseph Creek ACEC designations.
- Exclude exploration and development on 1,500 acres of public domain and 285 acres of private surface with federal mineral estate due to non-discretionary, withdrawal from mineral entry associated with Wild River designation under the Wild and Scenic Rivers Act (PL 90-542) as amended.

Mineral Materials

- Allow exploration and production on 3,381 acres of public domain as long as other resource objectives are met.
- Restrict exploration and production on 13,075 acres of public domain due to the Wild and Scenic River and Grande Ronde and Joseph Creek ACEC designations. The resource values associated with these designations shall restrict the production of mineral materials to locations where the adverse impacts shall not be noticeable.

Management Action

- Update the automated oil and gas lease stipulation files to implement the leasing decisions.
- Develop a contract for coal inventory of BLM tracts having lignite potential, contingent on funding.

Homestead Geographic Unit - 6

This area contains 12,431 acres of public land, including the Homestead ACEC (8,537 acres).

VEGETATION

Resource Condition Objective

1. Upland
   - Manage upland grass-shrub vegetation to achieve a mid-seral stage plant community.
   - Enhance and/or maintain upland habitat quality for deer, elk, grouse, bighorn sheep, etc.

2. Forestland
   - Establish or maintain healthy, diverse forestlands in all age classes and stocking levels with at least 10% of the acreage in old-growth habitat.

3. Riparian
   - Enhance and/or maintain the riparian habitat.

Allocation

1. Upland
   - Restrict livestock grazing through seasons of use, levels of utilization and/or live stock numbers.
   - Restrict livestock grazing for 3-5 growing seasons on range rehabilitation areas.

2. Forestland - contains approximately 1000 acres of commercial forest and 1500 acres of woodlands.
   - Restrict timber harvest on approximately 400 (40%) or commercial forestland to maintain watershed, wildlife, and recreation values. This will reduce the total amount of forest products available for harvest by approximately 30%.
   - Exclude timber harvest on approximately 600 acres (60%) of commercial forestland which are economically non-operable or are within the ACEC. (This acreage is not included in the allowable harvest base.)
   - Allow harvest on approximately 1500 acres (100%) of suitable woodlands.

3. Riparian
   - Restrict livestock grazing in riparian habitat in poor or fair condition through seasons of use, levels and numbers of livestock where conditions warrant.

Management Action

1. Upland
   - Restrict livestock grazing by controlling livestock numbers and the season of use under a grazing management system.
   - Monitor and evaluate grazing systems and adjust the systems or stocking levels as appropriate to maintain the vegetation objectives.
   - Defer livestock grazing for 3-5 growing seasons on range rehabilitation project areas.

2. Forestland
   - Continue routine inventories and surveys.
   - Monitor forestland activities to prevent timber theft and other unauthorized use.

   Restricted Commercial Forestland (400 acres)
   - Adjust timber stocking rates by precommercial and commercial thinning and by use of prescribed fire.

Homestead Grazing Allotments -
Livestock Management, Forage Allocations and implementation Status

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
3004	DOYLE GULCH	1817	183	C	SEASONAL	NO	4/1-6/30
3005	HUNSAKERCREEK	2917	132	C	SEASONAL	NO	4/16-5/14
3006	HOMESTEAD	5122	505	M	REST-ROT	YES	4/16-6/15
3007	COPPERFIELD	2575	106	M	ROTATION	YES	4/16-6/15

- Control competing vegetation and conditions that lead to catastrophic damage by insects or disease.
- Prepare sites for reforestation and artificially reforest (plant seedlings or apply tree seed) if natural reforestation is inadequate.
- Protect plantations from damage by wildlife and livestock.
- Harvest fuelwood and other minor forest products.

Excluded Commercial Forest (600 acres)
- Maintain old-growth habitat for the benefit of wildlife.
- Harvest trees killed or damaged by natural disasters, such as wildfire, insect epidemic, flooding, wind and landslides when salvage operations are economically feasible i.e., when included with salvage of adjacent public timber).

Allowed Woodland (1,500 acres)
- Harvest forest products consistent with the full productive capability of the area. Construct minimum roads necessary for product removal.

3. Riparian
- Continue riparian surveys.
- Enhance riparian habitat on the lower one-third of each identified stream through grazing systems tailored to achieve the riparian objectives.

WILDLIFE AND FISHERIES HABITAT

Resource Condition Objective
- Meet forage requirements for big game as recommended by ODFW.
- Maintain suitable habitat for native wildlife species and wintering bald eagles.

Allocation
- Allow native wildlife species transplants.
- Provide habitat for reintroduced native wildlife species.

Management Action
- Transplant bighorn sheep.
- Prepare and implement a wildlife habitat management plan.

CULTURAL RESOURCES

Resource Condition Objective
- Protect and preserve the information potential and public values of cultural resources.

Allocation
- Identify uses for specific cultural properties in activity plans. Surface-disturbing activities will avoid impacts to cultural resources.

Homestead Riparian Areas - Condition and Trend

Riparian Areas	BLM Miles	Riparian Condition	Potential	Trend	Comments
McGraw Creek	1.0	Good	Low	Up	
Nelson Creek	1.3	Good	Medium	Up	
Ashby Creek	1.1	Good	Medium	Stable	-
Cooper Creek	3.0	Good	Medium	Up	
Ballard Creek	1.6	Good	Medium	Up	Lower 1/3 in poor to fair condition
Herman Creek	1.2	Good	Medium	Up	
Iron Dyke Creek	1.1	Good	Medium	Stable	-
Homestead Creek	4.0	Good	Medium	Up	
Holbrook Creek	2.0	Good	Medium	Stable	
Bob Creek	1.8	Good	Medium	Stable	-
Hunsaker Creek	1.0	Good	Medium	Up	
Oxbow Creek	1.0	Good	Medium	Stable	
Total	**20.1***				

*All streams have been inventoried.

Management Action

- Inventory and evaluate cultural properties in response to project proposals and management actions.
- Conduct periodic patrols to discourage vandalism.
- Coordinate with other resource activity plans.

RECREATION

Resource Condition Objective

Maintain wilderness values of the McGraw Creek Wilderness Area and the McGraw Creek and Homestead Wilderness Study Areas (WSA).

- Maintain scenic quality.
- Enhance opportunities for primitive recreation.

Allocation

- Exclude new road construction in area.
- Restrict other resource developments to conform with Interim Management Plan (IMP) or Wilderness Management Plan requirements.
- Limit camping to a 14-day stay.
- Maintain VRM classes:

Class I	0 acres
Class II	12,431 acres
Class III	0 acres
Class IV	0 acres

Management Action

- Sign roads and trails for vehicle access.
- Develop hiking trails and trail heads and install informational signs.
- Develop an information and education program based on primitive recreation.
- Maintain VRM class values.

OFF ROAD VEHICLES

Resource Condition Objective

- Maintain ORV designations.

Allocation

- Maintain ORV designations:

Open	0 acres
Limited	12,431 acres
Closed	0 acres

Management Action

- Implement and maintain ORV designations.

LANDS

Resource Condition Objective

- Consolidate ownership patterns in order to improve resource management of both public and private land.
- Assure legal/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.

Assure that all uses of the public lands are properly authorized.

Allocation

- Land tenure adjustment:

Zone 1 - retention 12,431 acres;
Zone 2 - disposal 0 acres.

- Exclusion area for new rights-of-way in McGraw Creek Wilderness Area, 968 acres.

- Avoidance areas for new rights-of-ways:
  1. Homestead ACEC 8,537 acres
  2. Homestead WSA 7,498 acres

Management Action

- Resolve unauthorized uses of the public lands through termination, authorization by lease, permit, exchange or sale.

MINERALS

Resource Condition Objective

- Maintain the availability of lands outside the McGraw Creek and Homestead WSAs and the McGraw Creek Wilderness Area, for mineral leasing and mineral material production consistent with ACEC and other resource objectives. Availability will also apply to any WSA acreage released for multiple-use management.
- Maintain the availability of lands outside of WSAs and the wilderness area for locatable mineral exploration and development consistent with the "unnecessary or undue degradation" standard (43 CFR 3809). Maintain the availability of lands inside the WSAs consistent with BLM Interim Management (IMP) Guidelines and 43 CFR 3802.

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)

- Allow leasing on 1,465 acres of public domain with standard protective stipulations consistent with other resource objectives and ACEC designation.
- Restrict leasing on 2,500 acres of public domain with critical winter habitat for bald eagles, mule deer and elk by adding a winter season, protective stipulation which shall restrict operations on the lease during the period November 1 to April 15.

- Exclude leasing (non-discretionary) on 7,706 acres of public domain; 968 acres located in the McGraw Creek Wilderness Area are withdrawn from mineral leasing and 6,738 acres within the 2 WSAs are segregated from leasing until the U.S. Congress acts on wilderness designations. Restricted leasing, as described above, will be allowed on any lands within the WSAs which Congress releases for multiple-use management.

Geotthermal

- Allow leasing on 3,965 acres of public domain with standard protective stipulations and/or seasonal and other protective stipulations as determined from site specific environmental analysis prior to issuance of a lease.
- Exclude leasing (non-discretionary) on 7,706 acres of public domain; 968 acres located in the McGraw Creek Wilderness Area are withdrawn from mineral leasing and 6,738 acres within the 2 WSAs are segregated from leasing until the U.S. Congress acts on wilderness designations. Allow or restrict leasing, as described above, on any lands within the WSAs which Congress releases for multiple-use management.

Locatable Minerals

- Allow exploration and development on 3,965 acres of public domain consistent with the "unnecessary or undue degradation" standard (43 CFR 3809) and ACEC designation.

  Restrict exploration and development on 6,378 acres of public land, and 760 acres of public land with privately-owned mineral estate (located in the WSAs), consistent with BLM Interim Management Guidelines and 43 CFR 3802.
- Exclude exploration and development on 968 acres of public domain located in the McGraw Creek Wilderness Area which are withdrawn from mineral entry under the mining laws.

Mineral Materials

- Restrict exploration and development on 3,965 acres of public domain, located outside of WSAs and wilderness area, due to ACEC designation and other resource objectives.
- Restrict exploration and development on 6,738 acres of public domain located in the WSAs consistent with BLM Interim Management Guidelines.
- Exclude exploration and development on 968 acres of public domain located in the McGraw Creek Wilderness Area.

Management Action

- Update the automated oil and gas lease stipulation files to implement the leasing decisions.
- In order to improve compliance inspections on recent mining operations establish base-line surface disturbance that existed prior to the implementation of the 43 CFR 3809 regulations.
- Increase monitoring of active operations to 2 or more inspections per year, contingent on funding.

Pritchard Creek Geographic Unit - 7

This area contains 13,587 acres of public land.

VEGETATION

Resource Condition Objective

1. Upland
   - Manage upland grass-shrub vegetation to achieve a mid-seral stage plant community.
   - Improve upland habitat conditions for sage grouse, antelope and mule deer.

2. Forestland
   Maintain woodlands to meet the vegetation needs of other resources, principally watershed and wildlife habitat.

3. Riparian
   - Improve and maintain, where suitable, wet meadows for sage grouse and antelope.
   Enhance fishery habitat for trout on Lawrence Creek and Pritchard Creek.
   - Improve the condition of riparian habitats.

Allocation

1. Upland
   - Restrict livestock grazing.
   - Restrict livestock grazing for 3-5 growing seasons on range rehabilitation project areas.

2. Forestland - contains approximately 900 acres of woodland.
   - Exclude 900 acres from harvest of woodland products.

3. Riparian
   - Exclude livestock grazing in identified **stream** segments, bogs and spring overflows (e.g. Pritchard Creek, Lawrence Creek) where grazing is incompatible with riparian objectives.

Management Action

1. Upland
   - Monitor and evaluate the grazing system. Adjust the grazing system and stocking level as appropriate to maintain upland vegetation objectives.
   - Modify the grazing system to increase **forbs** in upland wildlife habitat areas.
   - Defer livestock grazing 3-5 growing seasons on range rehabilitation project areas.

2. Forestland (woodland - 900 acres)
   - Inventory and determine the production capability.
   - Manage for the protection of the water shed and suitable habitat for wildlife.

Pritchard Creek Grazing Allotments - Livestock Management, Forage Allocations and Implementation Status

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
2074	PRITCHARD CREEK	13567	2161	M	REST-ROT	YES	4/16-8/31

Pritchard Creek Riperian Areas - Condition and Trend

Riparian Areas	BLM Miles	Riparian Condition	Potential	Trend	Comments
Pritchard Creek	3.5	Poor	Medium	Down	-
Lawrence Creek	5.0	Good	Medium	Stable	-
Total	**8.5***				

- 6 miles to be inventoried.

3. Riparian
   - Continue riparian surveys.
   - Fence selected bogs, seeps, streams and meadows.
   - Inventory the fishery resource.
   - Install structures in selected streams.
   - Plant shrubs in selected exclosures.
   - Establish monitoring studies on vegetation and fisheries.
   - Restore deteriorated habitat through modification of grazing systems.

WILDLIFE AND FISHERIES HABITAT

Resource Condition Objective
- Improve habitat for fisheries.

Allocation
- Develop grazing systems that enhance fishery habitat.
- Restrict livestock use through seasons of use, utilization levels and livestock numbers.

Management Action
- Coordinate wildlife needs when modifying grazing system.
- Monitor fishery habitat condition and trend on the following streams:

CULTURAL RESOURCES

Resource Condition Objective
- Protect and preserve the information potential and public values of cultural resources.

Allocation
- Identify uses for specific cultural properties in activity plans. Surface-disturbing activities will avoid impacts to cultural resources.

Management Action
- Inventory and evaluate cultural properties in response to other resource project proposals and management actions.
- Conduct periodic patrols to discourage vandalism.
- Coordinate management of cultural properties with other resource activity plans.

RECREATION

Resource Condition Objective
- Maintain opportunities for identified recreation values.
- Maintain scenic quality.

Allocation
- Limit camping to a 14-day stay.
- Maintain VRM classes:

Class I	0 acres
Class II	129 acres
Class III	0 acres
Class IV	13,458 acres

- Limit vehicle use to identified roads and trails.
- Maintain ORV designations:

Open	13,587 acres
Limited	0 acres
Closed	0 acres

Management Action
- Maintain VRM class values.
- Develop identified recreation facilities.

OFF ROAD VEHICLES

Resource Condition Objective
- Maintain ORV designations.

Pritchard **Creek** Fisheries

Public Stream **Stream**	**Present** Miles	**Estlmated Condition**	**Trend**	**Species**	**Comments**
Pritchard	Cr. 4.0	Poor		Rainbow or Redband Trout, Bridgelip Sucker, Cottid, Dace	Irrigation and cattle grazing reduce trout production.
Lawrence	Cr. 3.25	Poor		Rainbow or Redband Trout, Bridgelip Sucker, Carp, Dace	Cattle grazing and erosion removes vegetative cover.

Allocation

- Limit vehicle use to identified roads and trails,
- Maintain ORV designations:

Open	13,587 acres
Limited	0 acres
Closed	0 acres

Management Action

- Implement and maintain ORV designations.

LANDS

Resource Condition Objective

- Consolidate ownership patterns in order to improve resource management of both public and private land.
- Assure legal/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.
- Assure that all uses of the public lands are properly authorized.

Allocation

- Land tenure adjustment:

Zone 1 - retention 13,587 acres;
Zone 2 - disposal 0 acres.

Management Action

- Emphasize acquisition of private lands within critical wildlife habitat areas.
- Resolve unauthorized uses of the public lands through termination, authorization by lease, permit, exchange or sale.

MINERALS

Resource Condition Objective

- Maintain the availability of lands for mineral leasing and mineral material production consistent with watershed and other resource objectives.
- Maintain the availability of lands for locatable mineral exploration and development consistent with the "unnecessary or undue degradation" standard (43 CFR 3809).

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)

- Allow leasing on 11,587 acres of public domain with standard protective stipulations.
- Restrict leasing on 2,000 acres of public domain with critical winter habitat for mule deer by adding a winter season, protective stipulation which shall restrict operations on the lease during the period November 1 to April 15.

Geothermal

- Allow leasing on 13,587 acres of public domain with standard protective stipulations and/or seasonal and other protective stipulations, as determined from site specific environmental analysis, prior to issuance of a lease.

Locatable Minerals

- Allow exploration and development on 13,587 acres of public domain consistent with the "unnecessary or undue degradation" standard (43 CFR 3809).

Mineral Materials

- Allow exploration and production on 13,587 acres of public domain as long as other resource objectives are met.

Management Action

- Update the automated oil and gas lease stipulation files to implement the leasing decisions for this area.

Oregon Trail Geographic Unit - 8

This area contains 3,378 acres of public land, including the Oregon Trail ACEC (1,495 acres).

VEGETATION

Resource Condition Objective

1. Upland
   - Manage upland grass-shrub vegetation to achieve a mid-seral stage plant community, on lands currently under a grazing system.
   - Maintain current vegetation conditions for all other tracts.

2. Forestland
   - Establish or maintain healthy, diverse forest stands in all age classes and stocking levels.

3. Riparian
   - Not present.

Allocation

1. Upland
   - Exclude livestock grazing at Flagstaff and Echo sites (approx. 770 acres and 57 AUMs); and restrict livestock grazing where not compatible with resource objectives.
   - Restrict livestock grazing for 3-5 grazing seasons on range rehabilitation project areas.
   - Continue to allocate livestock forage (293 AUMs) until monitoring indicates adjustments are necessary to maintain objectives.

2. Forestland - contains approximately 80 acres of commercial forestland.
   - Exclude from timber harvest 5 acres (6%) of commercial timber land.
   - Restrict timber harvest on 75 acres (94%) of commercial forestland. This will reduce the amount of forest products available for harvest by approximately 50%.

Management Action

1. Upland
   - Install fencing to exclude livestock within the ACEC at Flagstaff Hill and Echo Meadows.
   - Continue existing management systems,
   - Monitor, evaluate and adjust stocking levels where appropriate.
   - Defer livestock grazing for 3-5 growing seasons on range rehabilitation project areas.

2. Forestland
   - Continue routine inventories and surveys.
   - Incorporate with other forested tracts in the area covered by the proposed Meacham Forest Management Plan (refer to Map 2).

Oregon Trail Grazing Allotments -
Livestock Management, Forage Allocations and Implementation Status

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
1	ADMIN.BY USFS	80	8	C	DEF-ROT	NO	6/1-9/31
1002	IRON MOUNTAIN	200	99	I	DEF-ROT	YES	4/16-I 0/31
1006	HUNTINGTON	412	105	I	DEF-ROT	YES	4/1-10/31
1045	JORDANCREEK	360	54	C	SEASONAL	NO	41-12/15
0	UNALLOTED	340	0				
1056	HORSESHOE	75	3	C	SEASONAL	YES	5/16-8/30
1058	PLAN0 SCHOOL	40	6	C	SEASONAL	NO	4/1-4/30
1062	POWELL CREEK	255	16	C	SEASONAL	NO	4/1-11/30
1069	SISLEY CREEK	220	40	I	SPR/FALL	YES	4/27-11/30
2067	RANCH CREEK	157	22	C	SEASONAL	NO	4/1-10/31
2070	SUMMIT PASTURE	40	4	M	SPRING	YES	4/16-5/3
2074	PRITCHARD CREEK	220	37	M	REST-ROT	YES	4/16-8/31
2075	UNITY CREEK	173	26	C	SEASONAL	NO	4/1-12/31
2078	NORTH FLAGSTAFF	240	29	M	DEF-ROT	YES	4/16-12/15
2086	WHITE SWAN MINE	200	26	C	SPRING	NO	4/16-5/15
2087	FIRST CREEK	56	6	C	SEASONAL	NO	4/16-9/30
2099	VIRTUE HILLS	210	23	I	DEF-ROT	YES	6/15-9/15
6527	JACK CORREA	320	13	C	SEASONAL	NO	3/25-6/1

Restricted Commercial Forest (75 acres)

- Adjust timber stocking rates by precommercial and commercial thinning and by use of prescribed fire.
- Control competing vegetation and conditions that lead to catastrophic damage by insects and disease.
- Prepare sites for reforestation. Seed and/or plant trees if natural reforestation is inadequate.
- Protect plantations from damage by wildlife and livestock
- Harvest fuelwood and other minor forest products.

Excluded Commercial Forest (5 acres)

- Harvest trees killed or damaged by natural disasters, such as wildfire, insect epidemic, flooding, wind and landslides, if salvage operations are necessary to maintain historic values or for safety.

WILDLIFE HABITAT

Resource Condition Objective

- Maintain forage requirements for big game as recommended by ODFW.

Allocation

- Minimize or avoid new road development.

Management Action

- Monitor big game habitat for achievement of resource objectives.

CULTURAL RESOURCES

Resource Condition Objective

- Protect and preserve the information potential and public values of cultural resources. Maintain or enhance the present condition of Oregon Trail wagon ruts and historic landscape, conserve the Oregon Trail for the future and provide for public use.

Allocation

- Restrict or exclude development projects where incompatible with protecting and preserving Oregon Trail resources for public use.

Management Action

- Complete intensive inventory for cultural resources in this geographic unit.
- Implement historic resource protection actions identified in Oregon Trail management plan.
- Continue information/education programs for the protection of cultural resources.
- Nominate Oregon Trail properties to the National Register.

RECREATION

Resource Condition Objective

- Maintain scenic quality.
- Provide enhanced opportunities for historical interpretation.
- Provide for public access and use of the Oregon Trail.

Allocation

- Restrict limited duration camping to locations which do not impact the Oregon Trail. Limit camping to a 14-day stay.
- Maintain VRM classes:

Class I	0 acres
Class II	0 acres
Class III	3378 acres
Class IV	0 acres

- Allow recreation use for historic sightseeing, hiking, hunting and interpretation of Oregon Trail. Prohibit hunting on 507.5 acres at Flagstaff Hill.

Management Action

- Maintain VRM class values.
- Monitor recreation use to ensure protection of historic and wildlife resources.
- Mark and sign Oregon Trail. Implement recreation management actions identified in the Oregon Trail Management Plan.
- Develop day use interpretive facilities on identified key parcels of public land at Flagstaff Hill, Echo Meadows, and California Gulch.
- Acquire lands or access easements to enhance opportunities for public use of the Oregon Trail.

OFF ROAD VEHICLES

Resource Condition Objective

- Maintain ORV designations.

Allocation

- Restrii ORV to identified roads and trails.
- Maintain ORV classifications:

Open	1711 acres
Limited	1667 acres
Closed	0 acres

Management Action

- Identify designated roads and trails (mapping and signing).
- Maintain ORV designations.

LANDS

Resource Condition Objective

· Consolidate ownership patterns in order to improve resource management of both public and private land.

· Assure legal/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.

• Assure that all uses of the public lands are properly authorized.

Allocation

Land tenure adjustment:
Zone 1 - Retention 3,298 acres;
Zone 2 - Disposal 80 acres.

• The following are the lands within Zone 2:

T. 10 S., R. 42 E.
Sec. 17: SE1/4SW1/4 40.00

T. 11 S., R. 43 E.
Sec. 35: NE1/4SW1/4 40.00

• Avoidance area for rights-of-way in Oregon Trail ACEC 1,495 acres.

Management Action

· Emphasize acquisition of intact Oregon Trail remnants on private lands within Virtue Flat, California Gulch, Flagstaff Hill and other locations.

• Acquire preservation and public recreation access easements for Oregon Trail remnants.

• Seek withdrawal from mineral entry (722 acres)

• Seek relinquishment of current material site right-of-way on 160 acres at Echo Meadows.

· Resolve unauthorized uses of the public lands through termination, authorization by lease, permit, exchange or sale.

· Evaluate all lands actions to assure consistency with other resource objectives.

MINERALS

Resource Condition Objective

· Maintain the availability of lands for mineral leasing and mineral material production consistent with protection of the unique cultural and visual qualities of the Oregon National Historii Trail, ACEC designation and other resource objectives.

• Maintain the availability of lands for locatable mineral exploration and development consistent with the "unnecessary or undue degradation" standard (43 CFR 3809) and with protection of the unique cultural and visual qualities of the Oregon National Historic Trail.

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)
Allow leasing on 1,813 acres of public domain with standard protective stipulations.

• Restrict leasing on 1,495 acres of public domain located within the ACEC by adding a protective, "no surface occupancy" stipulation to the lease.

Geothermal

· Allow leasing on 3,308 acres of public domain with standard protective stipulations and/or seasonal and other protective stipulations as determined from site specific environmental analysis prior to issuance of a lease.

Locatable Minerals

• Allow exploration and development on approximately 2,830 acres of public domain, consistent with protection of the unique cultural and visual qualities of the Oregon National Historic Trail and the "unnecessary or undue degradation" standard (43 CFR 3809).

