Lakeview Draft Resource Management Plan Amendment and Draft Environmental Impact Statement

Volume II - Appendices

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BLM

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DOI-BLM-ORWA-L050-2018-0030-RMP-EIS Amendment

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

Appendices

Appendix 1 – Maps

Map A-1: Land Status
Map WCI-1: Wilderness Character Inventory
Map W-1: Existing Lands Managed for Wilderness Characteristics under Lakeview RMP under No Action Alternative and Alternatives A, C, D, and E
Map W-2: BLM-Identified Lands with Wilderness Characteristics Subject to 2010 Settlement Agreement - No Action Alternative
Map W-3: Proposed Lands Managed for Wilderness Characteristics - Alternative B
Map W-4: Proposed Lands Managed for Wilderness Characteristics - Alternative C
Map W-5: Proposed Lands Managed for Wilderness Characteristics - Alternative D
Map W-6: Proposed Lands Managed for Wilderness Characteristics - Alternative E
Map L-1: Existing Land Tenure Zones – No Action Alternative and Alternative A
Map L-2: Proposed Land Tenure Zones – Alternative B
Map L-3: Proposed Land Tenure Zones – Alternative C
Map L-4: Proposed Land Tenure Zones – Alternative D
Map L-5: Proposed Land Tenure Zones – Alternative E
Map L-6: Utility, Road, and Communication Site Right-of-Ways
Map L-7: Existing Major Right-Of-Way Avoidance and Exclusion Areas – No Action Alternative and Alternative A
Map L-8: Proposed Major Right-Of-Way Avoidance and Exclusion Areas – Alternative B
Map L-9: Proposed Major Right-Of-Way Avoidance and Exclusion Areas – Alternative C
Map L-10: Proposed Major Right-Of-Way Avoidance and Exclusion Areas – Alternative D
Map L-11: Proposed Major Right-Of-Way Avoidance and Exclusion Areas – Alternative E
Map L-12: Existing Wind and Solar Right-Of-Way Avoidance and Exclusion Areas – No Action Alternative and Alternative A
Map L-13: Proposed Wind and Solar Right-Of-Way Avoidance and Exclusion Areas - Alternative B
Map L-14: Proposed Wind and Solar Right-Of-Way Avoidance and Exclusion Areas - Alternative C
Map L-15: Proposed Wind and Solar Right-Of-Way Avoidance and Exclusion Areas - Alternative D
Map L-16: Proposed Wind and Solar Right-Of-Way Avoidance and Exclusion Areas - Alternative E
Map L-17: Existing Minor Right-Of-Way Avoidance and Exclusion Areas – No Action Alternative, Alternative A, and Alternative D
Map L-18: Proposed Minor Right-Of-Way Avoidance and Exclusion Areas – Alternative B
Map L-19: Proposed Minor Right-Of-Way Avoidance and Exclusion Areas – Alternative C
Map L-20: Proposed Minor Right-Of-Way Avoidance and Exclusion Areas – Alternative E
Map M-1: Subsurface Mineral Estate
Map M-2: Locatable Mineral Restrictions – All Alternatives
Map M-3: Existing Leasable Mineral Restrictions – No Action Alternative and Alternative A
Map M-4: Proposed Leasable Mineral Restrictions –Alternative B
Map M-5: Proposed Leasable Mineral Restrictions –Alternative C
Map M-6: Proposed Leasable Mineral Restrictions –Alternative D
Map M-7: Proposed Leasable Mineral Restrictions –Alternative E
Map M-8: Existing Salable Mineral Restrictions – No Action Alternative and Alternative A
Map M-9: Proposed Salable Mineral Restrictions – Alternative B
Map M-10: Proposed Salable Mineral Restrictions – Alternative C
Map M-11: Proposed Salable Mineral Restrictions – Alternative D
Map M-12: Proposed Salable Mineral Restrictions – Alternative E
Map OHV-1: Existing OHV Designations – No Action Alternative and Alternative A
Map OHV-2: Proposed OHV Designations – Alternative B
Map OHV-3: Proposed OHV Designations – Alternative C

Map OHV-4: Proposed OHV Designations – Alternative D
Map OHV-5: Proposed OHV Designations – Alternative E
Map TM-1: Existing Transportation Network – Northwest Lakeview Field Office
Map TM-2: Existing Transportation Network – Northeast Lakeview Field Office
Map TM-3: Existing Transportation Network – Southeast Lakeview Field Office
Map TM-4: Existing Transportation Network – Southwest Lakeview Field Office
Map G-1: Livestock Grazing Allotments – No Action Alternative, Alternative A, Alternative C, Alternative D, and Alternative E
Map G-2: Livestock Grazing Allotments - Alternative B
Map VRM-1: Existing Visual Resource Management Classes – No Action Alternative and Alternative A
Map VRM-2: Proposed Visual Resource Management Classes – Alternative B
Map VRM-3: Proposed Visual Resource Management Classes – Alternative C
Map VRM-4: Proposed Visual Resource Management Classes – Alternative D
Map VRM-5: Proposed Visual Resource Management Classes – Alternative E
Map V-1: Existing General Vegetation Classes
Map V-2: Sagebrush Steppe Condition
Map F-1: Recent Fire History
Map F-2: Fire Management Constraints
Map S-1: General Soils
Map WLF-1: Deer and Elk Winter Habitat
Map WLF-2: Bighorn Sheep and Pronghorn Habitat
Map WLF-3: Special Status Fish Species Habitat
Map WLF-4: Pygmy Rabbit Habitat
Map R-1: Special Recreation Management Areas and Designated BLM Recreation Sites
Map R-2: Recreation Opportunity Spectrum
Map HMA-1: Wild Horse Herd Management Areas
Map SMA-1: Special Management Areas

Appendix 2 – Lands with Wilderness Characteristics Inventory

Table of Contents

List of Tables

Wilderness Characteristics Inventory Background

Following the passage of the Federal Land Policy and Management Act of 1976 (FLPMA), the BLM initiated an inventory of lands with wilderness characteristics, as required under Section 603. In 1991, the BLM completed this comprehensive wilderness inventory covering the entire State of Oregon. Several public documents were prepared during the process which addressed lands within the Lakeview Field Office of the Lakeview District. These included: *Wilderness Proposed Initial Inventory, Roadless Areas and Islands which Clearly do not Have Wilderness Characteristics, Oregon and Washington* (BLM 1979f), *Wilderness Review, Initial Inventory* (BLM 1979g), *Wilderness review, Intensive inventory* (BLM 1979h), *Wilderness review, Intensive inventory (*BLM 1980a), and *Final Intensive Inventory Decisions* (BLM 1980b).

During the inventory process described above, the BLM followed guidance published in its *Wilderness Inventory Handbook* (BLM 1978a; 1978b) and several subsequent policy directives (BLM 1979a; 1979b; 1979c; 1979d; 1979e). The handbook defined "inventory" as a distinct phase of the wilderness review process that "involves looking at the public lands to determine and locate the existence of areas containing wilderness resources that meet the criteria established by Congress. Such areas are identified as Wilderness Study Areas." The handbook also described the "key factors of wilderness character" to consider during the inventory process as being:

a) Size - at least 5,000 contiguous roadless acres of public land[1] must exist.

b) Naturalness - the imprint of man's work must be substantially unnoticeable.

c) An outstanding opportunity for solitude or an outstanding opportunity for primitive and unconfined type of recreation must exist.

All three criteria had to be met in order for an area to be designated as a WSA (BLM 1978a). A total of 14 wilderness study areas (WSAs) and 1 instant study area (ISA) covering approximately 486,873 acres and located completely or partially within the Lakeview Field Office were designated during this process (BLM 1989a; 1991a). All WSAs and ISAs have subsequently been managed over the years under the BLM's WSA interim management policies (BLM 1995b, 2012h), pending either designation or release from wilderness study by an act of Congress.

Lakeview Resource Management Plan and Wilderness Characteristics

The BLM initiated a resource management planning (RMP) process for the Lakeview Field Office in 1999. While this planning effort was underway, the Washington Office, BLM issued new guidance on wilderness inventory procedures, titled *Wilderness Inventory and Study Procedures Handbook H-6310-1* (BLM 2001g). However, a separate memo instructed field offices to use the new guidance in future land use planning efforts while on-going planning efforts, such as the Lakeview RMP, were to follow existing state-specific guidance (BLM 2001b). Thus, the 2001 handbook never applied specifically to the

[1] Three exceptions to the size criteria were identified in the 1978 handbook. Areas less than 5,000 acres could only be considered if:
a) contiguous with land managed by another agency which has been formally determined to have wilderness or potential wilderness values,
b) contiguous with an area of less than 5,000 acres of other Federal lands administered by an agency with the authority to study and preserve wilderness lands, and the combined total is 5,000 acres or more, or
c) subject to strong public support for such identification and it is clearly and obviously of sufficient size as to make practicable its preservation and use in an unimpaired condition, and of a size suitable for wilderness management.

Lakeview RMP process. In addition, the 2001 handbook was rescinded in June 20, 2003 (BLM 2003g), prior to completion of the *Lakeview Proposed RMP/Final EIS* (BLM 2003a).

While natural landscapes undergo change over time in response to a variety of natural and man-caused actions (i.e. wild and prescribed fire, climatic cycles, implementation of new rangeland improvement projects, roads, and vegetation rehabilitation projects, mining, etc.), widespread or landscape-level human-caused change on BLM-administered lands typically occurs much slower than in rapidly developing rural or urban areas. The mere passage of time is not, in and of itself, a critical factor defining the need to update or maintain an inventory. Rather, is there new information or changed circumstances that would indicate a need for BLM to update or maintain its existing wilderness inventory? One of the critical questions to be answered is, "what conditions have changed since the area was last inventoried"?

During the development of the *Lakeview RMP/ROD*, the BLM ID team considered the need to maintain or update its existing wilderness characteristics inventory, but was not aware of any major changes that had occurred since the original inventory was completed that would warrant a complete re-inventory or major update for all public lands within the 3.2 million acre planning area. For this reason, the BLM focused its wilderness characteristics inventory update efforts on lands acquired since 1992 (totaling about 3,139 acres), within or immediately adjacent to existing WSAs (Fish Creek Rim, Abert Rim, and Guano Creek), as those lands had not been previously inventoried for wilderness characteristics. At that time, the BLM determined that an additional 1,187 acres of acquired lands contained wilderness characteristics (see Appendix J4, BLM 2001a). The BLM considered adding these areas to the adjacent WSAs at that time, but the terms of the 2003 Utah Settlement Agreement, signed just prior to publication of the *Lakeview RMP/ROD,* stated that BLM's authority to designate WSAs under Section 603 of FLPMA ended in 1991 and non-WSA areas that are found to contain wilderness characteristics could not be designated as WSAs or be managed under BLM's WSA management policy.

Litigation and 2010 Settlement Agreement

After the BLM completed both the *Lakeview* and *Southeastern Oregon RMP/RODs* in 2003 and 2002 respectively, several groups filed separate lawsuits in U.S. District Court (District of Oregon) challenging each RMP/ROD. This litigation resulted a Settlement Agreement in 2010 that required the BLM to update its wilderness characteristics inventory within the planning area (outside of WSAs) and use this updated inventory information in the affected environment, alternatives, and analysis sections of a subsequent plan amendment (see *2010 Settlement Agreement* section of Chapter 1).

Inventory and Planning Guidance

The *Land Use Planning Handbook H-1601-1* (BLM 2005a) describes policy on how the BLM is to address citizen wilderness inventory information and provides some criteria to use when reviewing new information specifically during the land use (resource management) planning process. In addition, the Oregon/Washington State Office, BLM issued draft guidance on how to maintain its wilderness inventory under Section 201 of FLPMA (BLM 2007a; 2008a).

In December 2010, the Secretary of the Interior issued Secretarial Order 3310 directing the BLM to maintain a current inventory of public lands with wilderness characteristics outside of WSAs and protect such lands during the land use planning or project level decision making process. The Washington Office BLM subsequently issued a draft wilderness inventory manual (BLM 2010a) that was very similar to the draft State Office BLM guidance (BLM 2007a; 2008a). The Washington Office also issued draft and final guidance in the form of three manuals (6301, 6302, and 6303) on how to conduct wilderness inventory updates and address lands with wilderness character during the land use and project level planning

processes (BLM 2010e; 2010f; 2011g; 2011h; and 2011i). However, in April 2011 the Congress passed the *Department of Defense and Full-Year Continuing Appropriations Act*, which included a provision prohibiting the use of appropriated funds to implement, administer, or enforce Secretarial Order 3310. Following this, the WO issued guidance in the form of IM-2011-154, placing Manuals 6301, 6302, and 6303 into abeyance, but included guidance on how to conduct wilderness characteristics inventory updates (BLM 2011a). Two new manuals (6310 and 6320; BLM 2021f, 2021g) were issued in 2021 which replaced the guidance contained in IM-2011-154 and previous versions of these manuals.

Resource Data Development and Maintenance

The BLM has maintained or updated its information or datasets on resource conditions and man-made disturbances/developments in response to changes on the landscape since 1991 that are relevant to assessing the key factors of wilderness character described above. Beginning in 1996, the BLM staff started developing a digital geographic information system (GIS) database in anticipation of initiating *the Lakeview RMP*. The database included a large number of individual, resource-specific datasets that were used for the creation of maps, development of management alternatives, and impact analyses contained in the Draft and Final RMP/EIS documents (BLM 2001a; 2003a). These datasets included:

- Roads and motorized trails from ground transportation (GTRN)
- Road attribute data from Facility Asset Management System (FAMS)
- Fences from grazing allotment boundaries (GRA)
- Wilderness Study Area boundaries (WSA)
- Recently acquired parcels with wilderness characteristics
- Rangeland Improvement Project System (RIPS)
- Utility corridors and distribution lines
- Mining disturbances
- Non-native seedings (TREATMENTS)
- Wildfires (FIRE_POLY)
- Prescribed fires, fuel treatments, and vegetation treatments (TREATMENTS)
- Public Land Survey System Dataset (PLSSDS)
- Land ownership (LLI)
- Raptor, big game, and pygmy rabbit habitat
- Sage-grouse habitat and lek sites

Since the *Lakeview RMP/ROD* was completed in 2003, many of the above datasets have continued to be updated, moved into a state-wide corporate data structure, and maintained to support both RMP and project implementation. In addition, new datasets have been developed that are important for on-going land management and wilderness inventory update activities. These include:

- Wilderness inventory unit boundaries (WILDERNESS CHARACTERISTICS)
- Ecological Site Inventory (ESI) – existing vegetation
- Man-made structures (STRUCTURES; includes buildings, reservoirs, waterholes, wells, troughs, pipelines, drift fences, wildlife guzzlers, cattle guards, recreation facilities, culverts, and road signs)

- Communication Sites
- Photos points and associated field photos
- Special status species – plants, fish, and wildlife (GEOBOB)

All of the above datasets have been maintained or updated since 2003 on an as-needed basis. This is documented further in the metadata[2] for each dataset. One must review the metadata for a given dataset in order to fully understand the contents and accuracy of the data. Further, this metadata is considered an integral part of the administrative record for both the road analysis and wilderness character determination processes.

Road Inventory Maintenance

Since roads form the majority of wilderness inventory unit boundaries, it is important to understand how the BLM's road and transportation network data was originally created and how it continues to be maintained on an on-going basis. Currently, the Lakeview Field Office has about 2,500 miles of roads identified for active management within its transportation plan network. Another 2,500 miles of roads, trails, and other routes are estimated to exist that are not contained within the transportation plan (BLM 2003a).

Initial Route Data Collection

Transportation system road lines were originally mapped on a series of 1 inch = 1 mile scale transportation quad maps published in 1984. Attribute data (*i.e.* road number, road name, road class, number of lanes, surface type, surface condition, etc.) were gathered by the BLM from field survey work and entered into the Facility Information Management Systems (FIMS) database in the early-1990s.

Digital route line work was originally captured in GIS from 7.5-minute topographical maps by the U.S. Geological Survey (USGS). The USGS digitized routes from these maps and made the data available to other federal agencies in Oregon beginning in the mid-1990s. In 1999, the Oregon/Washington State Office, BLM GIS staff took a copy of the USGS digital road dataset for Oregon and created a new corporate, state-wide GIS theme called ground transportation (GTRN). In 2001, the GTRN dataset for the Lakeview Field Office was updated with road numbers from existing transportation plan maps. Other attribute fields were subsequently populated by linking directly to the FIMS database (using the road number as the link field) and copying over other attribute values from FIMS.

Route Data Updates

Since 2001, the BLM has been updating its road datasets at multiple levels. In 2003, at the national level, the FIMS transportation data was moved into a new database called the Facility Asset Management System (FAMS) which contains data on all of BLM's facilities, including roads and trails. In 2005, the Oregon/Washington State Office BLM updated the majority of the route line work and attributes within GTRN for Lake and Harney Counties as part of the "Oregon All Roads" project which was funded by the State of Oregon. This update added, removed, and/or replaced route lines based on newer digital orthophoto quads (DOQs).

The Washington Office also commissioned a condition assessment study for all roads in the BLM's transportation system (FAMS database) with a maintenance Level of 3, 4, or 5. Between 2005 and 2007,

[2] Metadata is data about the data and typically documents: 1) when the data was collected, 2) how it was collected, 3) who collected it, 4) what kind of attributes are associated with it, 5) what format and projection the data is stored in, and 6) when it was last updated.

approximately 60% of these roads in the Lakeview Field Office had detailed condition assessments completed in the field and the results entered into the FAMS database. In 2010, the BLM Washington Office completed another update to the FAMS database. It reclassified all roads in FAMS into two distinct classes: roads and primitive roads (as defined in BLM 2006a). (This updated FAMS attribute data has been automatically linked to the road lines stored in GTRN). This condition assessment process may continue in the future, depending upon funding.

From 2003 to the present, the BLM has continued a comprehensive update of its GTRN dataset. This update process compared existing route lines within GTRN with recent (1994, 2000, 2003, 2005, 2009, 2012, 2015, and 2018) DOQs covering the Lakeview Field Office (planning area). The DOQs and the route line work were viewed on a computer screen using GIS software technology. BLM staff digitized many potential new routes using a "heads-up" digitizing process, where the DOQs are displayed as a backdrop on the computer screen and potential new route lines on digitized using the computer mouse. BLM staff also noted locations where existing routes were no longer visible on the DOQ and appeared to be reclaiming to a more natural condition. The BLM created field maps and went to the field to verify the presence, surface type, and overall condition of each route. The field inventory documented the presence or absence of evidence of past mechanical maintenance or improvements for a given route, as well as documented the presence of other man-made features present on the landscape.

Field Photos/Log

Digital photos of routes and man-made features were taken in various locations to supplement the inventory photos provided by other parties. All of these photos were used to assist in making boundary road determinations, as well as characterize the effects of existing man-made features on the overall natural character of a given unit. A photo log was created as an Excel spreadsheet that captured the photo number, route number, surface type, general comments including photo direction, photo filename, presence or absence of screening, geographic area name, and topographic quad name. Many of the photos and associated photo point names followed the following naming convention:

Example:

BH078NE_KS_051408.jpg = Photo Name (photo stored in JPEG digital file format)

BH078 = Photo Point Name (as stored in GIS Photo Point dataset) where:

BH = Geographic Area Name (i.e. Black Hills)
078 = Unique sequential number

NE = Direction of photo (i.e. Northeast)

KS = Initials of photo taker

051408 = Date photo was taken (i.e. May 14, 2008)

The field inventory results were recorded directly on the field maps or, in some cases, collected using global positioning system (GPS) technology. This field data were then used to update the GTRN, FAMS, STRUCTURES, and Photo Point GIS datasets.

New Information

In April 2005, the Oregon Natural Desert Association (ONDA) provided the BLM with an inventory report containing numerous proposed new wilderness study areas, based on information their staff or

members had collected (ONDA 2005). These recommendations included narrative reports, maps, photos, photo and route logs, and GIS data for 19 proposed new wilderness study areas covering over 1.7 million acres in the planning area. The group submitted two supplemental sets of digital photos and photo logs in 2007 regarding two of these proposals. The group also submitted a separate inventory report covering adjacent public lands in the Burns District (ONDA 2007). Three of the proposals presented in that document covered lands in both the Burns and Lakeview Districts (300,566 acres), while another inventory report was submitted to the BLM Prineville District in 2012 (ONDA 2012). One of the proposals contained in this document covered lands in the Prineville, Burns, and Lakeview Districts (10,068 acres). ONDA (2015) submitted additional information that represented a critique of BLM's inventory findings as of that point in time (see also *Public Involvement, Coordination, and Consultation* section of Chapter 4).

Wilderness Characteristics Inventory Update Process

While national inventory guidance was not finalized until 2012[3], the Lakeview Field Office, BLM followed the available inventory guidance as it conducted its wilderness characteristics inventory update (BLM 2007a; 2008a; 2010e; 2012e) in accordance with Provision 24 of the 2010 Settlement Agreement. While the recommended inventory report formatting varied somewhat over this timeframe, the essential criterion that must be documented did not change (roadless areas of at least 5,000 where the imprint of man's work is substantially unnoticeable, and containing either an outstanding opportunity for solitude or primitive and unconfined recreation). In addition, several trainings and inter-district meetings were conducted during this time to ensure that the ID team was familiar with the inventory guidance.

Training/Calibration Meetings

In accordance with provision 23 of the 2010 Settlement Agreement, BLM staff from offices throughout the State of Oregon met to discuss wilderness characteristics inventory consistency and "calibrate" its inventory procedures. These included:

- Wilderness Inventory Meeting (Prineville, OR; August 2006) – Lakeview BLM staff met with other district wilderness/planning representatives, state office staff, and solicitor's office to discuss the need to respond to public wilderness inventory information in a consistent manner.
- Wilderness Inventory Meeting (Vale, OR; July 2007) - Lakeview BLM staff met with other district wilderness/planning representatives and state office wilderness staff to review the draft state wilderness inventory update guidance, as well as go to the field to review inventory examples completed by Vale District staff.
- Wilderness Inventory Meeting (Redmond, OR; February 2009) – Lakeview BLM staff met with other district wilderness/planning representatives, state office wilderness staff, and solicitor's office to discuss the updates to the draft state wilderness inventory update guidance, inventory update progress, coordination with BLM offices in neighboring states, and answer questions regarding the logistics of the inventory process.
- Wilderness Inventory Calibration Meeting (Prineville, OR; November 2010) – Lakeview BLM staff met in the field with other district wilderness/planning representatives, state office wilderness/recreation staff, and representatives of Oregon Cattlemen's Association and Oregon Natural Desert Association to discuss the inventory process and guidance being used to insure

3 While updated inventory guidance was issued by BLM in 2021, it was not available or used during the inventory update process. There were only minor changes made to this guidance between 2012 and 2021; none of which would have any effects on BLM's current inventory findings.

that wilderness inventories conducted by different districts were being conducted in accordance with state/national inventory policy.

Process Summary

From 2007 to 2015, the BLM conducted wilderness characteristics inventory updates for public lands in the planning area, outside of designated WSAs (approximately 2.7 million acres), following its inventory guidance (BLM 2007a, 2008a, 2010e, 2012e, 2015h, 2015i). The inter-disciplinary (ID) team reviewed the existing wilderness inventory information contained in the BLM's wilderness inventory files, previously published inventory findings (BLM 1979f; 1979g; 1979h; 1980a; and 1980b), and citizen-provided wilderness information (document, maps, photos, and photo logs; ONDA 2005; 2007a; and 2015; Laird 2008).

The ID team then reviewed the resource data described above to determine if additional data update or field inventory was needed. The BLM conducted fieldwork to update both its road and wilderness inventories and to gather additional information to supplement citizen-provided input. Fieldwork and data updates were completed prior to updating the wilderness characteristics inventory for a given area. Using both citizen-provided and BLM photos (ONDA 2005, 2007a, 2007b, 2012, 2015; Laird 2008), field logs, and staff field knowledge, the BLM completed route analysis forms and made inventory unit boundary determinations within the planning area. All of this information was compiled into an inventory file for a given geographic area.

Unit Boundary Determination Process

At the beginning of the evaluation process for a given geographic area, the ID team identified routes within and outside of the evaluation area that, based upon field knowledge and professional opinion, they believed would likely meet the wilderness boundary road criteria. A route analysis was conducted for each of these routes. This analysis is documented in both ID team meeting notes and road analysis forms contained in the wilderness evaluation files. Most of the routes determined to be roads through this process are part of BLM's transportation plan identified within the FAMS and GTRN databases. This means they have a specific purpose, an assigned road number, and an assigned maintenance level.

Historically, most of the routes in the planning area (whether in the transportation plan or not) were created, at a minimum, by mechanically blading or grading to remove existing vegetation and push large rocks off to the side of the route. Many of these existing routes were created specifically to access areas where range improvement projects (i.e. fences, waterholes, wells, pipelines, etc.) were subsequently constructed. This resulted in the creation of relatively straight, vegetation-free, natural surface roads with small berms along one or both sides. In many locations, roads were constructed to a higher standard and have additional, more obvious features such as large rock berms, drainage ditches or wings, water bars, culverts, and distinct side cuts traversing up or across hillsides. The exact construction date for most of these roads is not known, but is often associated with the construction date of range improvement projects in the area. (Construction dates for range improvements are stored separately in the BLM's Rangeland Improvement Project System (RIPS) database).

Maintenance records for most routes in the resource area do not exist prior to 1990. It is likely that most routes have had only minor maintenance (i.e. blading or spot rocking of short segments) or have not needed regular maintenance since the time they were originally constructed. As a result, some mechanically constructed routes have some herbaceous and/or short, shrubby vegetation growing in the median. The presence of this vegetation does not, in and of itself, mean the route is impassable to vehicles or indicate a lack of relatively regular or continuous use.

Other routes in the resource area have been created solely by vehicles driving off-road and creating "two-tracks" where the vehicles have crushed the vegetation in the wheel tracks, but relatively tall vegetation remains in the median. These routes typically meander around obstacles and do not meet the wilderness inventory definition of a unit boundary road.

The BLM ID team documented the presence or absence of mechanical construction (blading, gravel, roadside berms, and cut and fill), improvements (culverts, stream crossings, drainage features, and barriers), and recent maintenance activities on the route analysis forms based on field visits, a review of all of the photos taken along the route, and professional knowledge of the route. Routes that were determined to meet the wilderness inventory definition of a road[4] were used, along with the boundaries of developed rights-of-way associated with utility lines/corridors and major highways, and non-federal ownership boundaries, to define the boundaries for inventory units that were subsequently evaluated for wilderness characteristics by the ID team.

Wilderness Characteristics Inventory Evaluation

Following the determination of inventory unit boundaries described in the preceding section, the ID team then evaluated a given inventory unit in accordance with the inventory guidance to determine if it met the wilderness characteristics criteria (described in the background section above). The evaluation for each unit is documented in both ID team meeting notes and in individual wilderness character writeups (Forms 1 and 2) prepared for each inventory unit. This documentation is contained in the wilderness inventory files and was posted on the Lakeview District's webpage.

Washington Office Consistency Review (2015)

In 2015, the Oregon BLM State Director requested an independent consistency evaluation of both Lakeview and Vale Districts' wilderness characteristics inventory processes. This field review exercise was conducted in the summer of 2015 by Washington Office and Nevada State Office wilderness specialists to determine if recent inventory updates in the Lakeview and Vale District Offices had been completed in a manner consistent with current national inventory policy. The reviewers found there were "no outstanding or grievous errors or deviation from past wilderness inventory procedures that would require any of these inventories to be voided" and then made a number of recommendations as to how to improve the quality of future inventories. From this review, the State Office wilderness specialist issued guidance requiring that both districts review, and if necessary, update individual inventory findings (BLM 2015h; 2015i).

Publication of Wilderness Characteristics Inventory Findings and Public Comments

Lakeview BLM staff completed its final review in September 2018. In September 2018, the BLM notified over 300 individuals on its mailing list that it was re-initiating this planning effort, that it had completed its wilderness characteristics inventory update, and that it had made these findings available on its inventory website at https://www.blm.gov/programs/planning-and-nepa/plans-in-development/oregon-washington/lakeview-wci. Hard copy inventory reports were also made available upon request.

[4] Some of the routes that were not identified as boundary roads during a given evaluation may have also been mechanically improved or maintained at some point in the past and may be maintained in the future, as needed. Most are in a useable condition by two-wheel drive, high-clearance vehicles, but during the field review, relatively regular and continuous use was not as evident and other supporting information about their use was not identified in the field or in the ID-team meetings, so they were not identified as boundary roads for wilderness inventory purposes.

In response, the BLM received comments from a number of parties and agencies regarding the accuracy of its inventory process or findings. Several of the letters also contained comments, photos, or other information related to specific inventory units, along with a request for the BLM to consider this information and update its inventory findings for those units.

The BLM reviewed these comment letters and evaluated the unit specific information to determine if it had already considered this information in its current inventory findings. If the information was, in fact, new information that the BLM had not previously considered, the BLM staff revised its inventory write-up for the specific unit(s). If the BLM had already considered this information in the inventory, this was also documented, but no substantive changes were made to the write-up for the specific unit(s). Overall, BLM found very few of the unit specific comments represented new information that it had not already considered in its 2018 inventory findings. A total of 26 inventory units were reviewed. Minor boundary changes were made in 6 of these inventory units due to boundary road determination changes. None of this new information or subsequent boundary adjustments resulted in a change in BLM's previous overall finding regarding the presence of wilderness characteristics for any specific unit (see *Additional Public Involvement* section of Chapter 4). This review was completed in 2020.

Summary of Wilderness Characteristics Inventory

As a result of this inventory update effort, BLM staff identified 826 distinct inventory polygons totaling approximately 3,179,423 acres located primarily in the Lakeview planning area. A number of these units were shared with the Deschutes, Central Oregon, Three Rivers, Andrews, and Surprise Field Offices (Map WCI-1, Appendix 1). Five of these units only touched the edge of the Lakeview planning area, were evaluated separately by the adjoining field office, and are not addressed further in this inventory summary. About 50 sub-units or distinct parcels were removed from inventory unit boundaries due to the presence of high concentrations of unnatural features. A total of 668 inventory units (totaling approximately 713,096 acres) failed to meet the size criteria or any exceptions to the size criteria and were eliminated from further consideration.

The BLM found a total of 156 inventory units met one of the size criteria and were evaluated further. Of these, the BLM found 130 units were larger than 5,000 acres. The BLM found 87 of these units contained wilderness characteristics (Table A2-1). The BLM also found 26 small units that were less than 5,000 acres in size, but still met the size criterion and contained wilderness characteristics solely due to being contiguous with an existing WSA. Overall, the BLM found 113 units (approximately 1,949,888 acres) outside of existing WSAs that contained wilderness characteristics. Nineteen of these units are shared with adjacent BLM Field Offices. Seven of these units (totaling about 1,187 acres) were previously identified during the development of the *Lakeview RMP/ROD* (BLM 2001a, 2003b) (see Map W-1, Appendix 1). In total, the BLM found 106 new wilderness characteristics units totaling approximately 1,654,103 acres located specifically within the Lakeview planning area (Tables A2-1 and A2-2; Map WCI-1, Appendix 1). More detailed inventory documentation, including photos, boundary road determinations, and wilderness characteristics inventory forms are contained in the BLM's wilderness characteristics inventory files. Individual wilderness characteristics inventory findings have been posted on the Lakeview District's inventory webpage at https://www.blm.gov/programs/planning-and-nepa/plans-in-development/oregon-washington/lakeview-wci. Pursuant to 40 CFR 1502.21, the BLM hereby incorporates by reference, the entirety of its wilderness characteristics inventory update documentation into this analysis. Table A2-3 contains a summary of current management within the 106 wilderness characteristics units.

Based upon a GIS comparison analysis, the BLM found wilderness characteristics to be present in about 67% of the same geographic areas within the planning area where ONDA (2005, 2012, 2015) felt wilderness characteristics existed.

Table A2-1. Wilderness Characteristics Inventory Summary for Units Larger than 5,000 Acres

Unit Name	Unit ID No.	Lakeview BLM Acres	Total BLM Acres**	Size	Naturalness	Outstanding Opportunity		Supplemental Values	Finding
						Primitive or Unconfined Recreation	Solitude		
Alkali Lake West	OR-015-069A	11430.3	11430.3	Y	N	NA	NA	NA	N
Alkali Buttes	OR-015-035B	6464.2	6464.2	Y	Y	Y	Y	Y	Y
Alkali Valley	OR-015-035A	7054.9	7054.9	Y	Y	N	N	NA	N
Bald Mountain	OR-015-144	13567.8	13567.8	Y	Y	Y	Y	Y	Y
Beatys Butte	OR-015-136	8458.6	8458.6	Y	Y	Y	Y	Y	Y
Benjamin Lake - East Butte	OR-015-010	25059.1	25059.1	Y	Y	Y	Y	Y	Y
Binkie Lake	OR-015-102	19836.5	19836.5	Y	Y	Y	Y	Y	Y
Biscuit Point	OR-015-081	32990.6	32990.6	Y	N	NA	NA	NA	N
Black Hills	OR-015-041	28264.9	28264.9	Y	Y	Y	Y	Y	Y
Buckaroo Pass	OR-015-138	13339.5	13339.5	Y	Y	Y	Y	Y	Y
Burma Rim	OR-015-048	38746	38746	Y	Y	Y	Y	Y	Y
Catlow Valley*	OR-015-159	17074.4	57111	Y	Y	Y	Y	Y	Y
Chase	OR-015-032A	18178.6	18178.6	Y	Y	N	N	NA	N
Christmas Valley East	OR-015-027	5022.8	5022.8	Y	Y	N	N	NA	N
Coglan Buttes East	OR-015-096A	11026.6	11026.6	Y	Y	N	N	NA	N
Coglan Buttes North	OR-015-096B	22054.4	22054.4	Y	Y	Y	Y	Y	Y
Coglan Buttes South	OR-015-098	18232.5	18232.5	Y	Y	Y	Y	Y	Y
Coleman Rim*	OR-015-126	17475.3	30138	Y	Y	Y	Y	Y	Y
Collins Rim - Deep Creek	OR-015-118	23095.3	23095.3	Y	Y	Y	Y	Y	Y
Colvin Lake	OR-015-104	13454.3	13454.3	Y	Y	Y	Y	Y	Y
Connley Hills	OR-015-019	5379.4	5379.4	Y	Y	Y	Y	Y	Y
Cox Butte	OR-015-038A	17843.2	17843.2	Y	Y	Y	Y	Y	Y
Cox Butte South	OR-015-038B	13367.8	13367.8	Y	Y	N	N	NA	N
Coyote Hills	OR-015-110	20644.3	20644.3	Y	Y	Y	Y	Y	Y
Diablo South	OR-015-095	18658.2	18658.2	Y	Y	Y	Y	Y	Y
Dog Leg South	OR-015-028A	6249.7	6249.7	Y	Y	N	N	NA	N
Doughnut Mountain	OR-015-051	10723	10723	Y	Y	Y	Y	Y	Y
Drake Creek	OR-015-0210	5448.4	5448.4	Y	Y	Y	Y	Y	Y
Dry Valley Rim	OR-015-052	38519.8	38519.8	Y	Y	Y	Y	Y	Y
Duncan Creek	OR-015-208	7844	7844	Y	Y	Y	Y	Y	Y
Eagle Butte	OR-015-085	13854.4	13854.4	Y	Y	N	N	NA	N
East Coyote Hills	OR-015-111	15563.3	15563.3	Y	Y	Y	Y	Y	Y
Egli Rim	OR-015-040	6193.5	6193.5	Y	Y	Y	Y	Y	Y
Elk Mountain	OR-015-013	67894.4	67894.4	Y	Y	Y	Y	Y	Y
Fandango	OR-015-046	14238.4	14238.4	Y	Y	Y	Y	Y	Y
Fish Lake	OR-015-123	7329.8	7329.8	Y	Y	Y	Y	Y	Y
Fisher Canyon	OR-015-124	16490	16490	Y	Y	Y	Y	Y	Y
Flint Hills	OR-015-106	32043.4	32043.4	Y	Y	Y	Y	Y	Y

Unit Name	Unit ID No.	Lakeview BLM Acres	Total BLM Acres**	Size	Naturalness	Outstanding Opportunity		Supplemental Values	Finding
						Primitive or Unconfined Recreation	Solitude		
Fossil Lake	OR-015-023	5110	5110	Y	Y	N	N	NA	N
Frederick Butte*	OR-056-048-H	56.6	13675	Y	Y	Y	Y	N	Y
Frederick Butte*	OR-056-048-D	349	17782.4	Y	Y	N	N	N	N
Frederick Butte*	OR-056-048-H1	0	7000.3	Y	Y	N	N	N	N
Goodrich Well North	OR-015-030A	6358.8	6358.8	Y	Y	N	N	NA	N
Goodrich Well South	OR-015-030B	5090.4	5090.4	Y	Y	N	N	NA	N
Grays Butte	OR-015-071	26233.6	26233.6	Y	Y	Y	Y	Y	Y
Greaser Ridge	OR-015-125	8839.7	8839.7	Y	Y	Y	Y	Y	Y
Guano Lake	OR-015-135	15049.5	15049.5	Y	Y	N	N	NA	N
Guano Slough*	OR-026-091	3552.4	18786	Y	Y	N	N	Y	N
Hayes Butte	OR-015-020	5475.3	5475.3	Y	Y	Y	Y	Y	Y
Horse Mountain	OR-015-049	15345.2	15345.2	Y	Y	Y	Y	Y	Y
Horsehead Mountain	OR-015-221	5481.6	5481.6	Y	Y	Y	Y	Y	Y
Horseshoe Rim	OR-015-087	15016.7	15016.7	Y	Y	Y	N	Y	Y
Jack Lake	OR-015-129	11190.7	11190.7	Y	Y	Y	Y	Y	Y
Jug Mountain	OR-015-083A	11326.4	11326.4	Y	Y	N	N	NA	N
Jug Mountain North	OR-015-083B	8547.1	8547.1	Y	Y	N	N	NA	N
Juniper Canyon	OR-015-077	13572.9	13572.9	Y	Y	Y	Y	Y	Y
Juniper Island***	OR-015-025	27,055	27,055	Y	Y	Y	Y	Y	Y
Juniper Mountain	OR-015-072	10441.5	10441.5	Y	Y	Y	Y	Y	Y
Kilgore Butte	OR-015-004A	28212.1	28212.1	Y	Y	Y	Y	Y	Y
Kit Canyon	OR-015-075	6106.8	6106.8	Y	Y	Y	Y	Y	Y
Lake Abert	OR-015-099	40773.3	40773.3	Y	Y	Y	Y	Y	Y
Lake Abert Northwest	OR-015-097	17550.4	17550.4	Y	Y	N	N	NA	N
Little Juniper Mountain	OR-015-130	23443.2	23443.2	Y	Y	Y	Y	Y	Y
Little Steamboat Point	OR-015-090	5540.9	5540.9	Y	Y	Y	Y	Y	Y
Lone Grave Butte	OR-015-134B	19607.9	19607.9	Y	Y	Y	Y	Y	Y
Lone Grave Butte South	OR-015-134C	11827.7	11827.7	Y	Y	N	N	NA	N
Long Lake	OR-015-128	7545.2	7545.2	Y	Y	Y	N	Y	Y
Mahogany Mountain	OR-015-137	7565.7	7565.7	Y	Y	Y	Y	Y	Y
Monument Flat	OR-015-117A	20075.8	20075.8	Y	Y	Y	Y	Y	Y
Monument Rock	OR-015-210	5721.7	5721.7	Y	Y	Y	Y	Y	Y
Murphy Waterholes Southeast*	OR-015-115F	3940	5383	Y	N	N	N	Y	N
Murphy Waterholes – Guano Slough*	OR-015-115	57619.2	100926	Y	Y	Y	Y	Y	Y
Natural Corral Draw	OR-015-086	14155.8	14155.8	Y	Y	N	N	NA	N
Northeast Warner Valley	OR-015-092	6443.4	6443.4	Y	Y	N	N	NA	N
Northwest Warner Valley	OR-015-091D	5841.4	5841.4	Y	Y	N	N	NA	N
Oatman	OR-015-205	11514.9	11514.9	Y	Y	Y	Y	Y	Y

Unit Name	Unit ID No.	Lakeview BLM Acres	Total BLM Acres**	Size	Naturalness	Outstanding Opportunity		Supplemental Values	Finding
						Primitive or Unconfined Recreation	Solitude		
Packsaddle Draw	OR-015-073A	6838.4	6838.4	Y	Y	Y	Y	Y	Y
Packsaddle Draw East	OR-015-073B	10374.3	10374.3	Y	Y	N	N	NA	N
Painter Ranch	OR-015-007	5519.5	5519.5	Y	Y	Y	Y	Y	Y
Peters Butte**	OR-015-006	45257	45257	Y	Y	Y	Y	Y	Y
Poker Jim Flat	OR-015-094	13046.7	13046.7	Y	Y	Y	Y	Y	Y
Post Lake	OR-015-044	10829.8	10829.8	Y	Y	Y	Y	Y	Y
Rabbit Hills	OR-015-108F	13546.2	13546.2	Y	Y	Y	Y	Y	Y
Rabbit Hills Northeast	OR-015-091	10447.8	10447.8	Y	Y	N	N	Y	N
Rams Butte*	OR-015-017	11694.2	11869	Y	Y	Y	Y	Y	Y
Rehart Canyon	OR-015-037	36085.5	36085.5	Y	Y	Y	Y	Y	Y
Robinson Lake*	OR-015-057B	23097.8	31544	Y	Y	Y	Y	Y	Y
Ryegrass	OR-015-143B	31803.9	31803.9	Y	Y	Y	Y	Y	Y
Saddle Butte North	OR-015-226	8036.4	8036.4	Y	Y	Y	Y	Y	Y
Saddle Butte South	OR-015-005	13960.5	13960.5	Y	Y	Y	Y	Y	Y
Sage Hen Flat East	OR-015-145A	7605.2	7605.2	Y	Y	N	N	NA	N
Sagehen Flat West	OR-015-145B	8509.9	8509.9	Y	Y	N	N	NA	N
Sagehen Spring North	OR-015-140B	9541.3	9541.3	Y	Y	N	N	NA	N
Saunders Rim	OR-015-065	59453	59453	Y	Y	Y	Y	Y	Y
Sheep Rock	OR-015-047	52078.1	52078.1	Y	Y	Y	Y	Y	Y
Sheeplick Draw	OR-015-043C	19631.4	19631.4	Y	Y	Y	Y	Y	Y
Shirk Rim	OR-015-133	13833.2	13833.2	Y	Y	Y	Y	Y	Y
Skokum Lake	OR-015-105	18035.2	18035.2	Y	Y	N	N	NA	N
South Green Mountain	OR-015-021C	5463.7	5463.7	Y	N	NA	NA	NA	N
South Plateau East	OR-015-029B	5418.7	5418.7	Y	Y	N	N	NA	N
South Plateau West	OR-015-029A	8383.7	8383.7	Y	Y	N	N	NA	N
South Warner Rim	OR-015-119	10812.8	10812.8	Y	Y	Y	Y	Y	Y
Spanish Lake	OR-015-121A	9918.3	9918.3	Y	Y	N	N	NA	N
Spaulding Reservoir East	OR-015-139A	5418.1	5418.1	Y	Y	N	N	NA	N
Spine Cob Butte	OR-015-093	11755	11755	Y	Y	N	N	NA	N
Steamboat Point	OR-015-076	29947.8	29947.8	Y	Y	Y	Y	Y	Y
Stevens Butte	OR-015-004B	6238.6	6238.6	Y	Y	Y	Y	Y	Y
Sucker Creek	OR-015-120A	7118.1	7118.1	Y	Y	Y	Y	Y	Y
Sunstone Mine North	OR-015-088	30982.5	30982.5	Y	Y	Y	Y	Y	Y
Swamp Lake	OR-015-112B	13920.6	13920.6	Y	Y	N	N	NA	N
Three Story Rim	OR-015-089	5478.2	5478.2	Y	Y	Y	Y	Y	Y
Tired Horse Butte - Bald Butte*	OR-25-023A	1394	23640	Y	N	N	N	NA	N
Tired Horse Butte*	OR-025-023E	14430.1	26665	Y	Y	Y	Y	Y	Y
Tired Horse Butte – Black Canyon*	OR-025-023B	0	9632	Y	Y	N	N	Y	N

Unit Name	Unit ID No.	Lakeview BLM Acres	Total BLM Acres**	Size	Naturalness	Outstanding Opportunity		Supplemental Values	Finding
						Primitive or Unconfined Recreation	Solitude		
Tucker Hill	OR-015-116	8314.4	8314.4	Y	Y	Y	Y	Y	Y
Twelvemile - Horse Creek*	OR-015-157	10378	24081	Y	Y	Y	Y	Y	Y
Twelvemile - Rock Creek*	OR-015-164	1545	15675	Y	Y	Y	Y	Y	Y
Twin Lakes	OR-015-080	20357.5	20357.5	Y	Y	N	N	NA	N
Vaugn Well	OR-015-026	5522.2	5522.2	Y	Y	N	N	NA	N
Venator Butte	OR-015-070	8966.7	8966.7	Y	Y	Y	Y	Y	Y
Wardell Well	OR-015-008	10134	10134	Y	Y	N	N	NA	N
Warner Lakes	OR-015-114	35672.2	35672.2	Y	Y	Y	Y	Y	Y
Waterhole A2*	OR-054-007-A2	4573.5	22377	Y	Y	Y	Y	Y	Y
Waterhole B1*	OR-054-007-B1	1764.1	5259	Y	Y	Y	Y	Y	Y
Waterhole B4*	OR-054-007-B4	470	5929	Y	N	N	N	Unknown	N
West Warm Springs - Buzzard Lake*	ORB05-03208	5601.1	22238	Y	Y	Y	Y	Y	Y
West Warm Springs - Deadhorse*	ORB05-03201	74653.2	145982	Y	Y	Y	Y	Y	Y
West Warm Springs - Lake*	ORB05-03209	8623.2	68127	Y	Y	Y	Y	Y	Y
Whiskey Lake	OR-015-062	62726.2	62726.2	Y	Y	Y	Y	Y	Y
Wilson Spring	OR-015-142	16478.9	16478.9	Y	Y	Y	Y	Y	Y
TOTAL		**1,630,259**	**1,949,881**						

* Unit shared with another Field Office; See Map WCI-1.
** Total acres for units shared by more than one Field Office.
*** Total does not include approximately 7,899 acres of the Lost Forest ISA that were inventoried as part of this unit. The ISA will continue to be managed under *BLM Manual 6330 - Management of Wilderness Study Areas* (BLM 2012h) under all alternatives.
**** Total does not include approximately 185 acres of the Lost Forest ISA that were inventoried as part of this unit. The ISA will continue to be managed under *BLM Manual 6330 - Management of Wilderness Study Areas* (BLM 2012h) under all alternatives.
N – value is not present.
Y – value is present.
NA = not applicable/not evaluated.

Table A2-2. Wilderness Characteristics Inventory Summary for Units Less than 5,000 Acres that Met the Exception to the Size Criterion

Unit Name	Unit ID No.	Lakeview BLM Acres	Total BLM Acres**	Size	Naturalness	Outstanding Opportunity		Supplemental Values	Finding
						Primitive or Unconfined Recreation	Solitude		
Abert Rim Parcel 1* **	OR-015-101	161.9	161.9	Y	Y	Y	Y	Unknown	Y
Basque Hills Northwest Addition	OR-026-084F	370.2	370.2	Y	Y	N	Y	Y	Y
Basque Hills Southeast Addition	OR-026-084G	1373.6	1373.6	Y	Y	N	Y	Y	Y
Billy Burr Parcel* **	OR-015-132C	509.5	509.5	Y	Y	Y	Y	Unknown	Y
Cougar Mountain	OR-015-220	916.9	916.9	Y	Y	Y	Y	Y	Y
Diablo West	OR-015-206	2521.7	2521.7	Y	Y	Y	Y	Y	Y
Fish Creek North	OR-015-117D	2206.8	2206.8	Y	Y	Y	Y	Y	Y
Fish Creek Parcel E	OR-015-117E	39.7	39.7	Y	Y	Y	Y	Y	Y
Guano Rim	OR-015-158	4786.9	4786.9	Y	Y	Y	Y	Y	Y
Hawk Mountain North Addition	OR-015-146C	57	57	Y	Y	Y	Y	Y	Y
Hawk Mountain Northeast Addition*	OR-015-146D	2836.2	3122	Y	Y	Y	Y	Y	Y
Lynch's Rim Parcel B* **	OR-015-117B	39.9	39.9	Y	Y	Y	Y	Unknown	Y
Lynch's Rim Parcel C* **	OR-015-117F	364.7	364.7	Y	Y	Y	Y	Unknown	Y
Lynch's Rim Parcel D* **	OR-015-117G	8.2	8.2	Y	Y	Y	Y	Unknown	Y
Poker Jim Contiguous A	OR-015-114A	141.1	141.1	Y	Y	N	Y	Y	Y
Poker Jim Contiguous B	OR-015-114B	88.6	88.6	Y	Y	N	Y	Y	Y
Poker Jim Contiguous C	OR-015-114C	36.8	36.8	Y	Y	N	Y	Y	Y
Poker Jim Contiguous D	OR-015-114D	23.1	23.1	Y	Y	N	Y	Y	Y
Poker Jim Contiguous E	OR-015-114E	243.3	243.3	Y	Y	N	Y	Y	Y
Rincon Southwest Addition*	OR-015-082P	2367.4	2739	Y	Y	Y	Y	Y	Y
Sheldon Rim	OR-015-190	475.1	475.1	Y	Y	Y	Y	Y	Y
Shirk Ranch Parcel 1* **	OR-015-132A	63.5	63.5	Y	Y	Y	Y	Unknown	Y
Shirk Ranch Parcel 2* **	OR-015-132B	40.6	40.6	Y	Y	Y	Y	Unknown	Y
Snyder Creek 1	OR-015-101A	26.1	26.1	Y	Y	Y	Y	Y	Y
Snyder Creek 2	OR-015-101B	828	828	Y	Y	Y	Y	Y	Y
South Sand Dunes	OR-015-209	4498.9	4498.9	Y	Y	Y	Y	Y	Y
TOTAL		**25,025**	**25,683**						

* Unit shared with another District; See Map WCI-1.
**Total acres for units shared by more than one district.
*** Identified in *Lakeview RMP/ROD* (BLM 2003b); See Map W-1.
N – value is not present.
Y – value is present.
NA = not applicable/not evaluated.

Table A2-3. Existing Land Use Allocations for Wilderness Characteristics Units (No Action Alternative and Alternative A)

Unit Name	Unit ID No.	Existing Designations		Existing Land Use Allocations									
		ACEC/ Suitable WSR/ NHRD	SFA/ PHMA/ GHMA	OHV	VRM	Grazing	Land Tenure Zone	Major ROWs	Wind/ Solar ROWs	Minor ROWs	Locatable Minerals	Leasable Minerals	Salable Minerals
Alkali Buttes	OR-015-035B			OP/LI	IV	OP	2	OP	OP	OP	OP	OP	OP
Bald Mountain	OR-015-144		SFA	OP/LI	IV	OP/EXCL	1	AV	EX	AV	OP	NSO	CL
Basque Hills Northwest Addition	OR-026-084F		SFA	LI	IV	OP	1	AV	EX	AV	OP	NSO	CL
Basque Hills Southeast Addition	OR-026-084G		GHMA	LI	IV	OP	1	AV	AV	OP	OP	CSU	CSU
Beaty Butte	OR-015-136		SFA	LI	IV	OP/EXCL	1	AV	EX	OP/AV	OP	NSO	CL
Benjamin Lake - East Butte	OR-015-010		PHMA/ GHMA	LI	IV	OP	1	AV	AV	AV	OP	CSU/NSO	CL/CSU
Binkie Lake	OR-015-102		SFA	LI	IV	OP	1	AV/COR	EX	AV	OP	NSO	CL
Black Hills	OR-015-041	ACEC	PHMA/ GHMA	LI	II/III/IV	OP/UA/ EXCL	1/2	OP/AV/COR	OP/AV	OP/AV	OP/POO	OP/NSO/ CSU	OP/CL/ CSU
Buckaroo Pass	OR-015-138		SFA	LI	IV	OP/EXCL	1	AV/COR	EX	AV	OP	NSO	CL
Burma Rim	OR-015-048		GHMA	OP/LI	IV	OP/EXCL	1/2	OP/AV/COR	OP/AV	OP	OP	OP/NSO/ CSU	OP/CSU
Catlow Valley*	OR-015-159		PHMA/ GHMA	LI	IV	OP	1	AV	AV	OP/AV	OP	NSO/CSU	CL/CSU
Coglan Buttes North	OR-015-096B		GHMA	OP/LI	II/III/IV	OP/EXCL	1/2	OP/AV	OP/AV	OP/AV	OP	OP/NSO/ CSU	OP/CSU
Coglan Buttes South	OR-015-098		GHMA	OP/LI	II/III/IV	OP/EXCL	1/2	OP/AV	OP/AV	OP/AV	OP	OP/NSO/ CSU	OP/CSU
Coleman Rim*	OR-015-126	ACEC	SFA/ PHMA	OP/LI	III/IV	OP/EXCL	1/2	OP/COR/AV	OP/AV/EX	OP/AV	OP/POO	OP/NSO/ CSU	OP/CL/ CSU
Collins Rim - Deep Creek	OR-015-118		SFA/ PHMA/ GHMA	LI	II/III/IV	OP/EXCL	1	AV/COR	AV/EX	OP/AV	OP/WD	NSO/CSU	CL/CSU
Colvin Lake	OR-015-104		SFA/ PHMA/ GHMA	OP/LI	IV	OP/EXCL	1	OP/COR/AV	OP/AV/EX	OP/AV	OP/WD	OP/NSO/ CSU	OP/CL/ CSU
Coleman Valley West - Ranch* (Twelvemile-Horse Cr.)	OR-015-157	Suitable WSR	PHMA/ GHMA	OP/LI	II/III/IV	OP/EXCL	1/2	OP/COR/AV	OP/AV	OP/AV	OP/WD	OP/CL/NSO/CSU	OP/CL/ CSU
Connley Hills	OR-015-019	ACEC	GHMA	LI	III/IV	OP	1/2	OP/AV/COR	OP/AV	OP/AV	OP/POO	NSO/CSU	CSU
Cougar Mountain	OR-015-220		GHMA	LI	IV	OP	1/2	OP/AV	OP	OP	OP	CSU	CSU
Cox Butte	OR-015-038A		GHMA	LI	IV	OP	1	AV	AV	OP	OP	CSU	CSU
Coyote Hills	OR-015-110		SFA/ GHMA	LI	IV	OP/EXCL	1	AV/COR	AV/EX	OP/AV	OP	NSO/CSU	CL/CSU

Unit Name	Unit ID No.	Existing Designations		Existing Land Use Allocations									
		ACEC/ Suitable WSR/ NHRD	SFA/ PHMA/ GHMA	OHV	VRM	Grazing	Land Tenure Zone	Major ROWs	Wind/ Solar ROWs	Minor ROWs	Locatable Minerals	Leasable Minerals	Salable Minerals
Diablo South	OR-015-095		GHMA	OP/LI	II/III/IV	OP	1/2	OP/AV	OP/AV	OP/AV	OP	NSO/CSU	CSU
Diablo West	OR-015-206			OP/LI	IV	OP	1/2/3	OP	OP	OP	OP	OP	OP
Doughnut Mountain	OR-015-051		GHMA	OP/LI	IV	OP/EXCL	1/2	OP/AV	OP/AV	OP	OP	OP/CSU	OP/CSU
Drake Creek	OR-015-0210		SFA/ PHMA	LI	II/III	OP/UA/ EXCL	1	AV/COR	EX	AV	OP/WD	NSO	CL
Dry Valley Rim	OR-015-052		GHMA	LI	IV	OP/EXCL	1	AV	AV	OP	OP	CSU	CSU
Duncan Creek	OR-015-208		GHMA	LI	II/III	OP/EXCL	1/2	AV/COR	OP/AV	OP/AV	OP	NSO/CSU	CL/CSU
East Coyote Hills	OR-015-111		SFA/ GHMA	OP/LI	IV	OP/EXCL	1/2	OP/AV	OP/AV/EX	OP/AV	OP	OP/NSO/ CSU	OP/CL/ CSU
Egli Rim	OR-015-040	NHRD	PHMA/ GHMA	LI	II/III/IV	OP/UA	1/2	OP/AV	OP/AV	OP/AV	OP	OP/NSO/ CSU	OP/CL/ CSU
Elk Mountain	OR-015-013		PHMA/ GHMA	LI	III/IV	OP/EXCL	1	AV	AV	OP/AV	OP	NSO/CSU	CL/CSU
Fandango	OR-015-046		GHMA	LI	IV	OP/UA	1	AV/COR	AV	OP	OP	CSU	CSU
Fish Creek North	OR-015-117D		SFA	LI	II	OP/EXCL	1	AV	EX	AV	OP	NSO	CL
Fish Creek Parcel E	OR-015-117E		GHMA	OP/LI	III	OP	1	OP/AV	OP/AV	OP	NFM	NFM	NFM
Fish Lake	OR-015-123		SFA/ GHMA	OP/LI	III/IV	OP/EXCL	1/2	OP/AV	AV/EX	OP/AV	OP	NSO/CSU	CL/CSU
Fisher Canyon	OR-015-124	ACEC	SFA	OP/LI	III/IV	OP/EXCL	1/2	OP/AV	OP/EX	OP/AV	OP/POO	OP/NSO	OP/CL
Flint Hills	OR-015-106		SFA/ GHMA	OP/LI	IV	OP	1/2	OP/AV	OP/AV/EX	OP/AV	OP/WD	OP/NSO/ CSU	OP/CL/ CSU
Frederick Butte*	OR-056-048-H		GHMA	LI	IV	OP	1	AV/COR	AV	OP/AV	OP	NSO/CSU	CSU
Grays Butte	OR-015-071		SFA/ PHMA/ GHMA	OP/LI	III/IV	OP/EXCL	1/2	OP/AV	OP/AV/EX	OP/AV	OP/WD	OP/NSO/ CSU	OP/CL/ CSU
Greaser Ridge	OR-015-125	ACEC	SFA/ GHMA	LI	III	OP/EXCL	1	AV/COR	AV/EX	OP/AV	OP/POO	NSO/CSU	CL/CSU
Guano Rim	OR-015-158		SFA/ GHMA	LI	IV	OP/EXCL	1	AV	AV/EX	OP/AV	OP/WD	NSO/CSU	CL/SCU
Hawk Mountain North Addition	OR-015-146C		SFA	LI	IV	OP	1	AV	EX	AV	OP	NSO	CL
Hawk Mountain Northeast Addition*	OR-015-146D		GHMA	LI	IV	OP/EXCL	1	AV	AV	OP	OP	CSU	CSU
Hayes Butte	OR-015-020		GHMA	LI	III/IV	OP/EXCL	1/2	OP/AV/COR	OP/AV	OP	OP	NSO/CSU	CSU
Horse Mountain	OR-015-049		GHMA	OP/LI	IV	OP	1/2	OP/AV	OP/AV	OP	OP	OP/CSU	OP/CSU

Unit Name	Unit ID No.	Existing Designations		Existing Land Use Allocations									
		ACEC/ Suitable WSR/ NHRD	SFA/ PHMA/ GHMA	OHV	VRM	Grazing	Land Tenure Zone	Major ROWs	Wind/ Solar ROWs	Minor ROWs	Locatable Minerals	Leasable Minerals	Salable Minerals
Horsehead Mountain	OR-015-221		GHMA	LI	IV	OP/EXCL	1	AV	AV	OP	OP	CSU	CSU
Horseshoe Rim	OR-015-087		SFA/ GHMA	LI	IV	OP/EXCL	1	AV	AV/EX	OP/AV	OP	NSO/CSU	CL/CSU
Jack Lake	OR-015-129		SFA	LI	III/IV	OP/CL	1	AV	EX	OP/AV	OP	NSO	CL
Juniper Canyon	OR-015-077		PHMA/ GHMA	LI	IV	OP/CL	1	AV	AV	OP/AV	OP	NSO/CSU	CL/CSU
Juniper Island	OR-015-025	ACEC	GHMA	OP/LI	I/III/IV	OP/EXCL	1/2	OP/AV/ EX	OP/AV/E X	OP/AV	OP/POO/W D	CL/NSO/ CSU	CL/CSU
Juniper Mountain	OR-015-072	ACEC	SFA/ GHMA	LI	IV	OP/EXCL	1	AV	AV/EX	OP/AV	OP/POO/W D	NSO/CSU	CL/CSU
Kilgore Butte	OR-015-004A		PHMA/ GHMA	LI	IV	OP/UA	1	AV/COR	AV	OP/AV	OP	NSO/CSU	CL/CSU
Kit Canyon	OR-015-075		GHMA	LI	IV	OP	1	AV	AV	OP	OP	CSU	CSU
Lake Abert	OR-015-099	ACEC/N HRD	GHMA	OP/LI	I/II/III	UA/EXC L	1/2	OP/AV	OP/AV	OP/AV	OP/POO	OP/CL/N SO/CSU	OP/CL/ CSU
Little Juniper Mountain	OR-015-130	ACEC	SFA	LI	III/IV	OP	1	AV/COR	EX	OP/AV	OP/POO	NSO	CL
Little Steamboat Point	OR-015-090		GHMA	LI	IV	OP/EXCL	1	AV	AV	OP	OP	CSU	CSU
Lone Grave Butte	OR-015-134B		SFA	LI	IV	OP	1	AV/COR	EX	AV	OP	NSO	CL
Long Lake	OR-015-128	ACEC	SFA	LI	III	OP	1	AV	EX	AV	OP/POO	NSO	CL
Mahogany Mountain	OR-015-137		SFA	LI	IV	OP/EXCL	1	AV/COR	EX	OP/AV	OP	NSO	CL
Monument Flat	OR-015-117A	ACEC	SFA /PHMA	LI	II	OP/EXCL	1	AV/COR	EX	AV	OP/POO	NSO	OP/CL/ CSU
Monument Rock	OR-015-210			OP	II/III/IV	OP/UA	2	OP	OP	OP	OP	OP/CSU	OP/CSU
Murphy Waterholes*	OR-015-115		SFA/ GHMA	LI	IV	OP/EXCL	1	AV	AV/EX	OP/AV	OP	NSO/CSU	CL/CSU
Oatman	OR-015-205			LI/CL	III/IV	OP/EXCL	2	OP/AV	OP/AV	OP/AV	OP	OP/CSU	OP/CSU
Packsaddle Draw	OR-015-073A		GHMA	LI	IV	OP	1	AV	AV	OP	OP	CSU	CSU
Painter Ranch	OR-015-007		GHMA	LI	IV	OP	1	AV/COR	AV	OP	OP	CSU	CSU
Peters Butte	OR-015-006		GHMA	LI	III/IV	OP	1	EX/AV/COR	AV/EX	OP/AV	OP/WD	CL	CL/CSU
Poker Jim Contiguous A	OR-015-114A		SFA/GH MA	OP/LI	III/IV	CL	1/2	OP/AV	OP/AV	OP/AV	OP	OP/NSO/ CSU	OP/CL/ CSU
Poker Jim Contiguous B	OR-015-114B		SFA/ PHMA/ GHMA	OP/LI	IV	OP	1	AV	AV/EX	AV	OP	OP/NSO/ CSU	OP/CL/ CSU

Unit Name	Unit ID No.	Existing Designations		Existing Land Use Allocations									
		ACEC/ Suitable WSR/ NHRD	SFA/ PHMA/ GHMA	OHV	VRM	Grazing	Land Tenure Zone	Major ROWs	Wind/ Solar ROWs	Minor ROWs	Locatable Minerals	Leasable Minerals	Salable Minerals
Poker Jim Contiguous C	OR-015-114C		SFA/ PHMA	LI	IV	OP	1	AV	EX	AV	OP	NSO	CL
Poker Jim Contiguous D	OR-015-114D		SFA/ PHMA	LI	IV	OP	1	AV	EX	AV	OP	CSU	CSU
Poker Jim Contiguous E	OR-015-114E		SFA/ PHMA/ GHMA	OP/LI	IV	OP	1/2	OP/AV	OP/AV/EX	OP/AV	OP/WD	OP/CL/NSO/CSU	OP/CL/ CSU
Poker Jim Flat	OR-015-094		SFA/ GHMA	OP/LI	IV	OP	1/2	OP/AV	OP/AV/EX	OP/AV	OP	OP/NSO/ CSU	OP/CL/ CSU
Post Lake	OR-015-044	ACEC	GHMA	LI	III/IV	OP	1	AV	AV	OP/AV	OP/POO	NSO/CSU	CSU
Rabbit Hills	OR-015-108F		GHMA	OP/LI	IV	OP	1/2	OP/AV	OP/AV	OP	OP	OP/CSU	OP/CSU
Rams Butte*	OR-015-017		GHMA	LI	IV	OP	1/2	OP/AV	OP/AV	OP/AV	OP	OP/CSU/ NSO	OP/CSU
Rehart Canyon	OR-015-037		GHMA	OP/LI	IV	OP/EXCL	1/2	OP/AV	OP/AV	OP/AV	OP	OP/NSO/ CSU	OP/CSU
Rincon Southwest Addition*	OR-015-082P		GHMA	LI	IV	OP	1	AV	AV	OP	OP	CSU	CSU
Robinson Lake*	OR-015-057B		PHMA/ GHMA	LI	IV	OP	1	AV	AV	OP/AV	OP	NSO/CSU	CL/CSU
Ryegrass	OR-015-143B		SFA/ GHMA	LI	IV	OP	1	AV	AV/EX	OP/AV	OP	NSO/CSU	CL/CSU
Saddle Butte North	OR-015-226		GHMA	LI	IV	OP	1	AV/COR	AV	OP/AV	OP	NSO	CSU
Saddle Butte South	OR-015-005		PHMA/ GHMA	LI	IV	OP	1	AV/COR	AV	OP/AV	OP	NSO/CSU	CL/CSU
Saunders Rim	OR-015-065		GHMA	OP/LI	IV	OP/EXCL	1/2	OP/AV	OP/AV	OP/AV	OP	OP/NSO/ CSU	OP/CSU
Sheep Rock	OR-015-047		GHMA	OP/LI	IV	OP/EXCL	1/2	OP/COR/AV	OP/AV	OP/AV	OP	OP/NSO/ CSU	OP/CSU
Sheeplick Draw	OR-015-043C		PHMA/ GHMA	OP/LI	II/III/IV	OP/UA	1/2	OP/COR/AV	OP/AV	OP/AV	OP	OP/NSO/ CSU	OP/CL/ CSU
Sheldon Rim	OR-015-190		SFA	LI	III/IV	OP	1	AV	EX	OP	OP	NSO	CL
Shirk Rim	OR-015-133	ACEC	SFA	LI	III/IV	OP/EXCL	1	AV/COR	EX	OP/AV	OP/POO	NSO	CL
Snyder Creek 1	OR-015-101A		SFA	LI	IV	OP	1	AV	EX	AV	OP	NSO	CL
Snyder Creek 2	OR-015-101B		SFA	LI	IV	OP	1	AV	EX	AV	OP	NSO	CL
South Sand Dunes	OR-015-209	ACEC	GHMA	OP/LI/ CL	III/IV	OP	1/2	OP/COR/AV	OP/AV	OP/AV	OP/POO	CSU	CSU
South Warner Rim	OR-015-119		SFA/ GHMA	OP/LI	II/III/IV	OP/EXCL	1/2/3	OP/COR/AV	OP/AV/EX	OP/AV	OP	NSO/CSU	CL/CSU

Unit Name	Unit ID No.	Existing Designations		Existing Land Use Allocations									
		ACEC/ Suitable WSR/ NHRD	SFA/ PHMA/ GHMA	OHV	VRM	Grazing	Land Tenure Zone	Major ROWs	Wind/ Solar ROWs	Minor ROWs	Locatable Minerals	Leasable Minerals	Salable Minerals
Steamboat Point	OR-015-076		PHMA/ GHMA	LI	IV	OP/EXCL	1	AV	AV	OP/AV	OP/WD	NSO/CSU	CL/CSU
Stevens Butte	OR-015-004B		GHMA	LI	IV	OP	1	AV	AV	OP/AV	OP	NSO/CSU	CSU
Sucker Creek	OR-015-120A	ACEC	PHMA	LI	IV	OP/EXCL	1	AV	AV	AV	POO	NSO	CL
Sunstone Mine North	OR-015-088		GHMA	OP/LI	IV	OP/EXCL	1/2	OP/AV	OP/AV	OP	OP	OP/CSU	OP/CSU
Three Story Rim	OR-015-089		GHMA	OP/LI	IV	OP	1/2	OP/AV	OP/AV	OP	OP	OP/CSU	OP/CSU
Tired Horse Butte*	OR-025-023E		GHMA	LI	IV	OP	1	AV	AV	AV	OP	NSO/CSU	CSU
Tucker Hill	OR-015-116	ACEC	PHMA	LI	II/IV	OP/EXCL	1	AV	AV	AV	OP/POO	CL/NSO	CL
Twelvemile - Rock Creek*	OR-015-164	WSR	GHMA	LI	II/III/IV	OP/EXCL	1	OP/COR/AV	AV	OP/AV	OP	CL/CSU	CL/CSU
Venator Butte	OR-015-070		GHMA	OP/LI	III/IV	OP/EXCL	1/2	OP/AV	OP/AV	OP	OP	OP/CSU	OP/CSU
Warner Lakes	OR-015-114	ACEC	SFA/ PHMA/ GHMA	OP/LI	III/IV	OP/UA/ NOT AVAIL	1/2	OP/AV	OP/AV/EX	OP/AV	POO	OP/NSO/ CSU	OP/CL/ CSU
Waterhole A2*	OR-054-007-A2		GHMA	LI	IV	OP/EXCL	1	COR/AV	AV	AV	OP/WD	NSO/CSU	CSU
Waterhole B1*	OR-054-007-B1		GHMA	LI	IV	OP	1	AV	AV	OP	OP	NSO/CSU	CSU
West Warm Springs - Buzzard Lake*	ORB05-03208		PHMA	LI	IV	OP	1	AV	AV	AV	OP	NSO	CL
West Warm Springs - Deadhorse*	ORB05-03201		PHMA/ GHMA	LI	IV	OP/EXCL	1	AV	AV	OP	OP	NSO/CSU	CL/CSU
West Warm Springs - Lake*	ORB05-03209	ACEC	PHMA	LI	IV	OP/EXCL	1	AV	AV	AV	OP/POO	NSO	CL
Whiskey Lake	OR-015-062		GHMA	OP/LI	III/IV	OP/EXCL	1/2	OP/AV	OP/AV	OP	OP	OP/NSO/ CSU	OP/CSU
Wilson Spring	OR-015-142		SFA	LI	IV	OP/EXCL	1	COR/AV	EX	OP/AV	OP	NSO	CL

* Unit shared with another District; acres only include Lakeview portion.
** Unit evaluated in BLM 2003a.
AV – ROW Avoidance area.
EX – ROW Exclusion area.
COR - Designated utility corridor.
OP – Area is Open to this use. For grazing OP means area is Available for grazing use.
LI – Vehicle use is Limited to existing or designated routes. Used for OHV use only.
CL – Area is Closed to this use.
NOT AVAIL – Area is Not Available for grazing use.
EXCL – Area is Excluded from or Closed to grazing use via grazing or project decision.
UA – Area is Unalloted; not in a grazing allotment.
VRM - Classes I, II, III, and IV.
POO - Open to mineral development but subject to approval of a Plan of Operations.
CSU - Open to mineral development but subject to conditional surface use restrictions.
NSO - Open to mineral development but subject to no surface occupancy.
NFM - No Federal subsurface mineral rights.
WD – Withdrawn.

Appendix 3 – Existing Management Common to All Alternatives

Table of Contents

Introduction

This appendix contains a summary of the management authorities, existing management goals or objectives, and existing management direction from the existing land use plan, as maintained and amended (BLM 2003b, 2015a) that would not change under any alternative addressed in this plan amendment.

Lands, Realty, and Cadastral Survey

Land Tenure

Authority

Section 102(a)(1) of the FLPMA requires that public land be retained in Federal ownership unless disposal of a particular parcel would serve the national interest. Section 102(a)(10) outlines uniform procedures be used for disposal, acquisition, and exchange of lands. Acquisition of land to consolidate ownership patterns can provide for more efficient land management and administration for both public and private landowners. Retention and acquisition of land containing significant resource values can also provide long-term management and protection of those values.

All past and future public lands sold or exchanged under 43 U.S.C. 682(b) (Small Tracts Act), 43 U.S.C. 869 (Recreation and Public Purposes Act), 43 U.S.C. (Sales), or 43 U.S.C. 1716 (Exchanges), where minerals are reserved to the United States, shall be open to operation under the mining laws upon the publication of opening orders in the *Federal Register* informing the public of such action.

Adjustments in land tenure zones typically occur under the authority of the FLPMA; however, under certain circumstances, other authorities may be applicable as well. All land tenure adjustments would be made in conformance with the Interior Appropriations Act of 1992 and the *Federal Land Ownership Plan for Lake and Harney Counties* (*n.d.*). These require no net increase in Federal ownership compared to what existed as of September 30, 1991. The disposition of Bankhead-Jones lands would be accomplished by FLPMA sale or exchange and not by Recreation and Public Purpose Act or by State in Lieu Selection authorities.

Management Goal

> ***Land Tenure Management Goal*** *- Retain public land with high public resource values. Consolidate public land holdings and acquire land or interests in land with high public resource values to ensure effective administration and improve resource management. Acquired land would be managed for the purpose for which it was acquired.*

Management Direction

Public lands in land tenure Zone 1 (ACEC/RNA, WSR, WSA, PHMA, and GHMA) and Zone 2 would be retained or increased (see also MD LR-8, BLM 2015a, p. 2-28 to 2-29). Under certain limited circumstances, disposal of public land could be permitted in land tenure Zones 1 or 2 to achieve other resource objectives. Public lands in land tenure Zone 3 would be available for disposal by State indemnity selection, private or State exchange, Recreation and Public Purpose Act lease or sale, public sale, or other authorized disposal method.

Lands would be acquired from other owners willing to sell or exchange lands with an emphasis on acquiring lands with high public resource values (*e.g.* PHMA, riparian areas, and inholdings in WSA,

ACEC/RNA, and WSR). Newly acquired lands would be managed for the highest potential purpose for which they are acquired. Acquired lands within special designations would be managed the same as the surrounding special designation. Other acquired lands would be managed in the same manner as comparable surrounding public lands. Access to public lands in the planning area would be maintained or improved through future land tenure adjustments.

Land Use Authorizations

Authority

Rights-of-way (ROWs) and other land use authorizations are approved pursuant to Sections 302 and 501 of the FLPMA. Section 503 provides for the designation of linear ROW corridors and encourages utilization of rights-of-way in-common to minimize environmental impacts and the proliferation of separate rights-of-way. Bureau policy also encourages prospective applicants to locate their proposals within designated corridors.

Section 368 of the Energy Policy Act of 2005 directs the Secretaries of Agriculture, Commerce, Defense, Energy, and Interior to designate corridors for oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities on Federal lands in the eleven contiguous Western States and incorporate these designated corridors into the relevant resource management plan. This was accomplished by the completion of the *Approved Resource Management Plan Amendments/Record of Decision for Designation of Energy Corridors on Bureau of Land Management-Administered Lands in the 11 Western States* (BLM 2009c).

Section 211 of the Omnibus Appropriations Act of 2018 amended Title V of the FLPMA. This amendment directs the BLM to work with electric utilities in planning and approving vegetation management and maintenance activities within power line rights-of-way on public lands. Its purpose is to enhance the reliability of the electric grid and reduce the threat of wildfire damage to, and caused by, vegetation-related conditions within electric transmission and distribution rights-of-way abutting public lands.

BLM policy also requires designation of right-of-way avoidance and exclusion zones during the land use planning process (BLM 2005a, Appendix C, p. 21):

Avoidance areas*:* are those areas where new rights-of-way location would be avoided unless there are no other options. This designation provides early notice to potential applicants proposing rights-of-way or other land use authorizations. Only those facilities or uses, which are determined to be consistent with the designation or could be adequately mitigated, would be permitted in avoidance areas.

Exclusion areas: are those areas where no new rights-of-way would be allowed. This designation provides protection of other resource values, which are not compatible with rights-of-way or other land use authorizations.

The President's National Energy Policy encourages the development of renewable energy (wind and solar) projects. The BLM addresses such proposals by issuing rights-of-way for testing and site development under the authority of Title V of the FLPMA and 43 CFR 2802. The avoidance and exclusion zones described above also apply to the location of solar and wind energy projects.

Under various hazardous material statutes, the BLM's potential liability is limited if the disposal of hazardous and non-hazardous wastes are prohibited on public lands. Currently, there are no authorized waste disposal sites on public lands in the planning area.

Public lands may be made available for State National Guard and Federal military training purposes. Sections 102(a)(4), 204, and 302(b) of the FLPMA guide how these uses may be authorized via withdrawal, right-of-way, or cooperative agreement. In addition, the Engle Act of 1958 (as amended by the FLPMA) reserves to Congress the authority to make withdrawals of 5,000 acres or greater for military purposes.

Management Goal

> ***Land Use Authorizations Management Goal*** *- Meet public and other agency needs for land use authorizations such as rights-of-way, leases, and permits, including those associated with renewable energy development and military training.*

Management Direction

Applications

All applications for ROWs, leases, permits (filming, temporary commercial uses, large non-commercial organized group activities, military training uses), and other land-use authorizations (such as private driveways, apiary sites, wind or solar energy developments, utility lines, and new roads) would be processed on a case-by-case basis, via completion of a separate site-specific NEPA analysis where appropriate BMPs, RDFs, or other mitigation measures (Appendix 7) would be considered. Applications would be approved, modified, or denied based on this analysis and the conformance with the existing land use plan direction, including the following ROW avoidance and exclusion area designations.

ROW Avoidance and Exclusion Areas

All existing WSAs and NRHP districts would continue to be managed as ROW exclusion areas for all types of ROWs. Any ACEC/RNAs or portions thereof located outside of Greater Sage-grouse habitat, Twelvemile Creek WSR, and Buck Creek watchable wildlife site would continue to be managed as ROW avoidance areas for all types of ROWs.

Greater Sage-grouse PHMA would continue to be managed as ROW avoidance areas for road and communication site ROWs. Both PHMA and GHMA would continue to be managed as ROW avoidance areas for high voltage (100 kV or greater) transmission lines and major pipelines (24 inches or greater). GHMA would continue to be open to other ROW/land use authorizations, but would be subject to additional Greater Sage-grouse habitat screening criteria (see MD LR-3 MD LR-6, MD LR-7, and MD SSS-13, BLM 2015a, p. 2-25 to 2-28).

Sagebrush Focal Areas (SFAs) would continue to be managed as ROW exclusion areas for new utility/commercial scale wind or solar energy developments. PHMA outside of SFA in Lake and Harney Counties and all GHMA would continue to be managed as ROW avoidance areas for new utility/commercial scale wind or solar energy developments (see MD RE 2, MD RE-3, and MD RE-4, BLM 2015a, p. 2-25 to 2-28).

ROW Corridors

Existing designated ROW corridor locations and designated widths would be retained and available for ROW location (see MD LR-2 and MD LR-5, BLM 2015a, p. 2-26 to 2-27) (Map L-6, Appendix 1; Table 3-4). Energy corridor 7-24, approved in the *Westwide Energy Corridor ROD* (BLM 2009c), would be retained and available for future ROW location (Map L-7, Appendix 1). Public lands within and adjacent to existing County roads and Federal/State Highway ROWs would be retained as locally designated ROW corridors for co-location of road and linear utility line ROWs (Map L-6, Appendix 1).

The expansion of existing ROWs and issuance of new ROWs would continue to be encouraged within or adjacent to designated ROW corridors or other existing ROWs outside of designated corridors, especially those which cross ROW exclusion or avoidance areas (see also MD LR-5 and MD LR-6, BLM 2015a). Applicants for electrical transmission lines greater than 69 kV, all mainline fiber optics facilities, and pipelines greater than 10 inches in diameter would be encouraged to locate their proposed facilities within designated corridors. Parallel or perpendicular access roads across ROW exclusion and avoidance areas would also be allowed for construction and maintenance of facilities located within designated corridors.

Waste Disposal Sites

In accordance with current policy, land-use authorizations would not be issued for disposal or storage of materials which could potentially contaminate the land (*e.g.* sanitary landfills, transfer stations, or hazardous waste disposal sites) anywhere within the planning area. If a public need for such sites arises in the future, public land could be made available (from land tenure zone 2 or 3) by sale or exchange.

Unauthorized Uses

Realty-related unauthorized uses (*e.g.* trespass) would be confirmed and abated on all public lands in the planning area. Unauthorized uses on public land that do not conflict with other resource values, would either be authorized or terminated, as appropriate. Sites affected by unauthorized uses would be rehabilitated as necessary.

Energy and Minerals

Authority

Section 102 of the FLPMA directs the public land to be managed in a manner, which recognizes the Nation's need for domestic sources of minerals from the public lands, while managing these lands in a manner that would protect scientific, scenic, historic, archeological, ecological, environmental, air, and atmospheric and hydrologic values. The BLM's mineral and national energy policies state that public lands shall remain open and available for mineral exploration and development unless withdrawal or other administrative action is justified in the national interest. BLM has the authority to manage three categories of minerals: leasable, locatable, and salable (*see* Glossary, Appendix 8, for definitions).

The General Mining Law of 1872, as amended gives parties the right to locate and develop mining claims on public land. The Mining and Minerals Policy Act of 1970 declares that it is the continuing policy of the Federal government to foster and encourage private enterprise in the development of domestic mineral resources. Locatable minerals are managed under 43 CFR 3800. These regulations describe how to locate and maintain mining claims, the requirements for working on the public lands, and how the BLM must prevent unnecessary and undue degradation of public lands during mining operations.

The Mineral Leasing Act of 1920, as amended, and the Geothermal Steam Act of 1970, as amended, provide the opportunity for parties to explore, develop, and produce publicly owned leasable minerals. The Energy Policy Act of 2005 addresses geothermal, oil, and gas leasing on public lands. Leasable minerals are managed under 43 CFR 3100 through 3500. These regulations describe how to obtain leases, fees for leases, and royalties on mineral production from leases; how the government manages leases; and the responsibility of the lessee. In addition, all minerals on acquired lands (except for salable minerals), are leased in accordance with the General Leasing Act.

The Materials Act of 1947, as amended, authorizes the disposal of mineral materials such as sand, gravel, stone, clay, and cinders. Salable minerals are managed under 43 CFR 3600 and 23 CFR (Federal Highway Material Site ROWs).

The National Energy Policy of 2001 states that the demands for electricity is projected to expand rapidly in the future and recommends that public lands remain open for energy and mineral development.

Restrictions to Mineral Exploration, Development, and Production

BLM-administered lands are generally open to mineral exploration and development under the multiple use management principles of the FLPMA. Pursuant to sections 202(e)(3) and 204 of FLPMA, public lands can only be withdrawn from and closed to the operation of the General Mining Law of 1872 by Secretarial or Congressional withdrawal. 43 U.S.C. §§ 1712(e)(3), 1714. However, mineral development on portions of the planning area may be restricted through application of stipulations, or completely closed to protect other resource values. The following types of closures that may be applied to mineral development activities:

Discretionary closures*:* areas determined through BLM's resource management planning or policy-making processes. These closures usually involve lands where other resource values are considered so important that they outweigh any economic return that can be expected from leasable or salable mineral development or the environmental impacts resulting from mineral operations could irreparably damage those resources. Examples include WSAs, segregations, and Greater Sage-grouse PHMA.

Non-discretionary closures: areas specifically closed to energy/mineral location, leasing, or disposal by law, regulation, executive order, or secretarial order. Examples include withdrawals and public water reserves.

Management Goals

Locatable Minerals Management Goal - *Provide opportunity for the exploration, location, development, and production of locatable minerals in an environmentally sound manner.*

Leasable Minerals Management Goal - *Provide leasing opportunity for oil and gas, geothermal energy, and solid minerals in an environmentally sound manner.*

Salable Minerals Management Goal - *Meet the demands of local, State, and Federal agencies, and the public for mineral material from public lands in an environmentally sound manner.*

Locatable Mineral Management Direction

Most of the Federal mineral estate in the planning area (approximately 3,075,996 acres) would remain open to locatable mineral exploration and development, subject to the existing mineral management direction, stipulations (e.g. preparation of a plan of operations), and BMPs listed in the *Lakeview RMP/ROD* (see Appendix D, p. A-6, and Appendix N, p. A-177 to A-179 of BLM 2003b) and in the *Oregon Greater Sage-Grouse ARMPA* (see Chapter 2, p. 2-24; Appendix A, Figure 2-5; and Appendix C of BLM 2015b) (Map M-2, Appendix 1; Appendix 7). Approximately 18,367 acres of mineral estate in the planning area would remain closed to (withdrawn) locatable mineral development to protect other resource values (see Table 14 of BLM 2003b).