· Exclude exploration and development, subject to valid existing rights, on 547.5 acres of public domain and 174.31 acres of "split estate" (private surface/federal minerals) located within the Flagstaff Hill, Straw Ranch, and Echo Meadows segments of the Oregon National Historic Trail and within the boundary of the Oregon National Historic Trail Interpretive Center at Flagstaff Hill. The following described lands are proposed for withdrawal from mineral entry under the general land laws and the mining laws:

Echo Meadows - Acres 55

T. 3 N., R. 28 E., WM
Sec. 22: NE1/4NE1/4SW1/4;
N1/2NW1/4NE1/4SW1/4;
SW1/4NE1/4NE1/4SE1/4;
S1/2NW1/4NE1/4SE1/4;
N1/2S1/2NE1/4SE1/4;
N1/2NW1/4SE1/4;
NE1/4SE1/4NW1/4SE1/4;

Straw Ranch - Acres 40

T. 10 S., R. 42 E., WM
Sec. 28: SW1/4NW1/4SW1/4NW1/4;
SW1/4SW1/4NW1/4;
SW1/4SE1/4SW1/4NW1/4;
SW1/4NW1/4NE1/4SW1/4;
W1/2SW1/4NE1/4SW1/4;
NE1/4NW1/4SW1/4;
NE1/4NW1/4NW1/4SW1/4;
E1/2SE1/4NW1/4SW1/4

Flagstaff Hill - Acres 626.81

T. 9 S., R. 41 E., WM
Sec. 5: Lot 5;
NW1/4SW1/4NE1/4;
SW1/4SW1/4NW1/4NW1/4;
N1/2NW1/4SW1/4NW1/4;
S1/2N1/2S1/2NW1/4;
S1/2S1/2NW1/4;
N1/2N1/2SW1/4;
That part of N1/2S1/2N1/2SW1/4 located north of Highway 86 right-of-way (20 ac. more orless)

Sec. 6:All of section located north of Highway 86 right-of-way (310 ac. of public domain, more or less, and 60 ac. of split estate, more or less);
S1/2SE1/4NE1/4SE1/4;
NE1/4NE1/4SE1/4SE1/4 (split estate)

Sec. 9:(Split-estate)
SW1/4NE1/4SW1/4NW1/4;
W1/2NW1/4SW1/4NW1/4;
SE1/4NW1/4SW1/4NW1/4;
N1/2SW1/4SE1/4NW1/4;
SE1/4SW1/4SE1/4NW1/4;
SE1/4SW1/4NW1/4;
W1/2NE1/4NE1/4SW1/4;
NW1/4NE1/4SW1/4;
NE1/4SW1/4NE1/4SW1/4;
SE1/4NE1/4SW1/4;
N1/2NE1/4NW1/4SW1/4;
SE1/4NE1/4NW1/4SW1/4;
N1/2NE1/4SE1/4SW1/4;
SE1/4NE1/4SE1/4SW1/4;
SW1/4SW1/4NW1/4SE1/4

Mineral Materials

- Allow exploration and development on 1,813 acres of public domain consistent with protection of the unique cultural and visual qualities of the

Oregon National Historic Trail.

- Restrict exploration and development on 1 ,017 acres of public domain located within the ACEC to areas where development will not adversely impact the unique cultural and visual qualities of the Oregon National Historic Trail.
- Exclude exploration and development, subject to valid existing rights, on 547.5 acres of public domain and 174.31 acres of split estate (private surface/federal minerals) within the Flagstaff Hill, Straw Ranch, and Echo Meadows segments of the Oregon National Historic Trail and within the boundary of the Oregon National Historic Trail Interpretive Center at Flagstaff Hill as previously described.

Management Action

- Update the automated oil and gas lease stipulation files to implement the leasing decisions.
- In order to improve compliance inspections on recent mining operations establish base-line surface disturbance that existed prior to the implementation of the 43 CFR 3809 regulations.
- Increase monitoring of active mining operations to 2 or more compliance inspections per year, contingent on funding.
- Initiate and complete withdrawal from entry under the general land laws and the mining laws, subject to valid existing rights, for 547.5 acres of public domain and 174.31 acres of “split estate” (private surface/federal minerals) as previously described.
- Prepare and implement a monitoring plan for exploration and mining within the Virtue Flat and Lime MPMAs consistent with the Oregon Trail Management Plan. Approximately 920 acres of the Virtue Flat MPMA and 340 acres of the Lime MPMA are located in this geographic unit.

Unity Reservoir - Bald Eagle Habitat Geographic Unit - 9

This area contains 360 acres of public land designated as an ACEC.

VEGETATION

Resource Condition Objective

1. Upland
   - Manage upland vegetation to achieve a midseral stage plant community.

2. Forestland
   - Maintain healthy forestlands in age classes and stocking levels appropriate for maintenance of bald eagle habitat.

3. Riparian
   - Maintain the current condition of the riparian habitat.

Allocation

1. Upland
   - Continue with present livestock forage allocation, level of use, grazing systems, and distribution.

2. Forestland - contains 125 acres
   - Harvesting timber is excluded on 125 acres.

3. Riparian
   - Restrict or exclude livestock grazing if grazing is shown to be adverse to objectives.

Management Action

1. Upland
   - Continue current management of category "C" allotments.
   - Monitor and evaluate to determine if other resource objectives are being met.
   - Restrict or exclude livestock grazing through fencing if other resource objectives are not being met.

2. Forestland

   Excluded Commercial Forest (125 acres)
   - Incorporate with other forested tracts in the area covered by the proposed Bridgeport/ Unity Forest Management Plans.
   - Maintain old-growth habitat for the benefit of bald eagles.
   - Continue routine inventories and surveys.
   - Monitor forestland activities to prevent timber theft and other unauthorized uses.
   - Conduct operations which would enhance bald eagle habitat (e.g., girdling trees to create snags for nesting or roosting).

3. Riparian
   - Inventory .7 mile of riparian habitat.

WILDLIFE HABITAT

Resource Condition Objective

- Maintain potential bald eagle alternate nest habitat.

Allocation

- Avoid new road development.
- Restrict recreation use during the nesting season.
- Restrict major surfacedisturbing action during the nesting season February 1 to August 15.

Management Action

- Minimize human activity during the nesting season.
- Maintain old-growth habitat.
- Monitor bald eagle habiiat to detect unauthorized activities in the area.

Unity Reservoir Grazing Allotments - Livestock Management, Forage Allocations and Implementation Status

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
5211	KING MOUNTAIN	125	5	C	SEASONAL	NO	4/16-6/15
5235	NORTH FORK	235	19	C	SEASONAL	NO	5/15-8/15

CULTURALRESOURCES

Resource Condition Objective

· Protect and preserve the information potential and public values of cultural resources.

Allocation

· Identify uses for specific cultural properties in activity plans. Surfacedisturbing activities will avoid impact to cultural properties.

Management Action

· Inventory and evaluate cultural properties in response to project proposals and management actions.

• Conduct periodic patrols to discourage vandalism.

• Coordinate with other resource activity plans.

RECREATION

Resource Condition Objective

· Maintain scenic quality.

Allocation

· Limit general recreation use to seasonal use.

• Maintain VRM classes:

Class I	0 acres
Class II	0 acres
Class Ill	0 acres
Class IV	360 acres

Management Action

· Maintain VRM class values.

OFF ROAD VEHICLES

Resource Condition Objective

· Maintain ORV designations.

Allocation

· Maintain ORV designations:

Open	0 acres
Limited	360 acres
Closed	0 acres

· Limit ORV use to designated roads and trails

• Exclude all ORV use in the unit during the period Feb. 1 -June 15.

Management Action

· Implement and maintain ORV designation. Identify designated roads and trails (through maps and signs).

· Install off road vehicle designation signs.

LANDS

Resource Condition Objective

· Assure legal/physical access to the land with important resource values.

• Assure that all uses of the land are properly authorized.

Allocation

• Land tenure adjustment:
Zone 1 - Retention 366 acres;
Zone 2 - Disposal 0 acres.

• Avoidance area for new rights-of-way in Unity ACEC, 366 acres.

· Exclusion area for new road construction.

Management Action

· Resolve unauthorized use of the land through termination, authorization by lease, permit, exchange or sale.

MINERALS

Resource Condition Objective

• Maintain availability of lands for mineral leasing and mineral material production consistent with preventing adverse impacts to threatened or endangered species and their habitat.

· Maintain availability of lands for locatable mineral exploration and development consistent with preventing adverse impacts to threatened or endangered species and their habitat (43 CFR 3809.2-2(d)) and consistent with the "unnecessary or undue degradation" standard (43 CFR 3809) and ACEC designation.

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)

• Restrict leasing on 360 acres of public domain with critical, bald eagle nesting habitat by adding a late winter to summer season, protective stipulation which shall restrict operations *on* the lease during the period February 1 to August 15th.

Geothermal

· Allow leasing on 360 acres of public domain with protective stipulations and/or seasonal and other protective stipulations as determined from site specific environmental analysis prior to issuance of a lease.

Locatable Minerals

· Allow exploration and development on 360 acres of public domain consistent with preventing adverse impacts to threatened or endangered species and their habitat (43 CFR 3809.2-2(d)), and consistent with the "unnecessary or undue degradation" standard (43 CFR 3809) and ACEC designation.

Mineral Materials

· Exclude exploration and development on 360 acres of public domain to protect to bald eagle habitat.

Management Action

· Update the automated oil and gas lease stipulation files to implement the leasing decisions for this area.

Sheep Mountain Geographic Unit - 10

This area contains 8,418 acres of public land, including the Sheep Mountain ACEC (5,398 acres).

VEGETATION

Resource Condition Objective

1. Upland
   - Manage upland grass-shrub vegetation to achieve a mid-seral stage plant community.
   - Maintain or enhance habitat for bighorn sheep, deer, elk, and grouse.

2. Forestland
   - Maintain as old-growth climax forest.

3. Riparian
   · Maintain or improve riparian habitat.

Allocation

1. Upland
   - Continue the present livestock grazing system, forage allocation, level of utilization and livestock numbers.
   · Restrict livestock grazing for 3-5 growing seasons on range rehabilitation project areas.

2. Forestland - contains approximate 200 acres of commercial forest and no manageable woodlands.
   - Exclude timber harvest on approximately 200 acres which are economically non-operable and are within the ACEC (this acreage is not included in the allowable harvest base).

3. Riparian
   · Restrict livestock grazing in riparian habitat in poor or fair condition through seasons of use, utilization levels, and livestock numbers.

Management Action

1. Upland
   - Continue the current grazing manage ment plan.
   · Monitor and evaluate the grazing system. Adjust the grazing system and stocking level as appropriate to maintain upland vegetation objectives.
   · Defer livestock grazing for 3-5 growing seasons on range rehabilitation project areas.

Sheep Mountain Grazing Allotments -
Livestock Management, Forage Allocations and Implementation Status

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
3001	PINE VALLEY	8418	844	I	SEASONAL	YES	4/16-8/31

2. Forestland

Excluded Commercial Forestland (200 acres)

- Continue routine inventories and surveys.
- Manage old-growth habitat for the primary benefit of wildlife and bald eagles.
- Harvest trees killed by natural disasters, such as wildfire, insect epidemic, wind and landslides when salvage operations are economically feasible (when included with salvage of adjacent public land timber); and when compatible with achieving resource objectives for the ACEC.

3. Riparian

- Inventory riparian condition and potential on 3.2 miles of stream.
- Restore and maintain riparian habitat through modification of grazing systems.

WILDLIFE HABITAT

Resource Condition Objective

- Meet forage requirements for big game as recommended by ODFW.
- Maintain or improve bald eagle winter habitat.

Allocation

- Exclude bald eagle winter roosting trees from harvest or removal.
- Allow native wildlife species transplants.

Management Action

- Transplant bighorn sheep.
- Monitor bighorn sheep distribution and habitat use.

CULTURAL RESOURCES

Resource Condition Objective

- Protect and preserve the information potential and public values of cultural resources.

Allocation

- Identify uses for specific cultural properties in activity plans. Surfacedisturbing actions will avoid impacts to cultural properties.

Management Action

- Inventory and evaluate cultural properties in response to project proposals and management actions.
- Conduct periodic patrols to discourage vandalism.
- Coordinate with other resource activity plans.

RECREATION

Resource Condition Objective

- Maintain wilderness values of the Sheep Mountain WSA.
- Maintain scenic quality.
- Enhance opportunities for primitive recreation.

Allocation

- Exclude new road construction in area.
- Limit camping to a 14-day stay.
- Restrict other resource developments to conform with Interim Management Plan or Wilderness Management Plan requirements.
- Maintain VRM classes:

Class I	0 acres
Class II	8418 acres
Class III	0 acres
Class IV	0 acres

Management Action

- Stabilize and maintain a Line Cabin for recreation overnight use.
- Develop trail through area as a segment of the Snake River Breaks trail system.
- Develop information and education program based on primitive recreation.
- Develop identified recreation facilities.
- Maintain VRM class values.

OFF ROAD VEHICLES

Resource Condition Objective

- Maintain Off Road Vehicle ORV designations.

Allocation

- Maintain ORV designations:

Open	780 acres
Limited	7638 acres
Closed	0 acres

- Limit vehicles to designated roads and trails.

Management Action

- Implement and maintain ORV designations.

LANDS

Resource Condition Objective

- Consolidate ownership patterns in order to improve resource management of both public and private land.
- Assure legal/physical access to public lands with important resource values.
- Maintain the availability of public lands for utility and transportation corridors and focal rights-of-way.
- Assure that all uses of the public lands are properly authorized.

Allocation

- Land tenure adjustment:

Zone 1 - Retention 8,418 acres;
Zone 2 - Disposal 0 acres.

- Avoidance areas for new rightsof-way:
  1. Sheep Mountain ACEC 5,398 acres
  2. Sheep Mountain WSA 7,040 acres

Management Action

- Resolve unauthorized use of the public lands through termination, authorization by lease or permit, exchange or sale.

MINERALS

Resource Condition Objective

- Maintain the availability of lands, outside the Sheep Mountain WSA. for mineral leasing and mineral material production consistent with other resource and ACEC objectives. Availability will also apply to any WSA acreage released for multiple-use management.
- Maintain the availability of lands outside of the Sheep Mountain WSA for locatable mineral exploration and development consistent with the "unnecessary or undue degradation" standard (43 CFR 3609). Maintain availability of lands inside the WSA consistent with BLM Interim Management Guidelines and 43 CFR 3802.

Allocation

Leasable Minerals

Oil and Gas (Refer to Table 14 and Map 12)

- Allow leasing on 1,218 acres of public domain with standard protective stipulations.
- Restrict leasing on 160 acres of public domain with critical winter wildlife habitat by adding a winter season, protective stipulation to the lease which will restrict operations on the lease during the period November 1 to April 15.
- Exclude leasing on 7,040 acres of public domain located within the WSA which has been segregated from leasing, until the U.S. Congress acts on wilderness designations. Restricted leasing, as described above, will be allowed on any public lands within the WSA which Congress releases for multiple-use management.

Geothermal

- Allow leasing on 1,378 acres of public domain with standard protective stipulations and/or seasonal and other protective stipulations as determined from site specific environmental analysis prior to issuance of a lease.
- Exclude leasing on 7,040 acres of public domain located within the WSA which has been segregated from leasing, until the U.S. Congress acts on wilderness designations. Allow leasing, as described above, on any public lands within the WSA which Congress releases for multiple-use management.

Locatable Minerals

- Allow exploration and development on 1,378 acres of public domain consistent with the "unnecessary or undue degradation" standard (43 CFR 3809) and ACEC designation.
- Restrict exploration and development on 7,040 acres of public domain located within the WSA consistent with BLM Interim Management Guidelines and 43 CFR 3802.

Mineral Materials

- Restrict exploration and development on 1,378 acres of public domain to meet other resource and ACEC objectives.
- Exclude exploration and development on 7,040 acres of public domain located within the

WSA. Restricted exploration and development will be allowed on any WSA lands released by Congress for multiple use management.

Management Action

- Update the automated oil and gas lease stipulation files to implement the leasing decisions.

Hunt Mountain Geographic Unit - 11

This area contains 2,409 acres of public land, including the Hunt Mountain ACEC (2,230 acres).

VEGETATION

Resource Condition Objective

1. Upland
   - Manage upland grass-shrub vegetation to achieve climax stage plant community.
   - Maintain populations of Threatened & Endangered or Sensitive plants.
   - Maintain or improve habitat for elk and Rocky Mountain goats.

2. Forestland
   - Establish or maintain healthy forest stands in diverse age classes and stocking levels. At least 10% of the acreage shall be maintained in old-growth habitat.

3. Riparfan
   - Maintain or improve the condition of riparian habitat on perennial streams in the unit.

Allocation

1. Upland
   - Continue to exclude livestock grazing

2. Forestland - contains approximately 2100 acres of commercial forestland.
   - Restrict timber harvest on approximately 900 acres (43%) in such a manner that water shed, wildlife, and recreation values are not degraded. This restriction is expected to reduce the full available harvest by approximately 50%.
   - Exclude from timber harvest approximately 1200 acres (57%) of commercial forestland which are economically non-operable or are within the ACEC. (This acreage is not included in the allowable harvest base.)

3. Riparian
   - An inventory of approximately 4.0 miles of streams in the unit is needed prior to assessing an allocation.

Management ***Action***

1. Upland
   - Monitor and evaluate the grazing potential for lease for livestock grazing.
   - Inventory and monitor T&E species.

Hunt Mountaln Grazing Allotments -
Livestock Management, Forage Allocations **and implementation Status**

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
0	UNALLOTED	2409	0	NONE	NONE	N.A.	N.A.

2. Forestland

· Continue routine inventories and surveys.
· incorporate with other forested tracts in the area covered by the proposed Hunt Mtn. Forest Management Plan (refer to Table 8 and Map 2).
· Monitor and act to prevent timber theft and other unauthorized use.
· inventory fuels and complete a natural fire history.

Restricted Commercial Forestland (900 acres)

· Adjust timber stocking rates by precommercial and commercial thinning and by use of prescribed fire.
• Control competing vegetation and conditions that lead to catastrophic damage by insects or disease.
· Prepare sites for reforestation. Seed and/or plant trees if natural reforestation is inadequate.
· Protect plantations from damage by wildlife or livestock.
· Harvest fuelwood and other minor forest products.

Excluded Commercial Forestland (1,200 acres)

· Maintain old-growth habitat for the benefit of wildlife, sensitive plants, watershed, and dispersed recreation.
· Harvest trees killed or damaged by natural disasters, such as wildfire, insect epidemic, Iiooding, wind and landslides when salvage operations are economically feasible (i.e., when included with salvage of adjacent public timber) and if other values will not be degraded.

3. Riparian

· Inventory 4 miles of streams in the unit

WILDLIFE AND FISHERIES HABITAT

Resource Condition Objective

· Maintain the current quality of wildlife habitat.
· Inventory 4 miles of streams in the unit. Fisheries habitat is unknown.

Allocation

• Allow wildlife species transplants as long as they do not adversely impact T&E plants.

Management Action

· inventory and monitor habitat use by Rocky Mountain goats.
· Inventory for fisheries habitat.

CULTURAL RESOURCES

Resource Condition Objective

· Protect and preserve the information potential and public values of cultural resources.

Allocation

· identify uses for specific cultural properties in activity plans. Surface-disturbing activities will avoid impact to cultural properties.

Management Action

· inventory and evaluate a representative sample of cultural resources in the geographic unit, in support of revision to the Eikhorn Fire Management Plan.
· Evaluate historic properties for National Register nomination and stabilization/protection needs.
• Coordinate with other resource activity plans.

RECREATION

Resource Condition Objective

· Maintain scenic quality.

Allocation

- Maintain VRM classes:

Class I	0 acres
Class ii	2,409 acres
Class ill	0 acres
Class IV	0 acres

- Limit camping to a 14-day stay.

Management Action

- Evaluate current scenic quality classifications and reclassify if needed.
- Inventory recreation resources.

OFF ROAD VEHICLES

Resource Condition Objective

- Maintain roads and trails open to vehicle travel.

Allocation

- Maintain ORV designations:

Open	144 acres
Limited	2265 acres
Closed	0 acres

Management Actlon

- implement and maintain ORV designations.
- Identify designated roads and trails (mapping and signing).

LANDS

Resource Condition Objective

- Consolidate ownership patterns in order to improve resource management of both public and private land.
- Assure legal/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.
- Assure that all uses of the public lands are properly authorized.

Allocation

- Land tenure adjustment:

Zone 1 - retention 2,409 acres;
Zone 2 -disposal 0 acres.

- Avoidance area for new rights-of-way in Hunt Mountain ACEC. 2,409 acres.

Management Action

- Acquire public access easements to enhance recreation opportunities.
- Resolve unauthorized uses of the public lands through termination, authorization by lease, permit, exchange or sale.
- Evaluate all lands actions to assure consistency with other resource objectives.

MINERALS

Resource Condition Objective

- Maintain the availability of lands for mineral leasing and mineral material production consistent with other resource objectives and ACEC designation.
- Maintain the availability of lands for locatable mineral exploration and developmenf consistent with the 'unnecessary or undue degradation" standard (43 CFR 3809) and ACEC designation.

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)

- Allow leasing on 409 acres of public domain with standard protective stipulations.
- Restrict leasing on 2,000 acres of public domain with critical winter habitat for mule deer and elk by adding a winter season, protective stipulation to the lease which shall restrict operations on the lease during the period November 1 to April 15.

Geothermal

- Allow leasing on 2,409 acres of public domain with standard protective stipulations and/or seasonal and other protective stipulations as determined from site specific environmental analysis prior to issuance of a lease.

Locatable Minerals

- Allow exploration and development on 2,409 acres of public domain consistent with the "unnecessary ***or*** undue degradation" standard (43 CFR 3809) and ACEC designation.

Mineral Materials

- Allow exploration and development on 2,409 acres of public domain consistent with other resource objectives and ACEC designation.

Management Actlon

- Update the automated oil and gas lease stipulation files to implement the leasing decisions.
- On recent mining operations, establish baseline surface disturbance that existed prior to the implementation of the 43 CFR 3909 regulations.
- Increase monitoring of active operations to 2 or more inspections per year, contingent on funding.

- Prepare and implement a monitoring plan for exploration and mining within the Hunt Mountain MPMA consistent with ACEC designation. All 2,520 acres of MPMA are contained within this geographic unit.

Powder River Canyon Geographic Unit - 12

This area contains 5,946 acres of public land, including the Powder River Canyon ACEC (5,880 acres).

VEGETATION

Resource Condition Objective

1. Upland
   - Manage upland grass-shrub vegetation lo achieve a mid-seral stage plant community.
   - Improve upland vegetation where needed to protect fiparian values.
   - Maintain and enhance crucial deer winter range.

2. Forestland
   - Maintain the productive capability of woodlands (which include scattered old growth Ponderosa pine) in a condition that will meet the needs and protection of biological and scenic values.
   - There is no commercial forestland.

3. Riparian
   - Maintain/enhance vegetation (canopy coverage, diversity -quantity, quality) in riparian habitat for fisheries.
   - Maintain and enhance wet meadows, seeps, etc.

Allocation

1. Upland
   - Restrict livestock grazing through seasons of use, utilization levels and livestock distribution.
   - Restrict livestock grazing for 3-5 growing seasons on range rehabilitation project areas.

2. Forestland -contains approximately 400 acres of woodlands
   - Exclude all the woodlands acreage from harvest of forest products.

3. Riparian
   - Exclude livestock grazing in identified stream segments, bogs and spring overflow areas.

Management Action

1. Upland
   - Continue livestock restrictions through existing grazing management system.
   - Monitor and evaluate grazing systems and adjust the systems and stocking levels as

appropriate to maintain the vegetative objectives. Plant shrubs and forbs that provide forage and cover for deer.

· Defer livestock grazing for 3-5 growing seasons on range rehabilitation project areas.

2 . Forestland

· Inventory woodlands and determine the productive capability.

· Monitor forestland activities to prevent unauthorized cutting.

3. Riparian

▪ Continue riparian surveys.

· Plant shrubs where needed to maintain riparian and fisheries habitat.

WILDLIFE AND FISHERIES HABITAT

Resource Condition Objective

Enhance winter bald eagle habitat.

· Maintain habitat for other raptors for nesting and hunting.

· Maintain or improve habitat for fisheries.

Allocation

· Restrict livestock use through seasons of use, utilization levels, and numbers on key wildlife areas (deer winter range).

Management Action

· Develop grazing systems that enhance habitat for fisheries,

· Develop and implement Wildlife Habitat Plan consistent with a Coordinated Activity Plan for the geographic unit. Plans may include shrub and tree planting, fencing, prescribed burn and stream structures.

• Continue inventories and monitoring of sage grouse, raptors. mule deer.

· Monitor fish habitat condition and trend on the following streams:

CULTURAL RESOURCES

Resource Condition Objective

· Protect and preserve cultural resources for their information potential and public values. Maintain or enhance the condition of a representative sample of prehistoric resources.

Allocation

· Identify uses for specific cultural properties in activity plans. Restrict or exclude development projects where incompatible with conserving prehistoric resources for scientific uses.

Management Action

· Inventory and identify a representative sample of cuftural resources in the geographic unit.

· Develop and integrate a Cultural Resource Management Plan with other resource activity plans.

· Evaluate archaeological properties for National Register nomination.

• Conduct periodic patrols and install protection signs to discourage vandalism.

· Annually monitor the condition of cuftural properties.

· Prepare and implement protection projects (fencing, stabilization) for threatened cuftural resources.

RECREATION

Resource Condition Objective

· Maintain scenic quality.

· Maintain quality opportunities for fishing, hunting, boating, hiking, etc.

Powder River Canyon Grazlng Allotments ▪
livestock Management and Forage Allocations and Implementation Status

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
2012	BIG CREEK	2486	227	M	DEF-ROT	YES	4/16-1/15
2019	SALT CREEK	1217	208	M	DEF-ROT	YES	4/10-12/31
2030	LOWER POWDER	556	78	M	DEF-ROT	YES	4/16-12/31
2060	FARLEY HILLS	158	14	C	SEASONAL	NO	4/16-7/15
2083	BIG RATTLESNAKE	178	16	C	SEASONAL	NO	5/1-10/31
2084	POWDER RIVER CANYON	1207	100	I	DEF-ROT	YES	4/16-11/30
5137	RESERVOIR	144	10	C	SEASONAL	NO	4/16-5/15

Allocation

- Maintain VRM classes:
  - Class I 0 acres
  - Class II 0 acres
  - Class III 4398 acres
  - Class IV 558 acres
- Exclude new road construction.
- Limit can-ping to a 14-day stay.

Management Action

- Sign public access roads and trails.
- Develop a hiking trail south from Thief Valley Reservoir to public lands.
- Implement an information and education program.
- Conduct visitor use surveys.

OFF ROAD VEHICLES

Resource Condition Objective

- Maintain the ORV designations.

Allocation

- Maintain ORV designations:
  - Open 80 acres
  - Limited 5866 acres
- Limit ORV use to designated roads and trails.

Management Action

- Maintain ORV designations.

Powder River Canyon **Fisheries**

Stream	Public Stream Miles	Present Condition	Estimated Trend	Species	Comments
Powder R.	10.0	Fair	Static	Rainbow or Redband Trout, Smallmouth Bass, Largemouth Bass, Channel Catfish, Brown Bullhead, Yellowperch, Bridgelip Sucker, Whitefish, Chiselmouth, Carp, Squawfish, Redside Shiner, Dace, Cottid, Coarsescale Sucker	Irrigation withdrawal depletes minimum flow. Irrigation return flow degrades water quality.
Big Cr.	2.0	Fair	Static	Rainbow or Redband Trout, Bridgelip sucker, Carp, C	Spring flooding from private lands removes riparian vegetation and reduces reproduction

Powder River Canyon Riparian Areas - Condition and Trend

Riparian Areas	BLM Miles	Riparian Condition	Potential	Trend	Comments
Powder River	6.7	Good	Medium	Stable	-
Big Creek	2.0	Good	Medium	Up	
Total	8.7'				

'2 miles to be inventoried.

LANDS

Resource Condition Objective

- Consolidate ownership patterns in order to improve resource management of both public and private land.
- Assure legal/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.
- Assure that uses of the public lands are properly authorized.

Allocation

- Land tenure adjustment:
  Zone 1 - Retention 5,872 acres;
  Zone 2 - Disposal 74 acres.

- The following are the lands within Zone 2:
  T. 7 S., R. 41 E.
  Sec. 7: Lots 1 & 2 74.30

- Avoidance acres for new rights-of-way:
  1. Powder River ACEC 5,880 acres
  2. Powder River Wild and Scenic River Corridor 2,485 acres

Management ***Action***

- Emphasize acquisition of private lands within the Wild and Scenic River corridor.
- Acquire public access easements for a proposed trail to public land south from Thief Valley Reservoir.
- Resolve unauthorized use of the public lands through termination, authorization by lease or permit, exchange or sale.

MINERALS

Resource Condition Objective

- Maintain the availability of lands for mineral leasing and rnneral material production consistent with Scenic River and ACEC designations and other resources objectives.
- Maintain the availability of lands for locatable mineral exploration and development consistent with the 'Unnecessary or undue degradation" standard (43 CFR 3809) and the Scenic River and ACEC designations.

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)

- Restrict leasing on 66 acres of public domain with critical winter habitat for bald eagles and mule deer with standard protective stipulations and by adding a winter season protective stipulation which will restrict operations on the lease during the period November 1 to April 15.
- Restrict leasing on 5,880 acres of public domain within the Powder River ACEC by adding a "no surface occupancy" stipulation to the lease.

Geothermal

- Allow leasing on 5,946 acres of public domain with standard protective stipulations and/or seasonal and other protective stipulations as determined from site specific environmental analysis prior *to* issuance of a lease.

Locatable Minerals

- Allow exptoration and development on 5,946 acres of public domain consistent with the "unnecessary or undue degradation" standard (43 CFR 3809) and with ACEC and Scenic River designations.

Mineral Materials

- Restrict exploration and development on 5,946 acres in the ACEC and Scenic River areas to those locations which are compatible with protecting natural, scenic, recreation and cultural values.

Management Action

- Update the automated oil and gas lease stipulation files to implement leasing decisions.

Blue Mountain Geographic Unit - 13

This area contains 33,541 acres of public land.

VEGETATION

Resource Condition Objective

1. Upland
   - Manage upland grass-shrub vegetation to achieve a mid-seral stage plant community.

2. Forestlanc
   - Maintain or establish healthy and diverse forestlands in all age classes and stocking levels, with at least 10% of the acreage in old growth habitat.

3. Riparian
   - Improve riparian habitat on poor to fair condition streams that support anadromous fish.

Allocation

1. Upland
   - Restrict livestock grazing through seasons of use, levels of utilization, or livestock numbers.

2. Forestland
   - contains approximately 11,100 acres of commercial forest and no manageable woodlands.
   - Restrict timber harvest on approximately 10,500 acres to maintain watershed, wildlife, and recreation values. This will reduce the full available harvest by approximately 15%.
   - Exclude timber harvest on approximately 600 acres which are economically non-operable. (This acreage is not included in the allowable harvest base acreage.)

3. Riparian
   - Exclude livestock grazing along selected stream segments, bogs and stream overflows where grazing is not compatible with other resource objectives.
   - Allow buffer strips along anadromous fishery streams.

Blue Mountain Grazing Allotments **Livestock Management, Forage Allocations and Implementation Status**

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
1	ADMIN.BY USFS	520	52	C	UNKNOWN	VARIABLE	
3	WASH ST.GAME DPT.	160	16	C	NONE	NO	NONE
4	ORE.ST.GAME DPT.	185	19	C	NONE	NO	NONE
5	ADMIN.BY PRINEVILLE	514	47	C	SEASONAL	NO	VARIABLE
6	SPEC.LAND USE PERMIT	240	24	C	NONE	NO	NONE
6501	JOE BALLARD	440	44	C	SEASONAL	NO	6/1-10/1
6502	FENCE CR.RANCH	320	21	C	SEASONAL	NO	4/15-10/15
6505	MYRA BANKS	80	3	C	SEASONAL	NO	4/1-5/1
6506	JOE BEACH	200	29	C	SEASONAL	NO	4/1-5/1
6509	THOMAS KERR	40	7	C	SEASONAL	NO	4/1-6/15
6511	C&B LIVESTOCK	480	23	C	SEASONAL	NO	4/1-4/30
6512	HENRY BIRD	160	24	C	SEASONAL	NO	4/1-10/31
6513	MACK 3IRKMAIER	120	12	C	SEASONAL	NO	9/1-9/30
6515	ROBERT LARABEE	38	5	C	SEASONAL	NO	6/1-10/31
6519	TOM B JTTERFIELD	72	18	C	SEASONAL	NO	6/1-12/1
6520	KEITH CAMERON	96	11	C	SEASONAL	NO	11/1-11/30
6521	GARY LOVELL	40	6	C	SEASONAL	NO	4/1-4/7
6523	TOM COLVIN	322	17	C	SEASONAL	NO	6/1-7/1
6524	CUNHA BROTHERS	240	24	C	SEASONAL	NO	6/16-10/1
6525	QUARTER CIRCLE	40	7	C	SEASONAL	NO	7/1-8/31
6526	DARRELL COPPOCK	39	8	C	SEASONAL	NO	6/1-10/1

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
6528	JOHN CORREA	40	a	C	SEASONAL	NO	6/1-6/31
6529	GLENN LARSON	160	13	C	SEASONAL	NO	3/1-2/28
6530	W.E.HUGHES	134	14	C	SEASONAL	NO	5/1-5/31
6531	CUNINGHAM SHEEP CO.	627	63	C	SEASONAL	NO	5/1-9/30
6532	JOE P.DOHERTY SHEEP	1300	205	C	SEASONAL	NO	7/1-10/31
6533	STEPHEN DRAPER	40	6	C	SEASONAL	NO	7/1-9/30
6535	FLETSCHER BROS.INC.	80	4	C	SEASONAL	NO	9/1-10/31
6536	FOUR 0 CATTLE CO.	110	13	C	SEASONAL	NO	4/1-11/31
6538	JACK COURTNEY	160	22	C	SEASONAL	NO	5/1-10/31
6540	ROBERT GIRDNER	120	12	C	SEASONAL	NO	6/1-9/30
6541	WILLIAM GOODALL	40	5	C	SEASONAL	NO	6/1-7/1
6544	FRED HABERMAN	40	3	C	SEASONAL	NO	4/1-1/31
6545	ROBERT HADLEY	160	16	C	SEASONAL	NO	5/15-9/30
6549	WILLIAM HEALY	310	107	C	SEASONAL	NO	4/15-7/14
6550	RONALD THOMAS	120	7	C	SEASONAL	NO	6/1-6/30
6552	ELVIN HENDRICKSON	40	a	C	SEASONAL	NO	4/1-11/1
6555	BILLY HINDMAN	360	40	C	SEASONAL	NO	7/1-9/30
6556	RAY HOCKETT	160	42	C	SEASONAL	NO	4/1-12/1
6558	ROBERT HOSKINS	730	67	C	SEASONAL	NO	6/1-10/30
6559	DAVID JACKMAN	120	18	C	SEASONAL	NO	4/1-12/30
6560	E.K.JACKSON	280	35	C	SEASONAL	NO	4/1-12/4
6561	JAEKEL&ROGERS	170	33	C	SEASONAL	NO	3/1-2/28
6562	HOWARD JOHNSON	57	8	C	SEASONAL	NO	5/1-10/31
6564	WILD CAN.CATTLE CO.	2172	306	C	SEASONAL	NO	4/1-12/31
6568	CHARLES KOPP	80	16	C	SEASONAL	NO	4/15-9/20
6569	LAZINKA RANCH INC.	1010	199	C	SEASONAL	NO	3/1-12/31
6570	MERVIN LEONARD	800	28	C	SEASONAL	NO	4/1-12/1
6571	L.F.BARKEE	440	44	C	SEASONAL	NO	5/1-10115
6574	CHRIS CUNNINGHAM	440	67	C	SEASONAL	NO	5/1-9/14
6576	JOE & NORMAN BEACH	40	3	C	SEASONAL	NO	7/1-10/31
6577	DON HUBBARD	920	120	C	SEASONAL	NO	5/1-12/23
6579	MADISON RANCHES INC.	280	12	C	SEASONAL	NO	4/1-11/1
6582	JON MALLORY	80	9	C	SEASONAL	NO	5/1-11/15
6585	VANDON MARTIN	280	35	C	SEASONAL	NO	411-8/31
6587	LYMAN NASH	a	2	C	SEASONAL	NO	6/1-6/30
6588	OWEN RANCHES	279	44	C	SEASONAL	NO	5/1-11/30
6589	PYLES CAN.CATTLE CO.	120	24	C	SEASONAL	NO	4/1-10/1
6591	J-C RANCH	80	16	C	SEASONAL	NO	4/15-12/15
6592	WALTER PURCELL	759	13	C	SEASONAL	NO	4/1-5/31
6593	ERCIL RICHMAN	30	5	C	SEASONAL	NO	6/1-1 O/l 5
6595	LENTZ FARMS	120	17	C	SEASONAL	NO	6/1-9/30
6596	WILSON WILDE	400	20	C	SEASONAL	NO	4/1-5/31
6597	JOE MARLIN	80	8	C	SEASONAL	NO	4/15-7/15
6598	MARTHA SMUTZ	1000	50	C	SEASONAL	NO	6/1-10/15
6600	JOHN STANDLEY	160	22	C	SEASONAL	NO	5/1-9/30
6604	EVERETT TALBOT	40	5	C	SEASONAL	NO	5/1-5/31
6606	VERNAL OLSON	120	11	C	SEASONAL	NO	6/1-10/15
6607	B.L.DAVIS	3710	287	C	SEASONAL	NO	3/1-2/28
6608	DONALD VAN MAREN	80	16	C	SEASONAL	NO	4/1-12/31
6610	RW.VOLLE	640	25	C	SEASONAL	NO	9/1-1/31
6611	HORSESHOE 7 RANCH	40	6	C	SEASONAL	NO	5/1-10/31

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
6612	FRED WILSEY	682	a7	C	SEASONAL	NO	4/1-12/1
6613	ED TRINDLE	200	I 2	C	SEASONAL	NO	6/1-9/1
6614	CARRIE GERBER	267	21	C	SEASONAL	NO	4/1-11130
6615	DOUG HUMPHREY	40	6	C	SEASONAL	NO	6/1-9/1
6616	JEROME LEPLATT	200	18		SEASONAL	NO	4/1-11/1
6617	FRED WILSEY	160	31	C	SEASONAL	NO	4/1-11/1
6618	WILSON CATTLE CO.	495	46	C	SEASONAL	NO	5/1-10/31
6619	HAROLD WRIGHT	40	6	C	SEASONAL	NO	5/1-9/1
6620	ORIAN WRIGHT	63	9	C	SEASONAL	NO	6/1-11/1
6621	DWIGHT WYCKOFF	80	7	C	SEASONAL	NO	6/1-1 OH
6623	DAVID YOUNG	40	7	C	SEASONAL	NO	6/1-9/30
6625	GRAND E RONDE ANGUS	440	30	C	SEASONAL	NO	6/1-10130
6626	HIDAWAY CATTLE	480	84	C	SEASONAL	NO	6/1-9/30
6628	ELMER KILBY	334	34	C	SEASONAL	NO	4/10-12/31
6629	RON LAY	188	22		SEASONAL	NO	4/1-11/1
6631	DONALD WARD	160	27	C	SEASONAL	NO	6/1-1 I/I

Unleased Lands:

T.	R.	SEC.	1/4SEC	ACRES
1N	38E	32	S1/2NW1/4	80
1N	38E	32	SW1/4	160
1N	41E	19	SE1/4SE1/4	40
1N	41E	30	NE1/4SE1/4	40
1N	42E	31	NE1/4SW1/4	40
1N	42E	31	SE1/4NW1/4	40
1N	42E	31	W1/2SE1/4	80
1N	42E	35	N1/2SW1/4	80
1N	42E	35	SE1/4NW1/4	40
1N	42E	35	SE1/4SE1/4	40
1N	45E	1	LOT 7	a
1N	45E	2	LOT 6	4
1N	45E	6	LOTS 1,2	al
1N	46E	9	NE1/4SE1/4	40
1s	24E	24	NW1/4NE1/4	40
1S	30E	a	SW1/4NE1/4	40
1s	40E	15	NE1/4SW1/4	40
1s	42E	1	N1/2NW1/4	80
1s	42E	1	N1/2SW1/4	80
1s	42E	1	SE1/4NW1/4	40
1s	42E	2	N1/2NE1/4	80
1s	42E	2	W1/2SW1/4	80
1s	43E	21	SW1/4SW1/4	40
1S	45E	24	SW1/4SE1/4	40
1s	46E	1	NE1/4NW1/4	50
1s	46E	8	NE1/4NW1/4	40
1s	46E	23	SE1/4SW1/4	40
1s	47E	16	SE1/4NE1/4	40
1s	47E	17	NE1/4SW1/4	40
1s	47E	30	SW1/4SW1/4	40

T.	R.	SEC.	1/4SEC	ACRES
1s	47E	31	NW1/4NW1/4	40
1S	47E	32	NE1/4SE1/4	40
2N	27E	6	NE1/4NW1/4	40
2N	28E	1 0	NW1/4SW1/4	40
2N	28E	28	E1/2E1/2	160
2N	39E	6	NE1/4NW1/4	40
2N	40E	12	E1/2NW1/4	80
2N	40E	12	NE1/41/4	160
2N	40E	12	SE1/4SE1/4	40
2N	41E	18	LOT 182	52
2N	41E	16	SE1/4NW1/4	40
2N	41E	20	NW1/4NW1/4	40
2N	41E	27	N1/2NW1/4	80
2N	41E	31	NW1/4NE1/4	40
2N	44E	17	SW1/4NW1/4	40
2N	45.5E	6	LOT 2	7
2N	45E	36	SW1/4NE1/4	40
2N	46E	6	LOT 10	27
2N	47E	31	LOT11	1
2N	47E	31	LOT 18	1
2N	47E	31	LOT 6	1
2s	31E	12	NE1/4NE1/4	40
2s	33E	4	LOT 2	3
2S	33E	5	LOT 10	17
2s	33E	5	LOT11	15
2s	33E	5	LOT 13	1
2s	33E	9	LOTS 5&8	32
2s	33E	11	LOT 3	2
2s	33E	13	LOT 6	17
2s	33E	19	LOTS 4&16	74

T.	R.	SEC.	1/4SEC	ACRES
2S	34E	13	SE1/4SE1/4	5
2S	35E	1	SW1/4NE1/4	40
2s	36E	24	NW1/4SW1/4	40
2s	37E	27	SE1/4NW1/4	40
2s	37E	35	SW1/4SW1/4	40
2s	46E	10	NW1/4SE1/4	40
2s	46E	23	NE1/4SE1/4	40
2s	47E	22	SW1/4SW1/4	40
3N	41E	5	NW1/4SW1/4	40
3N	46E	34	SE1/4NW1/4	40
3S	30E	24	SW1/4SE1/4	40
3s	32E	2	W1/2SE1/4	80
3s	36E	21	SE1/4SW1/4	40
3s	36E	30	SE1/4NE1/4	40
4N	37E	1	SE1/4SE1/4	40
4N	37E	1	SW1/4SE1/4	40
4N	37E	5	NW1/4NW1/4	40
4N	37E	9	NE1/4SE1/4	40
4N	37E	9	NW1/4SE1/4	40
4N	37E	10	NE1/4SE1/4	40
4N	37E	10	NW1/4NW1/4	40
4N	37E	10	S1/2NE1/4	80
4N	37E	10	SE1/4NW1/4	40
4N	37E	10	SE1/4SE1/4	40
4N	37E	10	SW1/4SW1/4	40
4N	37E	11	NW1/4SW1/4	40
4N	37E	11	S1/2SE1/4	80
4N	37E	11	SE1/4SW1/4	40
4N	37E	11	SW1/4SW1/4	40
4N	37E	12	N1/2NE1/4	80
4N	37E	12	SE1/4NE1/4	40
4N	37E	12	SE1/4NW1/4	40
4N	37E	12	SW1/4NE1/4	40
4N	37E	14	N1/2	320
4N	37E	15	N1/2NE1/4	80
4N	37E	15	NE1/4NW1/4	40
4N	43E	11	SE1/4SE1/4	10
4s	28E	15	NE1/4NE1/4	40
4S	29E	3	LOTS I-4	62
4s	29E	3	NE1/4SE1/4	40
4s	29E	4	LOTS 1&2	32
4s	29E	6	SE1/4SW1/4	40
4s	29E	6	SW1/4SE1/4	40
4s	30E	9	SW1/4SE1/4	40
4S	32E	36	NE1/4NE1/4	40
4s	35E	23	SW1/4NE1/4	40
4S	41E	33	SW1/4SE1/4	40
5N	28E	14	LOT 15&16	31
5N	28E	14	S1/2SE1/4	80
5N	28E	22	SE1/4SW1/4	40
5N	28E	22	W1/2SE1/4	80
5N	28E	26	NW1/4SW1/4	20
5N	28E	26	SE1/4SW1/4	20
5N	28E	26	SW1/4SW1/4	40
5N	28E	28	E1/2SE1/4	80
5N	28E	34	SW1/4NW1/4	20
5N	29E	22	SW1/4NW1/4	32
5N	29E	34	NE1/4NE1/4	40
5N	30E	4	SE1/4NE1/4	40
5N	37E	27	NE1/4NE1/4	40
5N	37E	27	NE1/4SE1/4	40
5N	46E	2	NW1/4NE1/4	40
5s	27E	3	NW1/4SW1/4	40
5s	27E	17	NE1/4SE1/4	40
5s	31E	6	SE1/4NE1/4	40
5s	31E	18	NW1/4SW1/4	40
5S	31E	18	SW1/4NW1/4	40
5s	33E	19	SE1/4NW1/4	40
5s	33E	21	SW1/4NW1/4	40
5s	39E	1	NE1/4SW1/4	40
5s	39E	3	NE1/4SE1/4	40
5s	39E	14	NE1/4NE1/4	40
5s	39E	14	W1/2SE1/4	80
6N	32E	15	NW1/4SW1/4	40
6N	42E	2	SE1/4NW1/4	40
6N	45E	31	NW1/4NW1/4	40
6N	46E	11	NE1/4SE1/4	40
6S	25E	1	LOT 1	24
6S	25E	9	NE1/4SW1/4	40
6S	29E	33	NW1/4NW1/4	40
6S	31E	15	S1/2NE1/4	80
6S	31E	29	NE1/4NW1/4	40
6S	31E	29	SE1/4SW1/4	40
6S	31E	31	NE1/4NE1/4	30
6S	35E	1	E1/2SW1/4	80
6S	40E	3	SW1/4NE1/4	40
6S	40E	13	SW1/4NE1/4	40
6S	40E	17	NW1/4NE1/4	50
6S	40E	26	NE1/4NW1/4	41
7N	44E	12	NW1/4SW1/4	40
7N	44E	12	W1/2NW1/4	80
7N	46E	18	NW1/4SE1/4	40
7N	46E	19	SE1/4SE1/4	40

Management Action

1. Upland
   - Continue grazing leases.
   - Monitor and evaluate grazing systems and adjust the systems or stocking levels as appropriate to maintain vegetation objectives.

2. Forestland
   - Continue routine inventories and surveys.
   - Prepare 11 separate site specific Forest Management Plans to guide future management of forested areas (refer to Table 8 and Map 2).
   - Monitor forestland activities to prevent timber theft and other unauthorized use.

- Enter into management agreements with the U.S. Forest Service to coordinate management actions and mitigate the cumulative effects of actions on adjacent lands.

Restricted Commercial Forestland

- Adjust timber stocking rates by precommercial and commercial thinning, and use of prescribed fire.
- Control competing vegetation and conditions that lead to catastrophic damage by insects or disease.
- Prepare sites for reforestation and seed or plant trees if natural reforestation is inadequate.
- Protect plantations from damage by wildlife or livestock.
- Harvest fuelwood and other minor forest products.

Excluded Commercial Forestland

- Maintain old-growth habitat primarily for the benefit of wildlife.
- Harvest trees killed by natural disasters, such as wildfire, insect epidemic, flooding, wind and landslides when salvage operations become economically feasible (when included with salvage of adjacent public timber).

3. Riparian
   - Continue riparian inventory and monitor riparian habitat condition. emphasizing anadromous fishery streams.

WILDLIFE AND FISHERIES HABITAT

Resource Condition Objective

- Meet regional big game forage requirements and fishery habitat objectives recommended by ODFW and WDW.
- Maintain cooperative agreements with ODFW on the Power City, Little Sheep, Wenaha and Bridge Creek Wildlife Areas; and with WDW on the Chief Joseph Wildlife Area.
- Inventory isolated tracts of BLM lands for their wildlife value.
- Maintain or improve habitat for fisheries.

Allocation

- Continue allocations of forage for wildlife in Cooperative Wildlife Areas; including Wenaha Bridge Creek, Powder City, Chief Joseph.

Management Action

- Cooperate with ODFW and WDW in the management of regional big game populations,

Blue Mountain **Riperian Areas - Condition and Trend**

Riparian Areas	BLM Miles	Riparian Condition	Potential	Trend	Comments
S.Fork Walla Walla	2	Excellent	Low	Stable	
Cable Creek	3	Fair	Medium	Stable	
Total	**5***				

'5.5 miles to be inventoried

Blue Mountain Fisheries

Stream	Public Stream Miles	Present Condition	Estimated Trend	Species	Comments
Little Sheep Cr.	**0.5**	?	?	?	**Not surveyed**
Cable Cr.	5	Good	Static	Static	2 miles not surveyed
S. Fork Wallowa R.	2	Excellent	Static	Static	
N. Fork John Day R.	3	?	?	?	3 miles not surveyed
Total	10.5'				

* Approximately 5.5 miles need to be inventoried.

fisheries and project development.

· Prepare and implement a Habitat Management Plan for isolated, scattered lands containing important wildlife values.