While a mining claimant must submit a notice for locatable mineral exploration operations of 5 acres or less to the BLM (43 CFR 3809.21), this does not represent a Federal action that requires compliance with the NEPA. The BLM does not approve or issue a decision for notice-level actions. The BLM would continue to review notices to ensure that unnecessary or undue degradation would not occur (in accordance with 43 CFR 3809.1(a) and 3809.5). Miners would be responsible for compliance with other

applicable Federal, State, and local environmental and reclamation laws during notice level exploration actions.

The approval of plans of operations and mining claim occupancy (43 CFR 3715 and 3809) are Federal actions that are subject to completion of additional NEPA analysis that demonstrates the proposed action would not cause undue or unnecessary degradation of the public lands (43 CFR 3809.1(a) and 3809.5). A plan of operations would be required for all locatable mining operations that are not casual use (43 CFR 3809.11(a)). This includes exploration activities that disturb over 5 acres, bulk sampling which would remove 1,000 tons or more of presumed ore for testing, or any surface-disturbing operations greater than casual use in "special status areas" which include areas of critical environmental concern (ACECs), wild and scenic rivers (WSRs) or areas designated for potential addition to the WSR system, areas designated closed to OHV use, and any lands/waters that contain Federally proposed or listed threatened or endangered species or their proposed or designated critical habitat (43 CFR 3809.11(c)). (*Note:* lands with wilderness characteristics do not meet the definition of a "special status area" under these regulations).

To the extent allowable by law, the BLM would identify and evaluate measures to avoid or minimize effects, and provide recommendations for net conservation gain during the NEPA process for plans of operations within Greater Sage-grouse habitat (PHMA and GHMA) (see MD MR 11 and MD MR 12, BLM 2015a, p. 2-24).

Within WSAs, locatable mineral exploration and development would continue to be managed under the requirements of 43 CFR 3802. Locatable mineral development and exploration activities within WSAs created under Section 603 of the FLPMA could occur in accordance with the General Mining Law of 1872, but must satisfy the non-impairment criteria or represent a legacied use (BLM 2012h, p. 1-25). Locatable mining within the Sagehen Hills WSA, which was studied under Section 202 of the FLPMA (approximately 7,986 acres), would be regulated under 43 CFR 3802, and must only meet the standard of preventing unnecessary or undue degradation of the public lands (rather than preventing impairment of wilderness suitability). Mining plans of operation would continue to be required for locatable mining operations within all WSAs and ACECs in the planning area. Should Congress remove a WSA from wilderness study, the area would become available for locatable mineral development subject to the undue or unnecessary degradation standard.

Leasable and Salable Mineral Management Direction

All WSAs would be closed to mineral leasing and salable mineral disposal. Should Congress release one or more WSA from wilderness study, the area could be re-opened to mineral leasing subject to stipulations and re-opened to salable mineral disposal.

The BLM would continue to work with Federal, State, counties, and other entities to rehabilitate exhausted salable mineral (rock) sources and relinquish any material site ROWs, free use permits, or material sale locations that are no longer needed. All surface disturbances would be reclaimed at the earliest feasible time.

Withdrawals

Authority

Section 204 of the FLPMA gives the Secretary of the Interior the authority to make, modify, extend, or revoke withdrawals and mandates periodic review of existing withdrawals. Withdrawals can include land, mineral, power site, or administrative. A withdrawal is a formal action that accomplishes one or more of the following:

- Transfers total or partial jurisdiction of federal land between federal agencies;

- Segregates (closes) federal public lands to appropriation under public land laws, including mining laws; or
- Dedicates public land for a specific public purpose.

There are three major categories of formal withdrawals:

- Congressional;
- Administrative; and
- Federal Power Act or Federal Energy Regulatory Commission (FERC) withdrawals.

Congressional withdrawals are legislative actions made by Congress in the form of public law. Administrative withdrawals are made by the President, Secretary of the Interior, or other authorized officers of the executive branch of the Federal government. The Secretary typically makes withdrawals under the authority of Section 201 of the FLPMA. FLPMA withdrawals are in effect for a maximum of 20 years, but upon expiration of that time period, they can be reviewed and extended another 20 years. Federal Power Act or FERC withdrawals are power project withdrawals established under the authority of the Federal Power Act of 1920. Such withdrawals are automatically created upon filing an application for a hydroelectric power development project with FERC.

Withdrawals greater than 5,000 acres require Congressional notification. Department of Interior policy (USDI 1971) further requires that:

- All withdrawals shall be kept to a minimum, consistent with the demonstrated needs of the agency requesting the withdrawals.
- Lands shall be available for other public uses to the fullest extent possible, consistent with the purposes of the withdrawal.
- A current and continuing review of existing withdrawals shall be instituted.

Management Goal

Withdrawal Management Goal - *Utilize withdrawal actions with the least restrictive measures necessary to accomplish the required purposes*.

Management Direction

Withdrawals have occurred for a number of purposes within the planning area and include public water reserves, an administrative site, a research natural area, a state wildlife reserve, and a seed orchard. There are also two Power Site Reserves located along Deep Creek and/or its tributaries which do not close these areas to mineral entry, but place a "superior use" review on the parcels. These existing withdrawals (totaling approximately 18,757 acres) would be retained until no longer needed (see Table 14 of BLM 2003b, as maintained).

The BLM has proposed one additional mineral withdrawal within the Red Knoll ACEC totaling approximately 4,600 acres (Map M-2, Appendix 1; see also Map SMA-19 and p. 90, BLM 2003b). This withdrawal was proposed as a mitigation for the Native American and cultural impacts associated with the Tucker Hill perlite mine development further to the north (BLM 1996e). The application for this proposal has been submitted to the BLM Oregon State Office, but has not been approved yet at the Department of Interior level. This withdrawal would prevent locatable mineral development (subject to valid existing rights) under all alternatives upon its completion. Although this would remove 4,600 acres from potential future mineral development it would not affect the current or proposed expansion of perlite mining operations at Tucker Hill (BLM 2020a).

Withdrawal review continuations, modifications, and revocations would continue in the future, as the need arises. Other agency requests (including those associated with military uses) for new withdrawals, relinquishments, or modifications would be considered on a case-by-case basis.

Visual Resources

Authority

Section 102(8) of the FLPMA states that public land should be managed to protect the quality of scenic values. The NEPA, section 101(b), requires Federal agencies to *". . . assure for all Americans . . . esthetically pleasing surroundings."* Guidelines for the identification of visual resource management (VRM) classes on public land are contained in BLM Manual Handbook 8410-1 (BLM 1986c). The establishment of VRM classes on public land is based on an evaluation of the landscape's scenic qualities, public sensitivity toward certain areas (such as certain special recreation designations and WSAs), and the location of affected land relative to major travel corridors (distance zoning).

Management Goal

Visual Resource Management Goal *- Manage public land actions and activities consistent with visual resource management (VRM) class objectives.*

Management Direction

VRM Classes

All public lands in the planning area would be managed in one of four VRM classes. The following VRM class objectives would apply to public lands under all alternatives:

VRM Class I – Management actions would preserve the existing character of the landscape. Allowed Level of Change: This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

VRM Class II – Management actions would retain the existing character of the landscape. Allowed Level of Change: The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

VRM Class III – Management actions would partially retain the existing character of the landscape. Allowed Level of Change: The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

VRM Class IV – Management actions would allow major modification of the existing character of the landscape. Allowed Level of Change: The level of change to the characteristic landscape can be high. Management activities may dominate the view and may be the major focus of viewer attention. However, the impact of these activities should be minimized through careful siting, minimal disturbance, and repeating the basic elements of form, line, color, and texture within the existing setting.

WSAs would continue to be managed as VRM Class I. Should a WSA be released from wilderness study by Congress, the area would return to the original VRM classification (BLM 1983). Twelvemile Creek suitable WSR would continue to be managed as VRM Class II.

All surface-disturbing projects would be designed to meet the corresponding VRM management class objectives which allow for differing degrees of modification in the basic elements of landscape features (form, line, color, and texture) while mitigating the adverse effect of management activities on scenic values The management objectives for each class would mitigate the potential adverse effect of management activities on scenic values (BLM 1984c and 1986c).

Visual Corridors

All developments, land alterations, and vegetation treatments within 3 miles (6 mile total corridor width) of all major travel routes (Highways 140, 31, and 395), designated scenic byways (Christmas Valley and Lakeview-to-Steens National Back Country Byways), and designated recreation areas would be designed to minimize visual impacts. Unseen areas within these 3-mile zones would not be held to this standard. All projects would be designed to retain or improve the natural character and scenic quality or minimize scenic intrusions along these routes over the long-term.

Vegetation

Authority

Section 102(8) of the FLPMA states "the public lands shall be managed in a manner that will protect the quality of scientific, … ecological, environmental, …water resource … values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals."

The Public Rangeland Improvement Act (PRIA) of 1978 also includes policy aimed at improving rangeland vegetation conditions. Guidance contained in 43 CFR 4180 and *Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington* (BLM 1997a) calls for maintenance or restoration of the physical function and biological health of vegetation communities.

Forest and woodland management is carried out under the authorities of Sections 102(12), 103(c), 103(h), and 103(l1) of the FLPMA which direct the public lands to be "managed in a manner that recognizes the Nation's need for domestic sources of… timber and fiber from the public lands", under the principles of multiple use and sustained yield. The law also recognizes timber production as a "principle or major use" of the public lands.

The Healthy Forest Restoration Act of 2003 contains a variety of authorities for the implementation of fuels reduction/forest restoration/biomass utilization projects. The Omnibus Appropriations Bill of 2003 authorizes the use of stewardship contracting for this type of management. 43 CFR Part 5400 addresses the sale of both timber and other vegetative resources (special forest products).

Executive orders, memorandums of understanding, and agreements direct BLM to manage riparian/wetland areas for biological diversity, productivity, and sustainability for the benefit of the Nation and its economy. There are a number of policies relating to riparian/wetland area management that direct BLM to:

- Focus management on entire watersheds using an ecosystem approach, involving all interested landowners and affected parties;
- Achieve riparian/wetland area objectives through the management of existing and future uses;
- Ensure that new plans and existing plans, when revised, recognize the importance of riparian/wetland values, and initiate management to maintain, restore, improve, or expand them;
- Ensure wetland and riparian sites meet or are making significant progress towards meeting standards of rangeland health.
- Prescribe riparian/wetland management based on site-specific physical, biological, and chemical condition and potential; and
- Use interdisciplinary teams to inventory, monitor, and evaluate management of riparian/wetland areas and to revise management where objectives are not being met.

Management Goals

General Vegetation Management Goal *- Protect, maintain, or enhance the existing diversity and distribution of desirable existing plant communities, including perennial native and desirable introduced plant species. Protect healthy, functioning ecosystems consisting of native plant communities. Provide for their continued existence and normal function of nutrient, water, and energy cycles.*

Sagebrush Steppe Management Goal *- Restore or rehabilitate degraded high-potential landscapes and decadent shrub communities.*

Vegetation Goal VEG 1 *- Increase the resistance of Greater Sage-grouse habitat to invasive annual grasses and the resiliency of Greater Sage-grouse habitat to disturbances such as fire and climate change to reduce habitat loss and fragmentation (BLM 2015a, p. 2-10, as amended).*

Vegetation Goal VEG 2 *- Within Greater Sage-grouse habitat, re-establish sagebrush cover, native grasses, and forbs in areas where they have been reduced below desired levels or lost. Use ecological site descriptions to determine appropriate levels of sagebrush cover and appropriate native grasses and forbs (BLM 2015a, as amended).*

Forest Management Goal *- In commercial (pine) forest stands, maintain or restore forest health and meet wildlife habitat needs.*

Woodland Management Goal *- Maintain or restore productivity and biodiversity in old-growth western juniper stands and quaking aspen/willow stands.*

Riparian and Wetland Management Goal *- Restore, maintain, or improve riparian vegetation, habitat diversity, and associated watershed function to achieve healthy and productive riparian areas and wetlands.*

Management Direction

Vegetation - General

The BLM would continue to base vegetation management decisions on both the ecological status of existing vegetation communities (see Appendix 6) and desired future vegetation conditions (BLM 2003a, p. 23-24). The ecological site inventory (ESI) describes ecological status as a rating that compares current plant community composition to the potential "climax" community that could exist on a given site based on soils and local climate. Plant communities typical of the variety of possible seral stages would express a mosaic of species composition, structure, ecological condition, and would meet the desired range of

conditions. Vegetation management in Greater Sage-grouse habitat would continue to follow the vegetation management objectives and decisions contained in the *Oregon Greater Sage-grouse ARMPA* (BLM 2015a).

Vegetation management would continue to be focused on maintaining or protecting functioning native plant communities where they currently exist. Management actions would maintain the condition of those native communities where vegetation composition and structure currently meet management goals. Vegetative treatments would be implemented to return communities to desired range of conditions (BLM 2003b, p. 23-24, as maintained).

Management of vegetation (including sagebrush steppe, invasive western juniper, and commercial forest stands) within ACEC/RNAs, or other special designations would be guided by the area-specific management direction or a subsequent area-specific management plan (BLM 2003b, p. 57-70, 73-74, as maintained). Natural processes (climate, fire, pests/disease, etc.) would be used to maintain native vegetation communities within WSAs where possible (BLM 2012h, p. 1-33). All vegetation treatment, restoration, and rehabilitation methods utilized within WSAs would be implemented in accordance with the current *WSA Management Manual (e.g.* BLM 2012h) in a manner that meets either the non-impairment standard or one of the exceptions to the non-impairment standard (e.g. protecting/enhancing wilderness values), as well as meets VRM Class I objectives. Restoration treatments in WSAs would use the least disruptive techniques that have the best likelihood of success (BLM 2012h, p. 1-10 to 1-13, 1-33 to 1-34).

Riparian and Wetlands

Attainment of proper functioning condition would be a first step to moving habitat conditions of entire watersheds and their components (uplands, streams, riparian/wetland areas, and lakes and ponds) toward achieving terrestrial, aquatic, and riparian goals. Management practices for other uses (grazing, recreation, forest harvest) and vegetation management would be designed to ensure healthy sustainable and functional riparian systems, as described for Rangeland Health Standard 2 (BLM 1997a).

The next step in the attainment of desired range of conditions would be to implement management actions that meet riparian management objectives within riparian/wetland areas and riparian conservation areas. Riparian management objectives generally describe instream and riparian characteristics within the flood-prone area, expressed as values for stream channel conditions and provide criteria to help assess aquatic, water quality, and riparian/wetland goals and attainment of desired range of conditions (see Appendix F, BLM 2003b, as maintained). The desired range of conditions of riparian/wetland areas (see BLM 2003b, as maintained, p. 23-24) typically fall between proper functioning condition and the ecological (or site) potential. Riparian management objectives for vegetation would be site-specific and based on a riparian ecological site inventory. Although attainment of proper functioning condition would assure that stream and riparian/wetland areas function and may be on an improving trend, it may not meet all riparian management objectives.

Riparian/wetland areas would be managed to emphasize the maintenance or improvement of natural values while providing for some commodity production. Management would focus on allowing uses and activities that protect or maintain riparian conservation areas or make measurable progress toward the attainment of water quality, proper functioning condition, and riparian management objectives. Areas not in proper functioning condition would be managed to attain an upward trend in the composition and structure of key riparian/wetland vegetation and desired physical characteristics of the stream channel.

Riparian conservation areas (RCAs) would be identified and delineated on the ground during project planning, where necessary. Uses within the riparian conservation area and contributing upland watersheds would be allowed as long as there is measurable progress towards attainment of water quality standards,

proper functioning condition, and riparian management objectives. BLM-managed roads in riparian conservation areas would be managed to improve riparian habitat conditions.

Those BLM riparian sites in fenced federal range (FFR) allotments that are not in proper functioning condition and where the BLM determines that livestock are contributing to that condition, would be excluded from livestock grazing. Existing riparian exclosures across the planning area would be maintained, as needed.

Spring developments would be modified to promote natural function where possible, but still allow livestock and wildlife access to developed water. No new playa lakebed developments would be allowed in intact playa systems. Baseline data would be collected on all developed playa lakebeds to determine the feasibility of restoration or enhancement.

Sagebrush Steppe

Shrub steppe communities across the planning area would continue to be managed to attain a trend toward the desired range of conditions (BLM 2003b, p. 23-25, as maintained) based on ecological site potential and Greater Sage-grouse habitat goals and objectives (BLM 2015a, as amended). Upland shrub cover would continue to be maintained for natural values and wildlife cover in most native vegetation communities, and in non-native seedings, where consistent with other resource management objectives. The frequency, distribution, and ecological integrity of native stands of mountain shrubs would be maintained where they currently meet site potential or management goals.

The prioritization for restoration work would be developed from a subbasin or watershed perspective. Specific restoration projects would be developed using an inter-disciplinary approach to direct the trend toward achieving management goals, improving structural and species diversity, and protecting soil and water resources.

Vegetation management would focus on improving plant community composition or structure in priority areas that are ecologically degraded, changing plant community structure where shrubs dominate grassland sites, or where invasive western juniper is threatening sagebrush steppe sites/Greater Sage-grouse habitats. High priority would be given to the restoration or rehabilitation of degraded or at-risk sagebrush steppe communities dominated by invasive non-native species, or invasive native woody species.

The ecological site inventory, completed in 2001, identified post-settlement, invasive western juniper on many sagebrush steppe ecological sites. Treating invasive western juniper would be prioritized based on where it is most adversely affecting other resources. These include quaking aspen and willow groves, riparian areas, within 4 miles of Greater Sage-grouse leks, Greater Sage-grouse priority habitat (PHMA), deer winter range, bighorn sheep range, and old-growth western juniper stands. Within sagebrush steppe sites western juniper would also be prioritized for treatment where tree canopy cover is under 15% (areas that still have a grass and sagebrush understory). These stands are more economical to treat due to the smaller size of the trees and the potential for use of prescribed fire for effective control.

The *Lakeview RMP/ROD* (BLM 2003b, p. 34, as maintained) called for rehabilitating up to 50 percent of sagebrush steppe sites with invasive western juniper over the life of the plan. Treatments would be designed to reduce invasive western juniper by 30 to 70 percent within treatment areas. The *Oregon Greater Sage-Grouse Approved RMPA* calls for establishing a mix of appropriate sagebrush classes (Objective VEG 1), increasing native plant diversity (Objective VEG 5), reducing encroaching juniper near leks and occupied habitat (Objective VEG 2, MD VEG 4, MD VEG 17), conducting appropriate vegetation treatments near leks (Objective VEG 6, MD VEG 15), and using native seeding, planting, and other habitat restoration management methods (MD VEG 8-10, MD VEG 13-14, MD VEG 18) within Greater Sage-Grouse habitats (BLM 2015a, p. 2-10 to 2-14). During project planning, the age class of the

western juniper, soil types, aspect, understory vegetation, and presence of non-native invasive species would also be considered.

Management of invasive western juniper within ACEC/RNAs or other special designations would be guided by the area-specific management direction or a subsequent area-specific management plan (BLM 2003b, p. 57-70, 73-74, as maintained; 2012h).

Commercial Forests

Due to the scattered locations of these small commercial pine forest stands, harsh site conditions/low site productivity, and low volumes per acre, these forest lands have been classified as "Lands where Forest Management is for the Enhancement of Other Uses," where forest management activities are made for the benefit of other resource uses or values. These lands do not provide an assigned Allowable Sale Quantity (ASQ) of commercial or non-commercial timber volume. However, forest products production could still occur on these lands as a byproduct of other vegetation management activities. Those BLM forest stands would be considered for forest health treatments when adjacent lands are treated (private or national forest) to provide old-growth forest wildlife habitat, hiding cover for mule deer, and watershed and scenic values.

Forest treatments would be employed to reduce stand over-stocking, control competing vegetation, remove invasive western juniper, white fir, or non-native vegetation, reduce ground and understory ladder fuels, reduce risk of catastrophic wildland fires, increase resistance to drought, insects and disease, and improve forest health.

Management of commercial forest stands within ACEC/RNAs and other special area designations would be guided by area-specific management direction or subsequent plans (BLM 2003b, p. 57-70, as maintained; 2012h).

Old-Growth Juniper Woodlands

Old-growth western juniper stands would be maintained or enhanced in rocky ridges and other fire-protected areas.

Non-Native Seedings

The *Lakeview RMP/ROD* (BLM 2003b, p. 28-29, as maintained) calls for managing non-native seedings in good or excellent condition to maintain seeding and forage production, and improving structural and species diversity. Non-native seedings in poor or fair condition would be managed to restore forage production and vigor, as well as improve structure and plant species diversity. In addition, *the Oregon Greater Sage-Grouse Approved RMPA* calls for restoring crested wheatgrass seedings and increasing native species within seedings in Greater Sage-grouse habitat (Objective VEG 9, MD VEG 10; BLM 2015a, p. 2-12 to 2-13).

Treatment and Restoration Methods

Prescribed and wildland fire, mechanical, chemical, and biological methods would be used to maintain or restore vegetation communities, wildlife habitats, and protect adjacent Federal, State, and private lands. Combinations of one or more treatment methods could be used. When vegetation treatments are planned, Native American values or uses would be evaluated. For example, traditional plant-gathering areas may need protection during treatment. Affected Tribes would be contacted at an early stage in project planning.

No more than 15 percent of the planning area (480,000 acres) would be treated annually by prescribed fire, mechanical fuel treatment, and use of a modified suppression strategy to reduce fuel loads. Up to 70 percent of the planning area could be treated over the life of the plan.

Active riparian restoration methods, such as native woody riparian vegetation plantings, vegetation manipulation, streambank stabilization, and installation of instream structures would be used. Prior to active riparian restoration work, appropriate grazing management strategies would be put in place that would allow improvement in riparian conditions following treatment.

Mechanical treatments would be preferred when trying to preserve shrubs, aspen/willow, and old-growth juniper components important to wildlife. However, sale or disposal of juniper as biomass (including machine skidding of material to landings and creation of temporary roads) removal, firewood, posts, poles, boughs, and other juniper products would be allowed where impacts to old-growth juniper or aspen/willow stands can be reduced to acceptable levels (see *Special Forest Products* section).

Commercial forest treatment methods could include selective cuts focused on thinning, culturing around old-growth forest (pine) trees in good condition, pre-commercial thinning, biomass removal, and prescribed fire to reduce ground fuels. Wildland fire could be used to treat commercial forest stands once fuel loadings are reduced to manageable levels.

Appropriate mixes of native and non-native perennial and annual plant species would be used for vegetation rehabilitation/restoration activities. Local source-identified native seeds and plants or those adapted to the area would be preferred for restoration. Species mixes would be determined on a site-specific basis and be dependent upon availability, the probability of successful establishment, risks associated with seeding failure, and cost (see Appendix L of BLM 2003b, as maintained). Use of competitive native species would be emphasized within sites that are moderately or highly susceptible to degradation.

Areas burned by wildfire or prescribed fire, or reclamation following mining, would be rested from livestock grazing for at least two growing seasons or when monitoring data indicate that health and vigor of desired vegetation has recovered to levels adequate to support grazing. The BLM could decide to rest an area for less than two growing seasons on a case-by-case basis based on monitoring data or an ID team evaluation. Other temporary use restrictions could be imposed to promote restoration when warranted.

Special Forest Products

The BLM would continue to make both commercial and personal collection of special forest products (firewood, posts, poles, Christmas trees, boughs, seeds, cones, and berries) available to the public in accordance with existing regulations (43 CFR 5400), policy (BLM 1996b, 2011j, 2012a), and land use plan direction (as maintained and amended; BLM 2003b, 2015b). Requests for special forest products would continue to be handled on a case-by-case basis by issuing special use permits in appropriate locations. Dead and down juniper and other conifer species would continue to be made available for both commercial and personal firewood use within designated use areas. The harvest of live juniper posts, poles (small and large), and boughs would continue to occur in designated use areas.

The removal of firewood, posts, or poles for either commercial or domestic use would continue to be prohibited within all ACECs and RNAs. The commercial collection of plants or plant material, including juniper berries or boughs would continue to be prohibited within all ACEC/RNAs. However, personal or tribal collection of plants or plant material would continue to be allowed within most ACEC/RNAs.

The use of special forest products within WSAs would be handled in accordance with the current *WSA Management Manual* (e.g. BLM 2012h). The collection of seeds, nuts, berries, and similar items for personal use, along with the collection of firewood for recreational campfire use would be permitted. In addition, agency or commercial seed or plant collection would be permitted if it supports vegetation restoration actions or scientific purposes. However, collection must occur in a non-impairing manner. Other special forest product use including personal/commercial firewood, Christmas trees, and boughs would be prohibited in WSAs (BLM 2012h, p. 1-35).

Non-Native Invasive Vegetation

Authority

FLPMA and PRIA direct BLM to "Manage public lands according to the principles of sustained yield, as well as manage the public lands to prevent unnecessary or undue degradation . . . so they become as productive as feasible." The introduction and spread of non-native invasive and undesirable species within the planning area contributes to the loss of rangeland productivity, increased soil erosion, reduced species and structural diversity, loss of wildlife habitat, and in some instances may pose a threat to human health and welfare.

The Carlson-Foley Act (Public Law 90-583) and the Federal Noxious Weed Act (Public Law 93-629) direct weed control on public land. Protection of natural resource values depends on educating people about the negative impacts of weeds and what actions agencies and individuals can take to prevent weeds from becoming established.

Management Goals

Non-Native Invasive Vegetation Management Goal *- Control the introduction and proliferation of non-native invasive species and competing undesirable plant species, and reduce the extent and density of established populations to acceptable levels.*

Vegetation Goal VEG 3 *- Use integrated vegetation management to control, suppress, and eradicate invasive plant species per BLM Handbook H-1740-2. Apply ecologically based invasive plant management principles in developing responses to invasive plant species.*

Management Direction

Known and new weed sites would be treated to restore the area to desirable vegetation communities. The existing integrated non-native invasive species management program (IWMP) would continue to be implemented across the planning area. The current program includes prevention, detection, education and awareness, and treatment (BLM 2003b, 2007c, 2015a, 2015e, 2015f, 2016a). Invasive species management in Greater Sage-grouse habitat would continue to follow the vegetation management objectives and decisions contained in the *Oregon Greater Sage-grouse Approved RMP Amendment* (BLM 2015a).

Weed Prevention Schedule

The BLM would continue to prepare a semi-annual Weed Prevention Schedule to educate its staff about ways to prevent weed spread and assist in preventing the spread of weeds. Education and outreach efforts would be expanded to include areas outside of Lake County in an effort to prevent new species from spreading into the planning area.

Weed Inventory and Monitoring

BLM would also continue to annually inventory for both known and potential new weed infestations to identify areas for treatment. One management priority would be the continued inventory of disturbed areas (e.g. roads, rights-of-way, water developments, recreation sites) to detect new invaders and monitoring treatment of known infestations. Over time, inventory efforts would be expanded to areas that are less disturbed, more remote, or not previously inventoried.

Weed Treatment Methods

The BLM would continue to utilize a variety of weed/invasive species treatment methods including manual (*e.g.* pulling, grubbing), mechanical (*e.g.*, chainsaws, mowing, weed eating), biological control

(usually insects), targeted grazing (including grazing of cheatgrass and pepperweed), prescribed fire, planting and seeding, and approved herbicides (BLM 2003b, 2007c, 2015a, 2015e, 2015f, 2016a). The selection of the appropriate control method would continue to be based on target species growth characteristics, size of the infestation, location, accessibility for equipment, expected effectiveness, potential impacts to non-target species, use of the area by people, and cost. Depending on the plant's characteristics, these treatment methods could be used individually or in combination and could occur over several years.

Approved herbicides would be used to treat non-native invasive species where appropriate. Based on existing environmental analyses and associated decisions, the 14 herbicides currently approved for use in the planning area include 2,4-D, chlorsulfuron, clopyralid, dicamba, diflufenzopyr+dicamba, fluridone, glyphosate, imazapic, imazapyr, metsulfuron methyl, picloram, sulfometuron methyl and tryiclopyr (BLM 2007c, 2010b, 2015e, 2015f, 2016a). Herbicide application would take place in accordance with the manufacturer's label and by qualified/certified applicators. Methods of application would include wiping or wicking, backpack spraying, spraying from a vehicle with a handgun or boom, aerial spraying, or other approved methods. Appropriate project design features, standard operating procedures, mitigation measures, conservation measures, prevention measures, and best management practices would be applied during herbicide applications (see Appendix A of BLM 2015a). From 2015 to 2018, the acres of weed/invasive species treatments by all methods have ranged from 10,000 to 25,000 acres per year. This level of treatment would be expected continue, but would vary annually depending on annual funding and staffing levels. Additional herbicides (such as Aminopyralid, Fluroxypyr, and Rimsulfuron) could be approved for use in the planning area in the future based on the completion of additional environmental analyses and associated decisions (*e.g.* BLM 2016l, 2016m, *in prep*.).

Special Status Plants

Authority

Section 102(8) of the FLPMA requires that public land be managed to protect the quality of ecological and environmental values. Special status plants represent one of these types of values. The Endangered Species Act (ESA) of 1973 mandates management that leads to the conservation or recovery of federally listed threatened or endangered species. It is in the public interest to prevent federal listing. Listing of a species as threatened or endangered may lead to restrictions on land uses, and under some circumstances may cause adverse socioeconomic impacts to commodity users. In most cases, there are both socioeconomic and biological benefits associated with conserving a species to avoid federal listing.

In 1987, the Oregon Legislature passed its own endangered species act, which gave the Oregon Department of Agriculture responsibility and jurisdiction over state threatened and endangered plants (Oregon Administrative Rules 601-243-005).

The management of special status species follows agency policy documented in BLM Manual 6840 (BLM. 2008i). This policy and the ESA both call for managing or conserving special status species and their habitat to prevent Federal listing. Special status plant species are limited in their distributions, populations, or habitats, and may be at risk of extirpation over various geographic areas. Conservation is defined as the use of all methods and procedures necessary to improve the condition of special status species and their habitats, to a point where their special status is no longer warranted. Policy objectives also state that actions authorized or approved by the BLM must not contribute to the need to list species under the ESA. The BLM State Director, in coordination with federal and state agencies, determines the designation of special status species.

Conservation agreements with USFWS detail monitoring, inventory, and plans to conserve special status plants and their habitat. Through this type of agreement, federal listing can be postponed or eliminated by more actively managing to protect the species.

Management Goals

Special Status Plant Species Management Goal *- Manage public lands to maintain, restore, or enhance populations and habitats of special status plant species. Priority for the application of management actions would be: (1) Federal endangered or threatened species, (2) Federal proposed species, (3) Federal candidate species; (4) State listed species, (5) BLM sensitive species, and (6) BLM strategic species.*

Special Status Plant Habitat Management Goal *- Protect, restore, or enhance the variety of native plant species and communities in abundance and distribution that provides for their continued existence and normal functioning.*

Management Direction

Ensure that management actions do not contribute to the decline of, or need to, federally list special status plants. Any applicable management specified in recovery plans developed by the USFWS for federally listed species in the future would be followed.

Restoration or enhancement of habitats and populations would occur in areas where it would be biologically sound and reasonable to do so. Habitat or population conditions would be maintained when they are at or near their potential.

Conservation and recovery of special status plant species would require:

- Acquiring basic information of distribution and habitat requirements.
- Determination of kind and degree of threats.
- Collecting monitoring and inventory data to use in the development of management plans. Continue cost-share programs and research opportunities with universities, federal and state agencies, researchers and volunteers, as a means of gathering this information.
- Development and implementation of species or habitat management plans such as conservation agreements written with the USFWS for plant species that have the BLM ranking of BLM sensitive.
- Encouraging studies of plant genetics and other biological parameters to determine what makes the species rare and the survival conditions for the plant and its habitat.

These actions would also require:

- Analyzing existing data and identifying gaps in data/information.
- Organizing inventories, monitoring, and management information through a standardized database.
- Identifying actions and funding necessary to conserve, recover, and maintain special status plant species.
- Scheduling surveys at the appropriate time of year to locate and identify special status plants and take appropriate management actions (which might require avoidance or mitigation) prior to project implementation.

- Ensuring that management actions necessary to protect, conserve, and recover special status plants species are implemented, monitored, and tracked.
- Acquiring appropriate lands having populations of species currently not protected.

Designation and management of Research Natural Areas (RNAs) is one method of protecting special status plants and their habitats. Within the BLM, RNAs are managed as ACECs. Nine of the 10 ACEC/RNAs in the planning area contain special status plant species. The existing ACEC/RNA management direction for each area is described in the *Lakeview RMP/ROD* (BLM 2003b, p. 57-70, as maintained). Continuing to manage these ACEC/RNAs for special status plant species would help facilitate protection, restoration, or enhancement of those plant species and associated native plant communities. Management of special status plant habitats in other locations within the planning area (outside of ACEC/RNAs) would include avoidance or mitigation measures that limit other uses at those sites.

Wildland Fire and Fuels

Authority

A wildland fire is defined as any non-structure fire in the wildland environment. The terms *appropriate management response* and *wildland fire use* are no longer accepted terminology; the term *fire management* includes all management response to wildfire and includes monitoring. There are two types of wildfire:

- Wildfires are all unplanned ignitions, including fires formally termed wildland fire use.
- Wildfires can originate as prescribed fires, which are originally planned ignitions, but could eventually be declared wildfires.

Secretarial Order No. 3336 (USDI 2015) directs BLM to take actions to enhance the protection, conservation, and restoration of a healthy sagebrush-steppe ecosystem and addresses important public safety, economic, cultural, and social concerns. This effort builds upon the experience and success of addressing rangeland fire and the broader wildland fire prevention, suppression, and restoration efforts to date.

Current federal fire policy guidelines state:

- Fires would be managed following direction in the Resource Management Plan.
- Implementation guidance would be documented in the Fire Management Plan.
- Resource benefit objectives would be allowed as directed in the Resource Management Plan.
- Both resource benefit and protection objectives would be allowed on the same fire, as directed in the Resource Management Plan and guided by the Fire Management Plan.
- There would be no “go-no-go” requirement when managing for benefits.
- Wildfire implementation plans are no longer required.
- Benefit and protection objectives could change over the life of the fire.
- Human-caused fire cannot have benefit objectives.

Wildland fire management decisions are based on the governing land use plan, approved fire management plans (FS and BLM 2018e), and the best available science. Both the *Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin* (FS and BLM 1996c) and the current *Federal Wildland Fire Management Policy* (FS *et al.* 2009) recognize fire's essential role as an ecological process. The scientific assessment found that strategic watershed-scale fuel management and fire use planning, integrating a variety of treatment methods, could cost-effectively reduce fuel hazards to acceptable levels and achieve ecosystem health and resource benefits. The policy emphasizes that for natural ignitions (i.e., lightning caused), a manager must have the ability to choose from the full spectrum of fire management actions—from prompt suppression to allowing fire to function in its natural ecological role.

The *Emergency Fire Rehabilitation Handbook H-1742-1* (BLM 1998k) outlines the process for implementing emergency fire rehabilitation projects following wildland fires.

Management Goals

Wildland Fire Management Goal *- Respond to all wildland fires with emphasis on firefighter and public safety. When assigning priorities, decisions would be based on relative values to be protected commensurate with fire management costs.*

Fuel and Prescribed Fire Management Goal *- Restore and maintain ecosystems consistent with land use patterns and historic fire regimes through use of wildland fire, prescribed fire, and other methods. Reduce areas of high fuel loading that may contribute to extreme fire behavior.*

Fire Rehabilitation Goal *- Rehabilitate burned areas to mitigate the adverse effects of wildland fire on soil and vegetation in a cost-effective manner and to minimize the invasion of weeds.*

Management Direction

In order to reduce the risks of wildland fires, the BLM would, in cooperation with other agencies, continue to regulate both industrial and non-industrial uses on the public lands using the Industrial Fire Precautions Level (IFPL) system. This system dictates the types of activities (such as chainsaw use) that are acceptable at given fire danger levels. Management of non-industrial uses would continue to occur through regulated closures and management directives for such activities as campfires and vehicle use. The directives are specific in terms of locations involved and actions prohibited. Normally, issuing such closures and directives occurs only during periods of high fire danger.

Before taking wildland fire suppression actions, the BLM would continue to evaluate the values at risk versus fire fighter and public safety. The Wildland Fire Decision Support System (WFDSS) would be used on fires that exceed initial attack capabilities to help in determining a strategic risk analysis. Protection of human life (firefighter and public safety) would continue to be the highest priority during a wildland fire management. Protection of property and natural and cultural resources would continue to be lower priorities (FS and BLM 2015a, BLM 2018e).

BLM would provide initial attack and full suppression on all wildland fires threatening other Federal, State, and private property, or sensitive areas such as threatened or endangered species habitat and cultural sites. However, where wildland fire can achieve resource benefits, the BLM would consider managing wildland fire by employing direct and indirect actions and use of natural topographic features, human-created barriers (*e.g.* roads), fuel, and weather factors.

The BLM would continue to establish more area-specific wildland fire management goals, objectives, and actions through the fire management planning process. Current fire management plans (*e.g.* BLM 1996g, 2018e) would continue to be implemented and updated as needed to provide the overall wildland fire management direction and preferred suppression actions for the planning area. The plan describes suppression action constraints (*i.e.*, avoiding use of heavy equipment during initial attack, special tactics

within WSAs and ACECs, etc.; see Map F-2, Appendix 1) and defines the numbers of personnel and equipment required for efficient suppression actions.

The use of wildland fire would be allowed in specific areas delineated in the fire management plan. In particular, naturally occurring fires within the 343,000-acre area Fort Rock Fire Management Area (Map F-2, Appendix 1) would continue to be managed using a modified suppression strategy (BLM 1996g). This area has the highest annual concentration of lightning strikes in the planning area. Approximately 30 to 45 lightning-caused ignitions occur in this area each year. These naturally occurring fires would continue to be monitored on a daily basis, would tend to be extinguished naturally, and would typically continue to be less than an acre in size.

Within WSAs, fire fighters would employ "minimum impact suppression tactics" whenever possible, while providing for the safety of firefighters and the public, and meeting other fire management objectives (BLM 2012h, p. 1-14). The use of heavy equipment for wildfire suppression in ACECs, RNAs, and WSAs would be avoided where possible. If used, heavy equipment would require agency administrator approval and would be restricted to existing roads and trails. Retardant use would also be allowed within these areas for initial attack. Retardant use in these areas during extended attack would be considered as a part of the Wildland Fire Decision Support System, after weighing the resource values at risk with public and fire fighter safety.

Fire and fuels management in Greater Sage-grouse habitat would continue to follow the fire and fuels management objectives and decisions contained in the *Oregon Greater Sage-grouse ARMPA* (BLM 2015a, p. 2-15 to 2-17).

The use of heavy equipment for wildfire suppression in ACECs, RNAs, and WSAs would be avoided where possible. If used, heavy equipment would require agency administrator approval and would be restricted to existing roads and trails. Retardant use would also be allowed within these areas for initial attack. Retardant use in these areas during extended attack would be considered as a part of the WFDSS, after weighing the resource values at risk with public and fire fighter safety.

Emergency Wildland Fire Rehabilitation

Emergency fire rehabilitation activities would be implemented after wildland fire following direction in Appendix L of the *Lakeview RMP/ROD* (BLM 2003b, as maintained). Emergency fire rehabilitation funds may be used to:

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

Common emergency rehabilitation activities could include seeding with native or non-native plants, non-native invasive species control, erosion control, and repairing fences or building new temporary management fences. Following a wildland fire, specialists would decide if emergency fire rehabilitation activities are warranted based on pre-fire vegetation conditions, soils, fire size and intensity, stream condition, slope, and improvements burned during wildland fire. Separate environmental analysis would only be completed for emergency fire rehabilitation projects that are outside the scope of activities described in Appendix L of the *Lakeview RMP/ROD* (BLM 2003b, as maintained).

Facilities

Management Goal

Facility Management Goal *- Develop, modify, or maintain facilities that are needed to manage the public lands.*

Management Direction

Maintenance of existing facilities in WSAs is generally allowable, but must be addressed on a case-by-case basis. Proposed new structures or facilities within WSAs would be subject to the non-impairment standard or one of the exceptions to the non-impairment standard (BLM 2012h).

Facilities that are no longer needed would be removed and rehabilitated. Exposed or uncovered wells at historic homestead sites would be filled in or secured by other means such as vandalism-resistant grating, after coordinating the closure with the State of Oregon Water Resources Department.

Off-Highway Vehicle Use and Travel Management

Refer to Appendix 9.

Livestock Grazing Management

Authority

The Taylor Grazing Act was passed on June 28, 1934, to protect public lands and their resources from degradation, to provide orderly use to improve and develop public rangelands, and to stabilize the livestock industry. Following various homestead acts, the Taylor Grazing Act established a system for allotting grazing privileges on Federal land to livestock operators based on grazing capacity and use priority, and for the characterization of allotment boundaries. The Act also established standards for rangeland improvements and implemented grazing fees. Approximately 142 million acres of land in western states were under the jurisdiction of the Grazing Service and Federal Land Office, which evolved into the BLM in 1946.

The Federal Land Policy and Management Act (FLPMA) passed in 1976, and the Public Rangelands Improvement Act (PRIA) passed in 1978. These also provide authority for managing grazing on public lands. Guidance for administering livestock grazing on public lands is contained in 43 CFR 4100 (2005) and numerous BLM manuals, handbooks, and instruction memorandums.

The 1996 rangeland reform process modified the grazing regulations identified in 43 CFR 4100. Specifically, 43 CFR 4180 and BLM guidance (BLM 2001b, 2001c) addresses the fundamentals of rangeland health. The objectives of the rangeland health regulations are *". . .* to promote healthy sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning conditions . . . and to provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy public rangelands*."*

Management Goals and Objectives

Livestock Management Goal *- Provide for a sustainable level of livestock grazing consistent with other resource objectives and public land use allocations.*

Objective LG 1 *- Manage livestock grazing to maintain or improve Greater Sage-grouse habitat by achieving Standards for Rangeland Health (BLM 2015a, p. 2-17).*

Objective LG 2 *– On BLM-managed lands, 12,083,622 acres will continue to be available for livestock grazing in Greater Sage-grouse habitat. In key RNAs, 22,765 acres will be unavailable to livestock grazing (BLM 2015a, p. 2-18).*

Management Direction

Livestock Grazing Use

Livestock grazing use would be managed to provide forage for livestock, wild horses, and wildlife, and leave sufficient herbaceous material on the ground to provide soil and watershed protection, to provide cover for wildlife, and meet other resource objectives.

Livestock permittees have the option to license up to their full active use in any given year. However, some permittees do not use their full active use for a variety of reasons, including previous agreements with BLM, management prescriptions in AMPs, economic factors, and annual forage and water availability.