· Inventory and monitor fisheries habitat condition and trend on the following streams:

PALEONTOLOGICAL RESOURCES

Resource Condition Objective

· Protect important paleontological areas.

Allocation

• Surface-disturbing activities will avoid impacts to important localities.

Management Action

· Inventory and evaluate paleontological areas in response to project proposals and management actions.

CULTURAL RESOURCES

Resource Condition Objective

· Protect and preserve the cultural resources for their information potential and public values.

Allocation

· Identify uses for specific cultural properties in activity plans. Surface-disturbing actions will avoid impact to cultural properties.

Management Action

· Inventory and evaluate cultural properties in response to project proposals and management actions.

• Conduct periodic patrols to discourage vandalism.

• Coordinate with other resource activity plans.

RECREATION

Resource Condition Objective

· Maintain scenic quality.

· Enhance opportunities for outdoor recreation.

Allocation

· Limit camping to a 14-day stay.

· Designate VRM classes:

Class II	1,851 acres
Class III	9,295 acres
Class IV	24,194 acres

Management Action

· Inventory recreation resources.

· Develop a Recreation Area Management Plan for the South Fork Walla Walla River.

• Develop recreation facilities on identified key parcels of public land.

· Develop area-wide recreation maps and brochures for information and education.

· Maintain VRM class values.

OFF ROAD VEHICLES

Resource Condition Objective

· Maintain Off Road Vehicle designations.

Allocation

· Maintain ORV designations:

Open	31,861 acres
Limited	1,680 acres
Closed	0 acres

Management Action

• Implement and maintain ORV designations.

LANDS

Resource Condition Objective

• Consolidate ownership patterns in order to mprove resource management of both public and private land.

. Assure legal/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.

· Assure that all uses of the public lands are properly authorized.

Allocation

· Land tenure adjustment:

Zone 1 - Retention 24,985 acres;

Zone 2 - Disposal 8,556 acres.

The following are the lands within Zone 2:

T. 3 N., R. 27 E.

Sec. 2: SE1/4SE1/4	40.00
12: S1/2SE1/4	80.00
24: SW114	180.00

T. 2 N., R. 28 E.

Sec. 10: NW1/4SW1/4	40.00
28: E1/2E1/2	180.00

T. 4 N., R. 28 E.

Sec. 14: A portion of S1/2SE1/4SW1/4 7.47

T. 5 N., R. 28 E.
Sec. 26: W1/2NW1/4SW1/4, SW1/4SW1/4, W1/4SE1/4SW1/4 80.00
28: E1/2E1/2 160.00
32: W1/2NE1/4 80.00
34: S1/2SW1/4NW1/4 20.00

T. 5 N., R. 29 E.
Sec. 22: SW1/4NW1/4 40.00
34: NE1/4NE1/4 40.00

Sec. 4: SE1/4NE1/4 40.00
10: S1/2 320.00
11: E1/2W1/2 160.00
13: SE114 160.00

T. 5 N., R. 31 E.
Sec. 2: Lot3 34.50
8: SW1/4SE1/4 40.00

T. 6 N., R. 31 E.
Sec. 17: Lot 3 37.05

T. 6 N., R. 32 E.
Sec. 15: Lo! 4 40.09

T. 3 N., R. 36 E.
Sec. 14: E1/2SW1/4, NW1/4SE1/4 120.00
23: NE1/4NW1/4 40.00

T. 4 N. R. 37 E.
Sec. 4: Lot 4 48.22

T. 1 S., R. 30 E.
Sec. 8: SW1/4NE1/4 40.00

T. 3 S., R. 30 E.
Sec. 24: SW1/4SE1/4 40.00

T. 4 S., R. 30 E.
Sec. 9: SW1/4SE1/4 40.00

T. 6 S., R. 30 E.
Sec. 33: SW1/4NE1/4 40.00

T. 3 S., R. 30 1/2 E.
Sec. 25: Lot 3 22.52
36: Lots 1,2,3, & 4 91.74

T. 2 S., R. 31 E.
Sec. 12: NE1/4NE1/4 40.00

T. 3 S., R. 31 E.
Sec. 17: SI/2SW1/4 80.00

T. 4 S., R. 31 E.
Sec. 26: SW1/4SE1/4 40.00
28: W1/2NE1/4 80.00

T. 5 S., R. 31 E.
Sec. 6: SE1/4NE1/4 40.00
T. 6 S., A. 31 E.
Sec. 29: SE1/4SW1/4 40.00

T. 2 S., R. 33 E.
Sec. 4: Lot 2 3.05
5: Lots 10, 11 & 13 33.46
9: Lots 5 & 8 31.61
11: Lot3 2.08
13: Lot6 11.63
19: Lots48 16 74.27

T. 5 S., R. 33 E.
Sec. 19: SE1/4NW1/4 40.00
30: SE1/4NW1/4 40.00

T. 2 S., R. 34 E.
Sec. 13: Lot 5 5.07

T. 6 N., R. 44 E.
Sec. 10: SE1/4NE1/4, NE1/4SE1/4 80.00
11: NW1/4SW1/4 40.00
15: Lots 1 & 4 70.78

T. 7 N., R. 44 E.
Sec. 12: W1/2NW1/4, NW1/4SW1/4 120.00

T. 7 N., R. 45 E.
Sec. 28: SW1/4NE1/4 40.00

T. 7 N., R. 45 E.
Sec. 18: NW1/4SE1/4 40.00
19: SE1/4SE1/4 40.00

T. 6 N., R. 46 E.
Sec. 10: SE1/4SW1/4, NE1/4SE1/4, S1/2SE1/4 160.00
Sec. 11: SW1/4NW1/4, NW1/4SW1/4, NE1/4SEI /4 120.00
Sec. 13: Lots 1 to 4 232.59
Sec. 15: Lots 2 to 4 157.38

T. 4 N., R. 43 E.
Sec. 4: NW1/4SE1/4 40.00
10: SE1/4NE1/4 40.00
11: SE1/4SE1/4 40.00

T. 6 N., R. 44 E.
Sec. 14: Lots 2.3 & 4 54.79

T. 1 N., R. 45 E.
Sec. 1: Lot 7 8.12
2: Lot 6 3.62

T. 1 1/2 N., R. 45 E.
Sec. 35: Lots 1, 2 & 3 3.53

T. 5 N., R. 45 E.
Sec. 1: NE1/4NE1/4 40.00

T. 2 N., R. 45 1/2 E.
Sec. 6: Lot 2 7.19

T. 2 N., R. 46 E.
Sec. 30: Lot 7 14.79

T. 3 N., R. 46 E.
Sec. 34: SE1/4NW1/4 40.00

T. 5 N., R. 46 E.
Sec. 2: Lot 2 51.42
Sec. 4: Lot 1 50.73
Sec. 5: Lot 1, SE1/4NE1/4 90.53
Sec. 6: S1/2NE1/4, W1/2SE1/4 160.00
Sec. 7: E1/2SE1/4 80.00
Sec. 8: E1/2E1/2 160.00
Sec. 9: W1/2NW1/4 80.00
Sec. 10: SE1/4NE1/4 40.00

T. 6 N., R. 46 E.
Sec. 14: Lots 1 to 4 184.77
Sec. 15: Lot 1 45.68
Sec. 24: Lots 1 to 5, S1/2SE1/4, SE1/4SE1/4, N1/2SW1/4 324.52
Sec. 25: E1/2E1/2 160.00
Sec. 32: NW1/3NE1/4, SW1/4NE1/4 60.00
Sec. 33: NE1/4NW1/4 40.00

T. 1 N., R. 47 E.
Sec. 3: SE1/4SW1/4 40.00
9: SE1/4NE1/4 40.00

T. 2 N., R. 47 E.
Sec. 13: NE1/4NE1/4 40.00
31: Lots 8, 11 & 18 1.80

T. 6 N., R. 47 E.
Sec. 32: SW1/4NW1/4 40.00
33: NE1/4NW1/4 40.00

T. 1 S., R. 45 E.
Sec. 24: SW1/4SE1/4 40.00

T. 1 S., R. 46 E.
Sec. 1: Lots 3 & 6 90.50
20: SE1/4SE1/4 40.00
23: SE1/4SW1/4 40.00
28: SE1/4SW1/4 40.00

T. 2 S., R. 46 E.
Sec. 10: NW1/4SE1/4 40.00
23: NE1/4SE1/4 40.00
24: SE1/4NE1/4 40.00

T. 1 S., R. 47 E.
Sec. 32: NE1/4SE1/4 40.00
33: NE1/4NE1/4 40.00

T. 2 S., R. 47 E.
Sec. 22: SW1/4SW1/4 40.00
29: SW1/4SW1/4 40.00

T. 2 N., R. 27 E.
Sec. 6: Lot 3 40.00

T. 4 N., R. 26 E.
Sec. 8: S1/2NE1/4, N1/2SW1/4 160.00

T. 5 N., R. 27 E.
Sec. 20: Unallotted portion of NW1/4SW1/4 18.00

T. 3 S., R. 23 E.
Sec. 31: Lots 2, 3, & 4, E1/2SW1/4, W1/2SE1/4 SE1/4SE1/4 354.10
32: SW1/4SW1/4 40.00

T. 1 S., R. 24
Sec. 24: Lot 2 39.81

T. 2 S., R. 29 E.
Sec. 1 NW1/4SE1/4 40.00

T. 4 S., R. 29 E.
Sec. 3: Lots 1, 2, 3, & 4 61.96
4: Lots 1 & 2 32.00

T. 4 S., R. 35 E.
Sec. 4: NE1/4SW1/4 40.00
17: SE1/4SE1/4 40.00

T. 4 S., R. 39 E.
Sec. 29: N1/2NW1/4 80.00

T. 5 S., R. 39 E.
Sec. 1: NE1/4SW1/4 40.00
3: NE1/4SE1/4 40.00
14: NE1/4NE1/4, W1/2SE1/4 120.00

T. 1 S., R. 40 E.
Sec. 15: NE1/4SW1/4 40.00

T. 5 S., R. 40 E.
Sec. 15: NW1/4NW1/4, NE1/4SW1/4 80.00
22: SW1/4NE1/4 40.00

T. 6 S., R. 40 E.
Sec. 3: SW1/4NE1/4 40.00
13: SW1/4NE1/4 40.00
24: SW1/4SE1/4 40.00
25: NE1/4NW1/4 40.00

T. 6 S., R. 41 E.
Sec. 20: SE1/4NW1/4 40.00
21: E1/2NW1/4 80.00
28: NE1/4NW1/4 40.00
30: Lot3 40.80
33: SW1/4SW1/4 40.00
34: NW1/4NE1/4 40.00
36: Lots 1,2,3,4,5,6,7 & 8, NW1/4NE1/4 123.47

T. 6 S., R. 42 E.
Sec. 30: W1/2NE1/4 80.00
31: Lot 3, excepting that portion in MS 680 30.00

Management Action

- Emphasize acquisition of lands within critical wildlife habitat areas or lands including intact remnants of the Oregon National Historic Trail.
- Acquire public access easements to enhance recreation opportunities.
- Conduct cadastral survey in the South Fork of the Walla Walla River area to identify public land boundaries.
- Resolve unauthorized use of the public lands through termination, authorization by lease ***or*** permit, exchange or sale.

MINERALS

Resource Condition Objective

- Maintain the availability of lands for mineral leasing and mineral material production consistent with other resource objectives.
- Maintain the availability of lands for locatable mineral exploration and development consistent with the "unnecessary or undue degradation" standard (43 CFR 3809).

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)

- Allow leasing on 25,721 acres of public domain with standard protective stipulations.
- Restrict leasing on 2,300 acres of public domain with critical summer habitat for deer and elk by adding a summer season, protective stipulation to the lease, restricting operations on the lease during the period May 15 to June 15.
- Restrict leasing on 5,520 acres of public domain with critical winter habitat for deer and elk by adding a winter season, protective stipulation to the lease which shall restrict operations on the lease during the period November 1 to April 15.

Geothermal

- Allow leasing on 33,541 acres of public domain with standard protective stipulations and/ ***or*** other protective stipulations as determined from site specific environmental analysis prior to issuance of a lease.

Solid Mineral Leasing - Coal

- No allocation at present. Future allocation decisions will require an RMP amendment.

Locatable Minerals

- Allow exploration and development on 33,541 acres of public domain consistent with the "unnecessary or undue degradation" standard (43 CFR 3809).

Mineral Materials

- Allow exploration and development on 33,541 acres of public domain as long as other resource ***objectives*** are met.
- Allow development of community pits if mineral materials exist and other resource objectives are met.

Management Action

- Update the automated oil and gas lease stipulation files to implement the leasing decisions
- Inventory for mineral materials on scattered tracts of public domain located near 11 small communities.
- Prepare a contract for inventory of coal resources on BLM tracts having lignite potential, contingent on funding.

Baker County Misc. Geographic Unit - 14

This area contains 218,605 acres of public land

VEGETATION

Resource Condition Objective

1. Upland
   - Manage upland grass-shrub vegetation to achieve a mid-seral stage plant community.
   - Enhance or maintain habitat quality for featured wildlife species such as deer, elk, antelope, bald eagles, raptors, and upland game birds.

2. Forestland
   - Establish *or* maintain health, forestlands in diverse age classes and stocking levels. At least 10% of the acreage will be old growth habitat.

3. Riparian
   - Maintain or enhance riparian habitat.
   - Restore or enhance fishery habitat on key streams.

Allocation

1. Upland
   - Restrict grazing through seasons of use, livestock numbers, or utilization levels.
   - Exclude livestock grazing in streams, bogs and stream overflows where incompatible with other resource objectives.
   - Restrict livestock grazing for 3-5 growing seasons on range rehabilitation project areas.

2. Forestland - contains approximately 5,800 acres of commercial forest and 20,000 acres of woodlands.
   - Restrict timber harvest on approximately 5,500 acres (97%) to maintain watershed, wildlife, and recreation values. This will reduce the total amount of forest products available for harvest by approximately 10%.
   - Exclude timber harvest on approximately 300 acres (3%) which are economically non-operable. (This acreage is not included in the allowable harvest base.)
   - Allow harvest of forest products on 20,000 acres of suitable woodlands.

3. Riparian
   - Restrict livestock grazing in riparian habitat in poor or fair condition through seasons of use, levels and numbers of livestock, where conditions warrant.
   - Restrict surface mining through operating plans on identified crucial habitat.

Baker County MIsc. Grazing **Allotments - Livestock Management, Forage Forage Allocations and Implementation Status**

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
0	UNALLOTTED	9197	0		NONE		NONE
1002	IRON MOUNTAIN	4609	768	I	DEF-ROT	YES	4/16-10/31
1005	WOODS GULCH	268	28	C	SPR-FALL	YES	4/16-I 1130
1006	HUNTINGTON	9378	1875	I	DEF-ROT	YES	4/1-10/31
1007	SCHOOL SECTION	606	63	M	SPRING	YES	4/16-5/31
1008	LIME PLANT	364	48	C	SEASONAL	NO	6/1-9/30
1009	SLAUGHTERHOUSE MTN.	797	110	M	DEF-ROT	YES	4/19-6/15
1010	WEST HIGHWAY	253	30	C	SEASONAL	NO	4/1-4/30
1011	SOUTH DURBIN CR.	775	168	I	SPR-FALL	YES	6/16-12/1
1012	CAVANAUGH CREEK	118	16	C	SEASONAL	NO	6/1-9/30
1013	BENSON CREEK	3359	858	I	REST-ROT	YES	4/16-10/31
1014	FREEWAY	533	122	M	DEF-ROT	YES	4/1-11/30
1015	EAST TABLE MTN.	1240	259	I	DEF-ROT	YES	4/16-1 1130
1016	TABLE MTN.	7678	2208	I	REST-ROT	YES	4/16-10/31
1017	BURNED	1254	343	M	DEF-ROT	YES	4/16-10/31
1018	UPPER DURBIN CR.	1004	197	M	DEF-ROT	YES	4/16-10/31
1019	MARSHALL CREEK	194	23	C	SEASONAL	NO	7/16-9/15

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	M G M T. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
1029	TRUE BLUE GULCH	62	14	C	SEASONAL	NO	4/1-10/31
1033	FUR MTN.	399	48	C	SEASONAL	NO	4/10-10/31
1036	WEATHERBY MTN.	210	28	C	SEASONAL	NO	5/1-5/31
1038	BEAVER CREEK	341	47	C	SPRING	NO	4/16-5/15
1039	TURNER GULCH	3746	484	M	DEF-ROT	YES	4/1-12/15
1040	LITTLE VALLEY	3199	695	M	DEF-ROT	YES	4/16-11/30
1041	CINDER BUTTE	1540	243	M	DEF-ROT	YES	5/1-8/30
1043	WHISKEY GULCH	80	27	C	SEASONAL	NO	5/16-6/15
1044	JUNIPER MTN.	2072	318	M	DEF-ROT	YES	4/1-12/15
1045	JORDAN CREEK	247	37	C	SEASONAL	NO	4/1-12/15
1046	DURKEE TIMBER	859	122	M	SEASONAL	YES	5/1-9/15
1048	NODINE CREEK	3054	684	I	DEF-ROT	YES	6/1-11/30
1049	LOWER MANNING CR.	479	40	C	SEASONAL	NO	4/1-11/30
1050	NORTH SWAYZE CR.	320	24	M	SPRING	YES	4/1-5/20
1051	ALDER CREEK	141	13	C	SEASONAL	NO	4/16-10/31
1052	TRAIL CREEK	885	107	C	SEASONAL	NO	4/16-10/31
1054	P.PELINE	110	12	C	SEASONAL	NO	4/1-7/31
1055	NORTH MANNING CR.	509	50	M	SPRING	YES	4/16-5/15
1056	HORSESHOE	129	4	C	SEASONAL	YES	5/16-8/30
1057	HIBBARD CREEK	160	24	C	SEASONAL	NO	9/15-11/30
1058	PLAN0 SCHOOL	40	6	C	SEASONAL	NO	4/1-4/30
1062	POWELL CREEK	375	23	C	SEASONAL	NO	4/1-11/30
1063	BAYHORSE	242	36	C	SEASONAL	NO	4/1-11/30
1064	GOLD CREEK	370	41	C	SEASONAL	NO	6/1-10/15
1065	PEARCE GULCH	63	6	C	SEASONAL	NO	4/16-12/15
1066	FAREWELL BEND	738	162	M	DEF-ROT	YES	4/16-10/31
1067	TUNNEL	21	4	C	SEASONAL	NO	9/22-11/30
1068	MORGAN MOUNTAIN	5117	1082	I	SPR/FALL	YES	4/27-11/23
1069	SISLEY CREEK	5247	920	I	SPR/FALL	YES	4/27-11/30
1320	MILL GULCH	1243	98	M	SEASONAL	YES	5/1-10/31
1326	BRINKER CREEK	20	2	C	SEASONAL	NO	7/1-7/31
1327	MEYER GULCH	167	15	C	SEASONAL	NO	5/1-9/30
1330	JUNIPER HILL	217	17	C	SEASONAL	NO	5/1-5/30
1333	MARBLE CREEK	84	12	C	SEASONAL	NO	4/1-4/30
2002	SUNNYSLOPE	492	51	C	SEASONAL	NO	4/1-12/15
2003	POWDER RIVER	210	35	C	SEASONAL	NO	4/16-5/15
2004	FIVE MILE	1373	150	M	REST-ROT	YES	4/10-6/9
2005	SECOND CREEK	3131	450	M	REST-ROT	YES	4/16-6/15
2006	CRYSTAL PALACE	105	6	C	SEASONAL	NO	4/16-11/30
2007	SARDINE CREEK	585	104	C	SEASONAL	NO	4/16-10/30
2008	RIVER INDIVIDUAL	339	66	C	SEASONAL	NO	4/10-10/30
2010	BONE GULCH	201	7	C	SEASONAL	NO	5/1-11/30
2011	BEAGE CREEK	117	7	C	SEASONAL	NO	4/1-10/31
2012	BIG CREEK	600	55	M	DEF-ROT	YES	4/16-1/15
2013	HIGHWAY #203	120	4	C	SEASONAL	NO	4/1-1/15
2015	MAGPIE PEAK	2100	428	M	DEF-ROT	YES	4/1-1/30
2017	WEST MAGPIE PEAK	760	123	C	ROTATION	YES	4/16-6/15
2019	SALT CREEK	800	135	M	DEF-ROT	YES	4/10-12/31
2020	CREWS CREEK	2996	420	I	ROTATION	YES	4/10-1/15
2021	SEEDING	400	150	M	SPRING	YES	4/10-5/9
2031	BULLDOZER	3986	1332	M	DEF-ROT	YES	4/16-1/15
2033	LOWER SALT CREEK	277	26	C	SEASONAL	NO	4/16-11/30
2034	LOVE CREEK	1794	180	M	REST-ROT	YES	4/16-1/15

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
2035	WATERSPOUT	1885	605	M	DEF-ROT	YES	4/16-1/15
2043	UPPER BIG CREEK	118	2	C	SEASONAL	NO	5/1-9/30
2044	NORTH TABLE MTN.	119	2	C	SEASONAL	NO	4/16-5/15
2050	UPPER RITTER CREEK	2713	500	M	REST-ROT	YES	4/16-12/31
2051	GALE PLACE	62	11	c	SEASONAL	NO	4/16-11/30
2060	FARLEY *HILLS*	302	27	C	SEASONAL	NO	4/16-7/15
2062	MAGPIE CREEK	84	9	C	SEASONAL	NO	4/16-7/15
2063	UPPER CREWS CREEK	200	16	C	SEASONAL	NO	4/16-10/30
2064	NORTH SPARTA	24	2	C	SEASONAL	NO	6/1-8/31
2065	TOWN GULCH	24	2	C	SEASONAL	NO	6/1-10/31
2066	BALDOCK	39	5	C	SEASONAL	NO	4/1-1/30
2067	RANCH CREEK	105	14	C	SEASONAL	NO	4/1-10/31
2068	ROSEBUD MINE	133	6	C	SEASONAL	NO	6/1-10/31
2069	LONE PINE MTN.	296	30	C	SEASONAL	NO	5/1-7/15
2070	SUMMIT PASTURE	1197	106	M	SPRING	YES	4/16-5/3
2073	OREGON TRAIL	380	25	C	SEASONAL	NO	4/16-10/31
2075	UNITY CREEK	582	61	c	SEASONAL	NO	4/1-12/31
2076	PRITCHARD FLAT	446	47	C	SEASONAL	NO	4/16-11/15
2077	RITTER CREEK	770	154	M	SPRING	YES	4/16-8/31
2078	NORTH FLAGSTAFF	1582	203	M	DEF-ROT	YES	4/16-12/15
2079	SOUTH FLAGSTAFF	170	8	C	SEASONAL	NO	4/16-5/31
2086	WHITE SWAN MINE	275	39	C	SPRING	NO	4/16-5/15
2087	FIRST CREEK	522	60	C	SEASONAL	NO	4/16-9/30
2092	CANYON CREEK	200	8	C	SEASONAL	NO	5/1-9/30
2095	HOMESITE	80	11	C	SEASONAL	NO	4/16-12/31
2096	VIRTUE FLAT	298	40	C	SEASONAL	NO	4/16-6/15
2097	DRY GULCH	40	6	C	SEASONAL	NO	4/1-9/30
2099	VIRTUE HILLS	3883	427	I	DEF-ROT	YES	6/15-9/15
2100	ENCINA	40	2	C	SEASONAL	NO	4/16-9/30
2101	QUARTZ CREEK	40	4	C	SEASONAL	NO	4/16-10/31
2102	NORTH SARDINE CREEK	185	19	c	SEASONAL	NO	4/16-5/15
2103	LAWRENCE CREEK	50	9	C	SEASONAL	NO	6/1-9/30
2104	INTERCHANGE	250	16	C	SEASONAL	NO	4/16-10/31
2108	KEATING HIGHWAY	4386	500	M	DEF-ROT	YES	4/16-12/15
2109	RUCKLES CREEK	5923	900	I	ROTATION	YES	4/16-1/15
2112	MAIDEN GULCH	1055	99	C	SEASONAL	NO	4/16-11/15
2114	LITTLE LOOKOUT	890	77	C	SEASONAL	NO	4/16-11/15
2120	PLEASANT VALLEY	193	28	C	SEASONAL	NO	4/16-9/30
2121	EAST PLEASANT VALLEY	375	88	M	ROTATION	YES	4/16-7/31
2127	KELLEY CREEK	1716	220	M	DEF-ROT	YES	4/16-1/15
2128	RISLEY BUTTE	2501	380	M	ROTATION	YES	4/16-7/1
2129	CHALK BLUFF	645	90	M	ROTATION	YES	4/16-6/15
2130	LYLE CREEK	409	29	c	SEASONAL	NO	4/16-10/31
2132	KUYKENDAHL CREEK	40	4	C	SEASONAL	NO	6/1-10/31
2139	WEST CREWS	80	13	C	SEASONAL	NO	4/16-11/30
2142	NORTH RIDLEY CREEK	40	4	C	SEASONAL	NO	4/16-12/31
3001	PINE VALLEY	17067	1707	I	SEASONAL	YES	4/16-8/31
3002	IMMIGRANT GULCH	7079	598	M	REST-ROT	YES	5/1-7/31
3003	RUTH GULCH	9087	1394	M	DE-ROT	YES	4/16-6/30
3008	BEAR WALLOW	720	68	C	SEASONAL	NO	4/10-6/19
3009	HOOKER FLAT	533	46	C	SEASONAL	NO	4/16-6/15
3010	DRY CREEK	40	6	C	SEASONAL	NO	4/16-5/15
3011	PARK	330	21	c	SEASONAL	NO	4/16-5/15