The average herbaceous forage utilization levels would not exceed 40 to 60 percent on key forage species.

Authorized grazing activities (including existing AMPs, agreements, grazing decisions, and/or terms and conditions of grazing use authorizations) would continue or be revised as needed; to ensure that land use plan management goals and objectives are being met.

Drought Management

During periods of drought livestock grazing use would be managed following current drought management policy (e.g. BLM 2013a) to maintain soil and vegetation health. Annual non-renewable grazing use would be authorized only if such use would not conflict with other resource management goals/objectives (43 CFR 4130.6-2).

Rangeland Health Standards

The Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington (BLM 1997a) would continue to serve as the basis for assessing and monitoring current rangeland conditions and trend. The following five existing standards would be retained under all alternatives:

1. **Watershed Function (Uplands)** - Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and landform.
2. **Watershed Function (Riparian/Wetlands)** - Riparian/wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.
3. **Ecological Processes** - Healthy, productive, and diverse plant and animal populations and communities appropriate to soil, climate, and landform are supported by ecological processes of nutrient cycling, energy flow, and the hydrologic cycle.
4. **Water Quality** - Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.
5. **Wildlife (Native, Threatened and Endangered, and Locally Important Species)** - Habitats support healthy, productive, and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate, and landform.

Additional information on current livestock grazing use and status of rangeland health assessments for allotments within the planning area is located in Appendix 5.

Soils

Authority

Section 102 (8) of the FLPMA states that the public lands shall be managed in a manner that protects the quality of ecological values. Soils represent one component of "ecological values". Section two (b)(2) of the PRIA established Congress' intent to "manage, maintain, and improve the condition of the public rangelands so that they become as productive as feasible for all rangeland values….". Soils also represent an important component of public rangelands and the productivity of rangelands. The Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington (BLM 1997a) call for maintaining or restoring the physical function and health of rangelands, including soils.

Management Goal

Soil Management Goal *- Manage soil to maintain, improve, or restore soil productivity, reduce erosion, and protect watershed resources. Protect fragile soils using best management practices (BMPs) during plan or project implementation.*

Management Direction

Appropriate BMPs would be applied to all ground-disturbing activities such as new projects, range developments, and road maintenance and construction to protect soil health and productivity. See Appendix 9 for a complete description of existing BMPs.

Biological soil crust research or monitoring would be encouraged in the future, particularly within Research Natural Areas (RNAs).

Water Resources and Watersheds

Authority

Section 202(8) of the FLPMA requires the BLM to comply with applicable pollution control laws, including State and Federal water pollution standards or implementation plans. The Federal Water Pollution Control Act (commonly known as the Clean Water Act [CWA]) of 1977, as amended, requires the restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters. The Environmental Protection Agency (EPA) has delegated authority to the state of Oregon to implement the Clean Water Act to the Oregon Department of Environmental Quality (ODEQ). BLM is responsible to meet the requirements of the Act on BLM-administered lands, but primacy in implementing the Act is retained by the State of Oregon. BLM is required to maintain water quality where it presently meets U.S. Environmental Protection Agency (EPA)-approved Oregon State water quality standards and improve water quality on public lands where it does not meet these standards.

Through a statewide memorandum of understanding (MOU) between the BLM and ODEQ, the BLM implements the CWA by managing to meet State water quality standards, generally by applying best management practices (BMPs) to projects as needed (Appendix 2). BMPs are methods, measures, or practices to prevent or reduce water pollution, including but not limited to structural and nonstructural controls, operations, and maintenance procedures. The ODEQ is responsible for identifying water quality limited stream segments, as defined by Section 303(d) of the CWA.

State-developed total maximum daily loads (TMDLs) and State-approved water quality management plans are required for watersheds containing water quality limited segments, as defined by Section 303(d) of the CWA.

In addition, other laws, regulations, policies, and executive orders (Appendix 10) direct BLM to manage water quality for the benefit of the nation and its economy.

Water quality is important for proper ecological function (PFC). The fundamentals of rangeland health (BLM 1997a) combine the basic precepts of watershed function and biological health with elements of law relating to water quality in Standards 1 and 4.

Management Goals

Watershed Management Goal *- Protect or restore watershed function and processes that determine the appropriate rates of precipitation capture, storage, and release.*

Water Quality Management Goal *- Ensure that surface and ground waters influenced by BLM activities comply with, or are making significant progress toward, achieving State of Oregon water quality standards.*

Management Direction

Watersheds would continue to be managed for uses and activities that emphasize restoration, protection, or improvement of watershed function/processes and maintenance or improvement of water quality, while providing for some commodity production. Management would strive to attain and maintain proper functioning condition (PFC) and water quality standards along streams and water bodies, and desired range of conditions (Appendix 8) throughout the watersheds.

Management activities would continue to comply with state and Federal laws designed to protect watershed health and water quality. BLM would continue to use the Protocol for Addressing Clean Water Act Section 303(d) Listed Waters (FS and BLM 1999) to address water quality limited water bodies on federal lands. Developed in collaboration with the USEPA, ODEQ, and Washington Department of Ecology, the guidance uses a three-pronged approach to address water quality problems on federal lands: a set of goals, a seven-component strategy, and a decision framework. The BLM would continue to use this protocol or subsequent guidance to fulfill its CWA responsibilities and provide assurance that management activities in 303(d)-listed waterbodies contribute to the maintenance of good water quality or restoration of poor water quality. Fulfillment of CWA requirements would occur primarily by documenting and implementing appropriate management measures during the project planning and NEPA process. Appropriate BMPs and RDFs would be applied during any subsequent implementation plan or project NEPA process (see Appendix 9).

The establishment of water quality standards and total maximum daily loads for CWA Section 303(d) listed water bodies is the responsibility of the State of Oregon with approval of the USEPA. It is also the State of Oregon's responsibility to develop water quality management plans which detail how the total maximum daily load (TMDL) would be implemented. The State would also be responsible for developing a schedule for completing TMDLs. The BLM would cooperate with the State in developing TMDLs and water quality restoration plans, as well as implementing such plans. Applicable to federal lands only, the management prescriptions in water quality restoration plans are drawn from federal standards, guidelines, and BMPs.

Public uses and activities would continue to be allowed along streams, water bodies, riparian conservation areas, and associated upland watersheds as long as there is maintenance or measurable progress toward attainment of water quality standards. Watersheds with streams and water bodies not meeting water quality standards would be managed to attain an upward trend in the composition and structure of upland and key riparian/wetland vegetation communities and desired physical characteristics of the stream channel and soils. Management activities and uses within the watershed that adversely affect infiltration rates, soil moisture storage, or safe release of water would be adjusted, restricted, or limited if desired vegetation and soil conditions could not be attained or maintained.

Management would focus on promoting uses and activities, which allow for protection, maintenance, or restoration of upland watershed health and measurable progress toward upland vegetation and soil management goals. However, active enhancement and restoration projects would be implemented in those areas with water quality limited segments, not recovering naturally or otherwise unable to attain the desired range of conditions through changes in passive management.

BLM-managed roads would be maintained, improved, relocated, or removed and rehabilitated to minimize unacceptable watershed impacts. Road construction and maintenance would utilize appropriate BMPs or RDFs (see Appendix 7).

Fish and Wildlife

Authority

BLM's primary role in fish and wildlife management is to provide the habitat that supports other agencies' desired species population goals. The Federal Land Policy and Management Act (FLPMA), numerous legislative acts and Executive Orders, and other regulations and policies direct the BLM to manage public land to provide habitat for fish and wildlife and to protect the quality of water (aquatic) resources. Section 102(8) of the FLPMA states that public land should be managed in a manner that provides food and habitat for fish and wildlife. FLPMA also requires that part of grazing fees be spent for range betterment, including aquatic and terrestrial wildlife habitat enhancement.

The Sikes Act of 1974 contains a mandate for the BLM to *". . . plan, develop, maintain, and coordinate programs for the conservation and rehabilitation of wildlife, fish, and game."* The Public Rangeland Improvement Act (PRIA) directs BLM to improve rangeland conditions with due consideration given the needs of wildlife and their habitats. The rangeland health regulations (43 CFR Part 4180) identify the need to foster productive and diverse populations and communities of plants, fish, and wildlife.

Executive Orders 11988 (floodplain management), 11990 (protection of wetlands), and 13443 (facilitation of hunting heritage and wildlife conservation) provide further direction for protection and management of fish and wildlife habitat. Executive Order 11987 (exotic species) directs Federal agencies to restrict the introduction of exotic species into the natural ecosystems on lands and waters they own, lease, or hold for administrative purposes. Secretarial Order 3347 also directs the BLM to identify actions that would improve fish and wildlife habitat.

Through a statewide memorandum of understanding (MOU) between the BLM and ODEQ, the BLM manages hydrologic basins ". . . to protect the recognized beneficial uses, salmonid fish (trout) rearing, salmonid fish spawning, [and] resident fish and aquatic life."

Secretarial Orders 3356, 3362, and 3366 emphasize cooperation with state agencies to maintain, enhance, and restore fish and wildlife habitat, migration corridors, and recreational access. BLM cooperates with

other agencies to accommodate their species population management goals to the extent consistent with the principles of multiple use management. Species management, such as introduction, removal, population control, and bag limits fall under the authority of the Oregon Department of Fish and Wildlife (ODFW) and the U.S. Fish and Wildlife Service (USFWS). The ODFW sets species population management objectives within their management plans (ODFW 1993, 2003a, 2003b, 2003c, 2005b, 2006, 2010, and 2011). The USFWS regulates migratory birds and threatened and endangered species. The Animal and Plant Health Inspection Service (APHIS) also has a role in managing certain wildlife species such as predators (i.e. coyotes and cougars), pests that cause agricultural damage (i.e. grasshoppers), or animals that pose a human health or safety hazard (i.e. problem bears) (APHIS 1987, 1994, 1995a, 1995b). All three agencies cooperate with the BLM regarding the management of fish and wildlife resources.

Fish and Aquatic Management Goal

Fish and Aquatic Habitat Management Goal *- Restore, maintain, or improve habitat to provide for diverse and self-sustaining communities of fishes and other aquatic organisms.*

Fish and Aquatic Management Direction

Management emphasis would provide habitat for fish and other aquatic organisms to maintain the distribution of native species among sub-watersheds while providing opportunities for some commodity uses. Nonnative species would receive less emphasis and would be supported only where they do not interfere with native species. Habitat would also be provided for the native species needed for self-sustaining aquatic communities.

Management would protect, maintain, or restore riparian condition, instream processes, and habitat diversity so that all native aquatic species can live in predominantly natural assemblages within their present or historic sub-watersheds. Where nonnative species already occur, habitat objectives would be based on the requirements of the native species. The purpose is to maintain a distribution of native species that would promote natural dispersal and recolonization among populations and allow species interactions that are part of ecosystem processes.

Because management throughout a watershed is considered important for the health and function of aquatic ecosystems, these alternatives focus on managing entire watersheds where uses or activities may have direct or indirect effects on riparian, wetland, and aquatic habitats. Uses or activities would be allowed in the watershed as long as they ensure progress toward (1) maintenance, protection, or restoration of instream processes and habitat diversity; (2) water quality that meets State standards for aquatic beneficial use; and (3) attainment of proper functioning condition, desired range of conditions, or riparian management objectives.

Livestock grazing and related activities would continue to be adjusted, restricted, or removed from those stream segments where proper functioning condition assessment ratings are functioning-at-risk with no apparent trend, downward trend, or nonfunctioning and where grazing is determined to be a causal factor in the current condition. Exclusion of livestock would be especially critical in BLM riparian sites in fenced Federal range (FFR) allotments. Exclusion of livestock would continue in these areas until systems are determined able to support reintroduction of grazing with proper management to improve riparian conditions.

Where habitat conditions are determined to be degraded and the habitat management goal cannot be reached through simply managing other uses, active instream improvements may be initiated, such as installing instream structures or planting vegetation.

Roads would be managed in riparian conservation areas to improve habitat conditions. Roads would be removed or relocated where an ID team determines that they are contributing to less than desirable habitat conditions. Road construction and maintenance would utilize appropriate BMPs (Appendix 9) to minimize sediment input and channel effects.

Acquisition of aquatic/riparian habitat or water rights would be pursued with willing owners. Water rights would be converted to instream or habitat rights.

Big Game Management Goal

Big Game Habitat Management Goal *- Facilitate the maintenance, restoration, or enhancement of big game (mule deer, elk, pronghorn, and bighorn sheep) populations and habitat on public land.*

Big Game Management Direction

Approximately 22,829 AUMs of forage would continue to be allocated to wildlife; 21,430 AUMs would continue to be allocated for expanding elk and bighorn sheep populations and in mule deer and pronghorn antelope winter range allotments to reflect current ODFW management population goals (ODFW 2003a, 2003b, and 2003c). Wildlife forage allocations by allotment and wildlife species are shown in Table A5-2 (Appendix 5). The "Other Wildlife" category (1,399 AUMs) shown in Table ES-1 reflects the forage needs of small mammals, raptors, and other birds.

Livestock grazing use within mule deer and pronghorn winter range allotments would not be allowed to exceed an average of 15 percent of the current year's leader growth of browse on bitter brush and mountain mahogany 2 out of 3 years (using measurement techniques described in Cooperative Extension Service *et al.* 1996).

Improvement of big game winter habitat, as identified in various wildlife Habitat Management Plans (such as BLM 1980c, 1980d, 1981a, 1984a, 1984b, 1986a, 1986b, 1993d) would continue (includes overlapping habitat for elk, pronghorn, mule deer, and bighorn sheep. Big game habitat within the planning area would be managed to attain desired wildlife habitat conditions over the long term. Achievement of desired wildlife habitat conditions would include a variety of methods to manage the big sagebrush overstory.

The present public land base within big game winter ranges would be retained in Federal ownership, unless an exchange could be made that would be more beneficial to wildlife. Any proposed changes would be reviewed by the ODFW.

Bighorn sheep habitat maintenance, restoration, or enhancement would be emphasized as identified in existing wildlife habitat management plans (such as BLM 1980c, 1980d, 1981a, 1984a, 1984b, 1986a, 1986b, and 1993d) and ODFW's current bighorn sheep management plan (ODFW 2003c). Bighorn sheep expanding outside of the current range would only be allowed where there are no disease transmission conflicts. A 9-mile buffer, as recommended in Mountain Sheep Ecosystem Management Strategy in the 11 Western States and Alaska (BLM 1995h), is required between new domestic sheep and goat permitted use areas and bighorn sheep use areas, as a mechanism to further avoid disease transmission. Domestic sheep grazing would not be allowed on BLM lands within the planning area unless it can be demonstrated that it would not negatively impact existing populations of bighorn sheep or future augmentation sites proposed by ODFW.

Restoration of bighorn sheep range and mule deer winter range would occur through reduction of western juniper encroachment. These treatments would be accomplished using prescribed fire or other methods.

Treatments would reduce invasive western juniper by 30 to 70 percent within each of the treatment areas. Any treatments occurring within WSAs would be consistent with the Wilderness IMP (BLM 1995b).

The Cabin Lake/Silver Lake Mule Deer Winter Range Cooperative Road Closure with USFS and ODFW would continue. Vehicle use in the area would be limited to designated roads and trails from December 1 to March 31 (Map OHV-1).

Upland Wildlife Management Goal

> ***Upland Wildlife Habitat Management Goal*** *- Manage upland habitats; including shrub steppe, forest, and woodlands, so that the forage, water, cover, structure, and security necessary for wildlife are available on public land.*

Upland Wildlife Management Direction

Equal emphasis would be placed on managing game and non-game wildlife within sagebrush steppe, forest, and woodland habitats. To the extent possible, wildlife community connectivity and interrelationships would be maintained in most habitats at the landscape scale. Pine forest, old-growth western juniper, quaking aspen, and mountain shrub habitat types would be managed as described under the Grass and Shrub, Forest, and Woodland sections of this chapter.

Big sagebrush habitat would be managed for shrub cover, structure, and forage values for the benefit of both game and non-game wildlife. Management of large blocks of grass and shrublands would also be done for the benefit of migratory land birds. Management would focus on maintaining existing grass and shrublands in high ecological condition on a no-net-loss basis and improving degraded habitats. Fragmentation would be reduced through restoration of degraded grass and shrublands by active restoration projects and changes in other management activities.

Sagebrush steppe habitat important to Greater Sage-grouse and other sagebrush-obligate species would be managed as described in the Special Status Animal Species section. In general, management would continue to follow the management goals, objectives, and decisions contained in the *Oregon Greater* Sage-grouse Approved RMP Amendment (BLM 2015a, as amended).

The existing forage allocation of 1,399 AUMs for wildlife species other than big game (Table ES-1) would be retained. Wildlife water developments (2,000–3,000-gallon guzzlers) would be installed where wildlife water is deficient.

Motorized use within most of north Lake County would continue to be limited to existing or designated roads and trails year-round to limit disturbances to wildlife. Seasonal closures would continue to be implemented annually in the northwest corner of the planning area to limit disturbance to wintering mule deer (Map OHV-1).

Bat habitat would be managed in accordance with the *Oregon and Washington Interim Cave Management Policy* (BLM 1995j) and existing and future cave management plans (*e.g.* BLM 2006c).

Disturbances to nesting raptors would be avoided during mating, nesting, and fledging season (February 1 to July 30).

Special Status Animal Species

Authority

Section 102(8) of the FLPMA requires that public land be managed to provide food and habitat for fish, wildlife, and domestic animals. The Endangered Species Act (ESA) mandates management that leads to the conservation or recovery of federally listed threatened or endangered species. It is in the public interest to prevent federal listing. Listing of a species as threatened or endangered may lead to restrictions on land uses, and under some circumstances may cause adverse socioeconomic impacts to commodity users. In most cases, there are both socioeconomic and biological benefits associated with conserving a species to avoid federal listing.

The management of special status species follows agency policy documented in BLM Manual 6840 (BLM. 2008i). This policy and the ESA both call for managing or conserving special status species and their habitat to prevent Federal listing. Most fish and wildlife assigned to a special status category are limited in their distributions, populations, or habitats and may be at risk over various geographic areas. Conservation is defined as the use of all methods and procedures necessary to improve the condition of special status species and their habitats, to a point where their special status is no longer warranted. Policy objectives also state that actions authorized or approved by the BLM must not contribute to the need to list species under the ESA. The BLM State Director, in coordination with federal and state agencies, determines the designation of special status species.

Management Goals

Special Status Animal Species Management Goal *- Manage public land to maintain, restore, or enhance populations and habitats of special status animal species. Priority for the application of management actions would be: (1) Federal endangered or threatened species, (2) Federal proposed species, (3) Federal candidate species; (4) State listed species, (5) BLM sensitive species, and (6) BLM strategic species. Manage in order to conserve or lead to the recovery of threatened or endangered species.*

Special Status Species Goal SSS 1 *- Conserve, enhance and restore the sagebrush ecosystem upon which Greater Sage-grouse populations depend in an effort to maintain and/or increase their abundance and distribution, in cooperation with other conservation partners (BLM 2015a).*

Management Direction

Management of Warner sucker, Foskett speckled dace, Hutton tui chub, Bald eagle, and Peregrine falcon would be in accordance with the most current management plans (FS 1994, BLM 2009g USFWS *et al*. 2015, BLM 2016k), recovery plans (USFWS 1998), and consultations/biological opinions (such as USFWS 1997, 2003, 2006).

BLM would participate with the USFWS (lead agency) in the preparation and implementation of future recovery/habitat management plans for listed and proposed species. Management actions would be adjusted to accommodate additions or deletions in official listings of special status species, as needed. Special status bat species habitat would be managed in accordance with the *Oregon and Washington Interim Cave Management Policy* (BLM 1995j) and existing and future cave management plans (BLM 2006c).

Management of Greater Sage-grouse habitat would continue to follow the management goals, objectives, and decisions contained in the *Oregon Greater Sage-grouse Approved RMP Amendment* (BLM 2015a, as amended).

Special status species management would emphasize achieving desired range of conditions that maintain, enhance, or restore habitats or populations of special status species. All special status species habitats or populations would be managed so that BLM actions would not contribute toward the need to list a species as federally threatened or endangered.

Management would be oriented toward the development of habitats that support healthy, biologically diverse communities of wildlife at mid and fine scales while meeting special status species needs. Individual species requirements would be included in management prescriptions, but not to an extent that over emphasizes that value of any one habitat type.

A variety of restoration projects or other land use adjustments could be required to manage for special status species. Some management for maintenance could require avoidance or mitigation measures. Some restoration or enhancement measures could involve very specific remedies leading to substantial adjustments in customary land use practices. Because of the variability in habitat use by special status species, management actions could be required within any of the habitat types described in this plan.

Recreation

Authority

Section 102(8) of the FLPMA provides for the management public lands for outdoor recreational uses as an integral part of multiple use management.

Current recreation policy (BLM 1990k; 2005a; 2011c) directs the BLM to designate special recreation management areas (SRMAs) and extensive recreation management areas (ERMAs) during the land use planning process.

Congress authorized an on-going Recreation Fee Program through the *Federal Lands Recreation Enhancement Act* (REA) in December 2004, and replaced the Recreational Fee Demonstration Program. REA authorizes the charging and collection of recreation fees at federal lands and waters for through 2014. This act was extended to 2020. The act provides that recreation fee revenues are available for expenditure by the local land managing agencies without further appropriation.

Executive Order 13443 directs Federal agencies to evaluate the effects of agency actions hunting participation, consider the recreational values of hunting in proposed agency actions, and establish goals to foster opportunities for the public to hunt game species. Additional authorities and MOUs addressing fishing, hunting, shooting sports, and general recreational access needs are discussed in the *Travel Management and Off-Highway Vehicle Use* section.

Management Goal

> **Recreation Management Goal -** *Provide or enhance developed and undeveloped recreation opportunities, while protecting other resources. Manage for increasing demand for recreation activities.*

Management Direction

Recreation management would be focused towards providing a variety of developed and undeveloped types of recreation (including motorized and non-motorized) opportunities (Maps R-1 and OHV-1, Appendix 1) while providing for adequate protection of natural and cultural values, providing for public health and safety, or addressing increases in demand (BLM 2003b). Recreation management in Greater

Sage-grouse habitat would continue to follow the recreation management decisions contained in the *Oregon Greater Sage-grouse ARMPA* (BLM 2015a, p. 2-29).

Special Recreation Management Areas

The existing North Lake and Warner Wetlands Special Recreation Management Area (SRMA) designations (Map R-1, Appendix 1) would be retained. Management of the Warner Wetlands and the North Lake SRMAs would focus on providing high quality recreation opportunities while protecting other resource values. The Warner Wetlands Recreation Area Management Plan (RAMP) would be retained and implemented to the extent feasible (BLM 1990b, 1990d, and 1990i), subject to additional site-specific NEPA analysis.

The management emphasis for the North Lake SRMA would include providing increased recreation opportunities while managing OHV and commercial uses (such as wilderness therapy schools, guided hunting, and nature tours, etc.), protecting natural and cultural resources, maintaining public health and safety, and increased monitoring and patrols to curb vandalism. The area provides a variety of recreational opportunities such as hunting, fishing, hiking, sightseeing, OHV use, and environmental education. A RAMP could be developed for the North Lake SRMA or individual recreation projects could be developed and approved in this SRMA in the future, subject to additional site-specific NEPA analysis.

Extensive Recreation Management Areas

The existing extensive recreation management area designations (ERMAs) (Map R-1, Appendix 1) would be retained. Recreation area management plans would not be prepared for these areas. No specific recreation management actions or projects are proposed within the ERMAs at this time. However, specific recreation actions or projects could still be developed and approved in these areas in the future, subject to additional site-specific NEPA analysis.

Recreational Access

Recreational access needs within the planning area would be addressed as described in the Off-Highway Vehicle and Travel Management section. The existing road network would be retained and managed to provide general public and recreational motorized access to the public lands in the planning area (Maps OHV-1, TM-1 to TM-4, Appendix 1).

The existing trail system would be retained and managed for both motorized and non-motorized uses. New trails for both non-motorized and motorized use would be designated and/or constructed on a case-by-case basis, based on public need, budget constraints, and additional NEPA analysis.

Developed Recreation Areas/Sites

Management of existing developed recreation areas/sites (Duncan Reservoir, Green Mountain, and Sunstone Campgrounds, West Fork Silver Creek primitive camping area, Buck Creek and Crack-in-the-Ground day use areas, and Dougherty Slide Hang Gliding Launch Site) would continue (Map R-1, Appendix 1). This could include such actions as recreation site maintenance, installing barriers to contain vehicles, or adding interpretive information to an existing site that is receiving increased use.

New recreation sites or areas could be developed to meet increased recreation demand, but only if other resource values can be protected. Examples of this may include providing new vault toilets, parking areas, or interpretive displays in appropriate locations.

Sunstone Public Collection Area

Only non-commercial, recreational collection of sunstones with hand tools would be allowed in the Sunstone Public Collection Area. Additional improvements within the existing day use and camping area

could be developed including a potable water source, additional shade structures and campsites, and managing as a fee collection site.

Camping

Most of the planning area would remain open to dispersed recreational camping use. However, occupancy and use of a camping site would be limited to 14 consecutive days. Camping within 300 feet of any discrete water source (see Glossary) would be prohibited.

No camping would be allowed in the Black Hills or Connley Hills ACEC/RNAs. Collection of dead and down wood and cutting of trees for campfire use would also be prohibited in these two areas. Camping would be allowed in designated camping areas within the Table Rock ACEC, but designation of specific campsites would be deferred to a future Recreation Management Area Plan (RAMP) or other activity plan. Collection of dead and down wood and cutting of trees for campfire use would be allowed in this area.

In the Lost Forest RNA/ISA, camping would only be allowed in four designated primitive campsites located along the outer boundary. No new campsites or other facilities would be developed within the Lost Forest RNA/ISA (Map SMA-1). Camping at the base of Sand Rock would continue to be prohibited, but a small vehicle pullout would remain available as parking for day-use access. There would be three designated camping/staging areas in the Sand Dunes WSA/ACEC be managed on a rotational basis.

Adaptive management activities that would allow the continued use of each of these camping/staging areas would be adopted as necessary to ensure the long-term use and protection of these areas. Collection of dead and down wood and the cutting of trees would be prohibited throughout the Lost Forest/Sand Dunes/Fossil Lake ACEC. Firewood may be brought in from outside the area and is currently available for purchase from off-site commercial sources.

Fishing

The BLM would cooperate with ODFW in maintaining existing and developing new recreational fishing opportunities on BLM-administered lands.

Hunting

The BLM would cooperate with ODFW and USFWS in maintaining existing hunting opportunities on BLM-administered lands.

Climbing/Rappelling

Rock/boulder climbing, and rappelling activities would be allowable throughout most of the planning area. However, it would continue to be prohibited in Table Rock, High Lakes, and Black Hills ACECs and in Crack-in-the-Ground (Four Craters WSA). The use of bolts or other permanent safety devices would be prohibited within all WSAs and significant caves. The use of bolts and other permanent safety devices in the remainder of the ACECs would require a special recreation permit.

Geocaching

Geocache sites would be allowed on public lands subject to the following:

- Geocache site must be registered with the Lakeview District office. Registration would require an individual or group to be responsible for placement, maintenance, or removal of the cache. A letter of authorization or a special recreation permit would be issued to officially authorize the activity.

- NEPA analysis would be required before approval of geocache sites.
- Geocache sites would not be allowed within or near threatened or endangered species habitat, cultural, or paleontological sites.
- Geocache sites within WSAs, ACECs, wetlands, or hazardous sites (active mining areas, abandoned mines, and hazmat sites) would only be authorized if effects would be minimal and could be adequately mitigated.
- Unregistered geocache sites would be removed.
- Registered geocache sites that are found to conflict with other uses or causing unacceptable environmental impacts would require additional mitigation, relocation, or removal.

Special Recreation Permits

Special recreation permits (SRPs) are authorizations that allow for recreational use of the public lands and related waters. Issuing SRPs functions as a means to manage visitor use, protect natural and cultural resources, provide for the health and safety of visitors, and provide a mechanism to accommodate commercial recreational uses. SRPs are required when activities are commercial, competitive, involve organized groups/events, or individual/group use in special areas occur.

Special recreation permits (SRPs) would be issued on an as-needed basis to meet demand while protecting cultural and natural resource values and maintaining public health and safety. SRPs are typically issued for activities such as organized OHV events, horseback rides, hunting and fishing guide services, commercial tours, and wilderness therapy schools.

Organized OHV events would be allowed on existing or designated open routes, and in the Sand Dunes WSA (subject to the *WSA Management Manual*; BLM 2012h) under the special recreation permit (SRP) process.

Recreational use within ACECs, including commercial and non-commercial uses authorized under SRPs, would be evaluated and permitted, modified, or prohibited as needed to protect ACEC values. Actions within WSAs that require authorization under a special recreation permit would only be allowed if the use satisfies the non-impairment criteria.

Public Education and Tourism

Provide information and education opportunities to enhance visitors' experiences and increase their knowledge of public lands. Tourism opportunities and development would be pursued only if they are consistent with meeting other resource objectives through cooperation with other agencies and groups.

Wild Horses

Authority

In 1971, the Wild Free-Roaming Horse and Burro Act (Public Law 92-195) was passed by Congress in response to public interest and concern about the management of free roaming horses and burros on public lands. There are no wild burros in the planning area. Therefore, this plan amendment only addresses wild horses. The Act defines wild free-roaming horses as all unbranded and unclaimed horses on public lands. The law requires that wild free roaming horses be managed in the areas they were found (at the time the law was passed), as an integral part of the natural system of public lands, and in a manner designed to achieve and maintain a thriving natural ecological balance in keeping with the multiple use

management concept of public lands. Two herd areas were established in the planning area. In 1976, the FLPMA amended the Wild Free-Roaming Horses and Burros Act to permit managing agencies to use or contract for helicopters and motorized vehicles in administering the Act.

In 1978, the PRIA amended the Act again. PRIA established and reaffirmed (1) the need to maintain a current inventory of animals and public rangeland conditions;(2) the requirement to manage, maintain or improve the condition of the public rangelands so that these lands become as productive as feasible for all rangeland values; (3) continuation of the policy to protect wild horses while at the same time facilitating the removal and disposal of excess wild free–roaming horses which pose a threat to themselves and their habitat and to other rangeland values and; (4) the opportunity to allow adopters to obtain title to animals in their care, to contract a research study(s) for the purpose of furthering information, and to establish an order and priority for removal of excess animals.

Management Goal

Wild Horse Management Goal *- Maintain and manage wild horse herds in established herd management areas (HMAs) at appropriate management levels to ensure a thriving natural ecological balance between wild horse populations, wildlife, livestock, vegetation resources, and other resource uses.*

Management Direction

Herd Management Areas

The boundaries of the two existing herd management areas (HMAs) were established through previous land use plans (BLM 1983a, 1983b). Wild horses would continue to be managed within these existing HMA boundaries (Map HMA-1). Table 3-40 summarizes key management components for the two HMAs. Horse numbers within each HMA would continue to be managed through a combination of monitoring, gathers, adoptions, and fertility control.

Wild horse management in Greater Sage-grouse habitat would also continue to follow the wild horse management objectives and decisions contained in the *Oregon Greater Sage-grouse Approved RMP Amendment* (BLM 2015a, p. 2-21 to 2-22). Management of both the Paisley and Beaty Butte HMAs would also continue to be guided by existing herd management and gather plans that identify specific management objectives for each HMA (*e.g.* BLM 1977a, 1977b, 2009a, 2009b, 2009f, 2012i, 2016e, 2018a). These plans would continue to be implemented and updated as needed.

Forage Allocations

Horses compete with livestock and wildlife for available forage and water. To prevent resource damage, BLM has allocated the available forage among wild horses, wildlife, and livestock, and established appropriate wild horse forage allocations for each HMA (Tables ES-1 and 3-40; Table A5-3, Appendix 5). The appropriate management levels (AMLs) or herd sizes have been established based on available resources, reproductive rates, other range uses, and public input to ensure that public land resources, including wild horse habitat, continue to be maintained in a satisfactory, healthy condition, and that unacceptable impacts to other resources are minimized. The AMLs in the Paisley Desert and Beaty Butte HMAs would remain at 60–150 horses and 100-250 horses, respectively. However, population levels and forage allocations could be adjusted in the future based on the results of monitoring studies, allotment evaluations, and rangeland health assessments, when needed, in order to achieve and maintain a thriving natural ecological balance and other multiple uses in each HMA.

While wild horses may be found on lands outside HMAs, these areas have no forage allocated to wild horses. The BLM has no authority to manage wild horses outside of HMAs and must remove them upon written request from the private landowner(s).

The forage allocation for the Paisley Desert herd would remain at 1,800 AUMs; the forage allocation for the Beaty Butte herd would remain at 3,000 AUMs. Forage for wild horses would be allocated to all horses in the HMA regardless of age and would be calculated consistent with other resource management plans in the State (the calculation is: the number of horses at the top AML multiplied by 12 months).

When monitoring data, evaluations, or assessments support a need to make a downward adjustment in the allocation of forage within an HMA, the wild horse AUMs would be decreased proportionately with authorized livestock AUMs. This would be done through the adaptive management process, based on each species' contribution to the failure to meet management objectives or failure to maintain an ecological balance. Conversely, when monitoring data identify additional forage is available on a sustained basis, proportionate increases between wild horse AUMs and livestock AUMs would occur, consistent with meeting other management objectives.

Monitoring

Monitoring of HMAs would continue each year through aerial and/or ground horse surveys, along with data collection of forage plants use. This data would continue to be used to determine when to gather horses, and how many horses to remove.

Herd Gathers/Adoption

Horses would be allowed to run free until either a herd reaches its upper AML or monitoring data indicate a need to gather. Gathering of excess horses would occur to prevent resource overuse and to preserve herd health. For example, in periods of drought when drinking water becomes limited, horses could be removed from the HMAs for their well-being, even if the herd is below the AML. Additionally, horses would be gathered if they stray outside the boundaries of the HMA. (Horses have historically strayed outside the HMAs. Horses from the Beaty Butte herd move between the BLM Burns District to the east and the Lakeview District and between the Sheldon and Hart Mountain National Wildlife Refuges. Horses from the Paisley Desert often move east and south into surrounding crested wheatgrass seedings). Gathering would typically occur outside the normal February through June breeding and foaling season. Gathers reduce horse numbers to the lower end of the AML to avoid the need for more frequent, expensive gathers that may disrupt the herd. Aircraft would continue to be used for horse gathering, including within ACECs, WSAs, and wilderness characteristics units.

Site-specific gathering details, including trap sites, would be determined at the time of each gather. Temporary traps would be located adjacent to existing roads and remain in place for up to 14 days. Temporary traps could be placed along existing roads or ways within WSAs if no other reasonable location is available. Usually, excess horses are transported to the Burns Wild Horse Corral for public adoption, but horses could also go to other adoption sites throughout the United States. Most wild horses removed from the HMAs would be placed into BLM's adoption program or otherwise placed for long-term care.

Fertility Control

Fertility control research using immune-contraceptives and other population control methods would continue to be implemented within the HMAs. Fertility control vaccine(s) would be considered as a

management option to reduce the frequency of gathers and benefit the health of wild horses and rangelands.

Horse Releases

Horses released back into HMAs after gathers would be animals that exhibiting the special and unique characteristics of that herd. In some instances, these horses may be from other wild horse herds. Horses would be selected to maintain herd characteristics and to diversify genetic variability, especially in the Paisley Desert HMA, which has a lower AML.

Water Developments

Established water developments and other range projects supporting wild horse management would be maintained, consistent with other management objectives. In particular, the boundary fencing of the HMAs would be maintained or improved to keep horses inside the HMAs. Wild horse projects that no longer function and cannot be repaired would be abandoned and the sites would be rehabilitated. Construction of new water developments and other horse management projects that minimize impacts to other resources would be considered.

Wilderness Study Areas

Authority

Under Section 603(c) of the FLPMA, the BLM must manage wilderness study areas (WSAs) to not impair their suitability for preservation for future designation as wilderness until such time as Congress acts either to designate WSAs as wilderness or permanently release them from wilderness study (BLM 2012h).

Management Goal

> ***WSA Management Goal*** *- WSAs will be managed under the current WSA management policy so as not to impair suitability for preservation as wilderness until such time as Congress makes a decision on wilderness designation.*

Management Direction

WSA Management Policy

All 14 existing WSAs and one Instant Study Area (ISA) (Table 3-54) would continue to be managed under the current WSA management policy (*e.g.* BLM 2012h) so as to not impair wilderness values until such time as Congress makes a decision regarding wilderness designation or release from wilderness study. The BLM's WSA management policy would continue to allow resource uses within WSAs in a manner that preserves the area's suitability for preservation as wilderness and protects the wilderness characteristics of all WSAs in the same or better condition than they were on October 21, 1976. All proposals for uses and/or facilities within WSAs must be reviewed to determine whether the proposal would impair the suitability of the WSA (non-impairment standard) for preservation as wilderness or meets one of the exceptions to the non-impairment standard (BLM 2012h, p. 1-6, 1-10, 1-43 to 1-44). The non-impairment standard requires:

- The use or facility must be temporary and
- The use or facility must not create new surface disturbance that requires reclamation.

The only permitted exceptions to the non-impairment standard are:

- Emergency actions necessary to prevent loss of life or property including, but not limited to: wildfire suppression, flood, pursuit of criminal suspects, search and rescue, and recovery of deceased persons;
- Actions that protect public safety;
- Action that restore impacts created by previous violations or emergency actions;
- Valid existing rights;
- Legacied uses;
- Actions that protect or enhance wilderness characteristics/values (BLM 2012h, p. 1-11 to 1-13).

Section 202 Management Direction

Within those WSAs studied under Section 202 of the FLPMA (Sage Hen Hills, and portions of Rincon and Basque Hills), existing and new locatable mining operations under the 1872 Mining Law would be allowed and regulated under 43 CFR 3802 to prevent unnecessary or undue degradation, rather than prevention of impairment of wilderness suitability. All other proposed management activities within these WSAs would be managed under the non-impairment criteria.

Management of WSAs Following Congressional Action

If Congress should designate one or more WSAs as wilderness in the future, the area(s) would be managed in accordance with the Wilderness Act of 1964, the authorizing legislation, the latest wilderness management policy (*e.g*. BLM 2012d), and any subsequent area-specific management plan(s).

If Congress should release one or more WSAs from further consideration as wilderness, these areas would no longer be managed according to the WSA management policy, but would revert back to the existing multiple use management allocations of the public lands surrounding the former WSA (BLM 1982c, 2012h, p. 1-2). However, any released WSA or portion of a WSA that has some other over-lapping special management designation (*e.g*. ACEC or WSR) would continue to be managed in accordance with that designation (Tables 2-1 and 3-2).

The BLM would document any future Congressional wilderness legislation and associated adjustments in WSA and wilderness characteristics management through plan maintenance (43 CFR 1610.5-4).

Areas of Critical Environmental Concern/Research Natural Areas

Authority

Sections 201(a) and 202(c)(3) of FLPMA and 43 CFR 1610.7-2 require the BLM to give priority to the designation and development of Areas of Critical Environmental Concern (ACECs) during the land use planning process. ACECs are areas of public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish or wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards (Section 103(a) of FLPMA). As a matter of policy, the BLM designates and manages RNAs as one specific type of ACEC. RNAs are managed to preserve natural features and ecosystems in as natural a condition as possible for research and educational purposes.

Management Goal

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

Management Direction

The Lakeview RMP/ROD retained four existing ACECs and designated 13 new ACECs. One existing ACEC was expanded. In addition, one existing RNA was retained and nine new RNAs were designated (BLM 2003b, p. 57, as maintained). These existing designations would be retained under all alternatives.

Wild and Scenic Rivers

Authority

The National Wild and Scenic Rivers Act of 1968 (Public Law 90-542 and amendments) protects selected free-flowing rivers that have outstandingly remarkable values (ORVs). The act defines a river as "a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, creeks, runs, kills, rills, and small lakes." The Act defines *free-flowing* as "existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion . . . shall not automatically bar its consideration for such inclusion." The potential ORVs listed in the Act are "scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values" (see *Glossary*, Appendix 8). Section 5(d) requires Federal agencies to consider potential wild, scenic, and recreational river areas in all planning of the use and development of water and related land resources. Section 10(a) describes the management requirement to protect and enhance the ORVs present.

Management Goal

Wild and Scenic River Management Goal *- Protect or enhance the outstandingly remarkable values of rivers determined to be administratively suitable for inclusion into the national wild and scenic river (WSR) system until Congress acts.*

Management Direction

Approximately 6.6 miles of Twelvemile Creek in south central Oregon and 2.2 miles of Twelvemile Creek in northeastern California and northwestern Nevada are currently recommended suitable for designation as a WSR with a "recreational" classification (BLM 2003b, 2007g, 2008b). Appropriate recreational river management objectives and standards would be followed while awaiting action by Congress (see Appendix J2, BLM 2001a).

Cultural and Paleontological Resources

Authority

The Archaeological and Historic Preservation Act of 1974 provides for the preservation of historical and cultural data that might otherwise be lost during Federal project construction. The Archaeological Resources Protection Act of 1979 requires Federal land managers to protect archaeological resources on Federal lands. The Historic Sites Act of 1935 and the National Historic Preservation Act of 1966 (as amended) protect historic and/or archaeological properties to include those of national, state, and local

significance and directs Federal agencies to consider the effects of proposed actions on properties eligible for or included in the National Register of Historic Places (NRHP).

The legal status of Tribal people, the sovereignty of Tribal governments, and the nature of reserved Tribal rights merit separate attention from the public's concerns. The Federal government holds certain trust responsibilities and obligations to Tribal groups based on various legal agreements described in Executive Order 13007 (Sacred Sites), the American Indian Religious Freedom Act of 1978, the Native American Graves Protection and Repatriation Act of 1990, 36 CFR 800 Sections 106 and 110, the National Historic Preservation Act of 1906 (as amended), Executive Orders 13007 and 13175, BLM Manual 1790 (BLM), Handbook H-1780 (BLM), Information Bulletin OR 2000-095. These authorities require BLM to consult with Native American Tribes and consider their rights and interests, including traditional uses, when land use decisions are made.

The Paleontological Resources Preservation Act is the primary statute addressing management of paleontological localities and specimens. The Omnibus Public Lands Act of 2009 (P.L.111-011) directs BLM to develop public awareness programs of, and manage and preserve paleontological resources on, public lands.

Management Goals

Cultural and Paleontological Resource Management Goal *- Identify, preserve, and protect significant cultural and paleontological resources.*

Cultural and Paleontological Resource Education Goal *- Increase the public's knowledge of, appreciation for, and sensitivity to, cultural and paleontological resources.*

Native American Traditional Use Goal *- Protect traditional religious sites, landforms, burial sites, cultural resources, culturally important plants, and other areas of interest in consultation with local Native American Tribes.*

Management Direction

All management actions or authorizations on public lands and private lands, which are federally funded, permitted, licensed, or assisted would continue to require compliance with Section 106 of the National Historic Preservation Act implementing regulations. This could consist of a literature review, a site survey on the ground to determine the presence or absence of cultural, historic, and paleontological sites, and site evaluation in consultation with Native Americans and the State Historic Preservation Officer, as appropriate.

The use of university-associated field schools would continue to be encouraged as one means of completing cultural and paleontological inventories and project site clearances. These schools provide the BLM with valuable data in a cost-effective manner while providing students with field experience. All collection of cultural and paleontological material for scientific purposes would require issuance of an antiquities permit. Collected archaeological and paleontological material would remain the property of the United States and would be preserved for future public use in an approved repository (i.e. university or museum collection).

All cultural resource sites that have been identified to date, as well as sites identified in the future, would continue to be evaluated for placement in one of the following use categories specified in *BLM Manual 8110* and *BLM Handbook H-1601-1* (BLM 1988c, 2005a):

Scientific use*:* Sites placed in this category would be preserved until research potential is realized.

***Conservation for future use**:* This category protects a site from destruction with the intent to have it available at some point in the future for research or public interpretation use.

***Traditional use**:* This category preserves a site for traditional uses or cultural practices of a living community (e.g. Native Americans or an ethnic group).

***Public use**:* Sites placed in this category would be used for recreation, public interpretation, or education.

Experimental use: Sites placed in this category would be used in scientific research. Such use may result in the complete consumption of the site in some cases. Site may be placed in public use as a result of completed research.

***Discharged from management**:* Sites placed into this category no longer exist or have been so damaged that they have no value of any kind. Sites may have been destroyed by erosion, consumption in research, or through destruction caused by past human activity.

Other uses would be limited as necessary to preserve and protect cultural and paleontological resources.

Regular consultation with Native American Tribes on all matters dealing with use, protection, and preservation of cultural resources within the Planning Area would continue.

Abert Rim, Greaser Petroglyph, and Picture Rock Pass Petroglyph National Register Districts/Sites would be retained and managed to protect cultural values. These areas would remain available for archeological research. The Greaser Petroglyph site would also remain available for public interpretive use.

The historic buildings and structures on the Shirk Ranch National Register site, located in Guano Valley, would be stabilized.

To limit illegal artifact or fossil collecting, site excavations, and vandalism, listed and eligible NRHP sites and locations known to contain large numbers of sites would be patrolled regularly. This would include the subbasins and uplands surrounding the Warner Valley, Abert Lake, Summer Lake, Christmas Valley, and Fort Rock.

Monitoring would provide data for tracking the condition of cultural/historic sites over time and determine where additional protection, stabilization, or restoration may be needed (see *Monitoring* section, BLM 2003b, p. 78-79).

Cost-share programs with universities, museums, researchers, and volunteers to inventory, analyze, and research cultural and paleontological resources would be continued. Interpretation and education projects or programs would be implemented in a manner that protects the values of the site. On-site and off-site interpretation projects or programs designed to increase awareness of the importance of preserving and protecting cultural and paleontological resources would be developed and implemented.

Consultation with Native American Tribes would be completed, as needed, and documented. All treaty rights and trust responsibilities applicable to public lands within the planning area would be honored. Tribal people would be encouraged to communicate their concerns regarding management of cultural plants and other subsistence resources to the BLM.

Ownership of the West Goose Lake reinternment site (approximately 40 acres) and the Adel Paiute Cemetery (approximately 10 acres) would be transferred to the local Tribes or possibly to the Bureau of Indian Affairs to be managed in trust for re-internment purposes.

The Red Knoll, Table Rock, Abert Rim, High Lakes, Rahilly-Gravelly, Hawksie-Walksie, Connely Hills, and Fish Creek ACECs would be retained and continue to be managed to protect cultural resource values and traditional use areas, including cultural plants. Specific management direction for each of these ACECs is described in the Special Designations section of this chapter. These areas would also be evaluated for eligibility as traditional cultural properties (TCPs) in the future and nominated if they qualify, dependent upon available funding, time, and other management priorities. If any of these ACECs or any portion of the Barrel Springs, Big Valley, or Klamath Tribes proposed TCPs are subsequently evaluated and designated as TCPs in the future, cultural sites within these areas would remain available for research, as appropriate.

Public lands would continue to be managed to maintain, restore, or enhance culturally important plant habitat and provide sustainable yields at a landscape level. Cultural plants would be managed for desired range of conditions by using a mix of protection, restoration, or enhancements measures. These measures may include prescribed fire or special considerations for wildland fire management. Old-growth western juniper stands would be maintained or enhanced (see *Vegetation* section) and available for traditional uses.

Social and Economic Values

Authority

Section 202(c) (2) of the FLPMA requires BLM to integrate physical, biological, economic, and other sciences in developing land use plans (43 USC 1712(c) (2)). FLPMA regulations 43 CFR 1610.4-3 and 1610.4-6 also require BLM to analyze social, economic, and institutional information. Section 102(8) of the FLPMA states that the public lands shall be managed in a manner that will provide for human occupancy and use. Section 102(12) states that public lands shall be managed in a manner that recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber (*i.e.* commodities).

Section 102(2)(A) of the NEPA requires federal agencies to "insure the integrated use of the natural and social sciences ...in planning and decision making" (42 USC 4332(2)(A)). Federal agencies are also required to "identify and address ...disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States" in accordance with Executive Order 12898 on Environmental Justice.

Public lands also provide or contribute to numerous environmental amenities of value to humans, such as clean water, scenic quality, and recreational opportunities. These amenities can enhance local communities as desirable places to live, work, or visit. Public lands can also attract visitors to the area, many of whom purchase goods and services that generate local economic activity. Executive Order 13443 directs Federal agencies to consider the economic values of hunting in proposed agency actions.

Historically, commodity values on public lands have been made available to individuals or businesses through sales, permitting, or other methods. The Federal government collects revenues when commodities are used. These commodities also generate private economic activity in the local, regional, national, and in some cases, international economies. Business activities of Federal agencies also generate economic activity in the local, regional, and national economies as both an employer and purchaser of goods and services. Federal lands also contribute to local government revenues in the surrounding area. Many

commodity programs include provisions to share revenue collections with local governments. Under Section 102(13) of the FLPMA, Payments- in-Lieu-of-Taxes (PILT) are also made to compensate counties for lost tax revenues because Federal lands are exempt from paying local property taxes.

Management Goal

Social and Economic Management Goal *- Manage public lands to provide social and economic benefits to local residents, businesses, visitors, and future generations.*

Management Direction

The following actions would contribute to achieving this management goal:

- Provide predictable and sustainable levels of commodity outputs.
- Provide natural resource amenities on public lands that enhance local communities as places to live, work, or visit.
- Implement business practices that promote participation by local vendors and purchasers, subject to existing legal, regulatory, and administrative authorities. This would include offering contracts that are diverse in size, type, term, and season.

Management actions would contribute to the stability of the local livestock, mining, and tourism industries by continuing to manage or authorize commodity uses that are of value to society (*i.e.* livestock forage, minerals, tourism, wood products, *etc*.) at existing sustainable levels (see Minerals and Energy, Livestock Grazing, Recreation, Forest, Grass and Shrub Restoration, and National Backcountry Byways and National Scenic Route sections).

The lands and realty program would allow for some public land disposal actions and emphasize the use of exchange as the preferred method of acquiring additional lands. Right-of-ways, easements, and other land use authorizations would be granted where appropriate to provide access to private lands or promote energy development, or energy transmission to meet societal demands.

Natural resource amenities from the public lands would continue to be provided at levels that meet or exceed legal requirements. Existing Special Designations (4 National Register Sites/Districts, 1 WSR, 17 ACECs, and 14 WSAs/ISA) would be retained and managed to protect resource values of importance to some sectors of society.

Anticipated increases in demand for recreational opportunities would be addressed by developing a management plan for the North Lake Special Recreation Management Area in the future (see Recreation section). Additional recreation developments would be implemented in the Warner Wetlands Special Recreation Management Area (BLM 1990i). The Sunstone Public Collection Area would continue to be managed to promote recreational sunstone rock-hounding opportunities. Hunting, fishing, camping, canoeing, OHV, motor touring, and other recreation opportunities would be provided across the planning area (see Recreation, OHV, and National Backcountry Byways and National Scenic Route sections). Special recreation permits would be issued on an as-need basis to meet recreational and commercial demands while also protecting cultural and natural values and public safety.

Business practices that promote participation by local vendors and purchasers would be implemented. This would include offering contracts that are diverse in size, type, term, and season. Contracting would operate within existing legal, regulatory, and administrative authorities.

Appendix 4 – Alternative Development and Comparison Methodologies

Table of Contents

List of Tables

List of Figures

Alternative Development Methodology

Alternative B – Emphasize Protection of Wilderness Characteristics

Under this alternative, all BLM-identified lands with wilderness characteristics (106 recently identified units and 7 existing RMP units (113 units totaling approximately 1,655,290 acres) would be managed to emphasize the protection of wilderness characteristics over all other multiple uses (Table 2-1; Map W-3, Appendix 1). This alternative was developed specifically to meet the requirements of one of the alternative designs specified in Provisions 14, 26b, 26c, 27, 28, 29, 30, and 31 of the 2010 Settlement Agreement.

The alternative includes a combination of Category C unit management and designation as new wilderness study areas under Section 202 of the FLPMA (Section 202 WSAs). All BLM-identified wilderness characteristics inventory units in the planning area (including 7 existing RMP units) were further evaluated for potential designation as new WSAs under Section 202 of the FLPMA.

The BLM first considered whether a unit was contiguous[1] with, or adjacent to[2], an existing WSA. Thirty-one contiguous units were identified during BLM's recent wilderness inventory (see Table 2-1; includes 26 small units listed Table A2-2 in Appendix 2 and 5 units larger than 5,000 acres). BLM assumed that contiguous units would add value to the existing, contiguous WSA due to adding to the total size of the WSA, and considered these units for designation and management as Section 202 WSAs under this alternative for this reason.

The BLM also evaluated adjacent units further to determine if they could add substantial value to the adjacent WSA based on their proximity and size, or would be difficult to manage as WSA due to their shape/configuration, presence of in-holdings or intermingling with non-federal lands, or other issues. The BLM determined that 15 whole units and portions of 2 units (391,496 acres) met these criteria and included these units as Section 202 WSAs under this alternative.

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[1] Contiguous: Lands or legal subdivisions having a common boundary. In the wilderness inventory context, lands either bisected by wilderness inventory (boundary) roads or having only a common corner are not contiguous. A checkerboard land pattern does not contain contiguous lands (BLM 2021, p. 1-13). For purposes of WSA consideration under Sect. 202 of the FLPMA under this planning effort, contiguous refers to a wilderness characteristics inventory unit that is no longer separated from a WSA by a route that meets the wilderness characteristics inventory definition of a boundary road (see BLM 2021, p. 1-14 to 1-15). It can also refer to lands that were, during previous inventories, were administered by non-federal entities but are currently administered by the BLM as a result of a more recent land sale or exchange.

[2] Adjacent: Lands or legal subdivisions having a common boundary. In the wilderness inventory context, lands separated from, or bisected by a minor wilderness inventory boundary road, powerline, or right-of-way may be adjacent to one another but are not contiguous.

Minor Boundary Road: BLM-managed road that currently meets the definition of a wilderness characteristics inventory unit boundary road (see BLM 2021, p. 1-14 to 1-15) but is typically less than 12-feet wide, has a natural surface, and has an assigned maintenance level of 2. Minor boundary roads are not major or main roads which include such things as Federal and State Highways, established County Roads (whether asphalt, gravel, or natural surface), and their associated right-of-ways, or most BLM maintenance level 3 and 4 roads in its existing transportation system (for definition of transportation system see BLM 2021, p. 1-15).

In total, this evaluation resulted in 34 units and portions of 2 units (273,680 acres) being considered for management as Section 202 WSAs under Alternative B. All new Section 202 WSAs would be managed under the WSA management direction in *BLM Manual 6330—Management of BLM Wilderness Study Areas* (BLM 2012h).

The BLM would manage the remaining BLM-identified lands with wilderness characteristics (77 units and portions of 2 units totaling approximately 1,381,142 acres) as Category C units to prioritize the protection of wilderness characteristics over other multiple uses (Table 2-1; Map W-3, Appendix 1).

Alternative C – Emphasize Protection of Specific Lands with Wilderness Characteristics while Providing for Limited Levels of Commodity Production and Other Multiple Uses

Decision Support (Matrix) Approach

In order to develop an alternative that considered multiple use balancing of future management within lands with wilderness characteristics, the ID Team identified a broad set of resources and resource use criteria by which to objectively evaluate each individual wilderness characteristics unit. The ID Team also incorporated the requirements of *Manual 6320 - Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process* (BLM 2012g) into the alternative design. This guidance directs BLM to consider the following criteria when making its recommendation for future management of lands with wilderness characteristics:

> *Manageability:* Consider and document whether the lands can be effectively managed to protect their wilderness characteristics. Consider whether boundary modification of the area (with or without surveying and marking portions thereof) would improve manageability. Factors affecting the ability to manage for the protection of wilderness characteristics include presence of other resources, ongoing uses, valid existing rights, subsurface mineral and surface ownership patterns, presence of and access to non-federal in-holdings, presence of pervasive or omni-present external impacts from activities outside the boundary, and other statutory requirements (BLM 2012g, p. 3).

> *Existing Resource Values and Uses:* Consider and document the extent to which other resource values and uses of lands within wilderness characteristics areas would be forgone or adversely affected if these characteristics are protected. Consider the benefits that may accrue to other resource values and uses as a result of protecting wilderness characteristics. Consider the presence of other resources, development potential, resource availability, economic importance, and compatibility with wilderness characteristics protection. (BLM 2012g, p.4).

The decision support approach (matrix) was used to help BLM organize existing guidance into standardized criteria for objectively evaluating the trade-offs associated with managing each inventory unit for the protection of wilderness characteristics, and to document the supporting rationale for determining which units to manage for protecting wilderness characteristics and which units to manage for other resource values. This approach provides a systematic and less subjective method for making individual unit determinations.

The methodology considered the extent to which other resource values and uses of lands with wilderness characteristics would be protected, forgone, or adversely affected if the wilderness characteristics were protected. The BLM also considered the benefits that could accrue to other resource values and uses as a result of protecting wilderness characteristics.

The criteria used in the evaluation matrix address potential management opportunities and conflicts. The BLM can choose to manage wilderness characteristic units for other resource uses, even when those uses would eliminate wilderness characteristics, but can only do so based on reasoned analysis. Two distinct factors were addressed by the matrix:

1. How severe, likely, and appropriate is a potential impact?
2. How manageable, ecologically intact, and relatively special and outstanding is the individual wilderness characteristic unit?

The matrix includes six criteria that represent the important factors to consider when considering how to manage an area with wilderness characteristics. These criteria are distinct and different from the criteria used to determine whether a unit meets the requirements for possessing wilderness characteristics. The six criteria evaluated in the matrix include:

1. The anticipated potential for impacts to wilderness characteristic inventory factors from reasonably foreseeable activities based on the anticipated magnitude and duration of the impacts;
2. The amount of discretion associated with the proposed action, which is referred to as the "impetus" for the action;
3. The suitability and need for the proposed action to occur within the wilderness characteristic area being considered;
4. The existence of management constraints that would affect the feasibility of managing the area with wilderness characteristics to preserve those characteristics;
5. The ecological state (condition) of the area with wilderness characteristics being considered; and
6. The relative quality of the unit based on size, landscape context, the presence of particularly remarkable features or recreational opportunities, and the degree of solitude within the wilderness characteristic unit.

Of the six criteria the first three are focused on assessing other management activities that are reasonably foreseeable within the wilderness characteristic unit. These three criteria seek to characterize the potential threat that other management activities may pose to wilderness characteristics within the unit and whether the impacts are likely and/or justified. Each of the individual criterion are scored on a 1 to 10 scale and the scores from all the criteria are ultimately combined in an additive manner.

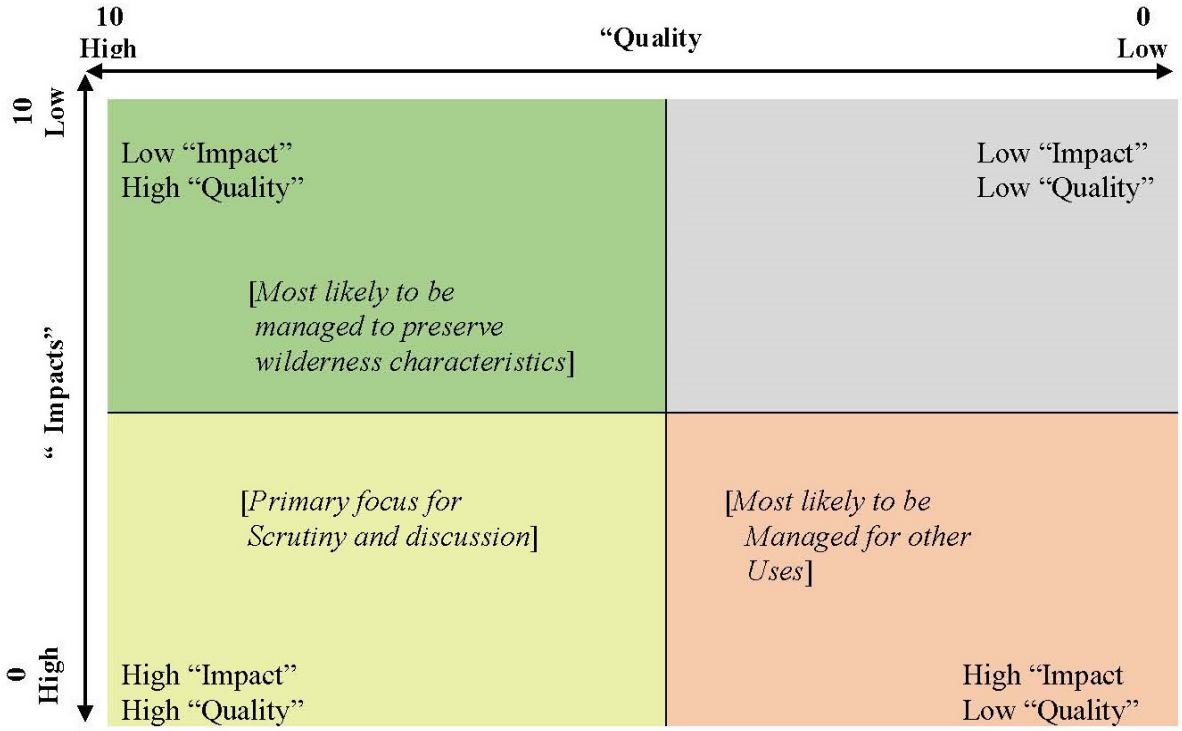
The other three criteria focus on evaluating the feasibility for managing the unit to preserve the wilderness characteristics within the unit. A critical aspect of this assessment is identifying the relative quality of each unit. All wilderness characteristic units are able to provide solitude, and/or primitive recreation opportunities in a natural setting. However, while all units meet these threshold conditions, some units are particularly special - providing unique or remarkable opportunities or experiences, containing high quality natural habitats, or could be easily managed to protect these conditions. The evaluation matrix is designed to ensure that these "best of the best" are highlighted for protection. Each criterion category is scored on a 1 to 10 scale and the scores are combined with the scores from the other criteria in the final assessment.

These criteria were rated and an overall score for each unit was derived. Though the scores are not definitive in demonstrating whether or not to protect a unit for wilderness characteristics, they provided a tendency of

the unit toward emphasizing management for wilderness characteristics, for other multiple use management, or for a combination of both.

The higher the overall score, the more preservation of wilderness characteristics was the suggested outcome. Conversely, the lower scoring units suggested allowing other resource uses, or even emphasize managing for other uses rather than wilderness characteristics.

Figure A4-1. Orientation for Matrix Criteria Scoring



The outcomes ranged from clear indications of how a unit should be managed to ambiguous results that highlighted conflicts regarding the most appropriate management for a unit. The ID team reviewed the results that had clear indications of how to manage to ensure that there were not issues that the criteria failed to evaluate, or which were obscured by the overall scoring. For units where scores were inconclusive, the ID team reviewed the summary score sheet to see whether the individual scores told a clear story or if there were other factors that should be considered (see *Post Workshop Analysis – Final Report*, 2018). Based on the matrix output, units were then sorted into one of three possible management categories:

Category A – lands where the BLM would prioritize the management of other resources and multiple uses over wilderness characteristics.

Category B – lands where the BLM would balance the management of wilderness characteristics with the management of other resources and multiple uses.

Category C – lands where the BLM would prioritize the protection of wilderness characteristics over the management of other resources and multiple uses.

The output from this categorization process for each alternative is displayed in Table 2-3. This alternative was developed specifically to meet the requirements of one of the alternative designs specified in Provisions 14, 26b, 26c, 27, 28, 29, 30, and 31 of the 2010 Settlement Agreement.

Alternative D – Preferred Alternative

The BLM ID team and representatives of the cooperating agencies met on several occasions to develop an additional alternative for consideration. This group examined the output from the matrix evaluation process (*see* Alternative C described above), discussed the qualities and management conflicts associated with each unit, and made a recommendation regarding which management category (A, B, or C) each of the 113 units would best fit under an additional alternative (see Map W-5, Appendix 1). These discussions and recommendations are documented in further detail within meeting notes (dated November 19 and December 3, 2018) and are displayed in Table 2-3.

BLM ID team and managers conducted one final review of this alternative design and shifted three units (Connley Hills, Juniper Mountain, and Warner Lakes) from category B to category A because they overlapped with ACEC designations with pre-existing special management already in place. Another unit (South Sand Dunes) was moved from category B to category A because it overlapped with an ACEC designation with pre-existing special management already in place, as well as an existing utility corridor designation. Another unit (Lake Abert) was moved from category B to category A because it overlapped with an ACEC designation with pre-existing special management already in place and contained a large number of private and state in-holdings.

One unit (Juniper Island) was divided in half. The ID team moved the north half from category B to category A because it overlapped with both ACEC and ISA designations with pre-existing special management already in place. The ID team retained the southern half in Category B. One unit (Sheldon Rim) was moved from category B to category A because it was small, narrow, and could not be managed effectively for wilderness characteristics.

One unit (Monument Rock) was moved from category B to category A because the north half is a steep rim face that is highly exposed to Highway 31 with no opportunity for solitude and it overlaps with the Oregon Outback National Scenic Byway protective designation. The south half of the unit borders national forest lands that are not managed for wilderness character. For these reasons, the ID team determined the unit could not be managed effectively for wilderness characteristics.

One unit (Oatman) was moved from category B to category A because it has been actively managed in the recent past to remove invasive western juniper and reduce fuel loading. The ID team identified the need for additional treatments in this area. In addition, the western portion borders national forest lands that are not managed for wilderness character. For these reasons, the ID team determined the unit could not be managed effectively for wilderness characteristics.

This alternative meets the requirements of alternative design specified in Provisions 14 and 26b of the 2010 Settlement Agreement.

Alternative E – Emphasize Protection of Specific Lands with Wilderness Characteristics Based on External Criteria

The Public Lands Access Subcommittee of the Southeast Oregon Resource Advisory Committee (SEORAC) met in October and November of 2018 to consider potential land use allocations, allowable

uses, and management actions that could be addressed within management alternatives for lands with wilderness characteristics in the Lakeview planning area.

The SEORAC examined three criteria to use to determine which management category each wilderness characteristics unit should be placed. These three criteria included ecological condition (uplands), hydrology (riparian), and connectivity to other wilderness character units. After an initial examination, the SEORAC decided that hydrology did not contribute much information for the Lakeview planning area, so this criterion was dropped from the process.

At meetings in October and November of 2018 the SEORAC scored each wilderness characteristics unit from 0-3 for both ecological condition and for connectivity. When combined, these scores give each unit an overall total score from 0, the lowest ecological integrity and least connected, to 6, with the highest ecological integrity and the most connected. Units with a total combined score of 0-1 were placed in management category 1 (A). Units with a total combined score of 2-4 were placed in management category 2 (B). Units with a total combined score of 5-6 were placed management category 3 (C). A full description of the methods used for this scoring methodology can be found in the notes from the October and November 2018 SEORAC meeting notes and in the document *RAC Score Calculation for Determination of Management Recommendations for Lands with Wilderness Characteristics.* The BLM considered these rankings in the assignment of wilderness characteristics unit categories for Alternative E.

Neither the subcommittee or the SEORAC were able to discuss or adopt recommendations regarding OHV allocations other allowable uses and management actions specifically for wilderness characteristics units in the Lakeview planning area. The subcommittee did provide a copy of tables containing OHV allocation and wilderness character management recommendations for the Southeastern Oregon planning area (Vale District BLM) for general reference. Members of the subcommittee recommended that the Lakeview BLM utilize an inter-disciplinary NEPA and public review process to develop a range of OHV allocation alternatives and consider their wilderness character management concepts in the alternatives.

This alternative meets the requirements of alternative designs specified in Provisions 14 and 26b of the 2010 Settlement Agreement.

Alternative Comparison Methodology Addressing Overlapping Special Management Constraints

Introduction

The following datasets were developed for use in the analysis of the Lakeview Resource Management Plan Amendment (RMPA) to quantify and visually display the varying level of special management constraints that would apply within the planning area across the range of alternatives.

No Action Alternative

The *OverlapConstraints_AltNA_LWC_Union_Sv2* dataset was developed to depict the overlap of existing special management constraints for resource management within the planning area for the No Action Alternative and was derived from a number of existing GIS datasets. Data for Wilderness Study Areas (WSAs), Areas of Critical Environmental Concern (ACECs), Greater Sage Grouse Habitat Management Areas (SFA, PHMA, and GHMA), Off-Highway Vehicle (OHV) designations, and No Action Wilderness Characteristics Inventory units (*No_Action*) were combined into this new feature class using the UNION command. A summary of the original source data included:

WSA Dataset

WSAs in the Lakeview Field Office were designated in the Wilderness Study Report (BLM 1991). Special management constraints are applied to management actions in WSAs to prevent impairment of wilderness values until such time as Congress makes a decision to designate the area(s) as wilderness or release the area(s) from wilderness study. For a complete description of this data consult the Wilderness Study Areas Spatial Data Standard. WSAs were clipped to the planning area boundary and dissolved in *WSA_Poly_Clip_Dissolve*.

ACEC Dataset

ACECs are administratively designated areas where special management is needed to protect relevant and important values (historic, cultural, scenic, fish, or wildlife values, natural systems or processes, or protect human life and safety) (43 CFR 1610.7-2). ACECs were clipped to the planning area boundary in *acec_poly_Clip1*.

Sage-Grouse Habitat Dataset

This dataset came from the *Greater Sage Grouse Resource Management Plan Amendment/Final Environmental Impact Statement* (BLM 2015b)) data where Priority Habitat Management Areas (PHMA) equated to ODFW's Core Areas and General Habitat Management Areas (GHMA) included ODFW's Low Density along with all known occupied or suitable sage-grouse habitat. (For further details on this data read the supplementary section of the BLM white paper, *Development of Sage-Grouse Preliminary Habitat Maps for Oregon: Process and Terminology*). Sagebrush Focal Areas (SFA) were created through collaboration with USFWS and depict "Highly Important Landscapes", as outlined in Memorandum FWS/AES/058711. These sage-grouse habitat management areas were clipped to the planning area boundary and stored in *SGphmaghma_BLM_LRA*.

Wilderness Characteristics Inventory Dataset

Wilderness Characteristics Inventory dataset includes areas which the BLM found to possess wilderness characteristics, as well as inventoried areas that the BLM found did not possess wilderness characteristics. Between 2005 and 2018, the BLM evaluated all lands in the planning area outside of WSAs for wilderness characteristics based on the criteria for size, naturalness, and outstanding opportunities for solitude or primitive and unconfined recreation. Only the 113 polygons where BLM found wilderness characteristics to be present (*AltB_LWC_113*) were utilized.

OHV Dataset

The OHV data represents current OHV designation decisions from previous land use planning efforts. OHV or motorized vehicle use on BLM-administered lands is regulated through the use of Open, Limited, or Closed area designations (43 CFR 8342) approved during the Land Use Planning process. The OHV dataset was clipped to the planning area boundary and stored in *OHV_Alt_NA*.

Weighting of Special Management Constraints

Following the UNION of the datasets listed above into the *OverlapConstraints_AltNA_LWC_Union_Sv2* dataset, the resulting polygons were weighted in a manner that reflected the existing resource protections

provided by existing stand-alone or over-lapping special management constraints. For each polygon, an initial base weighting value was assigned based on the most protective special management constraints in place (Table A4-1).

Table A4-1. Base Weighting Assigned to Areas Subject to Special Management Constraints Under All Alternatives

Special Management Designation	Base Weight Values
WSA	10
SFA	9
PHMA	7
GHMA	5
ACEC	5
OHV Closed only	3
OHV Limited only	1
No Special Management Constraints	0

Within the planning area, WSAs represented the most protective type of special management designation in effect and were subsequently weighted with the highest base value (10). Management of Sagebrush Focal Areas (SFA) represented the next most protective type of special management designation in the planning area and was weighted with a base value of 9. All special management designations were assigned a relative base weight value based upon the types of special management constraints (e.g. VRM Class I or II, OHV Limited or Closed, ROW exclusion or avoidance area, mineral restrictions, etc.) that are associated with the particular designation. The higher base weight values are indicative of higher levels of resource protection associated with higher levels of restrictions on ground-disturbing activities.

For the No Action Alternative, those areas where the BLM found wilderness characteristics to be present, but no other special management constraints occurred, were assigned a base weight of 2 to take into account the interim management constraints provided by Provisions 18 and 19 of the 2010 Settlement Agreement.

Within the planning area many special management designations overlap with one another. For this reason, existing areas with over-lapping special management constraints were assigned an additional stacked weighting value(s) (Table A4-2) to represent the relative additional resource protection provided by the over-lapping special management. The weighted values for each polygon were totaled to derive an overall total weighted rating where the higher values typically reflected areas with multiple over-lapping special management constraints in place. As a result, the total weights range from 0 to 14 with 0 representing no special management constraints and 14 representing the highest level of over-lapping special management constraints.

Table A4-2. Additive Weighting Assigned to Areas with Existing Overlapping Special Management Constraints Under All Alternatives

Special Management Designation	Additive Weight Values
SFA	3
PHMA	2
GHMA	1
ACEC	1

Alternative A

The *OverlapConstraints_AltA_LWC_Union_Sv2* dataset was developed to depict the overlap of existing

special management constraints on resource management within the planning area that are associated with Alternative A. Similar to the No Action Alternative, data for existing WSAs, ACECs, Greater Sage Grouse Habitat Management Areas (SFA, PHMA, and GHMA), and OHV designations were combined into this new feature class using the UNION command. Base and additive weighting values were assigned to each polygon in a similar fashion as the No Action Alternative. However, no base weighting values were assigned for any wilderness characteristics units. As a result, total weights ranged from 0 to 14 with 0 representing areas with no special management constraints and 14 representing the highest level of over-lapping special management constraints.

Alternative B

The *OverlapConstraints_AltB_LWC_Union_Sv2* dataset was developed to depict the overlap of existing special management constraints on resource management within the planning area and wilderness characteristics management that are associated with Alternative B.

Data for existing WSAs, ACECs, Greater Sage Grouse Habitat Management Areas (SFA, PHMA, and GHMA), Alternative B OHV designations *(OHV_AltB_V3*), and Alternative B Wilderness Characteristics Inventory units (*AltB_LWC_113)* were combined into this new feature class using the UNION command. Base and additive weighting values were assigned to each polygon as shown in Tables A4-1 and A4-2. Base weights for stand-alone Category C units (that did not overlap with any other existing areas with special management constraints) were assigned a value of 9. If a Category C unit overlapped an area with existing management constraints it was assigned an additive weighted value of 4. (There were no Category A or B units in this alternative). As a result, the total weights ranged from 0 to 16 with a 0 representing areas with no special management constraints and 16 representing the highest level of over-lapping special management constraints.

Alternative C

The *OverlapConstraints_AltC_LWC_Union_Sv2* dataset was developed to depict the overlap of existing special management constraints on resource management within the planning area and wilderness characteristics management that are associated with Alternative C. Data for WSAs, ACECs, Greater Sage Grouse Habitat Management Areas (SFA, PHMA, and GHMA), Alternative C OHV designations *(OHV_AltC_V2)* and Alternative C Wilderness Characteristics Inventory units (*AltC_LWC_w_RdBuff_3)* were combined into this new feature class using the UNION command.

Base and additive weighting values were assigned to each polygon as shown in Tables A4-1 and A4-2. Base weights for stand-alone Category C units were assigned a value of 9. Stand-alone Category B units were assigned a base weight of 4. Stand-alone Category A units were not assigned a base weight value (Table A4-3).

Table A4-3. Base Weighting Assigned to Lands with Wilderness Characteristics Categories Where There are No Existing Special Management Constraints Under Alternatives C-E

Special Management Designation	Base Weight Value
Category C Units only	9
Category B Units only	4
Category A Units only	0

Where a Category C unit overlapped an area with existing management constraints it was assigned an additive weighted value of 4. Where a Category B unit overlapped an area with existing management constraints it was assigned an additive weighted value of 1. Where a Category A unit overlapped an area with existing management constraints it did not receive an additive weighted value (Table A4-4).

Table A4-4. Additive Weighting Assigned to Areas with Existing Special Management Constraints that Overlap Lands with Wilderness Characteristics Categories Under Alternatives C-E

Special Management Designation	Base Weight Values
Category C Units	4
Category B Units	1
Category A Units	0

As a result, the total weights ranged from 1 to 16 with a 1 representing areas with an OHV limited designation as the only special management constraint and 16 representing the highest level of over-lapping special management constraints.

Alternative D

The *OverlapConstraints_AltD_LWC_Union_Sv2* dataset was developed to depict the overlap of existing special management constraints on resource management within the planning area and wilderness characteristics management that are associated with Alternative D. Data for WSAs, ACECs, Greater Sage Grouse Habitat Management Areas (SFA, PHMA, and GHMA), Alternative D OHV designations *(OHV_AltD),* and Alternative D Wilderness Characteristics Inventory units (*AltD_LWC_w_Buffs_1)* were combined into this new feature class using the UNION command.

Base and additive weighting values were assigned to each polygon as shown in Tables A4-1 and A4-2. Base weights for stand-alone Category C units were assigned a value of 9. Stand-alone Category B units were assigned a base weight of 4. Stand-alone Category A units were not assigned a base weight value (Table A4-3).

Where a Category C unit overlapped an area with existing management constraints it was assigned an additive weighted value of 4. Where a Category B unit overlapped an area with existing management constraints it was assigned an additive weighted value of 1. Where a Category A unit overlapped an area with existing management constraints it did not receive an additive weighted value (Table A4-4). As a result, the total weights ranged from 0 to 14 with a 0 representing an area with no special management constraints and 14 representing the highest level of over-lapping special management constraints.

Alternative E

Th *OverlapConstraints_AltE_LWC_Union_Sv2* dataset was developed to depict the overlap of existing special management constraints on resource management within the planning area and wilderness characteristics management that are associated with Alternative E. Data for WSAs, ACECs, Greater Sage Grouse Habitat Management Areas (SFA, PHMA, and GHMA), Alternative E OHV designations *(OHV_AltE)*, and Alternative E Wilderness Characteristics Inventory units (*AltE_LWC_w_RdsBuff_3*) were combined into this new feature class using the UNION command.

Base and additive weighting values were assigned to each polygon as shown in Tables A4-1 and A4-2. Base weights for stand-alone Category C units were assigned a value of 9. Stand-alone Category B units were assigned a base weight of 4. Stand-alone Category A units were not assigned a base weight value (Table A4-3).

Where a Category C unit overlapped an area with existing management constraints it was assigned an additive weighted value of 4. Where a Category B unit overlapped an area with existing management constraints it was assigned an additive weighted value of 1. Where a Category A unit overlapped an area with existing management constraints it did not receive an additive weighted value (Table A4-4). As a result, the total weights ranged from 0 to 14 with a 0 representing an area with no special management constraints and a 14 representing the highest level of over-lapping special management constraints.

Appendix 5 – Livestock Grazing Management

Table of Contents

List of Tables

Grazing Systems within the Planning Area

Each grazing system must be tailored for each allotment or pasture in combination with the producer's livestock operations to achieve appropriate use and meet land management objectives. Flexibility is integral to implementing successful livestock grazing systems on the Lakeview District. Our high desert arid landscapes are highly variable in climate, elevation, soils, and vegetation types year to year and location to location. Any strict adherence to set livestock numbers or dates lacking flexibility does not promote proper grazing management in our area. Adjusting livestock numbers and dates seasonally and yearly is critical to promote and sustain healthy vegetation communities and to ensure adequate forage for livestock communities.

The following descriptions outline the typical periods of grazing use in the planning area; however, there are some variations among allotments based on plant phenology, elevation, and climate. Table A5-1 shows typical grazing seasons in relation to calendar months.

Table A5-1. Grazing Seasons in Relation to Months of the Year

Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.
Winter				Spring			Summer			Fall	

Winter Grazing System

Under this system, grazing occurs approximately between November 1–February 28. Grazing during this treatment will occur when most plant species are dormant. Most plants will have completed their life cycles and stored maximum carbohydrates for the next growing season.

The winter grazing systems would allow heavy (65%) utilization of the previous season's growth. Livestock would be removed prior to plant initiating growth in the early spring. Grazing during this season aids reproduction and seedling establishment as livestock help scatter and plant seeds.

Early Spring Grazing System

Under this system, grazing occurs approximately between March 1–May 15. Spring grazing provides plants an opportunity to recover after utilization of early plant growth. By removing livestock before most spring and summer precipitation occurs, the plants will be able to store carbohydrates, set seed, and maintain their vigor. This spring treatment can be used every year with little effect on the plant.
Early use must take place before grass plants are in the boot stage. There must also be enough soil moisture in the ground to provide for regrowth after grazing. Therefore, flexibility in the early treatment will allow for use prior to April 1 but generally not after April 30, except at higher elevations with higher precipitation. At some of the higher elevation areas, spring use may occur into June.

Spring grazing would result in moderate utilization (50%) of a combination of the previous season's growth and the current season's early growth of herbaceous key species. Livestock are removed while plants are still growing; therefore, only 20–30% of the current season's growth is removed. The spring grazing period is the shortest of any grazing system, and plant regrowth continues about 30–45 days after livestock removal.

Grazing during this period requires plants to draw heavily upon food reserves to replace grazed portions. However, grazing would cease while adequate soil moisture is still available for the grazed plants to reach full growth, produce seed, and fully replenish food reserves. Consequently, this form of grazing is expected

to promote the vigor of both herbaceous and woody key species (Stoddart *et al*. 1975, Cook 1971). This system would enhance the production of perennial grasses since the production of a large number of viable seed is dependent upon vigorous mature plants (Hanson 1940). Seedling establishment would depend on the intensity of grazing in the spring following germination. If seedling plants are not physically damaged through trampling or being pulled up, they would normally be firmly established by the start of the third growing season (Stoddart *et al*. 1975).

Spring/Summer Grazing System

Under this system, grazing occurs approximately between May 1–August 31. This treatment allows for grazing during the critical growth period of most plants. Carbohydrate reserves are continually being utilized because the green parts of the plant are constantly being removed by livestock. The pastures that are under the summer treatment will generally experience some other treatment the following year.

Spring/summer grazing would allow 50% utilization of the annual production of key species during the late spring and summer each year. Grazing would begin each year at a time when carbohydrate reserves are low and continue until after seed-ripe.

Although the proposed stocking rates achieve 50% utilization on most areas, factors such as terrain, location of fences and water, and type of livestock and vegetation would often result in heavy grazing (60–80% of the annual vegetation production) in one portion of an allotment and light use (20–40%) in another area. A rapid decrease in key species composition is expected on those areas within an allotment which receives heavy utilization—primarily areas adjacent to water developments and valley bottoms.

Spring/summer grazing at the Northern Great Basin Experiment Station (approximately 50 miles north of the planning area) resulted in heavy utilization on 37% of the range; over an 11-year period, this produced a change in species composition toward less desirable bunchgrasses such as Sandberg's bluegrass. In studies concerning the grazing response of cool season perennial bunchgrasses Cook (1971) showed that 50% utilization was too severe for continuous late spring and summer use. The two species of grass in the study correspond in stages of vegetative growth to the key bunchgrasses in the resource area.

Fall Grazing System

Under this system, grazing occurs approximately between September 1–October 31. Grazing during this treatment will not begin until after most plants have reached seed-ripe and have stored adequate carbohydrate reserves. This treatment will assist in meeting the objectives by providing all plants an opportunity to complete their life cycles and produce the maximum amount of cover and forage.

Spring/Fall Grazing System

Spring/fall grazing would result in utilization of the herbaceous key species during the early portion of their growing period. Very little use of the woody key species is expected during this time. Grazing would occur again in the fall when herbaceous key species are dormant; however, moderate utilization of woody key species would be expected. This system would maintain the vigor and reproduction of the herbaceous key species. Woody key species would decrease slowly in composition because stocking rates would be based on 50% utilization of herbaceous species, but utilization of the more palatable woody species during the fall season would be heavier. However, at this time the spring/fall grazing system is currently not being implemented on any allotment or pasture within the planning area.

Deferred Grazing System

Under the deferred system, grazing would occur after most of the herbaceous key species have completed growth. Moderate utilization (60%) of the shrubs encourages growth of additional twigs, and therefore increases forage production. Reproductive capacity is decreased over the years, since increased twig growth reduces the development of flowers and fruits (Garrison 1953, cited by Stoddart *et al*. 1975). Where woody key species are found in limited numbers, some individual shrubs would be selected by cattle and heavily browsed, resulting in reduced vigor and eventual death of these plants; however, the total shrub mortality is expected to be insignificant. The critical growth period for woody key species occurs in late summer.

Livestock normally concentrate in riparian areas under deferred grazing. Many allotments under this grazing system within the planning area lack riparian areas. Livestock use of the riparian areas under deferred grazing is expected to be light or moderate in several areas due to factors such as inaccessibility and lack of adequate shade and water on adjacent upland areas.