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	M G M T . CAT.	GRAZING SYSTEM	IMPL.	USE DATES
3012	SQUAW CREEK	4271	350	I	SEASONAL	YES	4/16-I 1123
3014	TIMBER CANYON	5303	528	I	REST-ROT	YES	4/16-12/31
3016	BURNSIDE	419	42	C	SEASONAL	NO	5/1-10/31
3017	SHEEP MOUNTAIN	105	22	C	SEASONAL	NO	4/1-7/31
018	ROAD GULCH	1959	168	I	SEASONAL	YES	4/16-6/15
3019	DEER GULCH	30	2	C	SEASONAL	NO	4/16-6/1
3021	CROW RESERVOIR	1128	82	C	SEASONAL	NO	6/15-8/14
3022	FOSTER GULCH	1679	184	I	DEF-ROT	YES	5/1-5/31
3024	HORSESHOE	118	10	C	SEASONAL	NO	4/1-4/30
3025	MAIDEN GULCH	328	22	c	SEASONAL	NO	4/1-5/31
3027	CANYON CREEK	40	3	C	SEASONAL	NO	4/1-6/30
3028	KEYSTONE MINE	291	24	C	SEASONAL	NO	4/16-6/15
3029	DRY GULCH	2076	185	I	DEF-ROT	YES	4/15-9/30
3030	LOWER TIMBER CANYON	270	14	C	SEASONAL	NO	4/1-5/31
3031	UPPER DRY GULCH	440	33	C	SEASONAL	NO	4/15-6/5
3037	DALY CREEK INDIV.	684	96	C	SEASONAL	NO	4/1-9/30
3041	WEST FORK	40	5	C	SEASONAL	NO	4/I -8/31
3043	LONGBRANCH	45	5	C	SEASONAL	NO	4/1-8/31
3045	McLEAN GULCH	146	14	C	SEASONAL	NO	4/15-5/15
3047	NEW BRIDGE	138	7	C	SEASONAL	NO	4/16-5/15
3048	SAG CREEK	40	5	C	SEASONAL	NO	4/16-5/15
3049	BARNARD CREEK	1998	99	I	DEF-ROT	YES	4/16-5/28
5001	COYOTE POINT	400	16	C	SEASONAL	NO	4/1-4/30
5080	THIEF VALLEY	180	11	c	SEASONAL	NO	4/16-9/30
5133	RIVERDALE HILL	125	29	C	SEASONAL	NO	4/16-5/15
5137	RESERVOIR	144	IO	C	SEASONAL	NO	4/16-5/15
5138	BULGER FLAT	40	5	c	SEASONAL	NO	5/1-9/30
5201	BRANNON GULCH	3247	170	I	REST-ROT	YES	5/1-10/31
5202	BROWN ROCKS	1292	72	C	SEASONAL	NO	7/16-9/15
5203	BIG CREEK	80	10	C	SEASONAL	NO	5/1-9/30
5204	HAWRY FLAT	1059	66	C	SEASONAL	NO	4/15-5/30
5205	NORTH HEREFORD	350	23	C	SEASONAL	NO	4/16-5/15
5206	WHIPPLE GULCH	1159	116	C	SEASONAL	NO	5/1-10/31
5207	HEREFORD VALLEY	80	3	C	SEASONAL	NO	9/1-11/30
5208	CAMP DITCH	75	5	C	SEASONAL	NO	5/1-5/31
5209	CAMP CREEK	2798	141	I	REST-ROT	YES	4/20-6/31
5210	BEAVERDAM CREEK	29	2	C	SEASONAL	NO	5/1-5/31
5211	KING MOUNTAIN	525	18	C	SEASONAL	NO	4/16-6/15
5212	ROCK CREEK	128	10	C	SEASONAL	NO	5/1-5/31
5213	TIGER	IO	70	C	SEASONAL	NO	4/16-6/15
5215	DENNY FLAT	6620	376	I	REST-ROT	YES	4/21-6/15
5216	WEST CAMP CREEK	669	45	c	SEASONAL	NO	4/21-6/2
5217	ELMS RESERVOIR	120	8	C	SEASONAL	NO	4/1-4/30
5218	JUNCTION	160	112	C	SEASONAL	NO	5/1-9/30
5219	DRY GULCH	327	32	C	SEASONAL	NO	4/20-9/15
5220	WHITTED DITCH	76	4	C	SEASONAL	NO	4/1-4/30
5221	CHINA CREEK	161	9	C	SEASONAL	NO	4/1-4/30
5222	MEADOW CREEK	40	4	C	SEASONAL	NO	5/1-5/30
5223	MEADOW CR.	200	13	C	SEASONAL	NO	5/1-5/30
5225	JOB CREEK	65	3	C	SEASONAL	NO	10/1-10/31
5226	COW CREEK	118	7	C	SEASONAL	NO	6/1-6/30
5227	COPPER CREEK	235	20	C	SEASONAL	NO	5/1-8/31
5228	SUNFLOWER FLAT	160	20	C	SEASONAL	NO	6/1-10/31

ALLOT. NUMBER	ALLOTMENT NAME	ACRES	AUM's	MGMT. CAT.	GRAZING SYSTEM	IMPL.	USE DATES
230	MIDDLE FORK	200	19	C	SEASONAL	NO	10/1-10/31
5233	BULLRUN	32	4	C	SEASONAL	NO	4/1-4/30
5234	REED CREEK	341	22	C	SEASONAL	NO	5/16-6/15
5235	NORTH FORK	120	10	C	SEASONAL	NO	5/15-8/15
5236	COTTONWOOD CREEK	288	32	C	SEASONAL	NO	10/1-10/31
5238	SHORT CREEK	37	6	C	SEASONAL	NO	10/1-10/31
5303	LINDSAY MOUNTAIN	936	137	I	DEF-ROT	YES	4/20-7/25
5304	TITUS	292	9	C	SEASONAL	NO	4/16-7/15
5305	HOOKER GULCH	70	6	C	SEASONAL	NO	8/1-8/31
5306	DRY GULCH	93	4	C	SEASONAL	NO	7/1-10/31
5307	EBELL CREEK	120	4	C	SEASONAL	NO	5/1-6/30
5310	SOUTH BAKER	279	25	c	SEASONAL	NO	4/16-5/15
5311	ELK CREEK	2228	221	M	SEASONAL	YES	4/16-6/30
5312	JUNIPER GULCH	355	13	C	SEASONAL	NO	4/16-10/31
5313	POKER GULCH	1424	96	c	SEASONAL	NO	6/1-6/30
5316	SALISBURY	82	10	C	SEASONAL	NO	4/16-5/15
5319	TRAIL CREEK	710	93	C	SEASONAL	NO	6/1-8/31
5321	AUBURN	2631	83	C	SEASONAL	NO	
5322	STACK CREEK	54	5	C	SEASONAL	NO	7/1-7/31
5323	WENDT BUTTE	729	66	c	SEASONAL	NO	5/1-10/31
5325	TOWNE GULCH	166	32	C	SEASONAL	NO	4/4-10/15
5332	HILLCREEK	152	15	c	SEASONAL	NO	5/1-5/30
5334	OLD AUBURN	72	6	C	SEASONAL	NO	5/1-10/30
5335	BLUE CANYON	80	8	C	SEASONAL	NO	5/1-5/30
5336	UPPER HILL CREEK	20	3	c	SEASONAL	NO	4/16-7/15
5337	KOONTZ CREEK	31	4	c	SEASONAL	NO	9/1-9/30
5339	SUTTON CREEK	50	5	C	SEASONAL	NO	5/15-6/14
5340	LITTLEFIELD	40	2	C	SEASONAL	NO	5/1-6/30
5342	LOG CREEK	73	12	C	SEASONAL	NO	5/1-10/31

Management Action

1. Upland
   - Restrict livestock grazing by controlling livestock numbers, seasons of use, and fencing under grazing management system.
   - Continue existing grazing systems. Monitor and evaluate all grazing use and modify or implement new grazing systems where needed.
   - Defer livestock grazing for 3-5 growing seasons on range rehabilitation project areas.
   - Continue to inventory *Haplopappus radiatus* and develop a HMP if necessary.

2. Forestland
   - Continue routine inventories and surveys.
   - Prepare five site specific Forest Management Plans to guide future management of forested areas (refer to Table 8 and Map 2).
   - Monitor forestland activities to prevent timber theft and other unauthorized uses.
   - Enter into management agreements with the U.S. Forest Service to coordinate management activities on adjacent lands, and to minimize or mitigate the cumulative effects of such actions.

Restricted Commercial Forest/and (5,500 acres)

- Adjust timber stocking rates by precommercial and commercial thinning and by use of prescribed fire.
- Control competing vegetation and conditions that lead to catastrophic damage by insects or disease.
- Prepare sites for reforestation and seed or plant trees if natural reforestation is inadequate.
- Protect plantations from damage by wildlife and livestock.
- Harvest fuelwood and other minor forest products.

Excluded Commercial Forestland (300 acres)

- Maintain old-growth habitat for the benefit of wildlife.

- Harvest trees killed or damaged by natural disaster, such as wildfire, insect epidemic, flooding, wind and landslides, when salvage operations become economically feasible (when included with salvage of adjacent public timber) and when compatible with other resource objectives.

Allowed Woodlands (20,000 acres)

- Harvest forest products on available wood lands consistent with the full productive capability of the area. Construct minimum roads necessary for product removal.

3. Riparian
   - Continue riparian habitat inventories.
   - Fence identified streams, bogs and seeps, and plant shrubs where needed.
   - Establish monitoring on riparian vegetation and on macro invertebrates.
   - Rip-rap identified streambanks and install instream structures.
   - Modify livestock grazing systems where riparian improvement is needed.

WILDLIFE AND FISHERIES HABITAT

Resource Condition Objective

- Meet forage requirements for big game as recommended by ODFW.
- Enhance habitat for potential transplant of Columbian sharptail grouse, antelope, and turkey.
- Improve habitat condition for wintering deer.
- Maintain or improve habitat for fisheries.

Allocation

- Restrict livestock use through seasons of use, utilization levels and livestock numbers on key wildlife areas and crucial deer winter range.
- Allow transplants of wildlife species.

Management Action

- Develop grazing systems that enhance habitat for fisheries.
- Provide suitable habitat for transplanting wildlife.
- Use prescribed burning to improve habitat quality.
- Plant shrubs and forbs where needed on crucial deer winter range.
- Continue updating wildlife inventories.
- Continue agreements with ODFW on Auburn, Salmon Creek, and Elk Creek wildlife management areas.
- Inventory habitat for fisheries on ten miles of streams.
- Coordinate with ODFW on fish habitat projects on the following reservoirs:

Baker County Misc. Rlparlan Areas - Condition and Trend

Riparian Areas	BLM Miles	Rlparian Condltlon	Potential	Trend	Comments
Jordan Creek	1.0	Fair	High	Stable	
Immigrant Gulch	4.4	Fair	Medium	Stable	
Kelly Creek	2.0	Good	Medium	UP	
Ruckles Creek	2.6	Fair	Medium	Stable	
Ritter Creek	1.4	Fair	Medium	UP	
Ritter Creek	0.8	Fair	Medium	Stable	
Pine Creek	4.0	Poor	Low	Down	Mining
	16.2				
'Love Creek	2.5	Good	Medium	Stable	
*Beaver Cr.(lower)	0.6	Poor	Medium	Down	
'Upper Barnard Cr.	2.0	Excellent	Low	Stable	
'Deer Creek	2.5	Fair	Medium	Stable	
'Timber Canyon	2.0	Good	Low	Stable	
*Upper Shirttail	2.5	Fair	High	Stable	
'Lower Spring Cr.	1.0	Good	High	Stable	
Total	11.1"				

* Inventoried since 1985.
"22.5 miles to be inventoried.

Baker County Misc. Fisheries

Reservoir	Public Shoreline Miles	Present Condition	Estimated Trend	Species	Comments
Brownlee	35.0	?	Static	Primarily warm water	Severe waler level fluctuations eliminate vegetative cover and reduce fish production.
Hells Canyon	5.5	?	Static	Primarily warm water	Flood control results in severe water level fluctuations.
Higgins	.5	?	Static	RB,CT,BS 2/	irrigation results in severe water level fluctuations.
oxbow	6.0	?	Static	Primarily warm water	Flood control resuils in severe water level fluctuations.
Thief Valley	.5	?	Static	RB,BB,BC,BS, CS,SQ,FL,RS 2/	irrigation results in severe water level fluctuations.
Unity	3	?	Static	RB,CO,BS 2/	irrigation results in severe water level fluctuations.
Total	**50.0***				

Key

2/ These large reservoirs will not be inventoried by BLM. Fish species data provided by Oregon Department of Fish and Wildlife.

? Undetermined or Unknown

Fish Species:

BB Brown Bullhead
BC Black Crappie
BG Bluegill
LS Largescale Sucker
CT Cutthroat Trout
CC Channel Catfish
CL Chiselmouth
SD Speckled Dace
WF Whitefish
CO Cottid
CP Carp
CS Coarsescale Sucker
BT Bull Trout
RB Rainbow or Redband Trout
D Dace
DV Dolly Varden
SQ Squawfish
YP Yellowperch
LB Largemouth Bass
LD Longnose Dace
BS Bridgelip Sucker
RS Redside Shiner
SB Smallmouth Bass
TS Torrent Scuipin
STW Steelhead

*Approximately 10 miles need to be inventoried

PALEONTOLOGICAL RESOURCES

Resource Condition Objective

- Protect important paleontological areas.

Allocation

- Surface disturbing activities will avoid impacts to important localities.

Management Action

- Monitor important areas annually.
- Inventory and evaluate paleontological areas in response to project proposals and management actions.

CULTURAL RESOURCES

Resource Condition Objective

- Protect and preserve the information potential and public values of cultural resources. Maintain or enhance a representative sample of prehistoric resources. Maintain or enhance historic resources for scientific use, and interpretation of mining and settlement.

Allocation

- Identify uses for specific cultural properties in activity plans. Restrict or exclude development projects where incompatible with conserving prehistoric and historic resources for scientific and public uses.

Management Action

- Inventory and evaluate cultural resources in response to project proposals and management actions.
- Conduct periodic patrols and install protection signs to discourage vandalism.
- Annually monitor the condition of vulnerable cultural resources.
- Develop and implement a CRMP for historic and archaeological properties.
- Evaluate cultural resources for National Register nomination.
- Coordinate with other activity plans.
- Continue information and education programs for protection of cu iturai resources.

RECREATION

Resource Condition Objective

- Maintain scenic quality.
- Enhance recreation opportunities

Allocation

- Limit camping to a 14-day stay.
- Maintain VRM classes:

Class II	52,253 acres
Class III	20,787 acres
Class IV	74,980 acres

Management Action

- Inventory recreation resources.
- Develop a Recreation Management Plan for the three reservoir complex on the Snake River, and integrate with activity plans for other resources in the area-
- Develop recreation facilities on identified key parcels of public land.
- Develop area-wide recreation maps and brochures for information and education.

OFF ROAD VEHICLES

Resource Condition Objective

- Maintain ORV designations.

Allocation

- Maintain ORV designations:

Open	187,710 acres
Limited	30,895 acres
Closed	0 acres

Management Action

- Implement and maintain ORV designations.

LANDS

Resource Condition Objective

- Consolidate ownership patterns in order to improve resource management of both public and private land.
- Assure legal/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.
- Assure that all uses of the public lands are properly authorized.

Allocation

- Land tenure adjustment:
  Zone 1 • Retention 206,957 ac.;
  Zone 2 Disposal 9,646 ac.

- The following are the lands within Zone 2:

T. 13 S., R. 36 E.
Sec. 15: SW1/4NE1/4 40.00

T. 12 S., R. 37 E.
Sec. 13: SE1/4NW1/4, NE1/4SW1/4
80.00
14: SE1/4NE1/4, E1/2NW1/4
120.00

T. 13 S., R. 37 E.

Sec.	5: S1/2NE1/4	80.00
	9: NE1/4NE1/4	40.00
	15: E1/2NE1/4	80.00
	27: NW1/4SW1/4	40.00
	30: SE1/4NW1/4	40.00

T. 14 S., R. 37 E.
Sec. 6: Lot 3 37.73

T. 12 S., R. 38 E.
Sec. 2: Lot 2, SW1/4SE1/4 79.53
4: Lot 3 40.73
22: NE1/4SE1/4 40.00

T. 13 S., R. 38 E.
Sec. 19: E1/2SE1/4 80.00
20: W1/2SW1/4, NE1/4SW1/4 NW1/4SE1/4 160.00

T. 14 S., R. 38 E.
Sec. 4: Lot 3, SE1/4NW1/4 80.44

T. 7 S., Ft. 39 E.
Sec. 26: W1/2SE1/4, SE1/4SE1/4 120.00
35: N1/2NE1/4 80.00

T. 10 S.. R. 39 E.
Sec. 13: W1/2NE1/4, SE1/4NW1/4, W1/2SW1/4, SE1/4SW1/4 240.00
14: SE1/4SE1/4 40.00
33: SW1/4SW1/4 40.00

T. 11 S., R. 39 E.
Sec. 2: Lots 1 8 2 70.17
31: Lot3 33.37

T. 12 S., R. 39 E.
Sec. 5: Lot I, SE1/4NE1/4 72.48

T. 6 S., R. 40 E.
Sec. 18: Lot 6 10.42

T. 7 S., R. 40 E.
Sec. 26: NE1/4NE1/4 40.00

T. 9 S., R. 40 E.
Sec. 26: S1/2NE1/4, E1/2NW1/4, NW1/4NW1/4, N1/2SW1/4, W1/2SE1/4 360.00
27: E1/2NE1/4, SW1/4NE1/4, NE1/4SE1/4 160.00
34: SW1/4NW1/4, W1/2SW1/4, SE1/4SW1/4 160.00
35: NW1/4NE1/4 40.00

T. 10 S., R. 40 E.
Sec. 1: That part of Lot 1 in the S1/2NE1/4, That part of Lot 2 in the N1/2NE1/4, N1/2SE1/4 240.20
3: That part of Lot 1 in the SW1/4NW1/4, That part of Lot 2 in the NW1/4NW1/4, NW1/4SW1/4 120.37

T. 11 S., R. 40 E.
Sec. 6: SE1/4NE1/4 40.00

T. 12 S., R. 40 E.
Sec. 28: NW1/4SW1/4 40.00
29: SE1/4SW1/4 40.00

T. 13 S., R. 40 E.
Sec. 2: Lot 3 40.44
9: SE1/4NW1/4, NE1/4SW1/4, SE1/4 240.00
10: N1/2SW1/4 80.00

T. 7 S., R. 41 E.
Sec. 1: NW1/4SW1/4 40.00
4: Lots 3 & 4, SE1/4SW1/4, NE1/4SW1/4 160.80
11: SW1/4SE1/4 40.00
12: SW1/4SW1/4 40.00
14: SE1/4NE1/4, NW1/4NE1/4 80.00
23: SE1/4NW1/4 40.00
26: SE1/4NE1/4, E1/2SW1/4, SE1/4 280.00
35: N1/2NE1/4, NE1/4NW1/4, SE1/4NE1/4 160.00

T. a S., R. 41 E.
Sec. 7: Lot 4 39.34
9: W1/2SE1/4 80.00
19: N1/2NE1/4 80.00
28: N1/2SE1/4 80.00

T. 10 S., R. 41 E.
Sec. 9: NE1/4NE1/4 40.00
10: SE1/4SE1/4 40.00
12: S1/2NE1/4, SE1/4SE1/4 120.00
13: NE1/4NE1/4 40.00
14: E1/2NW1/4, NE1/4SW1/4 120.00
15: N1/2SW1/4, SE1/4SW1/4 f 20.00
la: N1/2SE1/4 80.00
21: NE1/4NE1/4, SE1/4NW1/4 80.00
22: NW1/4NW1/4 40.00

T. 9 S., R. 42 E.
Sec. 25: S1/2S1/2 160.00
35: SW1/4NE1/4;SE1/4NW1/4;NE1/4SW1/4;NW1/4SE1/4 160.00

T. IO S., R. 42 E.
Sec. 6: SW1/4SE1/4 40.00
11: NE1/4SE1/4 40.00
la: Lot I, SE1/4SW1/4, E1/2SE1/4 159.23

T. 11 S., R. 42 E.
Sec. 3: NW1/4SW1/4 40.00
4: S1/2NE1/4 80.00
a: SW1/4NW1/4 40.00

T. 9 S., R. 43 E.
Sec. 15: SW1/4SE1/4 40.00
22: NW1/4NE1/4 40.00
30: Lot 3 38.27
31: N1/2NE1/4 80.00
32: SW1/4NW1/4, NW1/4SW1/4 80.00

T. 10 S., R. 43 E.
Sec. 3: SE1/4SE1/4 40.00
4: N1/2SW1/4, SE1/4SW1/4 120.00
5: Lot 3, SW1/4NE1/4, SW1/4SW1/4, N1/2SE1/4 200.00
11: E1/2SW1/4 80.00
23: SE1/4NE1/4, N1/2SE1/4 120.00
24: NW1/4SW1/4 40.00
26: E1/2NE1/4 80.00

T. 11 S., R.43 E.
Sec. 23: N1/2SW1/4, NW1/4SE1/4 120.00
31: SW1/4SE1/4 40.00
36: N1/2 320.00
23: NW1/4SW1/4 40.00

T. 6 S., R. 44 E.
Sec. 13: SE1/4SE1/4 40.00
15: Lot3 27.58
21: Lots 1 & 2, Ollie Woodman Lode 26.00
22: Lot 3 10.80

T. 9 S., R. 44 E.
Sec. 23: SE1/4NW1/4, S1/2SE1/4 120.00
24: SE1/4NE1/4 40.00
26: NW1/4NE1/4, SW1/4SE1/4, E1/2SE1/4 169.00
27: NW1/4NW1/4, NW1/4SE1/4 80.00
31: E1/2SW1/4, NW1/4SE1/4 120.00
34: SW1/4SE1/4 40.00

T. 10 S., R. 44 E.
Sec. 2: SW1/4SW1/4 40.00
3: NW1/4SE1/4 40.00
6: Lots 3 & 4 77.21
18: Lots 2 & 3 77.39

T. 11 S., R. 44 E.
Sec. 19: Lot 1 9.70
33: SE1/4SW1/4 40.00

T. 12 S., R. 44 E.
Sec. 31: Lots 2, 3, & 4 130.62

T. 9 S.. R. 45 E.
Sec. 19: Lots 2, 3, & 4, E1/2SW1/4 197.67
30: Lot 3 39.48
35: E1/2SW1/4 80.00

T. 13 S., R. 45 E.
Sec. 30: Lot 3 40.06

T. 14 S., R. 45 E.
Sec. 19: SW1/4NE1/4, W1/2SE1/4 120.00
30: N1/2NW1/4NE1/4 20.00

T. 7 S., R. 46 E.
Sec. 25: E1/2E1/2, NW1/4NE1/4 200.00
36: E1/2NE1/4, NE1/4SE1/4 120.00

T. 6 S., R. 46 E.
Sec. 1: Lot 2 40.00

T. 9 S., R. 46 E.
Sec. 11: SW1/4NE1/4 40.00

T. 7 S., R. 47 E.
Sec. 30: Lots 1, 2, 3, & 4 166.46
31: Lots 1 & 2, NE1/4NE1/4, S1/2SW1/4NE1/4 142.40

Management Action

- Emphasize acquisition of private lands within critical wildlife habitat areas.
- Acquire public access easements to enhance recreation opportunities.
- Resolve unauthorized use of the public lands through termination, authorization by lease or permit, exchange or sale.

MINERALS

Resource Condition Objective

- Maintain the availability of lands for mineral leasing and mineral material production consistent with watershed and other resource objectives.
- Maintain the availability of lands for locatable mineral exploration and development consistent with the “unnecessary or undue degradation” standard (43 CFR 3809).

Allocation

Mineral Leasing

Oil and Gas (Refer to Table 14 and Map 12)

- Allow leasing on 95,692 acres of public

domain with standard protective stipulations.

- Restrict leasing on 47,460 acres of public domain with critical deer summer habitat by adding a summer season, protective stipulation to the lease restricting operations on the lease during the period May 15 to June 15.
- Restrict leasing on 70,773 acres of public domain with critical winter habitat for bald eagles and mule deer by adding a winter season, protective stipulation restricting operations on the lease during the period November 1 to April 15.