Deferred Rotation Grazing System

Under the deferred rotation grazing system, grazing use during the critical growing period would be alternated with grazing during early spring or late summer/fall in successive years. Early spring grazing would end soon enough to give most herbaceous key species an opportunity to replenish food reserves and maintain good vigor. Late summer grazing would occur after food reserves of the key species have been stored. As a result, the vigor of the key species would be maintained at an acceptable level. Reproduction of woody key species would not be improved because the sequence of grazing treatments does not provide sufficient protection from grazing to allow seed production and seedling establishment. No areas of riparian vegetation are located within the areas proposed for deferred rotation grazing.

Rotation Grazing System

Rotation grazing results in key species being grazed during part of the growing season every year. This system alternates grazing between early spring use one year and during the critical growing period the next year. The early spring grazing would end in time for the key species to replenish food reserves (see Spring Grazing System). As a result, the decline in vigor caused by use during the critical period of the growing season is somewhat offset by early grazing in alternate years.

Since utilization levels would be moderate (50%), the rotation grazing system is expected to only slightly enhance the reproduction of the herbaceous key species on native range because every pasture is grazed each year. Many new seedlings would be grazed or pulled up before becoming established. Woody key species would improve in vigor and reproduction because they are normally not grazed by livestock during the spring and early summer (Vavra and Sneva 1978).

Rest Rotation Grazing System

Rest rotation grazing system rotates period of grazing and rest between pastures. Rest rotation grazing results in moderate (50%) utilization of key species in the use pasture. Most of the use occurs during the growing season. Depending upon the number of pastures in the grazing system, approximately 23-33% of the area is completely rested from grazing each year. The need for periodic complete rest from grazing arises from the fact that even at proper stocking rates, continuous season long grazing usually results in utilization of the most palatable plants beyond the proper use level. The heaviest use usually occurs on the

most accessible areas, resulting in a decline in the key species composition. Hormay (1970) states that these species can be maintained by periodically resting the range from use by means of rest rotation grazing systems. Rest periods allow the plants to complete the stages of vegetative growth, seed production and food storage. In addition, it provides for seedling establishment and allows litter to accumulate. Rest rotation allows flexibility in livestock management during periods of drought. Rest rotation grazing systems generally provide for the maximum maintenance and/or improved vegetation community health over time compared to all other grazing systems due to a complete year of rest provided on a rotational basis.

Livestock Grazing Authorization

Most allotments within the planning area are grazed by livestock and have a grazing system, forage allocation, type of livestock (cattle), and season of use defined. Grazing use is authorized via a permit or lease. Information specific to grazing within each allotment is provided in Table A5-2. Several allotments are currently not grazed for various reasons (Table A5-3).

Rangeland Health Standards

Introduction

The objectives of the rangeland health regulations are: "to promote healthy sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning conditions . . . and to provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy public rangelands." For full details of the fundamentals, indicators of rangeland health, standards and guidelines of rangeland health refer to *Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington* (BLM 1997a). A summary of the 5 standards are provided in the following section.

The BLM began assessing rangeland health within the planning area in 1998. The BLM has completed rangeland health assessments on 120 of the allotments within the planning area and continues to update these assessments during the permit renewal process (Table A5-4). The Devil's Garden, Table Rock, Abert Rim, Diablo Mountain, Tucker Hill, and Bottomless Lake Allotments are not currently grazed (Table A5-3). Therefore, completing RHAs on these allotments has not been a management priority.

Standard 1: Watershed Function – Uplands

Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and landform.

Rationale and intent: This standard focuses on the basic physical functions of upland soils that support plant growth, the maintenance or development of plant populations and communities, and promote dependable flows of quality water from the watershed.

To achieve and sustain rangeland health, watersheds must function properly. Watersheds consist of three principle components: the uplands, riparian/wetland areas, and the aquatic zone. This standard addresses the upland component of the watershed. When functioning properly, within its potential, a watershed captures, stores, and safely releases the moisture associated with normal precipitation events (equal to or less than the 25-year, 5-hour event) that falls within its boundaries. Uplands make up the largest part of a watershed and are where most of the moisture received during precipitation events is captured and stored.

Table A5-2. Grazing Management Summary by Allotment

Allot-ment No.	Allotment name	Manage-ment Category[8]	Public land acres	Other acres	Animal unit months (AUMs)								Period of use[4]	Grazing system[5]	AMP date	Allotment evaluation date	Manage-ment objective[6]
					Mule deer/ Prong-horn	Elk	Big-horn sheep	Other wildlife[1]	Wildlife total	Wild horse[2]	Live-stock	SNU[3]					
00084	Rogers FFR	C	328	669	5	0	0	0	5	0	40	0	Sp,Su,Fa	Unk			4
00100	Peter Creek	M	14,015	661	25	30	30	5	90	0	329	0	Sp,Su,Fa	RR	1990		4
00200	Blue Creek Seeding	C	648	5,.359	45	0	0	5	50	0	131	0	Fa	Fa			1,2,3,4
00201	Vinyard Individual	I	7,872	358	100	10	100	12	222	0	460	0	Sp,Su	RR	1969	1999	1,2,3,4
00202	Hickey Individual	M	11,101	147	85	30	0	17	132	0	519	0	Sp,Su,Fa	DR	1975	1993	1,2,3,4
00203	O'Keeffe FFR[7]	C	559	4,763	1	9	0	1	11	0	48	0	Sp	Sp			1,2,3,4
00204	Crump Individual	I	2,931	507	45	0	100	5	150	0	92	106	Sp,Su	Sp		1993	4
00205	Greaser Drift	M	8,620	1,461	90	0	30	10	130	0	356	0	Fa, Wi, Sp	Fa	1999		1,3,4
00206	Lane Plan II	M	10,018	2,491	130	30	0	16	176	0	450	0	Sp,Su	RR	1970	1993	1,2,3,4
00207	Lane Plan I	M	25,053	1,620	180	30	0	20	230	0	1,942	0	Sp,Su,Fa	RR	1971	1993	1,2,3,4
00208	Sagehen	M	3,594	2,149	40	30	0	20	90	0	266	0	Su, Fa	D		1992	1,2,3,4
00209	Schadler FFR[7]	C	1,874	4,220	15	15	0	5	35	0	57	0	Su,Fa	Sp,Su			1,2,3,4
00210	Rim	M	1,550	706	10	0	0	5	15	0	39	0	Sp,Su	Sp,Su			4
00211	Round Mountain	M	17,092	2,009	160	90	0	23	273	0	1,102	0	Sp,Su	RR	1970	1990	1,2,3,4
00212	Rahilly-Gravelly	I	31,617	2,315	302	0	0	19	321	0	1,647	0	Sp,Su,Fa	RR	1984	1992	1,2,3,4
00213	Burro Springs	M	7,004	0	55	0	20	5	80	0	279	0	Sp,Wi	Sp		1992	1,3
00214	Chukar Springs	M	1,916	0	10	0	20	5	35	0	52	0	Sp	Sp			1,3,4
00215	Hill Camp	M	32,138	2,669	270	0	45	30	345	0	3,932	0	Sp,Su,Fa	RR	1975		1,2,3,4
00216	O'Keeffe Individual	I	51,223	2,645	287	0	100	30	417	0	4,808	0	Sp,Su,Fa	RR	2000		1,3,4
00217	Cox Individual	M	1,545	551	18	0	20	1	39	0	74	0	Wi, Sp	Wi	1972		1,3,4
00218	Sandy	M	5,397	0	25	0	0	5	30	0	600	0	Sp	Sp		1993	4
00219	Cahill FFR[7]	C	571	725	15	0	0	5	20	0	280	0	Fa,Wi	Wi			1,3,4
00222	Fisher Lake	M	4,070	356	45	0	0	5	50	0	781	0	Sp,Wi	Wi	1975	1992	1,3,4
00223	Hickey FFR[7]	C	917	420	50	15	0	11	76	0	64	0	Sp	Sp,Su		1992	4
00400	Coglan Hills	M	12,213	0	130	0	40	5	175	0	117	0	Sp,Su	Sp,Su			4
00401	Fenced Federal[7]	C	161	554	5	0	0	5	10	0	16	0	Sp	Sp			4
00403	Pine Creek	C	406	2,470	1	0	0	1	2	0	18	0	Sp,Su,Fa,Wi	Unk			4

Allotment No.	Allotment name	Management Category [8]	Public land acres	Other acres	Animal unit months (AUMs)								Period of use[4]	Grazing system[5]	AMP date	Allotment evaluation date	Management objective[6]
					Mule deer/ Pronghorn	Elk	Bighorn sheep	Other wildlife[1]	Wildlife total	Wild horse[2]	Livestock	SNU[3]					
00404	Willow Creek	M	11,996	9,219	195	0	0	5	200	0	565	0	Sp,Su	RR			1,3,4
00406	West Clover Flat	M	711	1,175	1	0	0	1	2	0	15	0	Sp,Fa	Sp,Su			1,2,4
00407	Clover Flat	M	2,586	5,116	35	0	0	5	40	0	200	0	Sp,Su	Sp,Su			1,2,4
00409	Tucker Hill	C	3,644	327	15	0	0	5	20	0	136	0	Unk	UNG			
00410	Tim Long Creek	C	445	1,518	1	0	0	1	2	0	15	0	Sp,Su,Fa,Wi	Unk			1,4
00411	Jones Canyon	C	662	19	1	0	0	1	2	0	13	0	Sp	Sp			4
00412	Fir Timber Butte	M	3,862	3,091	28	0	30	2	60	0	58	0	Sp,Su	Sp		1992	1,4
00415	Briggs Garden	C	778	891	5	0	0	35	42	0	42	0	Sp	Sp,Su			4
00416	White Rock	C	577	518	1	0	10	1	12	0	10	0	Sp,Su,Fa	Sp,Su			4
00418	Sq*** Lake	M	39,856	1,498	80	0	0	16	96	35	834	0	Sp	RR			4
00419	Saint Patricks	M	25,390	284	50	0	0	3	53	58	750	0	Sp,Su	Sp,Su			4
00420	Egli Rim	M	21,508	374	20	0	0	11	31	0	1056	171	Sp,Su	RR			4
00421	Rosebud	M	14,191	1,895	3	0	0	3	6	0	203	0	Wi	Wi			4
00422	Paisley Flat	M	4,045	387	15	0	0	5	20	0	585	0	Sp,Wi	Sp		1992	4
00423	Hill Field	M	4,387	1,589	80	0	150	10	240	0	163	0	Sp,Su	Sp,Su			4
00424	West Lake	M	8,968	1,410	110	0	70	10	190	0	600	0	Fa, Wi, Sp	Wi, Sp		1999	4
00425	Pike Ranch	M	5,683	1,789	2	0	0	3	5	0	95	0	Fa	Sp,Fa			4
00426	Five Mile Butte	I	47,038	812	105	0	100	15	220	0	1,021	0	Sp,Wi	Sp,Su		1992	4
00427	XL	I	42,671	3,507	150	0	80	25	255	0	4,220	0	Sp,Su,Wi	RR		1992	4
00428	Sheeprock	I	144,387	1,891	100	0	220	17	337	929	3,967	0	Wi, Sp,Su	RR	2001	2001	4
00429	Twin Lakes	M	17,966	0	135	0	0	15	150	0	2,345	0	Sp,Su	Sp,Fa		1992	4
00430	South Poverty	M	43,654	0	75	0	0	5	80	0	4,202	0	Sp,Su, Wi	RR		1992	4
00431	Narrows	M	11,276	219	20	0	100	20	140	0	275	0	Sp,Su	D			4
00432	Coleman Seeding	M	5,698	5	30	0	0	5	35	0	920	0	Sp,Su, Fa, Wi	RR		1992	4
00433	East Jug Mountain	M	12,444	136	70	0	0	10	80	0	2,236	0	Sp,Su	D		1992	4
00435	Shale Rock	I	13,177	54	50	0	0	10	60	0	1,220	0	Fa,Wi	D	2019		4
00436	Diablo Peak	C	53,612	310	80	0	100	5	185	0	0	0	Sp	UNG			4
00437	Abert Rim	C	9,368	208	0	0	180	20	200	0	0	0	N/A	UNAVAIL			4
00501	Flynn FFR[7]	C	3,025	5,635	50	0	0	5	55	0	121	134	Sp,Su,Fa,Wi	Unk [7]			4
00502	Fitzgerald FFR[7]	C	5,974	19,307	50	15	0	10	75	0	329	0	Sp,Su,Fa,Wi	Unk [7]	2019		4

Allot-ment No.	Allotment name	Manage-ment Category [8]	Public land acres	Other acres	Animal unit months (AUMs)								Period of use[4]	Grazing system[5]	AMP date	Allotment evaluation date	Manage-ment objective[6]
					Mule deer/ Prong-horn	Elk	Big-horn sheep	Other wildlife[1]	Wildlife total	Wild horse[2]	Live-stock	SNU[3]					
00503	Taylor FFR[7]	C	3,143	11,451	50	15	0	10	75	0	295	0	Sp,Su,Fa,Wi	Unk [7]			1,2,3,4
00505	Lynch	C	151	0	1	0	0	1	2	0	20	0	Sp,Su,Fa,Wi	Unk [7]			4
00507	Laird FFR[7]	C	2,788	8,626	1	0	0	1	2	0	120	0	Sp,Su,Fa,Wi	Unk [7]			4
00508	Rock Creek Ranch FFR[7]	C	216	264	1	0	0	1	2	0	9	0	Sp,Su,Fa,Wi	Unk [7]			4
00509	Cox Butte	I	38,406	0	50	0	0	13	63	0	1,196	124	Sp,Su,Fa	Sp,Su		1993	3,4
00510	Orejana Rim	I	55,338	16	80	0	50	20	150	0	1,423	352	Sp,Su,Fa	Sp,Su			1,3,4
00511	Northeast Warner	I	142,323	1,638	544	0	120	6	670	0	6,151	234	Sp,Su,Fa	Sp,Su			1,3,4
00512	North Bluejoint	I	20,473	1,963	80	0	0	20	100	0	289	79	Sp,Su	Sp,Su			4
00514	Corn Lake	I	77,604	1,014	124	0	0	16	140	0	2,663	1034	Sp,Su,Fa,Wi	RR			3,4
00515	Juniper Mountain	M	85,158	770	330	60	40	26	456	0	3,621	796	Sp,Su,Fa	RR			1,2,3,4
00516	Rabbit Basin	M	32,143	156	55	0	0	5	60	0	1,846	0	Sp,Su,Fa,Wi	Sp		1993	3,4
00517	Coyote-Colvin	I	118,456	11,850	983	75	30	17	1105	0	5,091	0	Sp,Su,Fa,Wi	RR	2019	2000	3,4
00518	Clover Creek	M	10,198	1,230	96	15	0	4	115	0	435	0	Su,Fa	RR		1994	1,2,3,4
00519	Fish Creek	I	14,795	12,993	20	75	0	24	119	0	575	0	Sp,Su, Fa	RR			1,2,3,4
00520	Lynch-Flynn	I	20,581	1,404	50	30	0	5	85	0	882	0	Sp,Su	RR			1,2,3,4
00521	Priday Reservoir	M	946	1,140	120	5	0	19	144	0	65	35	Sp	Sp,Su			1,2,3,4
00522	Abert Seeding	M	11,769	43	55	0	0	5	60	0	2,619	0	Sp,Su,Fa,Wi	RR	1968/ 2019	1992	3,4
00523	Warner Lakes	I	23,859	216	40	0	0	10	50	0	1,114	110	Sp,Su,Fa,Wi	Sp,Su,Fa,Wi	1990		1,2,3,4
00524	Lane Individual	C	2,568	678	40	0	40	10	90	0	65	0	Sp,Su,Fa	Wi			3,4
00529	South Rabbit Hills	M	9,127	0	35	0	0	5	40	0	1,266	0	Sp,Wi	Sp	2019	1993	1,2,3,4
00530	East Rabbit Hills	M	8,607	0	35	0	0	5	40	0	1,200	0	Sp,Wi	Sp		1993	
00531	North Rabbit Hills	M	12,054	657	35	0	0	5	40	0	1,317	0	Sp,Wi	Sp		1993	
00600	Beaty Butte	I	511,369	41,289	400	0	240	44	684	3,000	26,121	14,466	Sp,Su,Fa,Wi	RR		1999	1,2,3,4
00700	Silver Creek-Bridge Creek	I	6,517	192	50	60	0	19	129	0	303	343	Sp,Su	RR		1992	1,3,4
00701	Upper Bridge Creek	M	1,811	2,605	20	30	0	9	59	0	108	52	Sp,Fa	Sp,Fa	1970		1,3,4
00702	Buck Creek-Bridge Creek	M	5,910	459	120	30	0	22	172	0	309	30	Sp,Su,Fa	RR			1,3,4
00703	Bear Creek	M	1,300	1,805	30	30	0	6	66	0	118	11	Fa, Wi	Fa, Wi			1,3,4
00704	Ward Lake	I	13,105	3,143	170	150	0	17	337	0	416	101	Sp	RR		1993	3,4

Allotment No.	Allotment name	Management Category[8]	Public land acres	Other acres	Animal unit months (AUMs)								Period of use[4]	Grazing system[5]	AMP date	Allotment evaluation date	Management objective[6]
					Mule deer/ Pronghorn	Elk	Bighorn sheep	Other wildlife[1]	Wildlife total	Wild horse[2]	Livestock	SNU[3]					
00705	Oatman Flat	I	28,256	6,966	730	150	0	28	908	0	2,082	623	Sp,Su	RR			3,4
00706	Rye Ranch	M	3,787	18	120	40	0	10	170	0	536	0	Sp,Su,Fa	DR			4
00707	Tuff Butte	M	8,936	2,192	320	180	0	20	520	0	536	0	Sp,Su	RR			4
00708	Arrow Gap	C	2,564	3	140	6	0	20	166	0	135	25	Sp,Su	Sp,Su			3,4
00709	Dead Indian-Duncan	M	18,911	1,930	620	150	0	27	797	0	586	112	Sp,Su,Fa	RR			3,4
00710	Murdock	I	4,274	1,020	60	60	0	12	132	0	403	0	Sp,Su	RR			3,4
00711	South Hayes Butte	I	1,439	646	10	60	0	7	77	0	88	50	Sp,Su,Fa	Sp,Su,Fa			3,4
00712	Bridge Well Seeding	M	1,347	1,039	90	60	0	9	159	0	188	0	Sp,Su	RR	1992	1990	3,4
00713	Silver Creek	M	2,576	777	50	60	0	12	122	0	200	0	Sp,Su	RR	1992	1990	3,4
00714	Table Rock	C	3,632	459	160	6	0	13	179	0	0	0		UNG			3,4
00716	Silver Lake Lakebed	C	219	1,675	25	0	0	5	30	0	250	0	Wi	Wi			3,4
00900	Fremont	M	28,800	1,898	1,200	60	0	29	1289	0	1,970	0	Sp,Su,Fa	Sp,Su			3,4
00901	Wastina	M	5,759	30	300	40	0	11	351	0	419	0	Sp,Su,Fa	DR			3,4
00902	Cinder Butte	M	11,482	104	600	40	0	34	674	0	891	0	Sp,Su,Fa,Wi	DR			3,4
00903	Beasley Lake	M	2,632	10	60	40	0	6	106	0	232	0	Sp,Su,Fa	Sp,Su			4
00904	Highway	M	2,106	323	80	40	0	11	131	0	118	0	Sp,Su,Fa	DR			4
00905	Homestead	M	12,276	1,365	500	40	20	8	568	0	685	0	Sp,Su,Fa	DR			3,4
00906	North Webster	M	1,719	3,504	40	40	10	11	101	0	112	0	Su,Fa	DR			3,4
00907	Devils Garden	M	4,515	0	100	600	80	16	826	0	0	0	Temporary Use only	Unk			3,4
00908	Cougar Mountain	M	9,000	2,772	520	40	40	14	614	0	616	0	Sp,Su,Fa,Wi	DR			3,4
00909	Button	M	8,913	850	240	40	10	12	302	0	1,068	0	Sp,Su,Fa	DR			3,4
00910	Hogback	M	4,582	4,429	170	40	60	12	282	0	680	0	Sp,Su,Fa	DR		1992	3,4
00911	Valley	M	6,045	1,040	120	30	0	17	167	0	613	0	Sp,Su,Fa	RR			4
00914	West Green Mountain	M	21,271	3,017	200	40	60	13	313	0	1,395	0	Sp,Su,Fa,Wi	DR	1984		4
00915	Sq*** Butte	M	8,154	395	500	40	30	35	605	0	1000	0	Sp,Su,Fa	DR	1985		4
01000	Little Juniper Spring	I	113,192	674	440	0	30	40	510	0	5,418	0	Wi,Sp,Su,Fa	RR and DR			1,2,3,4
01001	Alkali Winter	M	79,472	845	55	0	50	5	110	0	6,223	0	Fa,Wi,Sp	Wi		1990	3,4
01002	Bar 75 Ranch FFR[7]	C	2,019	13,019	2	0	10	2	14	0	73	0	Sp,Su,Fa,Wi	Sp,Su			4
01073	South Butte Valley	M	3,711	5	2	0	0	2	4	0	900	0	Fa,Wi,Sp	Sp			4
01300	Becraft	C	121	0	3	0	0	2	5	0	10	0	Sp,Su	Unk			4

Allot-ment No.	Allotment name	Manage-ment Category [8]	Public land acres	Other acres	Animal unit months (AUMs)								Period of use[4]	Grazing system[5]	AMP date	Allotment evaluation date	Manage-ment objective[6]
					Mule deer/ Prong-horn	Elk	Big-horn sheep	Other wildlife[1]	Wildlife total	Wild horse[2]	Live-stock	SNU[3]					
01301	Crooked Creek	C	242	0	3	0	0	2	5	0	10	0	Sp,Su	UNG			4
01302	Thomas Creek	C	47	0	10	0	0	4	14	0	30	0	Su,Fa	Unk			4
01303	O'Keeffe	C	277	1	5	0	0	5	10	0	20	0	Sp,Su	Unk			4
01305	Schultz	C	201	0	10	0	0	4	14	0	29	0	Sp,Su,Fa	UNG			4
01306	Dicks Creek	M	366	3	20	0	0	7	27	0	55	0	Sp,Su	Unk			4
01307	Crane Mountain	C	240	0	0	0	0	0	0	0	0	0		UNG			
01308	Barry	C	118	0	1	0	0	1	2	0	4	0	Sp	UNG			4
10101	East Green Mountain	M	17,908	1,662	285	50	60	30	425	0	980	0	Sp,Su,Fa	RR	1993		4
10102	Crack-in-the-Ground	I	14,337	1,998	133	40	20	10	203	0	298	0	Sp,Su,Fa	RR			4
10103	ZX-Christmas Lake	I	534,572	51,655	500	260	20	29	809	778	31,069	6,588	Sp,Su,Fa,Wi	DR	2001	2001	4
10104	Bottomless Lake	C	587	0	0	0	0	0	0	0	50	0	Temporary Use only	Unk			
02647	Murphy FFR[7]	C	1,655	962	0	0	0	0	0	0	33	0	Wi,Sp,Su	RR		2001	4
02863	Pedersen FFR[7/10]	C	2,442	641	27	0	2	0	29	0	134	0	Sp.Su,Fa,Wi	Unk			4
TOTAL			**3,018,554** [11]	**311,248**	**15,840**	**3,131**	**2,567**	**1,430**	**23,000**	**4,800**	**164,471**	**25,576**					

[1] Other wildlife = raptors, Greater Sage-grouse, small mammals/birds, etc.

[2] Adjustments from two allotments (# 00400 and 00426) outside the herd area which were incorrectly allocated forage for wild horses. Forage allocations are redistributed based on herd management area boundaries. Forage allocations are also increased to provide 12 months of forage for all horses at the top range of the appropriate management level (150 horses in the Paisley Herd Management Area, 250 horses in the Beaty Butte Herd Management Area).

[3] SNU = Suspended nonuse.

[4] Sp = Spring; Su = Summer; Fa = Fall; Wi = Winter.

[5] Grazing systems: RR = Rest rotation; D = Deferred; DR = Deferred rotation; Sp = Spring; Su = Summer; Fa = Fall; Wi = Winter; FRF = Federal range fenced; Unk = Unknown; UNG = Ungrazed due being vacant or closed by grazing decision or agreement; UNAVAIL = Unavailable to livestock grazing by planning decision or legislation.

[6] Management objectives: 1 = Improve and/or maintain riparian vegetation; 2 = Improve water quality and quantity; 3 = Maintain and/or improve wildlife habitat; 4 = Maintain and/or improve ecosite condition.

[7] FFR = Federal fenced range: areas where small portions of Federal land are fenced within larger blocks of private lands or other ownerships; hence, grazing systems vary and are generally unknown.

[8] M= maintain; I = improve; C= custodial.

[9] AMP was amended with respect to season of use in December 2000.

[10] Allotment was split out from 00212 through 2014 grazing decision.

[11] Total includes acres of exclosures/closures.

Table A5-3. Allotments Currently Ungrazed by Livestock

Allotment Number	Current AUMs	Allotment Name	Public Acres	Reason
00409	136	Tucker Hill	3,644	Historically, this allotment was allocated 136 AUMs of livestock forage, which were transferred to XL allotment in the 1993 Paisley Adjudication Agreement. New forage has become available within this allotment due to recent fires and seedings. However, a small portion of public land (approximately 340 acres) has been removed from the forage base due to the development of the Tucker Hill perlite mine. This allotment is currently vacant, but grazing use could be authorized in this allotment in the future for either temporary, emergency use, or through a term grazing permit.
00436	0	Diablo Peak	53,594	Historically, this area was part of the 00400 allotment and was allocated up to 935 AUMs of livestock forage. The Paisley Adjudication agreements (1983 and 1993) made this area permanently unallocated to livestock grazing due to larkspur and lack of water sources. The allotment falls within the Diablo Mountain WSA. The *Lakeview RMP/ROD* made the area available for grazing use, assigned an allotment number, and noted that though livestock grazing was not authorized at that time, it could be authorized in the future. Forage allocation and season of use would be determined at that time (BLM 2015c, p. 63). There are few resource conflicts with grazing in this area. Recommend making this allotment available for temporary, emergency use should the need arise.
00437	0	Abert Rim	9,352	Historically, this area was part of the 00400 allotment and was allocated up to 601 AUMs of livestock forage. The 1993 Paisley Adjudication Agreement made this area "permanently unallocated" to livestock grazing due to topography and wilderness values. The *High Desert Management Framework Plan Amendment and Record of Decision for the Lake Abert ACEC* (BLM 1996d, p. 22-23) formally made this area unavailable to livestock grazing use and allocated all AUMs to wildlife. This decision was carried forward in the *Lakeview RMP/ROD* (BLM 2003b, Appendix E1, p. A-64, as maintained).
00523	0	Warner Lakes	572	The Swamp Lakes South Pasture within the Warner Lakes Allotment is part of the Flagstaff Bench area in the Warner Wetlands ACEC that was identified as available for livestock grazing use in the *Warner Wetlands ACEC Management Framework Plan Amendment* (BLM 1990d). In recent years interest has been expressed in grazing this area. The area lacks fencing and is currently vacant.
00714	0	Table Rock	3,755	Historically, this allotment was allocated 250 AUMs of livestock forage. 160 AUMs were transferred to another allotment due to lack of livestock water. The *ROD for the Lakeview Grazing FEIS* (BLM 1982a, 1982b) allocated 0 AUMs to this allotment. The 1983 Paisley Adjudication Agreement removed grazing due to lack of fencing, water, and potential conflict with bighorn sheep (BLM 2015c, p. 104). The allotment falls within the Table Rock ACEC and remains closed to grazing via agreement.
00907	0	Devil's Garden	4,515	Historically, this allotment was allocated up to 330 AUMs of livestock forage. The *Lakeview RMP/ROD* made this allotment available for livestock grazing use on a temporary, emergency basis only. No permanent AUMs were allocated (BLM 2015c, p. 113). This allotment falls within the Devil's Garden Lava Bed WSA and has not been grazed since at least 2003. There are few resource conflicts with grazing in this area. Recommend continuing to make this allotment available for temporary, emergency use only.
01301	10	Crooked Creek	242	Currently, this allotment is allocated 10 AUMs of livestock forage. A proposed transfer was never completed due to a lack of a deed. This allotment is currently vacant as there has been a lack of interest in grazing since 2006.
01305	29	Schultz	201	Currently, this allotment is allocated 29 AUMs of livestock forage. This allotment is currently vacant as there has been a lack of interest in grazing and no permit issued since 1997.
01307	10	Crane Mountain (Vernon)	240	This allotment was historically described as 120 acres in size, but is currently mapped as 240 acres within about 1,583 acres of isolated BLM-administered lands on top of Crane Mountain. A 10 AUM permit authorized grazing on approximately 240 acres until 1983. In 1983, a grazing decision was issued to close the allotment to livestock grazing to protect special status plants. Additionally, the terrain is rough, steep, lacks water, and is generally not well suited for livestock grazing. The remainder of the surrounding BLM acres are unallotted. This allotment remains closed via a grazing decision as there is no known interest in grazing this allotment at this time.
01308	4	Barry	118	Currently, this allotment is allocated 4 AUMs of livestock forage. The last grazing lease expired in 1984. This allotment is currently vacant as there has been a lack of interest in grazing for more than 34 years.
10104	50	Bottomless Lake	587	Use has been authorized annually on a temporary non-renewable basis. While 50 AUMs of forage was estimated as available, no permanent forage allocation has been made. The allotment was last grazed in 1996 and is currently vacant. Recommend continuing to make this allotment available for temporary, non-renewable use until such time as BLM receives a grazing application from a qualified applicant.
TOTAL	**239**		**76,820**	**Other potential AUMs = 1,651**

Table A5-4. Rangeland Health Assessment Summary for Allotments in the Planning Area

Allot-ment No.	Allotment Name	BLM Acres	Standard 1 (Uplands)	Standard 2 (Riparian)	Standard 3 (Ecological Processes)	Standard 4 (Water Quality)	Standard 5 (Wildlife)	Date	Determination/Causal Factor	Reference/Other Information
00100	Peter Creek	14,015	Met	Met	Met	Met	Met	2012	Met all standards	BLM (2012c)
00200	Blue Creek	648	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013i)
00201	Vinyard Individual	7,904	Met	Met	Met	Met	Met	2000	Met all standards	BLM (2000k)
00202	Hickey Individual	10,825	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013c)
00202	Hickey Individual	276	Met	Not Met	Met	Not Met	Met	2013	Not met; livestock grazing is not a causal factor	BLM (2013c); Stream reaches did not meet temperature standards and 3.4 miles are PFC rated FAR.
00203	O'Keefe FFR	559	Met	Met	Met	Not Met	Met	2020	Not met; livestock grazing is not a causal factor	BLM (2020b); Stream reaches did not meet temperature standards on 0.25 miles.
00204	Crump Individual	2,931	Met	Met	Met	Met	Met	2002	Met all standards	BLM (2002i)
00205	Greaser Drift	8,620	Met	Met	Met	Met	Met	2002	Met all standards	BLM (2002j)
00206	Lane Plan II	10,018	Met	NA	Met	Not Met	Met	2019	Not met; livestock grazing is not a causal factor	BLM (2019j); Stream reaches did not meet temperature standards on 3.9 miles.
00207	Lane Plan I	25,053	Met	Met	Met	Met	Met	2019	Met all standards	BLM (2019k)
00208	Sagehen Butte	2,114	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013d)
00208	Sagehen Butte	327	Met	Not Met	Met	Met	Met	2013	Not met; Livestock Grazing is not a causal factor	BLM (2013d); 0.4 miles of stream not meeting standard 2. About 1.1 miles did not meet temperature standard. Making progress toward meeting the standards.
00209	Schadler FFR	1,914	Met	NA	Met	NA	Met	2020	Met all applicable standards	BLM (2020c)
00210	Rim	1,550	Met	NA	Met	NA	Met	2016	Met all applicable standards	BLM (2016j)
00211	Round Mountain	17,092	Met	Met	Met	Not Met	Met	2013	Not met; livestock grazing is not a causal factor	BLM (2013v); Stream reaches did not meet temperature standard on 5.5 miles.
00212	Rahilly-Gravelly	31,617	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013w)
00213	Burro Springs	7,004	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013x)
00214	Chukar Springs	1,916	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004o)
00215	Hill Camp	32,138	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013y)
00216	O'Keefe Individual	51,223	Met	Met	Met	Met	Met	2018	Met all standards	BLM (2018l)
00217	Cox individual	1,545	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013ad)
00218	Sandy Seeding	5,397	Met	NA	Met	NA	Met	2018	Met all applicable standards	BLM (2018m)
00219	Cahill FFR	571	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013z)

Allot-ment No.	Allotment Name	BLM Acres	Standard 1 (Uplands)	Standard 2 (Riparian)	Standard 3 (Ecological Processes)	Standard 4 (Water Quality)	Standard 5 (Wildlife)	Date	Determination/Causal Factor	Reference/Other Information
00222	Fisher Lake	4,070	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013f)
00223	Hickey FFR	298	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013e)
00400	Coglan Hills	12,213	Met	Met	Met	NA	Met	2015	Met all standards	BLM (2015l)
00401	Fenced Federal	161	Met	Met	Met	Met	Met	2002	Met all standards	BLM (2002d)
00403	Pine Creek	397	Met	Met	Met	Met	Met	2015	Met all standards	BLM (2015m)
00403	Pine Creek	9	Met	Not Met	Met	Met	Met	2015	Not met; Livestock grazing is causal factor	BLM (2015m); Grazing excluded. Making progress toward meeting the standard
00404	Willow Creek	11,996	Met	Met	Not Met	Not Met	Met	2015	Not met; livestock grazing is not a causal factor	BLM (2015p); Annual invasive affecting standard 3. Stream reaches exceeded temperature standard for standard 4
00406	West Clover Flat	711	Met	Met	Met	Met	Met	2005	Met all standards	BLM (2005d)
00407	Clover Flat	2,586	Met	Met	Met	Met	Met	2003	Met all standards	BLM (2003i)
00409	Tucker Hill	3,644	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed			Vacant allotment; not assessed
00410	Tim Long Creek	445	Met	Met	Met	Met	Met	2015	Met all standards	BLM (2015n)
00411	Jones Canyon	662	Met	Met	Met	NA	Met	2014	Met all standards	BLM (2015i)
00412	Fir Timber Butte	2,300	Met	Met	Met	Met	Met	2006	Met all standards	BLM (2006f)
00412	Fir Timber Butte	1,540	Met	Not Met	Met	Not Met	Met	2006	Not met; livestock grazing is not a causal factor	BLM (2006f); Stream reaches did not meet temperature standards.
00415	Briggs Garden	778	Met	NA	Met	NA	Met	2006	Met all applicable standards	BLM (2006g)
00416	White Rock	577	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013r)
00418	Sq*** Lake	37,239	Met	NA	Met	NA	Met	2002	Met all applicable standards	BLM. (2002e)
00418	Sq*** Lake	2,617	Not Met	NA	Not Met	NA	Met	2002	Not met; Livestock Grazing is causal factor	BLM (2002e); Fence and rest resulting in progress toward meeting the standard
00419	Saint Patrick	25,390	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004n)
00420	Egli Rim	21,508	Met	Met	Met	NA	Met	2014	Met all standards	BLM (2014d)
00421	Rosebud	14,191	Met	NA	Met	NA	Met	2013	Met all standards	BLM (2013s)
00422	Paisley Flat	4,045	Met	Met	Met	NA	Met	2013	Met all standards	BLM (2013q)
00423	Hill Field	3,126	Met	Met	Met	Met	Met	2006	Met all standards	BLM (2006h)
00423	Hill Field	1,261	Met	Not Met	Met	Not Met	Met	2006	Not met; Livestock Grazing is causal factor	BLM (2006h); Making progress toward meeting the standards
00424	West Lake	4,968	Met	NA	Met	NA	Met	2007	Met all applicable standards	BLM (2007r)
00424	West Lake	4,000	Not Met	NA	Not Met	NA	Met	2007	Not met; livestock grazing is not a causal factor	BLM (2007r); Annual invasive species contributing to not meeting standards 1 and 3
00425	Pike Ranch	5,683	Met	NA	Met	NA	Met	2014	Met all standards	BLM (2014h)

Allot-ment No.	Allotment Name	BLM Acres	Standard 1 (Uplands)	Standard 2 (Riparian)	Standard 3 (Ecological Processes)	Standard 4 (Water Quality)	Standard 5 (Wildlife)	Date	Determination/Causal Factor	Reference/Other Information
00426	Five Mile Butte	47,038	Met	Met	Met	Met	Met	2006	Met all standards	BLM (2006i)
00427	XL (all pastures)	38,739	Met	NA	Met	NA	Met	2003	Met all applicable standards	BLM (2003j)
00427	XL (all pastures)	7,400	Not Met	NA	Not Met	NA	Met	2003	Not met; livestock grazing is not a causal factor	BLM (2003j); Annual cheatgrass from past wildfires contributing to not meeting standards 1 and 3
00427	XL (Middle Abert and North Abert Pastures)	4,146	Not Met	NA	Not Met	NA	Met	2014	Not met; livestock grazing is not a causal factor	BLM (2014p); Annual cheatgrass from past wildfires contributing to not meeting standards 1 and 3.
00427	XL (Middle Abert and North Abert Pastures)	12,610	Met	NA	Met	NA	Met	2014	Met all applicable standards.	BLM (2014p)
00428	Sheeprock	115,510	Met	NA	Met	Met	Met	2001	Met all applicable standards	BLM (2001k)
00428	Sheeprock	28,877	Not Met	NA	Not Met	Met	Met	2001	Not met; livestock grazing is not a causal factor	BLM (2001k); Sagebrush dominant communities with lack of understory vegetation. Active restoration needed.
00429	Twin Lakes	17,966	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004p)
00430	South Poverty	43,654	Met	Met	Met	NA	Met	2014	Met all standards	BLM (2015k)
00431	Narrows	11,276	Met	Met	Not Met	Met	Met	2003	Not met; livestock grazing is not a causal factor	BLM (2003l); Failed crested wheatgrass seeding, poor soil, cheatgrass infestation
00432	Coleman Seeding	4,578	Met	NA	Met	Met	Met	2014	Met all applicable standards	BLM (2014i)
00432	Coleman Seeding	1,111	Not Met	NA	Not Met	NA	Met	2014	Not met; livestock grazing is not a causal factor	BLM (2014i); Decadent crested wheatgrass plants
00433	East Jug Mountain	12,444	Met	Met	Met	Met	Met	2003	Met all standards	BLM (2003m)
00435	Shale Rock	13,177	Met	NA	Met	NA	Met	2015	Met all standards	BLM (2015r)
00436	Diablo Peak	53,612	Not completed	Not Completed	Not Completed	Not Completed	Not Completed			Unassessed; Currently not grazed per Paisley Adjudication Agreement
00437	Abert Rim	9,368	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed			Unassessed; Currently not grazed per Paisley Adjudication Agreement
00501	Flynn FFR	3,025	Met	Met	Met	Met	Met	2014	Met all standards	BLM (2013j)
00502	Fitzgerald FFR	5,974	Met	Met	Met	NA	Met	2016	Met all applicable standards	BLM (2016h)
00503	Taylor FFR	3,143	Met	Met	Met	Met	Met	2003	Met all standards	BLM (2003p)
00505	Lynch	151	Met	NA	Met	NA	Met	2013	Met all applicable standards	BLM (2013k)
00507	Laird FFR	2,788	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004c)

Allot-ment No.	Allotment Name	BLM Acres	Standard 1 (Uplands)	Standard 2 (Riparian)	Standard 3 (Ecological Processes)	Standard 4 (Water Quality)	Standard 5 (Wildlife)	Date	Determination/Causal Factor	Reference/Other Information
00508	Rock Creek Ranch FFR	216	Met	Met	Met	Met	Met	2002	Met all standards	BLM (2002a)
00509	Cox Butte	38,406	Met	Met	Met	Met	Met	2002	Met all standards	BLM (2002b)
00510	Orejana Rim	55,338	Met	Met	Met	Met	Met	2002	Met all standards	BLM (2002c)
00511	Northeast Warner	142,323	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013n)
00512	North Bluejoint	20,473	Not Met	Met	Not Met	Met	Met	2005	Not met; Livestock Grazing is causal factor	BLM (2004d); Making progress toward meeting the standard
00514	Corn Lake	77,604	Met	Met	Met	Met	Met	2003	Met all standards	BLM (2003o)
00515	Big Juniper Mountain	85,158	Met	Met	Met	Met	Met	2005	Met all standards	BLM (2004q)
00515	Big Juniper Mountain	3,520	Met	Not Met	Met	Met	Met	2005	Not Met; Livestock Grazing is causal factor	BLM (2004q); Making progress toward meeting the standard
00516	Rabbit Basin	32,143	Met	Met	Met	NA	Met	2013	Met all applicable standards	BLM (2013g)
00517	Coyote-Colvin	118,456	Met	Met	Met	Met	Met	2016	Met all standards	BLM (2016i)
00517	Coyote-Colvin	21,104	Met	Not Met	Met	Met	Met	2016	Not met; Livestock Grazing is causal factor	BLM (2016i); Making progress toward meeting the standard
00518	Clover Creek	10,198	Met	Met	Met	Met	Met	2003	Met all standards	BLM (2003q)
00519	Fish Creek	14,795	Met	Not Met	Met	Not Met	Met	1999	Not met; livestock grazing is not a causal factor	BLM (1999i); About 14% of Fish Creek is not at PFC but current livestock grazing management is resulting in significant progress towards meeting Standard 2. Honey Creek is not meeting temperature standard; Grazing has been excluded since 1980.
00520	Lynch-Flynn	20,581	Met	Met	Met	NA	Met	2013	Met all applicable standards	BLM (2013l)
00521	Priday Reservoir	946	Met	Met	Met	Met	Met	2003	Met all standards	BLM (2003n)
00522	Abert Seeding (Center East, Center West, and South Pastures)	8,911	Met	NA	Met	NA	Met	2013	Met all applicable standards	BLM. (2013ae)
00522	Abert Seeding (Highway Well Pasture)	1,856	Not Met	NA	Not Met	NA	Met	2015	Not met; Livestock grazing is causal factor	BLM (2015q); Making progress toward meeting the standard
00522	Abert Seeding (Leehman Pasture)	953	Met	NA	Met	NA	Met	2015	Met all applicable standards	BLM (2015q)
00523	Warner Lakes (all pastures)	23,859	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004q)
00523	Warner Lakes (Flagstaff Bench and Swamp Lake Pastures)	3,074	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013t)