Geothermal

- Allow leasing on 214,125 acres of public domain with standard protective stipulations and/or other protective stipulations as determined from site specific environmental analysis prior to issuance of a lease.

Locatable Minerals

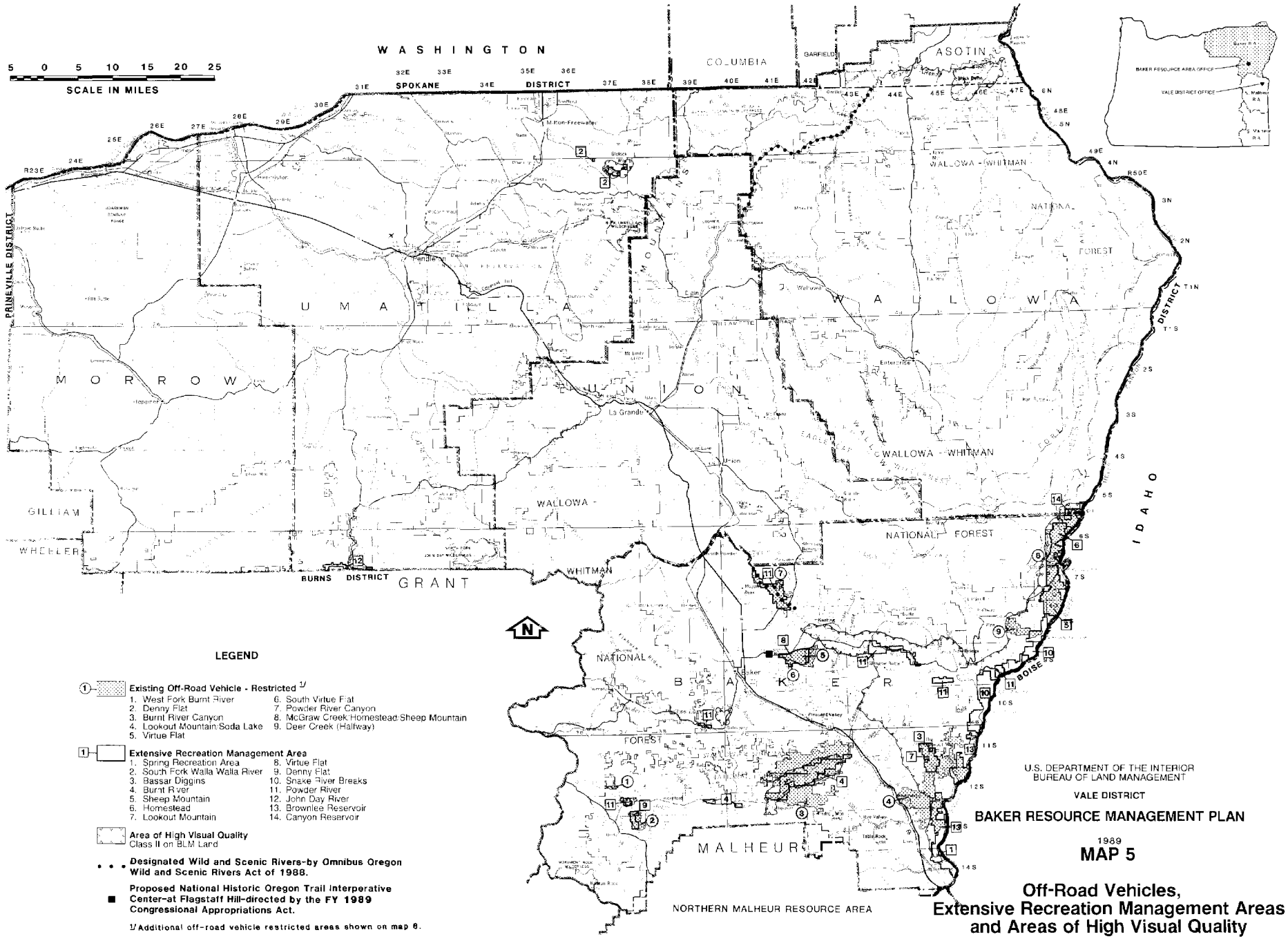
- Allow exploration and development on 214,125 acres of public domain consistent with the "unnecessary or undue degradation" standard (43 CFR 3809).

Mineral Materials

- Allow exploration and development on 214,125 acres of public domain as long as other resource objectives are met. Allow development of community pits where compatible with other resource objectives.

Management Action

- Update tie automated oil and gas lease stipulation files to implement the leasing decisions.
- Increasemonitoring of active operations to 2 or more inspections per year, contingent on funding.
- On recent mining operations, establish baseline surface disturbance that existed prior to implementatiorof the 43 CFR 3609 regulations.
- Prepare and implement monitoring plans for exploration and mining within the Connor Creek Mineral Priority Management Area (MPMA), Mormon Basin/Burnt River MPMA. Lime MPMA, Pine Creek WPMA, Elk Creek MPMA, Magpie Peak MPMA, Bay Horse MPMA, and Hereford MPMA.
- Inventor{ for mineral materials on scattered tracts of pubic domain located near 13 small communities.



LEGEND

① **Existing Off-Road Vehicle - Restricted** 1/

1. West Fork Burnt River
2. Denny Flat
3. Burnt River Canyon
4. Lookout Mountain/Soda Lake
5. Virtue Flat
6. South Virtue Flat
7. Powder River Canyon
8. McGraw Creek/Homestead/Sheep Mountain
9. Deer Creek (Halfway)

[1] **Extensive Recreation Management Area**

1. Spring Recreation Area
2. South Fork Walla Walla River
3. Bassar Diggins
4. Burnt River
5. Sheep Mountain
6. Homestead
7. Lookout Mountain
8. Virtue Flat
9. Denny Flat
10. Snake River Breaks
11. Powder River
12. John Day River
13. Brownlee Reservoir
14. Canyon Reservoir

Area of High Visual Quality
Class II on BLM Land

Designated Wild and Scenic Rivers-by Omnibus Oregon Wild and Scenic Rivers Act of 1988.

Proposed National Historic Oregon Trail Interperative Center-at Flagstaff Hill-directed by the FY 1989 Congressional Appropriations Act.

1/ Additional off-road vehicle restricted areas shown on map 6.

NORTHERN MALHEUR RESOURCE AREA

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VALE DISTRICT

BAKER RESOURCE MANAGEMENT PLAN

1989

MAP 5

Off-Road Vehicles, Extensive Recreation Management Areas and Areas of High Visual Quality

National Park Service

Historic Routes and Significant Resources

OREGON NATIONAL HISTORIC TRAIL

The enabling legislation (Public Law 95-625 amendment to the National Trails System Act, PL 90-543) authorized a primary route between Independence, Missouri, and Oregon City, Oregon. Table 1 summarizes the approximate miles by state. The general route is shown on map 1. An official route map for the Oregon National Historic Trail, as required by the National Trails System Act, has been prepared, and the route has been digitized using ARC-INFO, a geographic information system (GIS). The description of the route will be published in the *Federal Register*. If new research identifies more accurate route locations, an official notice of correction will be published.

When the Oregon National Historic Trail legislation was passed, Congress decided to concentrate on the most important right-of-way for purposes of official designation and marking. Where an alternative right-of-way of equal importance existed, both were selected. The years 1841–48 were designated for determining the primary route to avoid confusion with the route of the forty-niners to California. This route also includes the Barlow Road between The Dalles and Oregon City, Oregon, which was developed in 1846. Congress authorized a single route, except for a 126-mile branch (South Alternate Route) between Three Island Crossing, Idaho, and eastern Oregon, and a 114-mile branch (Columbia River Route) used between 1841 and 1846 extending from The Dalles to Oregon City, Oregon (see maps 1 and 7-9).

The route of the Oregon National Historic Trail begins at Independence, Missouri. The emigrants followed the older Santa Fe Trail to the southwest for about 40 miles, then headed northwest for the Platte River. Emigrants crossed the rolling hills of the eastern Great Plains, bisected by numerous rivers and streams, such as the Wakarusa, Kansas, Red Vermillion, Black Vermillion, and Big Blue Rivers. They followed the Little Blue River valley (into Nebraska), and when the river turned south, they continued northwest to the broad Platte River valley.

The emigrants followed the Platte River to its confluence in western Nebraska, crossed the South Platte near California Hill, and descended in the North Platte valley through Ash Hollow. After Ft. Laramie, the first major stopping place on the trail, emigrants moved northwest over the dry ranges connecting the meanders of the North Platte River, crossed and left the North Platte at present-day Casper, and

Table 1: Oregon National Historic Trail — Route Miles by State

State	Miles
Missouri	16
Kansas	165
Nebraska	424
Wyoming	491
Idaho	510
Oregon	524
Total	**2,130**

headed southwest across the high range country of Wyoming toward Independence Rock.

After South Pass, which many emigrants considered to be the halfway point of their trip, they crossed the Dry Sandy and the Big Sandy and eventually reached the welcome water, grass, and shade of the Green River. They then proceeded to Fort Bridger, the second of the major resupply points along the trail, which was then a small and isolated fur trading post.

After Fort Bridger the emigrants went over the rugged Bear River Divide, followed the Bear River into Idaho, and then left it to head across the desert toward Fort Hall, on the banks of the Snake River. Fort Hall was a fur trading post operated by the Hudson's Bay Company. It was also a supply point and aid station for the weary emigrants.

After Fort Hall the emigrants followed the Snake River through southern Idaho. They forded the Snake River at Three Island Crossing whenever possible. Once across, they skirted the mountains north of the Snake toward Fort Boise, another Hudson's Bay Company trading post, and another spot where rest and resupply were possible before crossing the Snake. Approximately half of the emigrants were unable to cross the river at Three Island Crossing, and were forced to use the 126-mile South Alternate Route. Days of hot and dusty travel along the south bank of the Snake awaited emigrants before they could rejoin the main route just west of Fort Boise.

After Fort Boise the emigrants crossed the arid rangeland of eastern Oregon, broken by the Malheur River, and met the Snake for the last time at Farewell Bend. They then turned northwest toward the Columbia River at The Dalles and the Blue Mountains. After the taxing crossing of the Blue Mountains, emigrants turned west and crossed north-central Oregon. They forded the John Day and Deschutes Rivers, finally descending into the Columbia River valley just east of The Dalles.

The overland portion of the trail ended at The Dalles until 1846, when the Barlow Road was opened. Before that time, the emigrants built rafts to travel down the Columbia River to Fort Vancouver, and then up the Willamette River to Oregon City. After 1846 most emigrants preferred to head south from The Dalles to Tygh Valley and then west across the southern shoulder of Mount Hood on the Barlow Road. They then crossed the Cascade Range at Barlow Pass and descended into Oregon City.

CALIFORNIA NATIONAL HISTORIC TRAIL

According to an opinion of the U.S. Department of the Interior's Office of the Solicitor (see appendix C), only those routes and cutoffs identified in the 1987 NPS *Feasibility Study* constitute the authorized route of the California National Historic Trail (see maps 1-6). Table 2 summarizes the approximate number of trail miles by state.

An official route map for the California National Historic Trail, as required by the National Trails System Act, has been prepared, and the routes have been digitized in a GIS format using ARC-INFO. The description of the routes will be published in the *Federal Register*. If new research identifies more accurate trail locations, an official notice of correction will be published.

The NPS 1987 *Feasibility Study* identified the following routes and cutoffs as constituting the congressionally authorized California National Historic Trail. (To help locate the trails, geographic references to present-day towns and highways are used, even though these designations may not have existed during the period being described.)

Main Trail from Independence (Missouri) to the Humboldt Sink(Nevada)

The primary route of the Oregon-California Trail left from Upper Independence Landing at Wayne City and ascended the steep river bluffs to Independence, Missouri, where emigrants outfitted for the journey. Referred to as the Independence Road, the route followed the older Santa Fe Trail southwest out of Independence, crossed the Big Blue River at Red Bridge crossing, and intersected the Westport Road west of present-day Gardner, Kansas. Turning northwest from the Santa Fe Trail, the trail intersected the Westport-Lawrence Road on the Wakarusa River, crossed the Wakarusa River near Lawrence and the Kansas River near Topeka, intersected the Fort Leavenworth–Kansas River Route, and paralleled the north side of the Kansas River. After crossing Red Vermillion Creek, the trail turned north to intersect the St. Joe Road west of present-day Marysville, Kansas.

Table 2: California National Historic Trail — Route Miles by State

State	Miles
Missouri	18
Kansas	290
Nebraska	1,067
Colorado	16
Wyoming	1,088
Idaho	457
Oregon	424
Utah	349
Nevada	1,136
California	994
Total	***5,839***

In Nebraska the trail paralleled the north side of the Little Blue River, intersecting the Oxbow Trail on the south bank of the Platte River (15 miles west of Fort Kearny). Here the trail followed the south bank of the Platte River west to the fork of the Platte. Emigrants followed the south bank of the South Platte and crossed at one of three sites. The lower crossing was opposite O'Fallon's Bluff (2 miles east of Sutherland, Nebraska), the middle crossing was at Ogallala, and the upper crossing (the most popular) was 4 miles west of Brule. After crossing the Platte the routes came together at Ash Hollow on the south bank of the North Platte River.

The main trail headed northwest, following the south bank of the North Platte River, past the landmarks Courthouse, Jail, Chimney, and Castle Rocks to Fort Laramie. This was the most important military post and emigrant resupply point along the entire trail. From here the main trail stayed on the south side of the river but divided into numerous branches — some up on the plateau and others in the floodplain of the North Platte River. The route passed near Ayres Natural Bridge and rejoined the North Platte River 4 miles southeast of Glenrock. The main trail turned west and followed the south bank of the North Platte to the area of Fort Caspar.

West of Fort Caspar the trail route split on the way to Avenue of Rocks, with the main trail coming south through Emigrant Gap and continuing southwest to meet the Sweetwater River near Independence Rock. Here the trail turned west and followed the Sweetwater past Devil's Gate and Split Rock to Three Crossings, where the primary route crossed the Sweetwater four times within 9 miles. Some emigrants avoided these crossings by swinging south on the aptly named Deep Sand route.

After passing Ice Slough the trail crossed the Sweetwater River for the last time at Burnt Ranch and continued southwest to South Pass and the Continental Divide. After crossing Dry Sandy Creek, emigrants arrived at the Parting of the Ways. The primary trail followed a well-watered route southwest, crossing Little Sandy Creek and Big Sandy River, and then heading for the Green River at Lombard Ferry. There were many braids of the main trail and alternate routes between Big Timber Station (6 miles northeast of Lombard Ferry) and Granger, but the primary route crossed the Green River at Lombard Ferry, headed south along the river to the site of the Bridger-Fraeb trading post at Palmer Crossing, and then turned southwest to Granger. From Granger, the trail continued southwest, passed Church Butte, and intersected Blacks Fork, which it followed to Fort Bridger. At Fort Bridger the trail headed north over the Bear River divide to Bear River. The main trail followed the east side of the Bear northward toward Idaho.

Two miles east of the Idaho border the trail route varied, with emigrants trying to find better routes along the Bear River and over the Sheep Creek Hills to Montpelier. The trail then headed north along the east bank of the Bear River and passed through Soda Springs. At Sheep Rock the main trail headed northwest up the Portneuf Valley, crossed the Portneuf River north of the present Chesterfield Reservoir and turned west along Jeff Cabin Creek to the Narrows of Ross Fork Creek. The trail followed Ross Fork to Fort Hall on the Snake River

(the Hudson's Bay Company post). At Fort Hall the primary route followed the east bank of the Snake River south to American Falls and past Massacre Rocks and Register Rock. Three miles east of Tule Island the route split, with the primary route heading southwest to the Raft River crossing.

After crossing the Raft River, the Oregon Trail headed west and the California Trail turned south through the Raft River valley to City of Rocks. The trail climbed through Pinnacle Pass (near Twin Sisters) and Granite Pass, and then dropped to Goose Creek. Emigrants followed Goose Creek south, through the northwest corner of Utah and into Nevada.

Through the Great Basin the trail proceeded southwest, followed Goose Creek, Little Goose Creek, and Rock Spring Creek, through Thousand Springs Valley, and then along West Brush Creek to Willow Creek. At Humboldt Wells (the source of the Humboldt River) the trail followed the north bank of the Humboldt River southwest through Elko, Nevada. The main route stayed near the Humboldt River and passed through narrow Carlin Canyon (during periods of high water, this route was almost impassable). West of Carlin the trail climbed Emigrant Pass and descended through Emigrant Canyon to rejoin the Humboldt at Gravelly Ford. Here the route divided to follow the north and south sides of the river and rejoined at Humboldt Bar, where a series of branches followed various routes across the Sierra Nevada.

Eastern Feeder Routes

Both prior to and during the gold rush years various river towns competed for the lucrative outfitting trade. The following are the routes that developed from east to west along the Missouri River.

St. Joe Road— 1844

Starting in 1844 many emigrants traveled up the Missouri River to St. Joseph to start their journey west, saving two weeks of travel time. Between 1849 and 1851 more emigrants departed from St. Joseph than any other jumping-off point along the Missouri. After leaving the Missouri River bottoms, the trail extended through rolling country to the west, crossing the Wolf and Nemaha Rivers. After intersecting the Fort Leavenworth–Big Blue River route at Marysville, Kansas, the trail crossed the Big Blue River and joined the Independence Road in open prairie 3 miles east of Hanover.

Old Fort Kearny Road (Oxbow Trail)1850

The Old Fort Kearny Road started near the original site of Fort Kearny on Table Creek at Nebraska City. Opened by the U.S. Army in 1847 as a supply road to the new Fort Kearny, the trail was first used in 1850 by emigrants who were too impatient to wait for a ferry at Independence, St. Joseph, or Council Bluffs. After leaving the Missouri River about half way between St. Joseph and Council Bluffs, the road swung northwest toward the Platte. Near Skull Creek the route split. The primary route turned west and then northwest toward the Platte River. The Oxbow Trail alternate went north from Skull Creek to reach the Platte River west of Linwood, where it followed the south bank of the Platte to Deer Creek and met the main Oxbow Trail coming up from David City. The combined route continued along the south bank of the Platte and joined the primary Oregon-California Trail 15 miles west of Fort Kearny.

Council Bluffs Road— 1845

Another major starting point in the later 1840s and 1850s was at Council Bluffs (north of the mouth of the Platte River and across the Missouri River from Omaha). Emigrants could cross at the middle, upper, and lower Missouri River ferries, each following a slightly different route to the vicinity of Fremont, Nebraska, where they joined the main branch of the Council Bluffs Road.

From Fremont the Council Bluffs Road headed west along the north bank of the Platte River to Columbus, where the trail split briefly. The principal route stayed north of the Platte River to the fork. The trail then followed the north bank of the North Platte and entered Wyoming near the town of Henry. The Council Bluffs Road crossed the North Platte River and joined the primary Oregon-California Trail at Fort Laramie.

Central Cutoffs and Alternate Routes

The cutoffs and alternate routes along the central section of the Oregon-California Trail are described from east to west.

Julesburg Cutoff— 1859

After 1859 much of the emigrant and freight traffic on the California Trail continued southwest from the upper crossing of the South Platte River, along the south side of the river, to Julesburg, Colorado. The discovery of gold in 1858 made Julesburg a major stage station. This route added a few miles to the journey, but the stage station offered supplies, and travelers along Lodgepole Creek were able to avoid the difficult ascent of California Hill and the descent of Windlass Hill into Ash Hollow. The Julesburg Cutoff crossed the South Platte River near the present-day town of Ovid, Colorado, and headed north and then west along Lodgepole Creek. The trail turned north just east of Sidney, Nebraska, passed Courthouse and Jail Rocks, and rejoined the primary Oregon-California Trail on the North Platte River 4 miles west of Bridgeport.

Childs Cutoff— 1850

At Fort Laramie, where the Council Bluffs Road crossed the North Platte River to join the main trail on the south bank, Andrew Childs pioneered a new route in 1850 by staying on the north bank of the North Platte between Fort Laramie and Casper. It was tougher going than the main route, but it attracted some use in later years. The Childs Cutoff allowed emigrants to avoid the crush of wagon trains on the south bank, two crossings of the North Platte River, and contamination from diseases being spread along the main trail during peak travel years.

Seminoe Cutoff— 1853

The Seminoe Cutoff bypassed Rocky Ridge and several crossings of the Sweetwater River in Wyoming. Pioneered by a fur trapper named Seminoe, it extended between Warm Springs and Burnt Ranch. The route stayed south of the Sweetwater River. It was never very popular with emigrants, who liked to travel near water, but it was used by freighters and others wanting to pass the slower-moving emigrant wagons.

Lander Road— 1858

Frederick Lander laid out the Lander Road from Burnt Ranch, Wyoming, to Fort Hall, Idaho, and improved the trail from Fort Hall to City of Rocks. The Lander Road saved five days of travel. Emigrants used this route primarily during the 1860s, especially those heading to Oregon and to the Montana minefields.

The trail headed northwest out of Burnt Ranch, ascended Lander Creek, climbed over the Continental Divide at Jensen Meadows, and descended to the Big Sandy River. Continuing west, the trail crossed the New Fork and Green Rivers and passed north of Marbleton. After skirting the south flanks of Mount Thompson, the trail ascended La Barge Creek, climbed over Wagner Pass, and descended to Smiths Fork. It followed the Salt River north to Star Valley and the town of Auburn and then turned west to follow Stump Creek into Idaho.

The trail passed through Terrace Canyon, south of Grays Lake, and between the Limerock and Crater Mountains, crossing the Blackfoot

River, following the south bank of the river to the present Cutthroat Trout campground and heading west to the Portneuf River. After crossing the Portneuf, the trail headed west to meet the primary route of the Oregon-California Trail (coming up from the south) at the Narrows of Ross Fork Creek.

Sublette Cutoff— 1844

On the west side of South Pass numerous cutoffs and alternate routes were developed during the late 1840s. The Sublette Cutoff, first used in 1844 by the Elisha Stevens party, gradually gained favor over the older Fort Bridger Trail because emigrants avoided the long loop down to Fort Bridger and then back up toward Fort Hall, cutting 65 miles and three days off the trip. Its drawback was a lack of good water, including a 50-mile stretch of dry desert known as Sublette Flats. Emigrants continued to use both the Sublette and Fort Bridger routes, but the forty-niners showed a preference for the Sublette Cutoff.

The primary route of the Sublette Cutoff left the main Oregon-California Trail at Parting of the Ways and headed west across Sublette Flats. An alternate route traveled down the Oregon-California Trail to Little Sandy Crossing and swung northwest to intersect the principal cutoff route. After crossing the Little Colorado Desert, the trail crossed the Green River at one of three sites and headed south. At Willow Creek the cutoff split into numerous branches, with the main trail climbing west over Slate Creek Ridge, crossing Wheat Creek (where the Dempsey-Hockaday Cutoff went west), and turning south along the west foot of Commissary Ridge to cross Hams Fork south of Kemmerer Reservoir. The trail then turned northwest and ascended Quakenasp Canyon to Emigrant Springs at Pine Grove (with a connector trail going north to the Dempsey-Hockaday Cutoff). The main trail crossed Dempsey Ridge, descended the Rock Slide, and turned northwest to rejoin the primary Oregon-California Trail coming north from Fort Bridger.

Baker-Davis Road— 1852

In 1852 numerous alternate routes were pioneered from the Sublette Cutoff, as emigrants and gold-seekers sought to take advantage of this shortcut but wanted to avoid the 50-mile crossing of the waterless Sublette Flats. The Baker-Davis Road followed the Big Sandy River farther before turning northwest, thereby avoiding the long desert stretch that the principal cutoff crossed. The starting point for the Baker-Davis Road was 7 miles northeast of Lombard Ferry, just west of Big Timber station. The route crossed the Green River at Case Ferry and joined the Slate Creek Cutoff 2 miles west of Fontenelle, Wyoming.

Kinney Cutoff and Westside Kinney Cutoff 1852

The Kinney Cutoff had several routes and branches that crossed the Green River at four different ferry sites. The main cutoff left the primary Oregon-California Trail 3 miles northeast of Lombard Ferry and headed northwest along the west side of Green River. Four feeder routes came into the Kinney Cutoff from the more northerly Baker-Davis Road. The Westside Kinney Cutoff crossed the Green River at Lombard Ferry and traveled up the west side of the river to meet the other Kinney Cutoff routes at Fontenelle, Wyoming. Two miles west of Fontenelle, the Kinney Cutoff intersected the Baker-Davis Road at the start of the Slate Creek Cutoff.

Slate Creek Cutoff— 1852

The Slate Creek Cutoff was the western extension of the Kinney and Baker-Davis routes. The cutoff began near the Green River, 2 miles west of Fontenelle, Wyoming, and headed west to Emigrant Spring. The trail climbed over Slate Creek Ridge and met the main Sublette Cutoff near Rocky Gap.

Dempsey-Hockaday Cutoff– 1854

The Dempsey-Hockaday Cutoff was a more northerly variant of the Sublette Cutoff, leaving that cutoff at Wheat Creek and heading west. The cutoff crossed Hams Fork north of Lake Vina Naughton, climbed over Dempsey Ridge, and turned northwest to intersect the primary Oregon-California Trail at Big Hill, east of Cokeville, Wyoming.

Hastings Cutoff— 1846

Lansford Hastings believed the best route to California lay directly through the Great Salt Lake Desert. In 1846 Hastings convinced about 80 wagons of late-starting emigrants to try his new route; the last of them was the ill-fated Donner-Reed party. As news spread of the Donner-Reed disaster in the Sierra, the Hastings Cutoff was thoroughly discredited. A few foolhardy gold-rushers used the route in 1849 and 1850, but after 1850 the route was never used again. However, the section of trail from Fort Bridger to Salt Lake City was heavily used by Mormon emigrants and those using the Salt Lake Cutoff.

The Hastings Cutoff started from Fort Bridger and headed southwest, crossing Bear River, passing The Needles and Cache Cave, and traversing Echo Canyon to the Weber River, which it followed to Henefer. From Henefer the trail followed by the first wagon company (the Harlan-Young party) continued down the narrow, tortuous Weber River canyon and emerged from the Wasatch Mountains south of present-day Ogden. The cutoff headed south from Ogden, along the western foot of the Wasatch Mountains, to Magna.

Because Hastings found the Weber River canyon descent to be extremely difficult for wagons, he advised the Donner-Reed party to go south through Main Canyon, over Hogsback Summit, and down East Canyon Creek. The route then turned up East Canyon Creek, through Little Emigration Canyon, over Big Mountain Pass to Mountain Dell, over Little Mountain Summit to Emigration Canyon and into the Great Salt Lake valley. When the Mormon Pioneer Company arrived in 1847, they improved the Main Canyon route, which became the preferred route for subsequent emigrants.

From Salt Lake City the Hastings Cutoff headed west across Tooele Valley, skirting the Oquirrh and the Stansbury Mountains. The trail then turned south to Hope Wells (the last good water) and crossed 83 grueling miles to Donner Spring, on the far side of the Great Salt Lake Desert. Turning northwest, the route climbed through Hastings Pass, crossed the Grayback Hills, and headed out onto the salt flats. The trail entered Nevada near Bidwell Pass.

On the other side of Bidwell Pass and Silver Zone Pass, the cutoff arrived at Big Springs in Goshute Valley, where it turned south and then west to the Sulphur Hot Springs in Ruby Valley. The trail crossed the Ruby Mountains by way of Overland Pass, emerging into Huntington Valley. The cutoff then followed Huntington Creek due north and through the South Fork Humboldt River Canyon, emerging on the Humboldt River to rejoin the primary route of the California Trail north of Moleen.

Salt Lake Cutoff— 1848

Having gotten mired down in mud trying to follow the Hastings Cutoff across the Great Salt Lake Desert in 1848, frontiersman Samuel Hensley led his pack train back to Salt Lake City. He decided to stay near the base of the Wasatch Mountains as he headed north, swinging through Ogden, crossing the Ogden River, and heading north to Utah Hot Springs and Brigham City. The Salt Lake Cutoff then turned northwest over Rattlesnake Pass and headed west across Curlew Valley. Passing Pilot Springs, Emigrant Spring, and Cedar Spring, the trail proceeded northwest into Idaho and the Raft River. Emigrants traveled west through the Raft River Narrows, crossed the Upper Raft River Valley, ascended Emigrant Canyon, and intersected the main California Trail coming from the south at the western end of City of Rocks.

When Hensley originally pioneered the route, he met members of the returning Mormon Battalion, who had just opened the Carson route

of the California Trail, and told them about his new cutoff. At City of Rocks the Mormon group found Hensley's pack route and took their wagons over it to Salt Lake City, thereby adapting the cutoff to wagon use. During the gold rush period, Hensley's Salt Lake Cutoff received heavy emigrant traffic.

Hudspeth Cutoff— 1849

Intending to shave days off their travel time by bypassing Fort Hall, a large wagon train that was captained by Benoni Hudspeth and guided by John J. Myers, split off the California Trail and headed west from Sheep Rock. After crossing Gem Valley the cutoff ascended the Fish Creek and the Portneuf Mountains and dropped into Henderson Canyon. Passing south of Lava Hot Springs, the trail crossed Marsh Valley, climbed over Cedar Mountain, and turned south along Dairy Creek and Little Malad River. The route turned west up Sublett Canyon and crossed the Sublett Range, passed through Sublett Creek Canyon, and emerged from the mountains near Sublett Reservoir. After crossing the Raft River valley, the cutoff rejoined the main California Trail on the west edge of the valley at Cassia Creek. The route took six days, rejoining the California Trail where it left the Raft River. While this route did not save a great deal of time, the remaining year's migration followed this new cutoff.

Western Routes

The western routes are described from east to west.

Carson Route— 1848

During the summer of 1848 members of the disbanded Mormon Battalion pioneered a new wagon trail east across the Sierra Nevada to the Humboldt River. Beginning in Pleasant Valley, east of what would become Placerville, they followed ridges to the crest of the Sierra at West Pass. They then made their way over Carson Pass and along the Carson River to a point near Fallon, Nevada. From there, they struck northerly to the bend in the Truckee River, where they joined the Truckee Route and followed it across the Forty-Mile Desert to the Humboldt Sink and the main California Trail.

As they headed east along the Humboldt River, the Mormons met Joseph Chiles, whom they told of their new wagon trail. Chiles decided to turn southwest at the Humboldt Sink and blaze a wagon trail to the Carson River. The main trail ran through what is now Lahontan Reservoir to Willow Station, across Churchill Valley to Fort Churchill, and up the Carson River to Dayton and then Carson City. The route turned southwest to Mormon Station in the town of Genoa, then south to Daggett Creek, down the western edge of the Carson Valley, and into California to West Carson Canyon. The trail emerged from the canyon at Hope Valley, turned southwest to the top of Carson Pass, the first summit on the route. Continuing west, the trail climbed through Emigrant Valley to West Pass. At 9,600 feet, Covered Wagon Summit was the highest point on the Carson Route and the second highest Sierra Nevada crossing on any emigrant route into California.

The trail then skirted Squaw Ridge to the Plasse Trading Post, descended to Tragedy Springs, and headed west (the route is now followed by U.S. 50). At Leek Springs the Carson Route turned northwest and followed Iron Mountain Ridge to intersect the Johnson Cutoff and Georgetown trails (coming in from the east) at Union House. The trail then turned southwest and passed through Pleasant Valley. At Diamond Springs, a spur trail went north 2 miles to Placerville. Travelers bound for Sacramento continued west to Mormon Tavern and on to Ten Mile House. Sutter's Fort was about 8 miles farther west along the south bank of the American River.

Walker River–Sonora Trail- 1852

In July 1852 merchants and promoters of the community of Sonora subscribed funds for a relief expedition to benefit stranded and starving gold-rushers. Emigrants taking advantage of the relief were expected to head towards Sonora in gratitude. Unfortunately, the high, rough road of the Sonora Pass and the unbroken trail caused great hardships and suffering for those emigrants who tried it.

The Walker River–Sonora Road left the Carson Route at Fort Churchill, turned south through Adrian Valley, and met the Walker River near Yerington, Nevada. The trail followed the Walker River south to Mickey Canyon, then north to rejoin the Walker River only 4 miles southwest of where they left it.

The trail generally followed the West Walker River to its headwaters on a route that wound to the 9,780-foot summit at Sonora Pass, the highest emigrant wagon pass in the United States. Emigrants traveled northwest down Summit Creek and then turned southwest, following ridges to Pinecrest. The route followed the ridge between the South Fork Stanislaus River and the North Fork Tuolumne River before descending along Sullivan and Sonora Creeks to Sonora.

Truckee Route— 1844

After pioneering the Sublette Cutoff west of South Pass, the Elisha Stevens party, accompanied by mountain men Caleb Greenwood and Isaac Hitchcock, continued on the Oregon Trail to the Raft River. They then followed the route used the previous year by the Walker party. After reaching the Humboldt Sink, a Paiute Indian chief whom they named "Truckee" took them west across the Forty-Mile Desert to the Truckee River south of Pyramid Lake. They followed the river through two difficult canyons to an opening over the Sierra Nevada, later known as Donner Pass. Facing snow in late November, they abandoned some of their wagons near Donner Lake and packed on to Sutter's Fort. They retrieved their wagons early the next year, becoming the first emigrant group to take wagons across the Sierra.

Emigrants taking the Truckee Route in later years crossed Humboldt Bar at the west edge of the Humboldt Sink and cut southwest across the Forty-Mile Desert to meet the Truckee River (this route is basically followed by I-80). Emigrants then followed the Truckee River west to Truckee Meadows (near Reno) then to Verdi. The trail climbed to the northwest along the south branch of Dog Creek to Dog Valley, turned southwest through Hoke Valley, crossed the Little Truckee River, and jogged south to Prosser Creek Reservoir, meeting the Truckee River east of Truckee, California, and following the river to Donner Lake.

At Donner Lake the trail split: the 1844 route went over Donner Pass, and an 1846 route (pioneered by Caleb Greenwood) went over Roller Pass; the routes rejoined at Summit Valley, and the trail descended to the South Yuba River, which it followed to Cisco Butte. From here the trail climbed to Crystal Lake, crossed Sixmile Valley and Carpenter Flat, and made the hazardous descent through Emigrant Gap into Bear Valley. The trail then followed the Bear River southwest, up Lowell Hill Ridge, across Deadmans Flat, over the top of Camel's Hump, and made a precipitous descent to Steephollow Crossing. This was the steepest descent encountered in the entire mountain crossing. Continuing southwest (on the north side of the Bear River), the route followed ridges above the river all the way to Johnson's Ranch.

Beckwourth Trail— 1851

Jim Beckwourth, a mulatto trapper, found an easier pass through the Sierra Nevada in the spring of 1851. With the backing of the mining operators at Bidwell Bar and the merchants of Marysville, he intercepted trains headed down the Truckee Route and guided them into Marysville. His route left the Truckee River at Truckee Meadows (near Reno) and headed northwest (a route later followed by U.S. 395). The route ascended Upper Long Valley, climbed over Beckwourth Pass, then headed west across Sierra Valley. It paralleled the Big Grizzly Creek up to Grizzly Valley, climbed over Grizzly Ridge, and descended along Greenhorn Creek to American Valley and the town of Quincy, California. Heading southwest, the trail crossed Meadow Valley, climbed over Bucks Summit, descended to Bucks Lake, crossed Grizzly Summit, and followed ridges south to Mountain House. Emigrants then followed Galen and Canyon Creeks to Bidwell Bar on the Feather River (now flooded by Lake Oroville).

From Bidwell Bar, travelers followed the freight and stage road to Marysville. The Beckwourth Trail was shorter for gold-rushers headed to Bidwell Bar but somewhat longer for those going to Marysville.

Applegate Traibr Southern Road to Oregon 1846

By 1846 a number of attempts had been made to find an alternative to the treacherous Columbia River Gorge route. Jesse Applegate, Levi Scott, and David Goff successfully led a group from Polk County, Oregon, down the Old Trappers Trail to California as far south as Ashland, Oregon. Turning east, they dipped into the northeastern corner of California, swung south around Goose Lake, and headed southeast through High Rock Canyon and over the Black Rock Desert. They finally reached the Humboldt River and the main California Trail at Lassen Meadows (the northern tip of today's Rye Patch Reservoir). Soon a number of Oregon-bound emigrants were persuaded to leave the established Oregon Trail and try this new route. It was an arduous trip that stretched much longer than planned.

From Lassen Meadows, westbound emigrants headed northwest to Rabbithole Springs, across the 50-mile Black Rock Desert to Black Rock Springs — the long-awaited "oasis in the desert" and the first adequate water since leaving the Humboldt River. The trail continued north and west, passing over Fortynine Pass and into California, skirting Upper Alkali Lake to the south, and climbing northwest through Fandango Pass to Goose Lake. From here the trail headed west, reaching Bloody Point, the site of several fatal conflicts between emigrants and the Modoc Indians.

The Applegate Trail swung around the southern edge of Lower Klamath Lake to Willow Creek. then headed northwest to Lake Miller in Oregon, and continued west across the Cascade Mountains, and descended to Tyler Creek. The route turned northwest to Ashland and Medford, followed the south bank of the Rogue River to Grants Pass, and then headed north (this route is now followed by I-5).

The trail passed Canyonville, crossing the South and North Umpqua Rivers, Calapooya Creek, and following Cabin Creek north to Pleasant Valley, where the trail split (with the western branch heading north and the eastern branch heading northeast and following the west bank of the Willamette River through Eugene), and rejoined 2 miles south of Monroe. The trail then paralleled the west side of Muddy Creek to Corvallis, and north along the route now followed by Oregon 99W. After crossing Calloway Creek, the trail turned northwest and arrived at Rickreall Creek, east of Dallas, Oregon.

Nobles Trail— 1852

The Nobles Trail was opened by William H. Nobles, with the financial backing of merchants in Shasta City (west of Redding, California). Emigrants using the Nobles Trail left the main California Trail at Lassen Meadows and followed the Applegate Trail west. At Black Rock Springs the Nobles Trail turned southwest to Granite Creek. By 1856, however, the discovery of Trego Hot Springs made it possible to leave the Applegate Trail at Rabbithole Springs and head due west to Granite Creek, shortening the journey by about 23 miles. From Granite Creek the Nobles Trail headed west from spring to spring (Gerlach Hot Spring, Deephole Spring, Buffalo Springs) to Smoke Creek Canyon and into California.

The trail then turned south, west, then south again to Honey Lake Valley, and followed the Susan River west to Susanville. On the west side of Honey Lake Valley the trail began to ascend the Sierra Nevada, passing Big Spring and turning northwest to the junction with the Lassen Trail near Feather Lake. The Nobles Trail followed the Lassen Trail north for 3 miles, then it headed north and west to Black Butte Creek. Here the trail turned south and entered the area of Lassen Volcanic National Park, then it climbed over Nobles Pass and descended to Manzanite Creek, which it followed to Shingletown. The route followed the Shingle Creek drainage for a few miles and then turned southwest to Fort Redding, then northwest, crossing the Sacramento River and reaching Shasta City .

Lassen Trail— 1848

In 1848 Peter Lassen and a small wagon train left the Humboldt River on the Applegate Trail to reach his ranch in the northern Sacramento Valley. Lassen turned off the Applegate Trail at the southern end of Goose Lake and led his party down the Pit River and beyond, until the group became demoralized and in need of provisions. Fortunately, two Oregon groups headed for the goldfields (one a wagon party led by Peter Burnett and the other a packing party) caught up with Lassen's group about 50 miles from his ranch. The Oregonians provided aid and helped the stragglers reach their destination.

MORMON PIONEER NATIONAL HISTORIC TRAIL

The enabling legislature authorized a route commemorating the 1846–47 journey of the Mormon Pioneer party (see maps 1 and 10-11). Table 3 summarizes the approximate number of trail miles by state.

The official route map for the Mormon Pioneer National Historic Trail has been prepared, as required by the National Trails System Act, and the route has been digitized in a GIS format using ARC-INFO. The description of the route will be published in the *Federal Register.* If new research identifies more accurate trail locations, an official notice of correction will be published.

The route begins at Nauvoo, Illinois, a former Sauk and Fox Indian village on the east bank of the Mississippi River. Under the leadership of Brigham Young, the original pioneer party started February 4, 1846, crossing by ferry to the Iowa shore. The route in Iowa commenced at Sugar Creek Camp, where the main camp began to roll on March 1, 1846, traveling up the east side of the Des Moines River, fording the river near Bonaparte, then paralleling the southern border of Iowa to the Corydon vicinity. There they turned northward across the prairie to near Osceola, then traveled westward to the Council Bluff area and the Missouri River, arriving there on June 13, 1846.

Table 3: Mormon National Historic Trail — Route Miles by State

State	Miles
Illinois	2
Iowa	317
Nebraska	511
Wyoming	511
Utah	74
Total	***1,415***

The Mormon pioneers crossed the Missouri River and entered present-day Nebraska on June 29, 1846. They established the Mormon settlement of Winter Quarters on the west bank, which was then frontier lands of the Omaha Indian Nation. That summer, advance parties traveled as far as the Elkhorn, Loup, and Niobrara Valleys in quest of desirable wintering sites.

The trek across Nebraska began from Winter Quarters in April 1847. The pioneers assembled first at the Crossing of the Elkhorn, then later at Liberty Pole Camp on the bank of the Platte, near Fremont. They followed the broad floodplain of the Platte River to Columbus, turned up the Loup Fork to pass Pawnee Mission, then crossed the Loup River near the 98th meridian and returned to the Platte River near Grand Island.

Brigham Young and his followers paralleled the north side of the Platte, measuring and recording their travel for future trail guidance. Upon reaching the junction of the North and South Forks of the Platte, they chose to move along the northern branch of the river where, on May 18, they found themselves opposite the camping grounds of Ash Hollow. Leaving the Sand Hills, they passed Chimney Rock, Courthouse Rock, and Scotts Bluff, and they left Nebraska on May 31 near Henry, where they could see the snow of Laramie Peak far to the west.

Brigham Young and his pioneers entered present-day Wyoming on June 1, 1847, and camped in the vicinity of Fort Laramie (Ft. William), where they were joined by the Mississippi Branch of Latter-day Saints. After conferring with the fort's inhabitants about trail conditions, they forded the North Platte River and continued west following the Oregon Trail to the Casper area, where they established the Mormon Ferry to recross the river.

They departed the North Platte to continue overland to the Sweetwater River and Independence Rock. The pioneers then proceeded up that drainage to cross the Continental Divide at South Pass. In the Pacific drainage, they followed the Big Sandy and its tributary to the Green River.

Leaving the Green River Valley, the Mormon pioneer party continued along the Oregon Trail to Fort Bridger, then followed the Donner-Reed route, crossing the Bear River and departing the state of Wyoming in the vicinity of the Needles.

Entering present-day Utah, Brigham Young and his followers passed Cache Cave, then proceeded down the precipitous Echo Canyon, followed the Weber River north to Henefer, then turned away from the river and up the main canyon to Hogsback Summit. There they had their first real view of the Wasatch country. They continued along the Donner-Reed route descending to East Canyon, then south along the creek to Mormon Flats. Here they turned west following Little Emigration Canyon to the bald and rocky crest of Big Mountain Pass. They rough-locked their wagon wheels for a straight-down descent to Mountain Dell Canyon, where they took a southerly direction. The route then swung west over the dividing ridge of Little Mountain summit, the last summit on the long trail, and to a sharp descent to Emigration Canyon. The final lap was on the short but treacherous winding and narrow canyon floor of "This is the Place." The pioneer scouts first reached the Valley of the Great Salt Lake on July 21, 1847, and the main body on July 22; due to illness, Brigham Young followed the main body two days later.

PONY EXPRESS NATIONAL HISTORIC TRAIL

The enabling legislation authorized a route of approximately 2,000 miles, including the original route and subsequent route changes, extending from St. Joseph, Missouri to Sacramento, California, as described in the National Park Service's 1987 *Feasibility Study*. Separate legislation in 1992 and a subsequent *Feasibility Study* resulted in the secretary of the interior adding the route from Sacramento to San Francisco in 1997. Table 4 summarizes the approximate number of trail miles by state and includes the mileage from Sacramento to San Francisco.

The general route is shown on maps 1-6. It is difficult to identify a specific set of miles for the Pony Express route because it changed through time, particularly after its starting point moved to Atchison, Kansas.

An official route map for the trail, as required by the National Trails System Act, has been prepared, and the route has been digitized in a GIS format using ARC-INFO. The description of the route will be published in the *Federal Register*. If new research identifies more accurate trail locations, an official notice of correction will be published.

For the most part the eastern segment of the route follows the Oregon, California, and Mormon Pioneer trails through Missouri, Kansas, Nebraska, and Wyoming. In eastern Kansas the route initially avoided the St. Joe Road of the Oregon-California Trail, following a network of established roads and trails until meeting the St. Joe Road and the main Oregon-California Trail slightly farther west.

In Nebraska the Pony Express Trail followed the main trail to and along the south bank of the Platte to the junction of the South Platte, which the Pony Express followed into Colorado to Julesburg. Turning

Table 4: Pony Express National Historic Trail — Route Miles by State

State	Miles
Missouri	1
Kansas	139
Nebraska	441
Colorado	16
Wyoming	540
Utah	241
Nevada	404
California	223
Total	**2,005**

northwest, the trail reentered Nebraska and continued back to the North Platte River to rejoin the main Oregon-California Trail into Wyoming. In Wyoming the route followed the main trail route along the North Platte to present-day Casper, then followed the Sweetwater River until crossing the Continental Divide at South Pass. The Pony Express Trail left the Oregon-California Trail at Fort Bridger and followed the Mormon Pioneer Trail and the Hastings Cutoff of the California Trail southwest into Salt Lake City.

The Pony Express Trail left the Hastings Cutoff and headed south to avoid the Great Salt Lake. It then proceeded westerly through the barren, desolate land to Nevada. The next portion of the route covered high desert and crossed several mountain ranges to Carson City. Then the trail turned south to Genoa, where it reconnected with the Johnson Cutoff of the California Trail. It followed the Carson River and scaled the Sierra Nevada at Echo Summit, descended the South Fork of the American River to Placerville and then to Sacramento, following what is now old U.S. Highway 50. The later Kingsbury-McDonald route over Johnson Pass also descended along the South Fork to Placerville, cutting out about 12 miles.

Significant Resources

The National Trails System Act provides for the identification of high-potential sites and segments, based on criteria established in the act. These criteria include historic significance, the presence of visible historic remnants, scenic quality, and relative freedom from intrusion. High-potential segments are those segments of a trail that afford high quality recreational experiences along a portion of the route having greater than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route. Each site or segment must have the potential to interpret the trails' historical significance and to provide opportunities for high-quality recreation.

This plan acknowledges that the lists of high-potential sites and segments for each trail must be flexible and will require periodic updates. Under both alternatives a mechanism is provided to modify and revise high-potential sites and segments as new information becomes available, or if the integrity of trail resources becomes compromised.

All of the information on sites and segments gathered during the planning process and submissions received from resource managers and trail organizations through September 18, 1997, has been entered into the database. This database is available at the Long Distance Trails Office. In the future it will be linked to the GIS mapping effort completed as part of this planning process.

Revisions have been made to the lists of high-potential sites and segments for each trail to reflect comments received during the various review processes and to reflect research conducted by the Long Distance Trails Office since the release of the *Draft Comprehensive Management and Use Plan / Draft Environmental Impact Statement.*

OREGON NATIONAL HISTORIC TRAIL: HIGH-POTENTIAL SITES AND SEGMENTS UPDATE

Modifications to the original listing of sites and segments identified in the *Comprehensive Management and Use Plan* for the Oregon National Historic Trail have resulted in the addition of 5 segments and 20 sites, the modification of 1 segment, and the deletion of 7 sites. Since the publication of the draft plan the Long Distance Trails Office has refined the list of high-potential resources associated with this trail. Four sites have been added, 10 have been deleted, and 15 names of sites or segments have been modified (see maps 7-9, and appendixes G and H).

Table 5 indicates the number of high-potential sites and segments by state. Table 6 displays the mileage of segments by state.

This list can be modified in the future to add sites and segments that additional research might indicate to be worthy of inclusion. Sites and segments can also be deleted from this list.

Table 5: Oregon National Historic Trail — High-Potential Sites and Segments by State

State	Sites	Segments
Missouri	7	0
Kansas	14	1
Nebraska	17	0
Wyoming	32	5
Idaho	32	3
Oregon	27	6
Washington	2	0
Total	***131***	***15***

Table 6: Oregon National Historic Trail — Mileage of High-Potential Segments

State	Number of Segments	Number of Miles
Kansas	1	6
Wyoming	5	243
Idaho	3	114
Oregon	6	82
Total	***15***	***445***

CALIFORNIA AND PONY EXPRESS NATIONAL HISTORIC TRAILS: HIGH-POTENTIAL SITES AND SEGMENTS

From the extensive list of submissions, 244 sites and 52 segments listed in tables 7 and 8 have been identified as high-potential (for a more comprehensive description of these resources, see appendixes E and F and maps 2-6). The segments total 2,077 miles. Some of these sites and segments have already been classified as high-potential in the plans for the Oregon and Mormon Pioneer Trails.

Since the publication of the draft plan, the Long Distance Trails Office has refined the list of high-potential resources associated with this trail. These changes are the result of the opinion by the U.S. Department of the Interior's Office of the Solicitor, public comments, and additional research conducted by the Long Distance Trails Office. Seven segments were deleted, seven were added, and the names of seven segments were modified. A total of 37 sites have been deleted, 14 have been added, and the names of 26 sites have been modified (see maps 2-6 and appendixes E and F).

This list of high-potential resources can be modified in the future to add sites and segments that additional research might indicate to be worthy of inclusion. Sites and segments can also be deleted from this list.