Allot-ment No.	Allotment Name	BLM Acres	Standard 1 (Uplands)	Standard 2 (Riparian)	Standard 3 (Ecological Processes)	Standard 4 (Water Quality)	Standard 5 (Wildlife)	Date	Determination/Causal Factor	Reference/Other Information
00524	Lane Individual	2,568	Met	Met	Met	NA	Met	2019	Met all applicable standards	BLM (2019l)
00529	South Rabbit Hills	9,127	Met	NA	Met	NA	Met	2015	Met all applicable standards	BLM (2015s)
00530	East Rabbit Hills	8,607	Met	Met	Met	NA	Met	2013	Met all applicable standards	BLM (2013m)
00531	North Rabbit Hills	12,054	Met	Met	Met	NA	Met	2013	Met all applicable standards	BLM (2013o)
00600	Beaty Butte	510,581	Met	Met	Met	Met	Met	1998	Met all standards	BLM (1998d)
00600	Beaty Butte - Guano and Sagehen Creeks	535	Met	Not Met	Met	Not Met	Met	1998	Not met; Livestock Grazing was causal factor	BLM (1998d); Guano and Sagehen Creeks are no longer grazed. Making progress toward meeting Standard 2.
00600	Beaty Butte - East Gulch	253	Met	Not Met	Met	Not Met	Met	1998	Not met; livestock grazing is not a causal factor	BLM (1998d); East Gulch widening and forming new floodplain.
00700	Silver Creek-Bridge	6,517	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004e)
00701	Upper Bridge Creek	1,811	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004f)
00702	Buck Creek-Bridge Creek	5,905	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013aa)
00702	Buck Creek-Bridge Creek	5	Met	Not Met	Met	Met	Met	2013	Not met; Livestock Grazing is causal factor	BLM (2013aa); Making progress toward meeting standard 2
00703	Bear Creek	1,300	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004g)
00704	Ward Lake	13,105	Met	Met	Met	Met	Met	2014	Met all standards	BLM (2014l)
00705	Oatman Flat	28,256	Met	NA	Met	NA	Met	2014	Met all applicable standards	BLM (2014e)
00706	Rye Ranch	3,787	Met	Met	Met	Met	Met	2002	Met all standards	BLM (2002f)
00707	Tuff Butte	8,936	Met	Met	Met	NA	Met	2014	Met all standards	BLM (2014f)
00708	Arrow Gap	2,564	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004h)
00709	Dead Indian-Duncan	18,911	Met	Met	Met	Met	Met	2015	Met all standards	BLM (2015o)
00710	Murdock	4,274	Met	NA	Met	NA	Met	2014	Met all applicable standards	BLM (2014g)
00711	South Hayes Butte	1,439	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004i)
00712	Bridge Well Seeding	1,347	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004j)
00713	Silver Creek	2,576	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004k)
00714	Table Rock	3,632	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed			Unassessed; Vacant allotment
00716	Silver Lake Lakebed	219	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004m)
00900	Fremont	28,800	Met	NA	Met	NA	Met	2014	Met all applicable standards	BLM (2014a)

Allot-ment No.	Allotment Name	BLM Acres	Standard 1 (Uplands)	Standard 2 (Riparian)	Standard 3 (Ecological Processes)	Standard 4 (Water Quality)	Standard 5 (Wildlife)	Date	Determination/Causal Factor	Reference/Other Information
00901	Wastina	5,759	Met	NA	Met	NA	Met	2014	Met all applicable standards	BLM (2014b)
00902	Cinder Butte	6,889	Met	Met	Met	Met	Met	2002	Met all standards	BLM (2002g)
00902	Cinder Butte	4,593	Met	Met	Not Met	Met	Not Met	2002	Not met; livestock grazing is not a causal factor	BLM (2002g)
00903	Beasley Lake	2,632	Met	Met	Met	Met	Met	2007	Met all standards	BLM (2007l)
00904	Highway	2,106	Not Met	Met	Not Met	Met	Met	2008	Not met; Livestock Grazing is causal factor	BLM (2008j); Making progress toward meeting the standard
00905	Homestead	12,276	Met	Met	Met	Met	Met	2007	Met all standards	BLM (2007q)
00906	North Webster	1,719	Met	NA	Met	NA	Met	2014	Met all applicable standards	BLM (2014c)
00907	Devil's Garden	4,515	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed			Unassessed; Currently reserved for emergency use only
00908	Cougar Mountain	8,789	Met	Met	Met	Met	Met	2007	Met all standards	BLM (2007m)
00908	Cougar Mountain	218	Met	Met	Not Met	Met	Met	2007	Not met; livestock grazing is not a causal factor	BLM (2007m); Invasive annual grass contributing to not meeting the standard 3
00909	Button Springs	8,913	Met	Met	Met	Met	Met	2005	Met all standards	BLM (2005f)
00910	Hogback Butte	4,582	Met	Met	Met	Met	Met	2007	Met all standards	BLM (2007n)
00911	Valley	6,045	Met	Met	Met	Met	Met	2002	Met all standards	BLM (2002h)
00914	West Green Mountain	21,271	Met	Met	Met	Met	Met	2005	Met all standards	BLM (2005e)
00915	Sq*** Butte	8,154	Met	Met	Met	Met	Met	2014	Met all standards	BLM (2014k)
01000	Little Juniper Spring (all pastures)	77,736	Met	Met	Met	Met	Met	2003	Met all standards	BLM (2003o)
01000	Little Juniper Spring (Packsaddle Pasture)	35,456	Met	Met	Met	NA	Met	2013	Met all applicable standards	BLM (2013h)
01001	Alkali Winter (all pastures)	79,472	Met	Met	Met	Met	Met	2003	Met all standards	BLM (2003k)
01001	Alkali Winter (Ryegrass and West Venator Pastures)	14,269	Met	NA	Met	NA	Met	2014	Met all applicable standards	BLM (2014j)
01001	Alkali Winter (Ryegrass and West Venator Pastures)	1,875	Not Met	NA	Not Met	NA	Met	2014	Not met; livestock grazing is not a causal factor	BLM (2014j); Vegetation treatments needed to improve conditions.
01002	Bar 75 Ranch FFR	2,019	Met	Met	Met	Met	Met	2003	Met all standards	BLM (2003o)
01073	South Butte Valley	3,711	Met	Met	Met	Met	Met	2003	Met all standards	BLM (2003k)
01300	Becraft	121	Met	Met	Met	NA	Met	2013	Met all applicable standards	BLM (2013p)

Allot-ment No.	Allotment Name	BLM Acres	Standard 1 (Uplands)	Standard 2 (Riparian)	Standard 3 (Ecological Processes)	Standard 4 (Water Quality)	Standard 5 (Wildlife)	Date	Determination/Causal Factor	Reference/Other Information
01301	Crooked Creek	242	Met	Met	Met	Met	Met	2004	Met all standards	BLM (2004r); Currently vacant.
01302	Thomas Creek	47	Met	Met	Met	Met	Met	2006	Met all standards	BLM (2006e)
01303	O'Keeffe	277	Met	Met	Met	Met	Met	2007	Met all standards	BLM (1999j)
01305	Schultz	201	Met	Met	Met	Met	Met	2007	Met all standards	BLM (2007j)
01306	Dicks Creek	366	Not Met	Met	Not Met	Met	Met	2013	Not met; Livestock grazing is causal factor	BLM (2013u); Making progress toward meeting the standard
01307	Vernon/Crane Mountain	120	Met	Not Met	Met	Not Met	Not Met	2007	Not met; livestock grazing is not a causal factor	BLM (2007o); flooding has caused degradation to Crane Creek. Crane Creek is listed as water quality impaired.
01308	Barry	118	Met	Met	Met	Met	Met	2007	Met all standards	BLM (2007p); Currently vacant
10101	East Green Mountain	17,114	Met	NA	Met	NA	Met	2007	Met all applicable standards	BLM (2007k)
10101	East Green Mountain	794	Not Met	NA	Not Met	NA	Met	2007	Not met; livestock grazing is not a causal factor	BLM (2007k); Annual invasive species (cheatgrass) contributing to not meeting the standard 3
10102	Crack-in-the-Ground	14,337	Met	Met	Met	Met	Met	2008	Met all standards	BLM (2008k)
10103	ZX-Christmas Lake (North Brim, Middle Brim, South Brim, Goodrich, South Sinks, Browns Valley, Bull Lake, Mean Rock Well, and Boilout Pastures)	222,468	Met	NA	Met	NA	Met	2001	Met all applicable standards	BLM (2001l)
10103	ZX-Christmas Lake (East Donut, West Donut, Saddle Mountain, Horse Mountain, North Sinks, Little Benjamin, Fossil Lake, Elk Butte, West Butte Valley, and Vaughn Well Pastures)	311,316	Not Met	NA	Not Met on about 41,660 acres	NA	Met	2001	Not met; Livestock grazing is or may be a causal factor	BLM (2001l); Making progress toward meeting standards 1 and 3
10104	Bottomless Lake	587	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed			Unassessed; Currently available for temporary non-renewable use only
02647	Murphy FFR	1,655	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed			Assessed this area in 2001 as part of the Red House Pasture of Sheeprock (00428) Allotment; approximately 12% of Red House Pasture failed to meet standards 1 and 3, but was not due to livestock grazing. It is unclear

Allot-ment No.	Allotment Name	BLM Acres	Standard 1 (Uplands)	Standard 2 (Riparian)	Standard 3 (Ecological Processes)	Standard 4 (Water Quality)	Standard 5 (Wildlife)	Date	Determination/Causal Factor	Reference/Other Information
										if the area failing to meet standards falls within what is now Murphy FFR Allotment.
02863	Pedersen FFR	2,442	Met	Met	Met	Met	Met	2013	Met all standards	BLM (2013w); Assessed as a portion of Rahilly-Gravelly Allotment (00212).

While all watersheds consist of similar components and processes, each is unique in its individual makeup. Each watershed displays its own pattern of landform and soil, its unique climate and weather patterns, and its own history of use and current condition. In directing management toward achieving this standard, it is essential to treat each unit of the landscape (soil, ecological site, and watershed) according to its own capability and how it fits with both smaller and larger units of the landscape. A set of potential indicators has been identified for which site-specific criteria will be used to determine if this standard is being met. The appropriate indicators to be used in determining attainment of the standard should be drawn from the following list.

Potential indicators: Protection of the soil surface from raindrop impact; detention of overland flow; maintenance of infiltration and permeability; and protection of the soil surface from erosion, consistent with the potential/capability of the site, as evidenced by the:

- Amount and distribution of plant cover (including forest canopy cover);
- Amount and distribution of plant litter;
- Accumulation/incorporation of organic matter;
- Amount and distribution of bare ground;
- Amount and distribution of rock, stone, and gravel;
- Plant composition and community structure;
- Thickness and continuity of the "a" horizon;
- Character of microrelief;
- Presence and integrity of biotic crusts;
- Root occupancy of the soil profile;
- Biological activity (plant, animal, and insect); and
- Absence of accelerated erosion and overland flow

Soil and plant conditions promote moisture storage as evidenced by:

- amount and distribution of plant cover (including forest canopy cover);
- amount and distribution of plant litter;
- plant composition and community structure; and
- accumulation/incorporation of organic matter

Standard 2: Watershed Function – Riparian/Wetland Areas

Riparian/wetland areas are in proper functioning condition appropriate to soil, climate, and landform.

Rationale and intent: Riparian/wetland areas are grouped into two major categories (1) lentic, or standing water systems such as lakes, ponds, seeps, bogs, and meadows; and (2) lotic, or moving water systems such as rivers, streams, and springs. Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and which under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions. Riparian areas commonly occupy the transition zone between the uplands and surface water bodies (the aquatic zone) or permanently saturated wetlands.

Proper functioning condition of riparian and wetland areas describes the degree of physical function of these components of the watershed. Their functionality is important to water quality in the capture and retention of sediment and debris, the detention and detoxification of pollutants, and in moderating

seasonal extremes of water temperature. Properly functioning riparian areas and wetlands enhance the timing and duration of streamflow through dissipation of flood energy, improved bank storage, and ground water recharge. Proper functioning condition should not be confused with the desired plant community or the desired range of conditions since, in most cases, it is the precursor to these levels of resource condition and is required for their attainment. A set of indicators has been identified for which site-specific criteria will be used to determine if this standard is being met. The criteria are based upon the potential (or upon the capability where potential cannot be achieved) of individual sites or landforms.

Potential indicators: Hydrologic, vegetation, and erosional/depositional processes interact in supporting physical function, consistent with the potential or capability of the site, as evidenced by:

- Frequency of floodplain/wetland inundation;
- Plant composition, age class distribution, and community structure;
- Root mass;
- Point bars revegetating;
- Streambank/shoreline stability;
- Riparian area width;
- Sediment deposition;
- Active/stable beaver dams;
- Coarse/large woody debris;
- Upland watershed conditions;
- Frequency/duration of soil saturation; and
- Water table fluctuation.

Stream channel characteristics are appropriate for landscape position as evidenced by:

- Channel width/depth ratio;
- Channel sinuosity;
- Gradient;
- Rocks and coarse and/or large woody debris;
- Overhanging banks;
- Pool/riffle ratio;
- Pool size and frequency; and
- Stream embeddedness.

Standard 3: Ecological Processes

Healthy, productive, and diverse plant and animal populations and communities appropriate to soil, climate, and landform are supported by ecological processes of nutrient cycling, energy flow, and the hydrologic cycle.

Rationale and intent: This standard addresses the ecological processes of energy flow and nutrient cycling as influenced by existing and desired plant and animal communities without establishing the kinds, amounts, or proportions of plant and animal community compositions. While emphasis may be on native species, an ecological site may be capable of supporting a number of different native and introduced plant and animal populations and communities while meeting this standard. This standard also

addresses the hydrologic cycle which is essential for plant growth and appropriate levels of energy flow and nutrient cycling. Standards 1 and 2 address the watershed aspects of the hydrologic cycle.

With few exceptions, all life on earth is supported by the energy supplied by the sun and captured by plants in the process of photosynthesis. This energy enters the food chain when plants are consumed by insects and herbivores and passes upward through the food chain to the carnivores. Eventually, the energy reaches the decomposers and is released as the thermal output of decomposition or through oxidation.

The ability of plants to capture sunlight energy, to grow and develop, to play a role in soil development and watershed function, to provide habitat for wildlife, and to support economic uses depends on the availability of nutrients and moisture. Nutrients necessary for plant growth are made available to plants through the decomposition and metabolization of organic matter by insects, bacteria and fungi, the weathering of rocks, and extraction from the atmosphere. Nutrients are transported through the soil by plant uptake, leaching, and by rodent, insect, and microbial activity. They follow cyclical patterns as they are used and reused by living organisms.

The ability of rangelands to supply resources and satisfy social and economic needs depends on the buildup and cycling of nutrients over time. Interrupting or slowing nutrient cycling can lead to site degradation, as this land becomes increasingly deficient in the nutrients plants require.

Some plant communities, because of past use, frequent fires, or other histories of extreme or continued disturbance, are incapable of meeting this standard. For example, shallow-rooted winter-annual grasses that completely dominate some sites do not fully occupy the potential rooting depth of some soils, thereby reducing nutrient cycling well below optimum levels. In addition, these plants have a relatively short growth period and thus capture less sunlight than more diverse plant communities. Plant communities like those cited in this example are considered to have crossed the threshold of recovery and often require great expense to be recovered. The cost of recovery must be weighed against the site's potential ecological/economic value in establishing treatment priorities.

The role of fire in natural ecosystems should be considered, whether or not it acts as a primary driver or only as one of many factors. It may play a significant role in both nutrient cycling and energy flows. A set of indicators has been identified for which site-specific criteria will be used to determine if this standard is being met.

Potential indicators: Photosynthesis is effectively occurring throughout the potential growing season, consistent with the potential/capability of the site, as evidenced by plant composition and community structure.

Nutrient cycling is occurring effectively, consistent with the potential/capability of the site, as evidenced by:

- Plant composition and community structure;
- Accumulation, distribution, incorporation of plant litter and organic matter into the soil;
- Animal community structure and composition;
- Root occupancy in the soil profile; and
- Biological activity including plant growth, herbivory, and rodent, insect, and microbial activity.

Standard 4: Water Quality

Surface water and ground water quality, influenced by agency actions, complies with state water quality standards.

Rationale and intent: The quality of the water yielded by a watershed is determined by the physical and chemical properties of the geology and soils unique to the watershed, the prevailing climate and weather patterns, current resource conditions, the uses to which the land is put and the quality of the management of those uses. Standards 1, 2, and 3 contribute to attaining this standard.

States are legally required to establish water quality standards and Federal land management agencies are to comply with those standards. In mixed ownership watersheds, agencies, like any other landowners, have limited influence on the quality of the water yielded by the watershed. The actions taken by the agency will contribute to meeting state water quality standards during the period that water crosses agency administered holdings.

Potential indicators: Water quality meets applicable water quality standards as evidenced by:

- Water temperature;
- Dissolved oxygen;
- Fecal coliform;
- Turbidity;
- pH;
- Populations of aquatic organisms; and
- Effects on beneficial uses (i.e., effects of management activities on beneficial uses as defined under the CWA and state implementing regulations).

Standard 5: Wildlife (Native, Threatened and Endangered, and Locally Important Species)

Habitats support healthy, productive, and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate, and landform.

Rationale and intent: Federal agencies are mandated to protect Threatened and Endangered (T&E) species and will take appropriate action to avoid the listing of any species. This standard focuses on retaining and restoring native plant and animal (including fish) species, populations, and communities (including T&E and other special status species and species of local importance). In meeting the standard, native plant communities and animal habitats would be spatially distributed across the landscape with a density and frequency of species suitable to ensure reproductive capability and sustainability. Plant populations and communities would exhibit a range of age classes necessary to sustain recruitment and mortality fluctuations.

Potential indicators: Essential habitat elements for species, populations, and communities are present and available, consistent with the potential/capability of the landscape, as evidenced by:

- Plant community composition, age class distribution, productivity;
- Animal community composition, productivity;
- Habitat elements;
- Spatial distribution of habitat;
- Habitat connectivity; and
- Population stability/resilience.

Appendix 6 – Vegetation Communities

Table of Contents

List of Tables

Introduction

Upland vegetation community data for the planning area is available primarily from two sources: the Oregon DATAGAP1 satellite imagery classification by the Oregon Natural Heritage Program (Kagan and Caicco 1996) and BLM's Ecological Site Inventory (ESI). Riparian and wetland vegetation communities in the planning area are also described following the Proper Functioning Condition methodology (BLM 1993a, 1998c).

Oregon DATAGAP1

The following summary of existing upland vegetation communities was derived originally for the Proposed Lakeview RMP/Final EIS (BLM 2003a, p. 2-2 to 2-18). This summary is derived from the DATAGAP 1 (Kagan and Caicco 1996). Pursuant to 40 CFR Section 1502.21, the BLM hereby incorporates the existing upland vegetation community discussions by reference in its entirety.

Big Sagebrush Shrub/Grassland

Big sagebrush shrubland is the most common vegetative cover type in southeastern Oregon. Approximately 54% of the plant communities mapped on BLM-administered lands in the planning area are dominated by one of three subspecies of big sagebrush: Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*), mountain big sagebrush (*A. tridentata* ssp. *vaseyana*), or basin big sagebrush (*A. tridentata* ssp. *tridentata*). These communities occur as a mosaic with other shrub-steppe communities over much of the foothills and valley floors. Native grasses range from rare to abundant, depending on site history and soil/water relationships. Native perennial bunchgrasses include bluebunch wheatgrass (*Pseudoroegneria spicata*), Sandberg bluegrass (*Poa secunda*), Idaho fescue (*Festuca idahoensis*), Great Basin wildrye (*Leymus cinereus*), junegrass (*Koeleria macrantha*), needle-and-thread grass (*Achnatherum hymenoides*), Thurber's needlegrass (*Achnatherum thurberianum*), western needlegrass (*Achnatherum occidentale*), and, in more disturbed areas, bottlebrush squirreltail (*Elymus elymoides*). Introduced grasses are primarily annual cheatgrass (*Bromus tectorum*) and perennial crested wheatgrass (*Agropyron cristatum*).

Low and Black Sagebrush/Grassland

Low sagebrush (*Artemisia arbuscula*) communities are located throughout eastern Oregon, generally on areas with shallow, clayey soils of basalt origin. Approximately 13% of plant communities mapped on BLM-administered lands in the planning area are dominated by low sagebrush and it is often the only shrub in the stand; Sandberg bluegrass is the most common grass. Other associated grasses are bluebunch wheatgrass, Idaho fescue, and bottlebrush squirreltail. Low sagebrush is usually the dominant vegetation in shallow soil and soils with an impervious layer that excludes the formation of big sagebrush and other shrub types. The sites have extensive areas of exposed rock and often do not have enough vegetation to support wildland fires. These areas are often rich in forbs. Black sagebrush (*Artemisia nova*) communities are similar to low sagebrush in shrub height, soil depth (shallow), dominant grass, and sparse vegetation that typically cannot carry a fire. Black sagebrush dominates approximately 0.1% of plant communities mapped on BLM-administered lands in the planning area.

Salt Desert Scrub/Grassland

This plant community occurs in the alkaline playa lake basins of the northern Great Basin. Approximately 8% of plant communities mapped on BLM-administered lands in the planning area are dominated by salt desert scrub. It is especially prominent around Lake Abert, Summer Lake, Alkali Lake, and the Warner Lakes. These are low to tall shrub communities comprised of dispersed alkali-tolerant vegetation. Salt

desert scrub is a "catchall" term that describes several different environments more common in Nevada. On the most saline, seasonally flooded sites, black greasewood (*Sarcobatus vermiculatus*) is dominant, and winterfat is usually associated with droughty soils with high carbonate content on alluvial fans and toe slopes. Sites with better drainage support a variety of shrubs and several salt tolerant plants, such as shadscale (Atriplex confertifolia), hopsage (*Grayia spinosa*), budsage (*Picrothamnus desertorum*), rabbitbrush (*Chrysothamnus/Ericameria* spp.), and grasses such as saltgrass (*Distichlis spicata)*, bottlebrush squirreltail, and basin wildrye. Big sagebrush or sagebrush steppe cover types surround salt desert scrub. The most extensive areas are always associated with the large, ephemeral lakes of the region. However, there are numerous small pockets of this cover type scattered throughout southeastern Oregon (Anderson et al. 1998, Kagan and Caicco 1996).

Modified Grassland (Crested Wheatgrass and Cheatgrass)

Extensive grasslands in southeastern Oregon that formerly were composed of native perennial bunchgrasses have been planted with crested wheatgrass (*Agropyron cristatum*) (a bunchgrass) today, and/or have been infested by invasive annual grasses such as cheatgrass (*Bromus tectorum*), Medusahead rye (*Taeniatherum caput-medusae*), and North African (Ventenata dubia) grass. Forbs commonly found in this community include yarrow (*Achillea millefolium*), milkvetch (*Astragalus* spp.), arrowleaf balsamroot (*Balsamorhiza sagittata*), spreading phlox (*Phlox diffusa*), salsify (Tragopogon spp.), and mullein (*Verbascum thapsus*). The ecological integrity of such sites is low, especially over large areas, because there are few mosaics of other plant communities, little diversity of wild animal species that use these communities, and disruption of corridors for animal movement.

Vegetated Lava/Sand Dunes

There are large expanses of sparsely vegetated lava fields with occasional isolated patches of tall shrub communities where Wyoming and basin big sagebrush are predominant and low shrub communities may also occur. These include barren recent lava flows with no vegetation, lava flows with big sagebrush inclusions, and flows that have recently been colonized by vegetation. Bluebunch wheatgrass, Sandberg bluegrass, needlegrass, Idaho fescue, and junegrass occur in soil pockets in these flows. However, bare lava characterizes large areas of this type. While big sagebrush is the principal dominant plant, low sagebrush is also common at certain sites. The two rabbitbrushes are also associates. Other shrubs found are currants (*Ribes* spp.), bitterbrush, and desert-sweet/fernbush (*Chamaebatiaria millefolium*). The vegetated sand dunes have a variety of grasses, especially Indian ricegrass (*Achnatherum hymenoides*), creeping wildrye, and basin wildrye (*Leymus cinereus*), while only a few shrubs survive on the dune systems.

Miscellaneous Shrub/Native Perennial Grassland

Miscellaneous shrubs dominate approximately 2% of plant communities mapped on BLM-administered lands in the planning area. Mountain mahogany (*Cercocarpus ledifolius*) shrubland is located on the steep, rocky slopes and mountain ridges in southeastern Oregon. It usually appears as a minor component within the old-growth western juniper (*Juniperus occidentalis*) woodland types or within the sagebrush steppe. Although commonly encountered, the mountain mahogany cover type generally exists in units too small for effective mapping. This widely dispersed tall shrub community grows in rock talus, rock outcrops, and in the soil pockets within the rocky slopes along with big sagebrush. It can be the dominant overstory vegetation with occasional western juniper and low sagebrush or bitterbrush, several buckwheats (*Eriogonum* spp.), and some grasses (bluebunch wheatgrass, Sandberg bluegrass, Idaho fescue, and western and Thurber's needlegrasses).

Located in medium-tall shrubland steppe with bunchgrass or cheatgrass understory, bitterbrush (*Purshia tridentata*) communities can be dominant or co-dominant with big sagebrush. Idaho fescue is the characteristic native bunchgrass, with bluebunch wheatgrass co-dominant at lower elevations, while at higher elevations and in sandier soils, western needlegrass dominates (Anderson *et al*. 1998). Rabbitbrush species are common associates. Basin big sagebrush and mountain big sagebrush grow as co-dominants in some areas. Occasionally, western juniper and ponderosa pine (*Pinus ponderosa*) are found as isolated individuals in these plant communities.

Snowberry (*Symphoricarpos* spp.) communities are found on steep slopes between alpine habitats and riparian or sagebrush steppe. They are usually in areas with some soil development, north facing, on very steep slopes, and can be in a mosaic with quaking aspen groves. Thurber's needlegrass, bluebunch wheatgrass, Idaho fescue, and Sandberg bluegrass form the understory. Many forbs grow in the area with snowberry, as do mountain mahogany, quaking aspen (*Populus tremuloides*), and mountain big sagebrush. Western juniper may be located with these shrubs at lower elevations.

Silver Sagebrush/Grassland

The silver sagebrush (*Artemisia cana*) community is found in playas, which are moist, semi-alkaline flats or valley bottomlands. Silver sagebrush dominates approximately 0.9% of plant communities mapped on BLM-administered lands in the planning area. Some of the playas are quite extensive. Silver sagebrush occurs in playas because it tolerates the alkalinity and standing water. This shrub community is moderately- to widely-spaced, growing in deflated (eroded by wind) areas, and partially filled with sediment. Although rhizomatous species such as creeping wildrye (*Elymus triticoides*), milkvetch (*Astragalus* sp.), and cress (several mustard species) occasionally occur, the understory can be dominated by widely spaced bunchgrasses, such as Sandberg bluegrass, mat muhly (*Muhlenbergia richardsonis*), and alkali grass (*Sporobolus airoides*). Silver sagebrush is the dominant and characteristic shrub of this community; however, yellow rabbitbrush (*Chrysothamnus viscidiflorus*) is a common associate.

Mountain Big Sagebrush/Grassland

Mountain big sagebrush communities occur on plateaus, mountain toeslopes, and stony flats with minimal soil development at high elevations in the High Desert Province. Mountain big sagebrush dominates approximately 0.25% of plant communities mapped on BLM-administered lands in the planning area. This medium-to-medium-tall shrubland varies with widely spaced to dense shrubs that occur on deep-soiled to stony flats, ridges, and mountain slopes, and usually in cool, moist areas with some snow. In this community, Idaho fescue is the most common and diagnostic grass. Mountain big sagebrush is the dominant shrub, but low sagebrush can occur in some places. Other shrubs that can occur are chokecherry (*Prunus virginiana*), serviceberry (*Amelanchier* spp.), snowberry, bitterbrush, and buckthorn (*Frangula* spp.). Occasionally, mountain big sagebrush grows in snowbank areas or other moist sites within this community. Few trees occur in this community, but quaking aspen and mountain mahogany may be present. This is a forb-rich community where Indian paintbrush (*Castilleja* spp.), cinquefoil (*Potentilla* spp.), lupines (*Lupinus* spp.), and buckwheat species are abundant.

Ponderosa Pine and Mixed-Conifer Forests

The Ponderosa pine community is a widespread forest type in eastern Oregon. Within the planning area, it is usually found in scattered parcels (approximately 30,364 acres; Map V-1, Appendix 1) in the foothill margins or transitional zones bordering adjacent National Forests. Widely spaced Ponderosa pine trees typically dominate the diverse shrub and herbaceous layers.

The mixed conifer community is a closed-canopied, upper montane forest type that is dominated by a mix of pine and fir (*Abies* spp.) species and a variety of understory shrubs, grasses, and forbs. Within the

planning area this community is also found in scattered parcels (approximately 1,345 acres; Map V-1, Appendix 1) bordering adjacent National Forests.

Quaking Aspen

This community is widely scattered throughout the coniferous forest and sagebrush steppe of eastern Oregon. They are typically found in isolated pockets on sites that maintain high soil moistures throughout the year such as areas that hold snow drifts through spring or are subjected to elevated groundwater due to other factors such as foot slopes below rims facing northeast. Aspen stands occur inter-mixed with the ponderosa/mixed-conifer sites in the higher elevations, as well as in sagebrush steppe sites that border riparian areas.

Although quaking aspen are a relatively small, scattered vegetative component within the planning area (approximately 2,053 acres), its contribution to the diversity of flora and fauna communities is great. The magnitude of impact this deciduous tree has on species diversity and ecological processes is influential enough for consideration of this species as a keystone cover type (Knight 2001, Campbell and Bartos 2001). The biodiversity of a healthy aspen community is second only to riparian communities. Aspen communities typically have more lush under-growth and layered vegetation structure than neighboring coniferous forests (White *et al.* 1998, Mueggler 1985).

Aspen communities need periodic disturbance to reduce competition and promote regeneration. Historically, the primary disturbance was wildfire, although herbivory from wildlife, as well as domesticated ungulates after European settlement, also impacted aspen communities in some areas (Romme *et al.* 2001, Riegel *et al.* 2006). Prior to 1900, the average disturbance from wildfire in larger aspen stands occurred between 10 and 16 years, and total stand replacement fires occurred between 60 to 100 years (Riegal *et al.* 2006; Wall *et al.* 2001). More recently encroaching conifers such as western juniper and white fir are replacing aspen stands, primarily due to an absence of wildfire disturbance (Wall *et al.* 2001; Riegel *et al.* 2006). Many aspen stands in the planning area are not naturally regenerating and have diminished in size, number, and condition. In an effort to reinvigorate aspen stands, the BLM has completed juniper removal and prescribed fire treatments in some of these stands in recent years (BLM 2005g, 2011l, 2017e. Research within and adjacent to the planning area found that over 90% of the aspen stands below 6,890 feet in elevation were encroached by western juniper, with 12% of these stands completely replaced by western juniper, and 23% dominated by western juniper (Wall *et al.* 2001).

Higher elevation aspen stands in the planning area have also experienced significant declines due to the encroachment of other conifers such as white fir (Riegel *et al.* 2006). Competition from the invasion of young western juniper, as well as livestock and wildlife browsing of sprouts, has also contributed to aspen decline throughout the planning area.

Western Juniper

Western juniper distribution was historically limited to low productive sites or rocky areas with only light grasses and other low fuels incapable of carrying ground fires. These historic sites are where most old-growth western juniper stands are located today, containing trees hundreds of years old. However, juniper has expanded its historic range into sagebrush steppe habitats, riparian areas, and the transitional zones between pine/mixed conifer forest and sagebrush steppe communities.

In sagebrush steppe ecosystems, periodic pre-settlement fires killed most western juniper saplings before dense stands could develop. Two historic factors have influenced the present day distribution of western juniper: post-settlement grazing (which reduced fine fuels capable of carrying fire across the landscape) and fire suppression activities have allowed western juniper to encroach into sagebrush steppe sites. In

addition to western juniper expansion into neighboring vegetation communities, there has also been a substantial amount of infill and increased density of juniper trees across the planning area, as indicated by observing stand dynamics and research (Miller *et al.* 2008). This infill of post-settlement juniper could pose a risk of subjecting these sites to higher intensity, stand-replacing fires under specific climatic conditions. Miller *et al.* (2007) developed guidelines for land managers to use to assess juniper stand dynamics and differentiate between pre- and post-settlement trees during vegetation management activities.

Miller *et al*. (2005) classifies areas with juniper into three phases (I, II, or III) based on the level of juniper encroachment/dominance. Phase I consists of areas dominated by sagebrush and other shrubs (sagebrush steppe) with scattered young juniper trees interspersed. Phase II consists of areas with higher densities of larger juniper trees, with an intact shrub/grass understory. Junipers and shrubs are co-dominant and influence ecological processes equally. Phase III consists of areas dominated by high densities of older juniper trees where the understory has been lost, leaving bare ground beneath the trees.

Ecological Site Inventory (ESI) Process

An ecological site inventory (ESI) was conducted in the Planning Area between 1983 and 2001. It represents a 100 percent survey of an area where ecological data is collected and represented on maps. The primary data includes an inventory of existing vegetation and soils within the survey boundary. The primary tool or unit that is developed during the inventory is called a map unit description. A map unit description defines the soil and the vegetative community that exists in a given location. Map unit descriptions also consider precipitation, geology, elevation, slope, aspect, and the general setting of the unit which may have influenced its development. Within the Planning Area, there have been many influences such as past volcanic activities and the encroachment and egress of inland lakes in the past.

The data was collected by a team of range specialists and soil scientists. The members develop the map unit. The ecological site inventory includes an Order 3 soil survey completed in accordance with the National Soil Handbook (SCS 1983) which means that the main focus is the current or projected management needs of the managing agency or owners of the land and a minimum delineation or unit size of 160 acres. Ecological site inventory has been given the discretion to map at a smaller scale if a management-oriented need exists that should be addressed such as a wetlands, sensitive plant area, or a mineral deposit.

The soil scientist digs and describes at least one pedon (pit) per map unit. The soil scientist delineates the horizons of the pedon taking physical measurements on details such as depths of a horizons; sand, silt, and clay content (texture) of the horizons, rock fragmentation, structure and rupture resistance, nature of roots and pores, effervescence, pH and any other notable details such as cementation or occurrence of various types of deposits. The data collected conforms to the standards of the National Soils Handbook (SCS 1983) and other guidance.

The range specialist collects vegetative data according to the standards set by the National Range Handbook (BLM 1984d). The range specialist walks through the unit and makes an ocular estimation of the percent composition by weight for each species present. The specialist also collects data on total vegetative cover, production, observed apparent trend, soil surface factors, and other parameters. This existing vegetation description is then compared to existing ecological site description (rangesite) and a condition class rating is assigned by comparing to the potential natural community (PNC) defined in the ecological site description. The data collected by the range specialist is used in making future management decisions such as allotment management plans, grazing management decisions, and rehabilitating areas after wildfire.

The information collected by each specialist is represented on a series of maps using a coded polygon to delineate each map unit. The map unit code number is defined in a legend which relates to a detailed text description for each map unit. The map unit description describes the characteristics of the unit in relation to many potential capabilities or uses, such as rangeland, commercial development, agricultural production, timber production, etc.

When the survey is completed, the soils data component is typically made available as a county soil survey published by the Natural Resource Conservation Service (NRCS). Historically, these county soil surveys were published in book form (e.g. NRCS 1999a, 2006). In recent years, the NRCS has made the survey data available on their website in both geographic information system and digital tabular formats (NRCS 2008, 2010a, 2010b). The vegetation data component is not typically published, but is maintained by the BLM and made available on their website in both geographic information system and digital tabular formats.

Dominant Plant Communities Based on the Ecological Site Inventory

Table 6-1 lists the dominant plant associations located within the planning area, based on the ESI vegetation data collected between 1983 and 2001. The dominant species is listed first with the co-dominant species listed below the main species heading. All botanical scientific nomenclature is according to USDA, PLANTS database: http://plants.usda.gov (see also NRCS 2012).

Riparian Vegetation (Lotic Systems)

Lotic riparian systems are running water systems, such as rivers, streams, and springs (BLM 1993a, 1998c). Riparian vegetation is dependent on the stream channel type, duration of water availability, soil type and depth, climate, and management history. Riparian areas are typically very narrow, and have not all been accurately mapped, but are assumed to be present along perennial streams in the planning area. Sedges, rushes, and in some cases, willow and alder, dominate streams with deeper soils and longer-lasting water. Boulder-dominated streams may have pockets of vegetation monopolized by grass and shrubs. As water availability decreases, herbaceous vegetation shifts from sedges to grasses. The grasses change from *wetland obligates*—plants that usually occur in wetlands under natural conditions, to *wetland facultative*—plants that usually occur in wetlands but found sporadically in non-wetlands. Lower elevation sites often have alder and dogwood along with willow as the predominant woody vegetation. Willow dominates higher sites. There are several species of willow in the planning area, some more moisture-dependent than other species. For example, Scouler willow can survive dry upland sites, while sandbar willow requires wet conditions. The presence of these species can assist in determining stream-site condition as it relates to site potential. Canyon-confined streams in lower reaches often have ponderosa pine as a dominant structural over-story feature. Western juniper has invaded many riparian zones and quaking aspen stands, replacing the more desirable riparian species.

Willow dominated floodplain riparian areas are included in these plant communities and consist of tall shrub communities with dense willow cover interspersed with wetlands, sedge meadows, or moist forb-rich grassland. This community occurs in broad valley floors as well as in narrow riparian canyons along rivers and streams. Many rivers usually have some cottonwood, willow, rose, snowberry, red-osier dogwood, and some pine and *Prunus* species. Alder is rare on the BLM portion of the planning area. At one time, cottonwood was probably more prevalent; at present, it does not occur widely in Lake County (Anderson *et al.* 1998). Stinging nettle is present in most areas.