A list of sites and segments that may merit inclusion as high-potential sites and segments in the future was developed during the planning process and is part of the resource database maintained at the Long Distance Trails Office.

Table 7: California and Pony Express National Historic Trails — High-Potential Sites and Segments by State

State	Sites	Segments
Missouri	11	0
Kansas	23	1
Nebraska	27	0
Wyoming	39	8
Utah	25	5
Idaho	16	3
Nevada	39	15
Oregon	15	3
California	49	17
Total	**244**	**52**

Table 8: California and Pony Express National Historic Trail — Mileage of High-Potential Segments

State	Number of Segments	Number of Miles
Kansas	1	16
Wyoming	8	356
Utah	5	588
Idaho	3	62
Nevada	15	584
Oregon	3	49
California	17	422
Total	**52**	**2,077**

MORMON PIONEER NATIONAL HISTORIC TRAIL: HIGH-POTENTIAL SITES AND SEGMENTS UPDATE

The original listing of sites and segments identified in the 1981 *Comprehensive Management and Use Plan* for the Mormon Pioneer National Historic Trail has been updated, resulting in the addition of 3 segments, the modification and extension of 3 segments, the addition of 7 sites, and the deletion of 33 sites. The plan did not specify mileages for some of the initial protection segments, but an examination of the document maps reveals about 40 miles of trail were identified as high-potential. This plan extends that mileage to 307 miles.

Sites were deleted from the list of high-potential sites because they failed to meet the criteria described in the legislation or were not associated with the pioneer trip of 1846–47. The original plan rated most of these sites C-2, indicating that they were of low priority and related to the period after the pioneer migration. However, many of these sites were part of the expanded high-potential segments and would continue to receive the protection such designation entails. Other sites have been deleted because there is disagreement as to their location.

Since the publication of the draft plan the Long Distance Trails Office has refined the list of high-potential resources associated with this trail. A total of 5 sites have been added, 1 has been deleted, and the names of 10 sites or segments have been modified (see maps 10-11, and appendixes I and J).

Table 9 indicates the number of high-potential sites and segments by state. Table 10 displays the mileage of segments by state.

This list can be modified in the future to add sites and segments that additional research might indicate to be worthy of inclusion. Sites and segments can also be deleted from this list.

Table 9: Mormon Pioneer National Historic Trails — High-Potential Sites and Segments by State

State	Sites	Segments
Illinois	2	0
Iowa	10	0
Nebraska	12	0
Wyoming	30	4
Utah	5	2
Total	**59**	**6**

Table 10: Mormon Pioneer National Historic Trail — Mileage of High-Potential Segments

State	Number of Segments	Number of Miles
Wyoming	4	212
Utah	2	95
Total	**6**	**307**

U.S. Forest Service

Resource Inventory

Environment

Geology

The Scenic Byway geology from I-84 all the way up Willow Creek consists of many layers of lava flows. Lava flow thicknesses range from 10 to 100 feet. Individual flows rippled from fissures or cracks in the earth's surface and spread over tens of miles in a few hours. In the 10 million year period between 6 and 16 million years ago, sporadic outpourings of molten, highly fluid lava spread out over the landscape. In some cases, many thousands of years passed between lava flows. In other cases, successive flows occurred immediately.

What is seen now, as a result of six million years of erosion, are glimpses of lava flow outcroppings in roadcuts or steep banks carved by streams. Often, one, two, or more individual flow layers are visible. Sometimes. thin reddish colored layers are evident between successive lava flows. The thin beds are evidence of ancient soils that developed on the surface of the lower flow. It was later cooked and compressed when the next flow occurred. Iron oxides concentrated in the soil provide the reddish hues.

When lava cools, it sometimes forms columns that appear as hexagonal tiles if viewed from the top surface. From the side, flows often display a series of regular, parallel breaks in the rock that appear as a series of side-by-side columns. Geologists have determined that the columns form perpendicular to the direction of flow.

There are several locations along the road upstream of Willow Creek Dam that offer excellent opportunities to stop and look at the rocks closely.

At Cutsforth Park, the geology changes and lighter colored andesite flows are exposed. These rocks share an extrusive volcanic origin with the basalts but differ chemically. Just beyond sight from the road, large blocks of andesite lie in jumbled disarray with large trees growing out of cracks and between the large blocks. There are also small caves and tunnels formed by blocks lying next to and on top of each other.

Above Cutsforth Park the geology and topography change dramatically. From about the Umatilla National Forest boundary, the road and surrounding terrain steepens. Thin seams of coal can be found near Willow Creek, but the coal beds are too thin and sporadic to be of commercial value. Farther up the road, a variety of interbeded continental sedimentary rocks, including sandstone, siltstone, and shale are exposed in the streambed of a cascading waterfall.
From a short distance below to the summit of the Byway, basement rock of the Blue Mountains exist. The bedrock consists of altered sedimentary and igneous rocks about 150 to 200 million years old. Relative to the age of the earth, these rocks are very young. Rock types include argillite, chert, limestone, greenstone, and others.

At the junction of Forest Roads 53 and 21, intrusive igneous rocks underlie surface soils. Unfortunately for geologists and rockhounds, viewing of underlying bedrock is hampered by a two to five-foot layer of soil. This soil, commonly referred to as "ash soil," resulted when Mt. Mazama (Crater Lake) erupted. Fortunately for everyone, the soil is highly suited to growing trees and vegetation.

The Scenic Byway geology from Ukiah to the Pearson Guard Station consists of many layers of the Columbia River basalt lava flows. These sometimes columnar jointed rocks represent one of the largest outpourings of flood basalts in the world. Some flows extruded as much as 400 square miles of lava and some flows erupting from vents and fissures in NE Oregon made it all the way to the Pacific Ocean. These flood basalts filled the valleys and low spots in the Blue Mountains changing the landscape forever. The boulder-strewn meadows on either side of the 52 road contain shallow soils developed in the top of the lava flow. A panoramic view of the North Fork John Day River Canyon is located just east of the junction with the 55 road. The river has carved a deep canyon into the multiple bench-forming lava flows. Just east of the Pearson Guard Station, the somber blue-brown basalts give way to the older white, yellow, orange and pinkish-gray volcanic tuffs, rhyolites and platy andesite flows of the Clarno Formation. Layers of bouldery volcanic mud flows called lahars can be seen along the road and are similar to the hot mudflows that filled and destroyed the Toutle River in Washington during the 1980 Mt. St. Helens eruption. A glassy gray rock seen in the road cuts is called perlite and is used commercially in lightweight concrete.

As you cross the North Fork of the John Day River near the campground, you are driving over a terminal moraine left by a valley glacier. Piles of boulders called tailings can be seen along the road and were hand-stacked by placer miners in the 1800's.

The next road cuts reveal contorted, folded and faulted older rocks that originated as chains of islands and blocks of sea floor crust in the Pacific Ocean. These rocks, called exotic terrains, are a testimony of the driving power of plate tectonics.

Most of the rock seen between the NFJD Campground and the village of Granite is a dark metamorphosed mudstone called argillite. This argillite was originally deposited as a sedimentary mudstone in the Pacific Ocean basin, similar to conditions in the warmer western Pacific Ocean.

The higher mountains visible to the east are made up of the lighter-colored granodioritic rocks of the Bald Mountain Batholith. These intrusive rocks invaded and melted upward through the newly joined terranes of the Blue Mountains. These intrusive rocks provided some of the hot mineralized fluids that reacted with the older rocks forming mineral deposits of gold, silver, copper, lead and zinc. Much of the rusty stains in the argillite seen along the road are a result of the upward movement of mineralized hydrothermal fluids.

An estimated 5.8 million dollars of mostly gold and silver were produced from the Granite mining district. The ruins of the Cougar Mill can be seen three miles north of Granite on the west side of the road. This mine produced approximately $670,000 worth of gold and silver in the 1930's. Just north of Granite, hand-stacked "walls" of placer tailings can be seen east of the road. Chinese miners carefully stacked these boulders to recover the gold located on top of the bedrock.

Wildlife

The vast, undeveloped areas along the Byway provides a diverse variety of wildlife species. More than 300 species of vertebrate animals are found in the Blue Mountains. The distribution, as well as abundance, of wildlife populations is largely determined by habitat type and conditions. Several special habitat components are very important including riparian areas, meadows, dead/down trees (snags), and old growth timber.

The forest supports one of the largest Rocky Mountain elk herds in the country. Other game species include mule deer, white-tailed deer, black bear, Rocky Mountain and California bighorn sheep, mountain lion, turkey, quail, grouse, and several species of waterfowl. Non-game wildlife include many species of furbearers, songbirds, predators, and reptiles. The Bald eagle occurs as a late fall and winter migrant along the North Fork John Day River. Large snags along the river are used as roost or perching sites for these scattered migrants.

Vegetation

The great diversity of the region is reflected by the occurrence of 10 of the 116 forest and range ecosystems identified by Kuchler (1964) in the United States. The diverse vegetative types are directly related to landform, climate, elevation and historic management practices employed on the land.

The area adjoining the Columbia River and the Columbia Plateau are dominated by range land vegetation (grasses and shrubs) with forested types virtually nonexistent; some tree species can be found along streams or near springs. These areas are characterized by low precipitation levels with high summer temperatures.

The mountainous region is characterized by forest trees and shrubs; these types range from heavily forested areas of dense vegetation to more open, park-like settings of Ponderosa pine. Mountain meadows are interspersed throughout the forested areas providing a variety of vegetative types. Wildflowers are common in these mountain meadows particularly in the spring.

Forest health is an emerging issue in the Blue Mountains of Oregon. Along much of the forested area between Heppner and Ukiah there is stark evidence of a severe Mountain Pine Beetle infestation. Most of the dead trees were removed by logging and the regeneration process is very visible as new lodgepole pine begins to dominate the sites. In addition, severe infestations of Western spruce budworm and Douglas-fir bark beetles have created large stands of dead and dying white fir and Douglas-fir. These epidemics have major impacts on water quality, fisheries, wildlife habitats, recreation opportunities, timber growth, visual resources, fire hazards, and other resources of the area.

Water

The Byway travels through two major drainages of the Columbia River basin. Willow Creek lies along the western 70 miles of the route. It serves as a major source of irrigation for the Willow Creek valley.

The remainder of the Byway travels through many small drainages that drain into the North Fork John Day River. This river was designated a Wild and Scenic River in 1988. The North Fork John Day River's primary recreational uses are fishing, camping, hiking, and sightseeing. The North Fork John Day River Trail lies on the north side of the river in the North Fork John Day Wilderness. The area is rich in early gold mining sites where both placer and dredge mining occurred. Water quality is excellent. Stream improvement projects have rehabilitated fish habitat.

The river has the largest natural spawning population of anadromous fish in the Columbia River system above Bonneville Dam.

Fire

Fire has played an important role in the evolution of natural ecosystems and is essential to the perpetuation of many plant communities in the Blue Mountains of eastern Oregon (Hall, 1977). Fire scars indicate that fires of varying intensities occurred on an average of at least once every ten years prior to fire protection. High intensity conflagration fires caused plant communities dominated by highly competitive lodgepole pine and western larch to be favored over ponderosa pine, while low intensity surface fires maintained open, park-like stands of mature ponderosa pine and larch by removing competition from less fire-resistant trees and new growth. Local lore has it that the frequency of fires in the area cast a "bluish" tint over the landscape; thus the name "Blue Mountains" was coined.

Since fire suppression programs began in the early 1900's, the exclusion of fire has changed the environment to one favorable to fire-sensitive white fir and other tree species. In a study of fire ecology in the Blue Mountains of eastern Oregon, it was noted that the change from ponderosa pine to white fir and Douglas-fir is gradually changing the Blue Mountain plant community from fire resistant to fire susceptible (Hall, 1977).

Heritage

The 1804 Lewis and Clark expedition is considered the beginning of the historic period for eastern Oregon. The party came down the Columbia River reaching the eastern edge of Morrow County on October 19, 1805 (French, 1971).

Euro-American contact was limited from 1804 until the discovery of gold in the 1860's. Gold mining provided the impetus for the development of goods and services. Merchants, farmers, and stock raisers were attracted to the area. Gold mining reached its peak in the late 1890's. Several important lode mines were located in the Granite Mining District.

Immigration into the area was often by way of aboriginal trails. The practice has produced an overlapping pattern of trails, wagon roads, and highways. Oregon became a territory in 1849 and settlers wanted clear title to lands traditionally held by Indians. Consequently, by 1855 Indian lands were ceded to the U.S. Government, and the Umatilla, Cayuse, and Walla Walla tribes were placed on the Umatilla Indian Reservation. Homesteading of public domain land steadily increased until the early 1900's.

In addition to mining and homesteading activities, the use of range land for both cattle and sheep grazing became increasingly important between 1860 and 1900. From 1900 to the present, timber harvest has continued as one of the primary economic activities. Associated with the history of the area is development of the railroad and new means of transportation and communication.

Sites

Oregon Trail

The Oregon Trail shares a special place in the annals of history as it provided the main link for residents of the East wishing to move "out west!" Many enthusiastic pioneers began the long journey from Independence, Missouri, to the Oregon Territory via the Oregon Trail. It was a long and difficult journey lasting six months or longer. Many obstacles had to be overcome along the way; Indian attacks, disease, scarce supplies of food and water, floods, and breakdowns. Many lives were lost. The Oregon Trail crosses the Byway route about 15 miles south of the Columbia River. From 1841 to 1860 the wagon trains wore deep ruts as the westward movement gained momentum. People continued to traverse the route on foot for many decades later.

Oregon Trail ruts are visible today near Well Spring (13 miles east of Cecil). This Site was very important to the pioneers, serving as a watering hole in an otherwise desert-like landscape.

Cecil

The town of Cecil was founded as a result of one migrant's misfortune along the Oregon Trail. William Y. Cecil had stopped to repair his wagon after leaving the Well Spring area. His skill became very sought after as other members of the same wagon train began coming to him for repairs. The Cecil's decided to stay along the banks of Willow Creek where William Cecil built the first store and the government established a Post Office at Cecil in 1867.(Griffith, 1982).
The 100-year old post office still stands among the family-owned buildings. The Oregon Trail is still visable decending the hillside from Well Spring.

Morgan

The post office for the town of Morgan was originally located in the home of Ozwell Douglas two miles north of the present town site. The Kerr-Grifford grain company built a "sack house" grain warehouse at Morgan soon after the railroad was built up Willow Creek in 1888. Morgan became a shipping point for tremendous quantities of grain from both east and west of Willow Creek (Griffith, 1989). Morgan Road (located south of Morgan) provides access to the Four Mile Canyon Oregon Trail Site.

Ione

The eastern portion of the town site of Ione was originally settled by sheepman Ed Cluff in 1872. Another stockman, George Emerick owned the western portion of the town site. In 1883, Elisha Sperry acquired the Emerick land and thought it would be a good spot for a town site. Sperry named the town after a little girl, Ione Arthurs, living in the area with her parents. The residents of Ione were content to live in a little country town with just enough merchants to provide the goods demanded by the Swedes who settled in the area. A post office was established in 1884 and a schoolhouse was built in 1885. It was incorporated in 1899 with Elisha Sperry serving as Ione's first mayor (French, 1971). Ione is a good access point for a side trip to the Well Spring Oregon Trail Site.

Lexington

The town of Lexington can be traced to 1868 when William and Henry Penland drove a band of 1,000 sheep from Halsey, Oregon to where

Lexington now stands. The town sprang up without any real encouragement from Penland. The site was sheltered by the rolling bunchgrass hills and was close to abundant water and wood. Penland's sheep operation grew to such vast scale that the "home place" was almost a small town in itself. With an ever increasing population in the bunchgrass hills around its periphery, Lexington was the natural trading center for most of the area. Moreover, wanting schools and churches for their children, a group of energetic, civic-minded citizens were dedicated to building a town. The day came in 1885 when the town was platted. Jane Penland was given the privilege of naming the town; she named it Lexington after her birthplace in Kentucky. William Penland, having introduced sheep into the area, built the first great fortune in this part of Oregon (McMillan, 1974).

Lexington grew more rapidly than any other town in eastern Oregon. It never was a raw, struggling frontier town; it was a solid community from the very beginning. The business directory contained nearly 30 establishments. Then in November 1887, three blocks of the business district were reduced to ashes when a devastating fire swept through the town. This fire had far reaching effects on the history of Morrow County. Lexington was never again to achieve the growth pattern it had started. Some businesses were rebuilt but many were not (McMillan, 1974).

Heppner

The town site of Heppner was founded when a squatter sold his claim to George Stansbury in 1870. The area was located "upstream" from William Penlands homestead (Lexington), and became known as Stansbury Flat. Stansbury had been postmaster at a small community on Butter Creek called Vinson, but in 1873 he was reappointed postmaster at a location known as Stansbury Flat. Before Stansbury moved his post office to its new location, an unidentified stockman persuaded Henry Heppner and Jackson Morrow to move to Stansbury Flat and build a store. The few stockmen settled in the area (journals list the number at about 25) had to haul their supplies from Umatilla Landing or Castle Rock along the Columbia River, a vast distance in those days. These stockmen wanted Heppner and Morrow to take over the job of bringing in supplies and distributing them (French, 1971). They decided to speculate on a store and in 1872, the store was opened for business. The settlement on Stansbury Flat grew rapidly, and before the year was out, it had been renamed for Henry Heppner, a suggestion, it is said, that came from Jackson Morrow. The town was platted in 1877.

Morrow County Museum

This museum houses a wealth of articles and photographs from the early days in the area. Located in downtown Heppner, the museum brings the rolling hills of the surrounding area to life. In addition to thousand of historic and prehistoric artifacts, five different rooms of early settler life have been carefully recreated for visitor enjoyment.

Morrow County Courthouse

This historic building continues to stand guard over the town of Heppner. It was constructed in 1902 and is listed on the National Record of Historic Places. It was designed by E. Lazarus and measures 52.5 feet by 82 feet with four fireproof vaults. It was made of blue stone at a cost of $22,000. It remains one of the more impressive courthouses in Oregon (French, 1971).

Smith Ditch

One trans-basin diversion ditch is present along the Byway. The Smith Ditch diverts water from Ditch Creek in the John Day Basin into Willow Creek in the Columbia Basin for irrigation in the mid and lower Willow Creek Valley. It was constructed in the 1930's under the Civilian Conservation Corps program. The nearby Ditch Creek Cabin is a good example of the cabin used by Forest Rangers in earlier years.

Ukiah

This town was originally called Camas Prairie. The Native American Indians came to the area for many years to gather wild blue camas root. The name of the town was changed to Ukiah by E.B. Gamba who lived in Ukiah, California before moving to Oregon. The town site, formed in 1891, supported several churches, mercantile stores, a telephone office, a creamery, bakery, blacksmith, livery stable, hotels, dance halls, and other establishments. Grazing, mining, and logging have been the primary industries.

Fremont Powerhouse

The Fremont Powerhouse, located near Granite, Oregon, is a remnant of the mining era during the early part of this century. It was built to provide electrical power to nearby towns and gold mines in the area. Its history dates back to 1903. About this time, the earnings of some of the local mines, principally the Red Boy, began to decrease drastically. Efforts were made to find more efficient methods of operation. Until 1905, the Red Boy had been operated by steam power. In an effort to operate the mine more economically, the owners decided to utilize local water power to generate low cost electrical power. The powerhouse was completed in 1907, but power was not produced until 1908. Olive Lake, located eight miles away, provided water for the powerhouse. The water was delivered to the powerhouse through a wood and steel pipeline (most of which is still in place) which dropped 1,068 feet in eight miles. The Fremont Powerhouse provided electricity to the area until it closed in 1967. In 1968, the California-Pacific Utilities Company donated the entire complex to the Forest Service. The powerhouse is listed in the National Register of Historic Places.

Uses and Events

Settling the Willow Creek Valley

There is no historical evidence that Willow Creek Valley was settled any earlier than 1859 when John J. Jordan drove his wagon and stock south from the Oregon Trail crossing at Willow Creek (which became Cecil in 1863) to his future homesite near the confluence of Willow and Rhea Creeks. Jordan built a log cabin from cottonwood trees growing along the creek. He brought cattle from the Willamette Valley (in western Oregon), thus becoming the area's first cattleman. He also maintained a freight station on his place until the completion of the railroad in 1888.

Heppner Flood

In June, 1903, a devastating flash flood occurred. An intense storm passed through the area releasing a torrent of rain. When the runoff from Balm Fork and Willow Creek came together just upstream of Heppner, the wall of water was estimated to be about 20 feet high. Much of the city was destroyed; 250 people lost their lives in this flood which still ranks as the single event with the largest toll of human life in Oregon's history. The first roller compacted concrete dam in North America was constructed on Willow Creek in 1983 as a flood control device.

Grazing

In the late 19th century, sheep grazing left a dramatic mark on the landscape. Early Western Oregon emigrants were originally from the prairie states and had difficulty getting used to the tall trees on the west side of the Cascade Mountains. In the early 1860's, they drove their herds of cattle and sheep across the mountains in search of drier, more desirable range lands. They found the area of the Blue Mountains very desirable with an abundance of feed. For years sheep grazing provided the economic lifeline of Morrow County. "The Heppner hills often smelled like sheep; they were every place; almost half a million of them." (French, 1971).

Irish Influence

Very early in its history, St. Patrick was recognized as Heppner's patron saint. The first Irishman to live in Morrow County was William Hughes, who arrived in the area in time to be included in the 1870 census. He went into the stock business and other occupations so he could help finance fellow countrymen interested in sheep grazing. Hughes wrote to Irish families to recruit young countrymen for the sheep camps in

Morrow County. They were attracted to the sheep business. The greatest influx of Irish occurred around 1890 (French, 1971).

The Irish added an exuberance to life in Morrow County. They remembered St. Patrick through the years by flying the Irish flag and enjoying a community dinner. Today, St. Patrick is remembered each March with one of the largest celebrations in the State of Oregon. The town of Heppner goes "all out" for the St. Patrick's Day celebration as a reminder of the Irish history of the area.

Coal Mines

Near the headwaters of Willow Creek, coal was discovered around 1879. Henry Villard, a prominent railroad promoter, came to Heppner to investigate the discovery. If sufficient coal was found, the railroad might come up Willow Creek into the mountains. In 1901, a number of prominent men in the Heppner area became interested in the venture and formed the Heppner Coal Mining Company. Sufficient coal was found and various pits were opened. Much excitement was created by this find. Work apparently progressed until the disastrous flood of 1903 in Heppner. Some of the backers lost their lives which may have caused the mine to close (Mitchell, 1982).

The Pendleton Railroad and Coal Company was the last company to be formed in the area. It wanted to construct a railroad to the mine, but it was becoming apparent that the coal discovered was not of high enough quantity or quality to make mining a profitable enterprise. The coal was not suitable for railroad steam engines. Needless to say, no major coal extraction took place; remnants of the exploratory work can still be seen in the area today.

Railroad

The transcontinental railroads did not serve Oregon until the 1880's. The Oregon Railway and Navigation line along the Columbia River served the state's needs within its own confines, but there was no eastern connection with the Union Pacific until 1884. When the Oregon Short Line from Granger, Wyoming, to Huntington, Oregon was completed. The Northern Pacific had reached Portland the year before, and Southern Pacific had made its Oregon and California connection by 1887 (McMillan, 1974).

With the transcontinental lines completed, the railroad companies began to show interest in developing branch feeder lines. Oregon Railway and Navigation considered the northern Oregon area between Pendleton and The Dalles as its domain. However, the geography of the region made access difficult, because most of the communities of

eastern Oregon were separated by several deep canyons. Individual branch lines were built to reach them rather than one main line.

The Willow Creek branch line was built to lexington by 1888, strengthening the economy of the area by allowing more people to homestead and providing easier access to the market (McMillan, 1974). The railroad was eventually extended to Heppner and is still used today.

Logging

The history of logging in the Morrow and Umatilla County region can be traced back to the the first timber survey notes of Alonzo Gegnon in 1874. C.K. Peck's 1942 thesis presented to the School of Forestry, Oregon State College states in part:

> "The first cuts on the forests were made in the "1850's-60's" when packers, freighting in supplies to the mines in Grant County and in Idaho, built settlements at the various places along the route."
>
> "Only the best of logs could be used from which to saw lumber. Each tree was necessarily felled on favorable ground so that the men could dig a trench below the logs in which to stand and pull the whip saw. Logs were often placed on skids and moved into positions over the pits so that the laborious work was made easier."

Several mills were located in the region as early as the 1870's. S.P. Garrigues built the first mill in the Willow Creek Valley in 1878. The mill was operated for several years with a ready market for lumber in nearby communities, including Heppner fifteen miles north. Logging was done by teams of oxen that skidded logs downhill in dirt chutes.

Today, Kinzua Corporation operates a mill near Heppner. Situated along the Byway, this is one of the most modern, computerized sawmills in the country. Kinzua also generates electricity in a co-generation plant; this plant uses sawmill waste materials that were not utilized historically.