The role vegetation plays in stream condition (bank stability, sediment capture, flood-flow attenuation, and source of woody debris) depends on channel type. Channel types E3-6, C3-6, and G3-6 (Rosgen

Table 6-1. Dominant Plant Associations

Antelope bitterbrush	*Purshia tridentata* (Pursh) DC.
bluebunch wheatgrass	*Pseudoroegneria spicata* (Pursh) A. Löve ssp. *spicata*
cheatgrass	*Bromus tectorum* L. [2]
Idaho fescue	*Festuca idahoensis* Elmer
squirreltail	*Elymus elymoides* (Raf.) Swezey
Thurber's needlegrass	*Achnatherum thurberianum* (Piper) Barkworth
western needlegrass	*Achnatherum occidentale* (Thurb.) Barkworth ssp. o*ccidentale*
Basin big sagebrush	*Artemisia tridentata* Nutt. ssp. *tridentata*
basin wildrye	*Leymus cinereus* (Scribn. & Merr.) A. Löve
basin wildrye	*Leymus cinereus* - tansymustard *Descurainia* sp. Webb &
Bethel.	
beardless wildrye	*Leymus triticoides* (Buckley) Pilg.
beardless wildrye	*Leymus triticoides*. - granite prickly phlox *Linanthus pungens*
	(Torr.) J.M. Porter & L.A. Johnson
Bluebunch wheatgrass	*Pseudoroegneria spicata* ssp. *spicata*
bluebunch wheatgrass	*Pseudoroegneria spicata* ssp. *spicata* - common
	woolly sunflower *Eriophyllum lanatum* (Pursh) Forbes var. grandiflorum (A.
	Gray) Jeps.
bluegrass	*Poa* L. sp.
cheatgrass	*Bromus tectorum*[1]
cheatgrass	*Bromus tectorum*[1] - clasping pepperweed *Lepidium*
	perfoliatum L.[1]
cheatgrass	*Bromus tectorum*[1] - tumble mustard *Sisymbrium altissimum* L. [2]
cheatgrass	*Bromus tectorum*[1] - tansymustard *Descurainia* sp.
crested wheatgrass	*Agropyron cristatum* (L.) Gaertn. [1]
Cusick's bluegrass	*Poa cusickii* Vasey
Idaho fescue	*Festuca idahoensis*
Idaho fescue	*Festuca idahoensis* - sulphur-flower buckwheat
	Eriogonum umbellatum Torr.
Indian ricegrass	*Achnatherum hymenoides* (Roem. & Schult.) Barkworth
mat muhly	*Muhlenbergia richardsonis* (Trin.) Rydb.
	povertyweed *Iva axillaris* Pursh
needle and thread	*Hesperostipa comata* (Trin. & Rupr.) Barkworth ssp. *comata*
povertyweed	*Iva axillaris*
Sandberg bluegrass	*Poa secunda* J. Presl
sedge	*Carex* L. sp.
squirreltail	*Elymus elymoides*
squirreltail	*Elymus elymoides* - buckwheat *Eriogonum* Michx. sp.
squirreltail	*Elymus elymoides* - milkvetch *Astragalus* L.
Thurber's needlegrass	*Achnatherum thurberianum*
western needlegrass	*Achnatherum occidentale* ssp. *occidentale*
Basin wildrye	*Leymus cinereus* (Scribn. & Merr.) A. Löve
Beardless wildrye	*Leymus triticoides* (Buckley) Pilg.
Big sagebrush	*Artemisia tridentata* Nutt.
basin wildrye	*Leymus cinereus*
bluebunch wheatgrass	*Pseudoroegneria spicata* ssp. *spicata*
bluegrass	*Poa* sp.
cheatgrass	*Bromus tectorum*[1]
cheatgrass	*Bromus tectorum*[1] - pepperweed *Lepidium* L. sp.
crested wheatgrass	*Agropyron cristatum*[1]
fiddleneck	*Amsinckia* Lehm. sp.
Idaho fescue	*Festuca idahoensis*
Indian ricegrass	Achnatherum hymenoides
Sandberg bluegrass	*Poa secunda*
squirreltail	*Elymus elymoides*

thickspike wheatgrass	*Elymus lanceolatus* (Scribn. & J.G. Sm.) Gould ssp. *lanceolatus*
Thurber's needlegrass	*Achnatherum thurberianum*
Black or Alkali Greasewood	*Sarcobatus vermiculatus* (Hook.) Torr.
basin wildrye	*Leymus cinereus*
beardless wildrye	*Leymus triticoides*
beardless wildrye	*Leymus triticoides* - clasping pepperweed
Lepidium perfoliatum[2]	
beardless wildrye	*Leymus triticoides* - tansymustard *Descurainia* sp.
cheatgrass	*Bromus tectorum*[1]
cheatgrass	*Bromus tectorum*[1] - clasping pepperweed
Lepidium perfoliatum[2]	
cheatgrass	*Bromus tectorum*[1] - tansymustard *Descurainia* sp.
crested wheatgrass	*Agropyron cristatum*[1]
Indian ricegrass	*Achnatherum hymenoides*
needle and thread	*Hesperostipa comata* ssp. *comata* - tansymustard
Descurainia sp.	
Pursh seepweed	*Suaeda calceoliformis* (Hook.) Moq.
saltgrass	*Distichlis spicata* (L.) Greene
saltgrass	*Distichlis spicata* - seepweed *Suaeda* Forssk. ex J.F. Gmel. sp.
saltgrass	*Distichlis spicata* - Mojave seablite *Suaeda moquinii*
	(Torr.) Greene
saltgrass	*Distichlis spicata* - Pursh seepweed Suaeda calceoliformis
seepweed	*Suaeda* sp.
squirreltail	*Elymus elymoides*
squirreltail	*Elymus elymoides* - clasping pepperweed
Lepidium perfoliatum[1]	
squirreltail	*Elymus elymoides* - Mojave seablite *Suaeda moquinii*
tansymustard	*Descurainia* sp.
wildrye	*Elymus* L. sp.
Black sagebrush	*Artemisia nova* A. Nelson
bluebunch wheatgrass	*Pseudoroegneria spicata* ssp. *spicata*
Sandberg bluegrass	*Poa secunda*
squirreltail	*Elymus elymoides*
Bluebunch wheatgrass	*Pseudoroegneria spicata* (Pursh) A. Löve ssp. *spicata*
tansymustard	*Descurainia* sp.
Bluegrass	*Poa* L. sp.
Bud sagebrush	*Picrothamnus desertorum* Nutt.
cheatgrass	*Bromus tectorum*[1]
squirreltail	*Elymus elymoides*
squirreltail	*Elymus elymoides* - seepweed *Suaeda* Forssk. ex J.F. Gmel.
Cheatgrass	*Bromus tectorum* L.[2]
clasping pepperweed	*Lepidium perfoliatum*[2]
narrowleaf soap plant	*Chlorogalum angustifolium* Kellogg
tansymustard	*Descurainia* sp.
Crested wheatgrass	*Agropyron cristatum* (L.) Gaertn.[2]
lupine	*Lupinus* L. sp.
milkvetch	*Astragalus* sp.
tansymustard	*Descurainia* sp.
Curl-leaf mountain mahogany	*Cercocarpus ledifolius* Nutt.
Idaho fescue	*Festuca idahoensis*
mountain big sagebrush	*Artemisia tridentata* Nutt. ssp. *vaseyana* (Rydb.)
Beetle- bluegrass	*Poa* sp.
Dock	*Rumex* L.
Idaho fescue	*Festuca idahoensis* Elmer
lupine	*Lupinus* sp.
Hardstem bulrush	*Schoenoplectus acutus* (Muhl. ex Bigelow)
	A. Löve & D. Löve var. *acutus*
Littleleaf horsebrush	*Tetradymia glabrata* Torr. & A. Gray

Low or little sagebrush	*Artemisia arbuscula* Nutt.
bluebunch wheatgrass	*Pseudoroegneria spicata* ssp. *spicata*
bluebunch wheatgrass	*Pseudoroegneria spicata* ssp. *spicata* - milkvetch
	Astragalus sp.
bluebunch wheatgrass	*Pseudoroegneria spicata* ssp. *spicata* - spiny phlox *Phlox hoodii*
Richardson bluegrass	*Poa* sp.
brome grass	*Bromus* L. sp.
Idaho fescue	*Festuca idahoensis*
Idaho fescue	*Festuca idahoensis* - spiny phlox *Phlox hoodii*
Idaho fescue	*Festuca idahoensis*- prickly phlox
	Leptodactylon Hook. & Arn.
Idaho fescue	*Festuca idahoensis* - spreading phlox *Phlox diffusa* Benth.
prairie Junegrass	*Koeleria macrantha* (Ledeb.) Schult. - willowherb
	Epilobium L.
Sandberg bluegrass	*Poa secunda*
Sandberg bluegrass	*Poa secunda* - longleaf phlox *Phlox longifolia* Nutt.
Sandberg bluegrass	*Poa secunda* - spreading phlox *Phlox diffusa*
squirreltail	*Elymus elymoides*
Thurber's needlegrass	*Achnatherum thurberianum*
Mat muhly	*Muhlenbergia richardsonis* (Trin.) Rydb.
povertyweed	*Iva axillaris*
Meadow Barley	*Hordeum brachyantherum* Nevski
Mountain big sagebrush	*Artemisia tridentata* Nutt. ssp. *vaseyana* (Rydb.) Beetle
bluebunch wheatgrass	*Pseudoroegneria spicata* ssp. *spicata*
bluegrass	*Poa* sp.
brome grass	*Bromus* sp.
cheatgrass	*Bromus tectorum*[1]
crested wheatgrass	*Agropyron cristatum*[2]
Idaho fescue	*Festuca idahoensis*
Idaho fescue	*Festuca idahoensis* - buckwheat *Eriogonum* sp.
needle and thread	*Hesperostipa comata* ssp. *comata*
ponderosa pine	*Pinus ponderosa* C. Lawson - sedge *Carex* sp.
Sandberg bluegrass	*Poa secunda*
sedge	*Carex* sp.
squirreltail	*Elymus elymoides*
Thurber's needlegrass	*Achnatherum thurberianum*
western needlegrass	*Achnatherum occidentale* ssp. *occidentale*
western juniper	*Juniperus occidentalis* Hook.
Needle and thread	*Hesperostipa comata* (Trin. & Rupr.) Barkworth ssp. *comata*
Orchardgrass	*Dactylis glomerata* L. [2]
Ponderosa pine	*Pinus ponderosa* C. Lawson
antelope bitterbrush	*Purshia tridentata* (Pursh) DC. - Idaho fescue
	Festuca idahoensis
curl-leaf mountain mahogany	*Cercocarpus ledifolius* - Idaho fescue *Festuca idahoensis*
Idaho fescue	*Festuca idahoensis*
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* - bluebunch wheatgrass
	Pseudoroegneria spicata ssp. *spicata*
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* - Idaho fescue *Festuca idahoensis*
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* - Sandberg bluegrass
	Poa secunda
Thurber's needlegrass	*Achnatherum thurberianum*
yellow rabbitbrush	*Chrysothamnus viscidiflorus* (Hook.) Nutt. - western needlegrass *Achnatherum*
	occidentale ssp. *occidentale*
Povertyweed	*Iva axillaris* Pursh
Rock willow	*Salix vestita* Pursh
saltgrass	*Distichlis* sp.
Rubber rabbitbrush	*Ericameria nauseosa* (Pall. ex Pursh)
	G.L. Nesom & Baird ssp. *consimilis* (Greene)

	G.L. Nesom & Baird var. *ceruminosa* (Durand & Hilg.)
	G.L. Nesom & Baird
basin wildrye	*Leymus cinereus*
beardless wildrye	*Leymus triticoides*
beardless wildrye	*Leymus triticoides* - tansymustard *Descurainia* sp.
Sandberg bluegrass	*Poa secunda* - desert parsley *Lomatium* Raf. sp.
squirreltail	*Elymus elymoides*
Rubber rabbitbrush	*Ericameria nauseosa* (Pall. ex Pursh) G.L. Nesom & Baird ssp. *nauseosa* var. *nauseosa*
basin wildrye	*Leymus cinereus*
beardless wildrye	*Leymus triticoides*
bluebunch wheatgrass	*Pseudoroegneria spicata* ssp. *spicata*
cheatgrass	*Bromus tectorum*[1]
cheatgrass	*Bromus tectorum*[1] - tansymustard *Descurainia* sp.
crested wheatgrass	*Agropyron cristatum*[2]
Idaho fescue	*Festuca idahoensis*
Indian ricegrass	*Achnatherum hymenoides*
medusahead	*Taeniatherum* Nevski sp.[1]
needle and thread	*Hesperostipa comata* ssp. *comata*
saltgrass	Distichlis spicata
smooth brome	*Bromus inermis* Leyss.[2]
squirreltail	*Elymus elymoides*
Thurber's needlegrass	*Achnatherum thurberianum*
western needlegrass	*Achnatherum occidentale* ssp. *occidentale*
Rush	*Juncus* L.
Russian thistle	*Salsola kali* L.[1]
Saltgrass	*Distichlis spicata* (L.) Greene
seepweed	*Suaeda* sp.
Sandberg bluegrass	*Poa secunda* J. Presl
Sedge	*Carex* L. spp.
Shadscale saltbush	*Atriplex confertifolia* (Torr. & Frém.) S. Watson
cheatgrass	*Bromus tectorum*[1]
cheatgrass	*Bromus tectorum*[1] - clasping pepperweed *Lepidium perfoliatum*
cheatgrass	*Bromus tectorum*[1] - Russian thistle *Salsola kali*
cheatgrass	*Bromus tectorum*[1] - tansymustard *Descurainia* sp.
saltgrass	*Distichlis spicata*
sand dropseed	*Sporobolus cryptandrus* (Torr.) A. Gray
Sandberg bluegrass	*Poa secunda*
squirreltail	*Elymus elymoides*
squirreltail	*Elymus elymoides* - seepweed *Suaeda* sp.
Sickle saltbush	*Atriplex falcata* (M.E. Jones) Standl.
squirreltail	*Elymus elymoides*
Silver sagebrush	*Artemisia cana* Pursh
beardless wildrye	*Leymus triticoides*
bluegrass	*Poa* sp.
brome grass	*Bromus* sp.
figwort	*Scrophularia* L. sp.
mat muhly	*Muhlenbergia richardsonis*
rush	*Juncus* sp.- unidentified annual forb
rush	*Juncus* sp.- cryptantha *Cryptantha* Lehm. ex G. Don
rush	*Juncus* sp.- povertyweed *Iva axillaris*
Sandberg bluegrass	*Poa secunda*
Sandberg bluegrass	*Poa secunda* - unidentified annual forb
sedge	*Carex* sp.
sedge	*Carex* sp. - unidentified annual forb
sedge	*Carex* sp.- povertyweed *Iva axillaris*
spikerush	*Eleocharis* R. Br. sp.
squirreltail	*Elymus elymoides*

squirreltail *Elymus elymoides* - lupine *Lupinus* sp.
squirreltail *Elymus elymoides* - povertyweed *Iva axillaris*
squirreltail *Elymus elymoides* - sulphur-flower buckwheat *Eriogonum umbellatum*
Wheeler bluegrass *Poa nervosa* (Hook.) Vasey
wildrye *Elymus* sp.
wood bluegrass *Poa nemoralis* L.
Spikerush *Eleocharis* R. Br.
Spiny hopsage *Grayia spinosa* (Hook.) Moq.
beardless wildrye *Leymus triticoides*
cheatgrass *Bromus tectorum*[1]
crested wheatgrass *Agropyron cristatum*[1]
squirreltail *Elymus elymoides*
Squirreltail *Elymus elymoides* (Raf.) Swezey
clasping pepperweed *Lepidium perfoliatum*[2]
dock *Rumex* sp.
evening primrose *Oenothera* L. sp.
knotweed *Polygonum* L. sp.
povertyweed *Iva axillaris*
tansyleaf evening primrose *Camissonia tanacetifolia* (Torr. & A. Gray) P.H. Raven ssp. *tanacetifolia*
Thickspike wheatgrass *Elymus lanceolatus* (Scribn. & J.G. Sm.) Gould ssp. *lanceolatus*
Threetip sagebrush *Artemisia tripartita* Rydb. ssp. *tripartita*
Thurber's needlegrass *Achnatherum thurberianum* (Piper) Barkworth
Timothy (not identified to species: most likely alpine (or mountain) timothy *Phleum alpinum* L. or possibly nonnative (*P. pratense* L.)
Western juniper *Juniperus occidentalis* Hook.
Antelope bitterbrush *Purshia tridentata* - Thurber's needlegrass *Achnatherum thurberianum* - pussytoes *Antennaria* Gaertn. sp.
basin big sagebrush *Artemisia tridentata* ssp. *tridentata* - bluebunch wheatgrass *Pseudoroegneria spicata* ssp. *spicata*
basin big sagebrush *Artemisia tridentata* ssp. *tridentata* – cheatgrass *Bromus tectorum*[1]
basin big sagebrush *Artemisia tridentata* ssp. *tridentata* – Idaho fescue *Festuca idahoensis*
basin big sagebrush *Artemisia tridentata* ssp. *tridentata* – Indian ricegrass *Achnatherum hymenoides*
basin big sagebrush *Artemisia tridentata* ssp. *tridentata* – Sandberg bluegrass *Poa secunda*
basin big sagebrush *Artemisia tridentata* ssp. *tridentata* – squirreltail *Elymus elymoides*
basin big sagebrush *Artemisia tridentata* ssp. *tridentata* – Thurber's needlegrass *Achnatherum thurberianum*
basin big sagebrush *Artemisia tridentata* ssp. *tridentata* – western needlegrass *Achnatherum occidentale* ssp. *occidentale*
beardless wildrye *Leymus triticoides* - granite prickly phlox *Linanthus pungens*
big sagebrush *Artemisia tridentata* - bluegrass *Poa* sp.
big sagebrush *Artemisia tridentata* - Thurber's needlegrass *Achnatherum thurberianum*
big sagebrush *Artemisia tridentata* - Idaho fescue *Festuca idahoensis*
big sagebrush *Artemisia tridentata* - bluebunch wheatgrass *Pseudoroegneria spicata* ssp. *spicata*
big sagebrush *Artemisia tridentata* - cheatgrass *Bromus tectorum*[1]
bluebunch wheatgrass *Pseudoroegneria spicata* ssp. *spicata*
bluegrass *Poa* sp.
curl-leaf mountain mahogany *Cercocarpus ledifolius* - Idaho fescue *Festuca idahoensis*
Idaho fescue *Festuca idahoensis*
low or little sagebrush *Artemisia arbuscula*
low or little sagebrush *Artemisia arbuscula* - bluebunch wheatgrass *Pseudoroegneria spicata* ssp. *spicata*
low or little sagebrush *Artemisia arbuscula* - crested wheatgrass *Agropyron cristatum*[1]

low or little sagebrush	*Artemisia arbuscula* - Idaho fescue *Festuca idahoensis*
low or little sagebrush	*Artemisia arbuscula* - Idaho fescue *Festuca idahoensis* - lupine *Lupinus* sp.
low or little sagebrush	*Artemisia arbuscula* - Idaho fescue *Festuca idahoensis* -spiny phlox *Phlox hoodii*
low or little sagebrush	*Artemisia arbuscula* - Idaho fescue *Festuca idahoensis* – spreading phlox *Phlox diffusa*
low or little sagebrush	*Artemisia arbuscula* - onespike danthonia *Danthonia unispicata* (Thurb.) Munro ex Macoun
low or little sagebrush	*Artemisia arbuscula* - Sandberg bluegrass *Poa secunda*
low or little sagebrush	*Artemisia arbuscula* - squirreltail *Elymus elymoides*
low or little sagebrush	*Artemisia arbuscula* - Thurber's needlegrass *Achnatherum thurberianum*
milkvetch	*Pseudoroegneria spicata* ssp. *Spicata* - *Astragalus* sp.
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – bluebunch wheatgrass *Pseudoroegneria spicata* ssp. *spicata*
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – bluebunch wheatgrass
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – bluegrass *Poa* sp.
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – cheatgrass *Bromus tectorum*[1]
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – crested wheatgrass *Agropyron cristatum*[1]
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – Idaho fescue *Festuca idahoensis* – pussytoes *Antennaria* sp.
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – Idaho fescue *Festuca idahoensis* – spreading phlox *Phlox diffusa*
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – needle and thread *Hesperostipa comata* ssp. *comata*
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – prairie Junegrass *Koeleria macrantha*
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – Sandberg bluegrass *Poa secunda*
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – squirreltail *Elymus elymoides*
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – Thurber's needlegrass *Achnatherum thurberianum*
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* – western needlegrass *Achnatherum occidentale* ssp. *occidentale*
mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana* - wildrye *Elymus* sp.
onespike danthonia	*Danthonia unispicata* - longleaf phlox *Phlox longifolia*
rubber rabbitbrush	*Ericameria nauseosa* ssp. *nauseosa* var. *nauseosa* – bluebunch wheatgrass *Pseudoroegneria spicata* ssp. *spicata*
rubber rabbitbrush	*Ericameria nauseosa* ssp. *nauseosa* var. *nauseosa* – cheatgrass *Bromus tectorum*[1]
rubber rabbitbrush	*Ericameria nauseosa* ssp. *nauseosa* var. *nauseosa* – crested wheatgrass *Agropyron cristatum*[1]
rubber rabbitbrush	*Ericameria nauseosa* ssp. *nauseosa* var. *nauseosa* – needle and thread *Hesperostipa comata* ssp. *comata*
rubber rabbitbrush	*Ericameria nauseosa* ssp. *nauseosa* var. *nauseosa* – squirreltail *Elymus elymoides*
Thurber's needlegrass	*Achnatherum thurberianum*
wax currant	*Ribes cereum* Douglas - bluebunch wheatgrass *Pseudoroegneria spicata* ssp. *spicata*
Wyoming big sagebrush	*Artemisia tridentata* Nutt. ssp. *wyomingensis* Beetle and Young - Idaho fescue *Festuca idahoensis*
yellow rabbitbrush	*Chrysothamnus viscidiflorus* (Hook.) Nutt. ssp. *viscidiflorus* var. *stenophyllus* (A. Gray) H.M. Hall –
Thurber's needlegrass	*Achnatherum thurberianum*

wheatgrass	*Agropyron* Gaertn.
White fir	*Abies concolor* (Gord. & Glend.) Lindl. ex Hildebr.
Winterfat	*Krascheninnikovia lanata* (Pursh) A. Meeuse & Smit
Wyoming big sagebrush	*Artemisia tridentata* Nutt. ssp. *wyomingensis* Beetle & Young
basin wildrye	*Leymus cinereus*
beardless wildrye	*Leymus triticoides*
bluebunch wheatgrass	*Pseudoroegneria spicata* ssp. *spicata*
bluebunch wheatgrass	*Pseudoroegneria spicata* - spiny phlox *Phlox hoodii*
bluegrass	*Poa* sp.
cheatgrass	*Bromus tectorum*[1]
crested wheatgrass	*Agropyron cristatum*[1]
Cusick's bluegrass	*Poa cusickii*
Idaho fescue	*Festuca idahoensis*
Indian ricegrass	*Achnatherum hymenoides*
larkspur	*Delphinium* L. sp.
needle and thread	*Hesperostipa comata* ssp. *comata*
Sandberg bluegrass	*Poa secunda*
Sandberg bluegrass	*Poa secunda* - clasping pepperweed *Lepidium perfoliatum*
Sandberg bluegrass	*Poa secunda* - longleaf phlox *Phlox longifolia*
squirreltail	*Elymus elymoides*
stipa/needlegrass	(now *Achnatherum* P. Beauv.) sp.
thickspike wheatgrass	*Elymus lanceolatus* ssp. *lanceolatus*
Thurber's needlegrass	*Achnatherum thurberianum*
Yellow rabbitbrush	*Chrysothamnus viscidiflorus* (Hook.) Nutt.
basin wildrye	*Leymus cinereus*
beardless wildrye	*Leymus triticoides*
beardless wildrye	*Leymus triticoides* - povertyweed *Iva axillaris*
bluebunch wheatgrass	*Pseudoroegneria spicata* ssp. *spicata*
cheatgrass	*Bromus tectorum*[1]
cheatgrass	*Bromus tectorum*[1] – scurfpea *Psoralidium* Rydb. sp.
cheatgrass	*Bromus tectorum*[1] - tumble mustard *Sisymbrium altissimum*[1]
cheatgrass	*Bromus tectorum*[1] - tansymustard *Descurainia* sp.
crested wheatgrass	*Agropyron cristatum*[1]
crested wheatgrass	*Agropyron cristatum*[1] - tansymustard *Descurainia* sp.
crested wheatgrass	*Agropyron cristatum*[1] – unidentified annual forb
Idaho fescue	*Festuca idahoensis*
Indian ricegrass	*Achnatherum hymenoides*
needle and thread	*Hesperostipa comata* ssp. *comata*
western needlegrass	Achnatherum occidentale ssp. occidentale
Thurber's needlegrass	*Achnatherum thurberianum*
saltgrass	*Distichlis spicata*
Sandberg bluegrass	*Poa secunda*
sedge	*Carex* sp.
squirreltail	*Elymus elymoides*
squirreltail	*Elymus elymoides* - tansymustard *Descurainia* sp.
tansy mustard	*Descurainia* sp.

Other Land Cover Types (Non-Vegetated)
Unvegetated areas
Unstable lands – steep unvegetated slopes; sand dunes
Rockland – unvegetated rock covered surface
Water – ponds and lakes
Burned lands – recently burned areas where vegetation recovery has not yet occurred
Lakebed/Playa – open, unvegetated dry lakebeds with highly saline or alkaline soils

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[1] Non-native species.

1996) depend on vegetation to control stream function. The type of vegetation is also critical. Larger sedges have more extensive soil-holding ability than grasses like Kentucky bluegrass. Large woody debris, such as tree trunks or boulders, may supply the bank-forming structure on streams (other than the vegetation-dependent ones).

Structure and type of vegetation is critical to wildlife and fish habitat, even when it does not control stream morphology, condition, or function. Quaking aspen, taller willows, and cottonwood supply vertical structure for neo-tropical migrant birds. Cavity nesters make use of trees as they age and decay. Vegetation also supplies shade to the stream and helps to cool the water. Leaves from hardwoods supply nutrients to the riparian and aquatic system. In some areas, these leaves can be the driving force as a food source for aquatic macroinvertebrates, which in turn become a food source for fish.

Cottonwood deserves special consideration when managing riparian vegetation. Many cottonwood stands have declined in the planning area. Some remnant stands have little or no natural regeneration, while identification of some historic stands occurs only by the remaining dead and down trees. Cottonwood seed establishment occurs during flood events when a silt bed is developed. Normal water levels do not present the conditions needed for seedling establishment. Seedlings must be protected from grazing for a period after establishment in order to survive.

Riparian vegetation communities are more diverse than the surrounding upland areas and are able to support a wider variety of wildlife species. This is especially true when considering the amount of habitat edge that exists between the riparian and upland vegetation types. The riparian habitat "islands" provided around springs are of special significance because they often provide the only habitat diversity in uniform upland desert communities.

Wetland Vegetation (Lentic Systems)

Lentic wetland systems consist of standing water systems, such as lakes, ponds, seeps, bogs, and meadows (BLM 1994a, 1999e). The large numbers of closed basins that typify the High Desert Province include dry (historic) lakebeds, lakebeds that are inundated infrequently and for short periods, perennial lakes that fluctuate in size, and wetlands and marshes that are reasonably perennial. Vegetation on these bottomlands varies according to the frequency, depth, and duration of inundation. Probably the most significant and valuable wetlands in the High Desert Province, from an ecosystem viewpoint, are those associated with isolated springs and small streams scattered over the arid landscape. The variety of shrubs, grasses, and forbs depends on the degree and duration of wetness and shade at each location (Williams 1998).

Hardstem bulrush-cattail marshes form open to dense, nearly monotypic (solitary) stands of bulrush where standing water is located throughout much of the growing season. Patches of cattail, burreed, and several species of *Scirpus* are the most important graminoids. *Carex* species occur in and around this habitat type, along with *Eleochari*s and *Juncus* species. In some areas, spike rush forms a monotypic community along wetland channels.

Sedge montane meadows and wetlands are scattered throughout the planning area with tall sedge meadows and wetlands, with dense, rhizomatous, or tufted sedges dominating the meadows. Usually these areas are low in forb production. Tufted hairgrass is the most common grass, occurring at the drier margins. The forbs often present are *Potentilla, Geum, Lupinus,* and *Lomatium* species and occasionally blue camas and *Perideridium* species. *Salix* species dominate streams that run though these meadows. Tufted hairgrass montane meadows and valley prairie occur on a few sites in the planning area. These tall montane meadow grasslands with dense, tufted grasses range from forb-rich to grass-sedge dominated

areas. Occasionally, willows, silver sagebrush, and black greasewood are located in these areas. Tufted hairgrass is usually the dominant species. In some areas, Nevada bluegrass or Cusick's bluegrass are entirely dominant. *Carex* and *Juncus* species are co-dominant in wetter margins.

Proper Functioning Condition Methodology

In response to growing concern over the integrity of ecological processes in many riparian and wetland areas, the BLM Director approved the Riparian-Wetland Initiative for the 1990s (BLM 1991d), establishing national goals and objectives for managing riparian/wetland resources on BLM-administered land. The initiative's goals were to restore and maintain existing riparian/wetland areas so that 75% or more were in proper functioning condition by 1997 and to provide the widest variety of habitat diversity for wildlife, fish, and watershed protection. Subsequently, the BLM established a definition for proper functioning condition and a methodology for its assessment (BLM 1993a). With the BLM adoption of proper functioning condition assessment as a standard for evaluating riparian areas, this standard will supplement existing stream channel and riparian evaluations and assessments. The following describes how proper functioning condition is defined separately for lotic and lentic waters:

Lotic Systems

Lotic riparian/wetland areas are functioning properly when adequate vegetation, landform, or large woody debris are present to:

- Dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality;
- Filter sediment, capture bedload, and aid floodplain development;
- Improve floodwater retention and groundwater recharge;
- Develop root masses that stabilize streambanks against cutting action;
- Develop diverse ponding and channel characteristics to provide the habitat, water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses;
- Support greater biodiversity.

Lentic Systems

Lentic riparian/wetland areas are functioning properly when adequate vegetation, landform, or debris is present to:

- Dissipate energies associated with wind action, wave action, and overland flow from adjacent sites, thereby reducing erosion and improving water quality;
- Filter sediment and aid floodplain development;
- Improve flood water retention and groundwater recharge;
- Develop root masses that stabilize islands and shoreline features against cutting action;
- Restrict water percolation;
- Develop diverse ponding characteristics to provide the habitat and water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses;
- Support greater biodiversity.

Condition Definitions

The functioning condition of riparian/wetland areas is a result of the interaction of geology, soil, water, and vegetation; because of this, the process of assessing whether or not a riparian/wetland area is functioning properly requires an interdisciplinary team of specialists in vegetation, soils, hydrology, and wildlife biology. Site-specific and onsite assessments are necessary because of the unique attributes of individual riparian areas.

Riparian/wetland areas are determined to be *functional-at-risk* when they are in functional condition, but an existing soil, water, or vegetation attribute makes them susceptible to degradation. Additionally, these areas are distinguished based on whether or not they demonstrate an *upward*, *static*, or *downward* trend. When riparian/wetland areas are not providing adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows and thus are not reducing erosion and improving water quality as listed above, the areas are classified as *non-functional*. The absence of a particular physical attribute, such as a floodplain, is an indicator of nonfunctional condition. However, in some cases, not all elements are required for a stream to function. For example, a bedrock- or boulder-controlled stream would not need vegetation in order to meet the definition of proper functioning condition. Also, since there is no way to improve floodwater retention in these two types of streams, it would not have to meet the third component—improve floodwater retention and groundwater recharge—in order to be in proper functioning condition.

Riparian/wetland areas are classified as being in *unknown* condition when the BLM lacks sufficient information to make a condition determination.

Riparian/wetland areas will typically reach proper functioning condition before they achieve an advanced ecological status. The range between proper functioning condition and an area's biological potential then becomes the decision space for social, economic, and other resource considerations. Until attainment of proper functioning condition occurs, management priorities and options concentrate on reaching this condition. In areas that meet proper functioning condition, the focus of management is to ensure a continuation of this condition.

Appendix 7 – Best Management Practices and Other Protective Measures

Table of Contents

Introduction

Best Management Practices (BMPs) are discretionary land or resource management techniques designed to maximize beneficial results and minimize (mitigate) negative impacts of proposed management actions. Interdisciplinary, site-specific NEPA analysis is necessary to determine which BMPs are appropriate to apply to a given project-level proposal. This process can be described in five steps which include: 1) selection of a specific BMP(s); 2) application of the BMP(s); 3) monitoring; 4) evaluation; and 5) feedback. Data gathered through monitoring can be evaluated and used to identify changes needed in BMP design or application (BLM 2003a).

Wilderness Characteristics BMPs - Alternatives B-E

Under these alternatives, the following additional BMPs would be used to reduce or eliminate potential effects of management actions on wilderness characteristics within Category C units, where appropriate. These BMPs could also be used to reduce potential effects of management actions on wilderness characteristics within Category B units at the discretion of the decision-maker.

Ground Disturbance

- Move or avoid surface-disturbing activities in sensitive areas (including Category C or B units) to reduce visual effects (BLM 2003b, Appendix D, p. A-4).
- Contour disturbed areas to blend[1] with the natural topography. Disturbance in visually sensitive areas (including Category C or B units) should be re-contoured to match the original topography.

Vegetation Treatment, Restoration, and Rehabilitation

- Design forest health treatments to blend[1] with natural terrain (BLM 2003b, Appendix D, p. A-5) in Category C or B units.
- Scatter woody material/slash (tree tops, limbs, etc.) in cutting units and treatment areas (where there is no follow-up prescribed burning planned), consistent with fuel loading limitations (BLM 2003b, Appendix D, p. A-5) in Category C or B units.
- Avoid piling and burning woody material or slash within riparian/wetland areas (BLM 2003b, Appendix D, p. A-6) in Category C or B units.
- Where possible conduct prescribed burning under conditions when a low-intensity burn can accomplish stated objectives and protect soil productivity. To retain the organic surface or duff layer, burn when soils and/or organic duff layers have adequate moisture, or are snow-covered or frozen to minimize potential effects to the physical and chemical properties of soils (BLM 2003b, Appendix D, p. A-5 to A-6) in Category C or B units.
- Where vegetative screening was a key component of finding an outstanding opportunity for solitude, leave a portion of existing tall shrubs and/or large trees on-site to retain screening and solitude opportunities when conducting vegetation treatments/restoration actions in Category C units.

Visual

- Design management actions within Category C units to meet VRM Class II objectives.
- Design management actions within Category B units to meet VRM Class III objectives.

[1] Blending is defined as reducing form, line, and color contrast associated with the surface disturbance. Matching is defined as reproducing the original topography and eliminating form, line, and color caused by the disturbance as much as possible (BLM 2003b, Appendix D, p. A-4).

- Apply special design or reclamation measures to protect scenic and natural landscape values (including those within Category C or B units). This could include designing above-ground facilities to blend in with the surrounding environment, transplanting trees and shrubs, use low-profile permanent facilities, and painting with neutral colors to minimize visual contrasts (BLM 2003b, Appendix D, p. A-4).
- Avoid cutting and leaving large trees (without follow-up prescribed burning) in visually sensitive areas (VRM Class I or II, designated scenic corridors, and Category C units).
- During hand cut (chainsaw) and pile treatments, pile material on top of stumps to remove or reduce the appearance of stumps following prescribed burning operations in Category C or B units.
- Design the edges of vegetation treatment and restoration areas to blend in with the surrounding vegetation and topography (no straight lines) in Category C or B units.

Required Design Features (RDFs), BMPs, and Other Protective Measures for Other Resources - All Alternatives

A complete listing and explanation of all previously approved BMPs and RDFs associated with other resource management activities are contained in Appendix D of the *Lakeview Resource Management Plan and Record of Decision* (BLM 2003b, as maintained), Instructional Memorandum OR-2011-074 – *Incorporating Road and Sediment Delivery Best Management Practices into Resource Management Plans* (BLM 2011k), and Appendix C of the *Oregon Greater Sage-Grouse Approved Resource Management Plan Amendment* (BLM 2015a). In addition, project design criteria from the *Biological Assessment-Programmatic Informal Consultation with Project Design Criteria for Federal Land Management Activities Affecting the ESA Listed Endangered Gray Wolf* (BLM 2018i) have been carried forward as BMPs. A complete listing and explanation of all previously approved project design features, standard operating procedures, mitigation measures, conservation measures, prevention measures, and BMPs associated with invasive plant management activities are contained in and Appendix A of the *Integrated Invasive Plant Management for the Lakeview Resource Area Revised Environmental Assessment* (BLM 2015e). These RDFs, BMPs, and other protective measures remain in place and are not changed by the alternatives in this RMP Amendment. These measures are hereby incorporated by reference in their entirety. The following section lists where these measures can be located.

Other Resource BMPs *(see Appendix D; BLM 2003b)*

- Road Design and Maintenance (p. A-23; superseded by BLM (2011k) below)
- Surface-Disturbing Activities (p. A-25)
- Rights-of-Way and Utility Corridors (p. A-25)
- Forest Management (p. A-26)
- Fire Suppression (p. A-26)
- Prescribed Burning (p. A-26)
- Livestock Grazing Management (p. A-27)
- Mining (p. A-27)
- Noxious Weed Management (p. A-27; superseded by BLM (2015e) below)
- Developed Recreation (p. A-27)

Road and Sediment Delivery BMPs *(BLM 2011k)*

- Road Construction and Maintenance – (Entire Document)

Sage-Grouse RDFs *(see Appendix C; BLM 2015a)*

- Roads (p. C-3)
- Reclamation (p. C-4)
- Lands and Realty (p. C-4)
- Fluid Mineral Development (p. C-4)
- Fire, Fuels and Vegetation (p. C-5)
    - Vegetation and Fuels Management (p. C-5)
    - Fire Operations (p. C-6)
- Livestock Grazing (p. C-8)
- Noise (p. C-8)
- West Nile Virus (p. C-8)
- Locatable Mineral Development (p. C-9)
- Operations (p. C-9)
- Reclamation (p. C-11)

Sage-Grouse BMPs *(see Appendix C; BLM 2015a)*

- Post Fire and Restoration Seeding (p. C-12)
- West Nile Virus (p. C-13)
- Livestock Grazing (p. C-13)
- Travel Management (p. C-13)

Grey Wolf PDC *(BLM 2018i)*

- Noise or Visual Disturbance(s) (p. 9)
- Livestock Grazing (p. 9)

Invasive Plant Management Project Design Features *(see Appendix A; BLM 2015e)*

- Water (p. 278)
- Cultural Resources and Native American Concerns (p. 279)
- Wilderness Study Areas (p. 279)
- Lands with Wilderness Characteristics (p. 279)
- Organic Farms (p. 280)

Invasive Plant Management Standard Operating Procedures and Mitigation Measures *(see Appendix A; BLM 2015e)*

- General (p. 281)
- Land Use (p. 281)
- Air Quality (p. 283)
- Soil Resources (p. 283)
- Water Resources (p. 284)
- Wetlands and Riparian Areas (p. 286)
- Vegetation (p. 286)
- Pollinators (p. 288)
- Fish and Other Aquatic Resources (p. 288)
- Wildlife Resources (p. 289)
- Threatened and Endangered Species (p. 290)
- Livestock (p. 290)
- Wild Horses and Burros (p. 292)
- Paleontological and Cultural Resources (p. 292)
- Visual Resources (p. 294)

- Wilderness and Other Special Areas (p. 295)
- WSAs (p. 295-296)
- Recreation (p. 296)
- Social and Economic Values (p. 297)
- Rights-of-Way (p. 298)
- Human Health and Safety (p. 299)

Noxious Weed Management BMPs *(see Appendix A; BLM 2015e)*

- Invasive Plant Prevention Measures (p. 302)
- Project Planning (p. 302)
- Project Development (p. 302)
- Revegetation (p. 303)

Invasive Plant Management Conservation Measures *(see Appendix A; BLM 2015e)*

- Plant Conservation Measures (p. 304)
- Aquatic Animals Conservation Measures (p. 309)
- Butterfly or Moth Conservation Measures (p. 312)
- Amphibian and Reptile Conservation Measures (p. 313)
- Fish Conservation Measures (p. 314)

Appendix 8 – Glossary

Acquired land – Land acquired for BLM administration in various ways, such as, but not limited to:

- any lands purchased by congressionally appropriated funds,
- land donations,
- land exchanges,
- Land and Water Conservation Fund acquisitions,
- land withdrawals returned to public land status through withdrawal revocations and/or
- relinquishments,
- split-estate acquisitions,
- federal agency jurisdictional transfers,
- easement acquisitions, and/or
- lands acquired by any other means.

Acquisition – the act or process of acquiring fee title or interest in property.

Active preference - That portion of the total grazing preference for which grazing use may be authorized (*see* 43 CFR 4100.0-5).

Activity planning - Site-specific planning which precedes actual development. This is the most detailed level of BLM planning. See also *Implementation Plan* definition.

Actual use - The amount of animal unit months (AUMs) of forage consumed by livestock based on the numbers of livestock and grazing dates submitted by the livestock operator and confirmed by periodic field checks by the BLM (*see* 43 CFR 4100.0-5).

Adjacent - Specific to an inventory unit and its relative location to a WSA. The inventory unit is adjacent to the WSA if the two are separated by a road or other designated boundary feature. See also *contiguous* definition.

Adjustments - Changes in animal numbers, periods of use, kinds or class of animals or management practices as warranted by specific conditions.

Administrative Use - Administrative use includes BLM, County, Municipal, BLM Permittee, human health and safety, and valid existing rights.

Allotment - An area of land designated and managed for grazing of livestock, where one or more livestock operators may graze livestock (*see* 43 CFR 4100.0-5). Allotments generally consist of BLM- administered lands, but may also include other federally managed, state owned, and private lands. An allotment may include one or more separate pastures.

Allotment categorization - Grazing allotments and rangeland areas used for livestock grazing are assigned to an allotment management category during resource management planning. Allotment categorization is used to establish priorities for distributing available funds and personnel during plan implementation to achieve cost-effective improvement of rangeland resources. Categorization is also used to organize allotments into similar groups for purposes of developing multiple use prescriptions, analyzing site-specific and cumulative impacts, and determining trade-offs. The three management categories (maintain, improve, and custodial) broadly define rangeland characteristics, potential, opportunities, and needs. The criteria for each category are:

Maintain (M) category

- Present range condition is satisfactory.
- Allotments have moderate or high resource production potential and are producing near their potential (or trend is moving in that direction).

- No serious resource: use conflicts/controversies exist.
- Opportunities may exist for positive economic return from public investments.
- Present management appears satisfactory.
- Other criteria appropriate to the planning area.

Improve (I) category

- Present range condition is unsatisfactory.
- Allotments have moderate to high resource production potential and are producing at low to moderate levels.
- Serious resource: use conflicts/controversy exist.
- Opportunities exist for positive economic return from public investments.
- Present management appears unsatisfactory.
- Other criteria appropriate to the planning area.

Custodial (C) category

- Present range condition is not a factor.
- Allotments have low resource production potential and are producing near their potential.
- Limited resource use conflicts/controversy exist.
- Opportunities for positive economic return on public investment do not exist or are constrained by technological or economic factors.
- Present management appears satisfactory or is the only logical practice under existing resource conditions.
- Other criteria appropriate to the planning area.

Allotment management plan (AMP) - A written program of livestock grazing management, including supportive measures if required, designed to attain specific management goals in a grazing allotment (*see* 43 CFR 4100.0-5).

Allowable sale quantity (ASQ) – Formerly referred to as "allowable cut"; the volume that a sustained yield unit can produce annually under an approved land use plan.

Allowable uses - Uses that may be allowed under the land use plan direction and achieve management goals or resolve management issues.

All-Terrain Vehicle (ATV) - Oregon Statutes define all vehicles intended for off-highway use (*see also Off-Highway Vehicle definition)* to be ATVs, but breaks them into 3 classes:

- *Class I:* A wheeled vehicle having a wheelbase and chassis of fifty (50) inches in width or less, steered with handlebars, a dry weight of 800 pounds or less, three or more low-pressure tires, and a seat designed to be straddled by the operator. Examples include 3-wheelers and quads.
- *Class II:* Vehicles wider than 50 inches and having a dry weight of more than 800 pounds. Examples include jeeps, sand rails, and SUVs.
- *Class III:* Vehicles having 2 tires and a dry weight of less than 800 pounds. Examples include motorcycles.

Animal unit month (AUM) - A standardized measurement of the amount of forage necessary for the sustenance of one cow or cow/calf pair for 1 month (approximately 800 pounds of forage). Equivalents are one bull, steer, heifer, horse, burro, mule; or five sheep or goats over the age of 6 months.

Appropriate management level (AML) - The optimum number of wild horses and burros, expressed as a range from low end to top end that contributes to a thriving natural ecological balance on public lands and protects the range from deterioration.

Appropriate management response - Specific actions taken in response to a wildland fire to implement protection and fire use objectives (outdated term).

Aquatic - Living or growing in or on the water.

Archaeological resource – any material remains of human life or activities which are at least 100 years of age, and which are of archaeological interest (43 CFR 7.3(a)).

Archaeological site – *see Cultural Resource* definition.

Area of critical environmental concern (ACEC) - Type of special land use designation specified within the *Federal Land Policy and Management Act* where special management is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards (*see* 43 CFR 1601.0-5).

Assessment - The act of evaluating or interpreting data and information for a defined purpose.

Authorized Use – An activity (*i.e.,* resource use) occurring on the BLM–administered lands that is explicitly or implicitly recognized and legalized by law or regulation.

Avoidance area (right-of-ways) - Areas with sensitive resource values where rights-of-way and Section 302 permits, leases, and easements would be strongly discouraged. Authorizations made in avoidance areas would have to be compatible with the purpose for which the area was designated and not be otherwise feasible on lands outside the avoidance area.

Back-country byways - Vehicle routes that traverse scenic corridors utilizing secondary or back country roads. National back country byways are designated based on the type of road and vehicle needed to travel the byway.

Barotrauma – Trauma caused by rapid or extreme changes in air pressure, especially affecting enclosed cavities within the body.

Base metal - A metal inferior in value to platinum, gold, and silver, generally applied to commercial metals such as copper, lead, and zinc.

Bed load - Coarse sediment particles with a relatively fast settling rate that move by sliding, rolling or bouncing along the streambed in response to higher stream flows.

Beneficial uses - The primary beneficial uses of surface water are domestic water supply, salmonid and resident fish habitat, irrigation, livestock watering, wildlife and hunting, fishing, water contact recreation, and aesthetic quality.

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

Big Game – Indigenous, ungulate (hoofed) wildlife species that are hunted, such as elk, deer, bison, bighorn sheep, and pronghorn antelope.

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

Biodiversity (biological diversity) – The variety of life and its processes, and the interrelationships within and among various levels of ecological organization.

Bioengineering - Techniques combining the biological elements of live plants with engineering design concepts for slope protection and erosion reduction.

Biological Assessment (BA) - Information prepared by a Federal agency to determine whether a proposed action is likely to: (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species that are proposed for listing; or (3) adversely modify proposed critical habitat. Biological assessments must be prepared for "major construction activities" (50 CFR §402.02). A BA may also be recommended for other activities to ensure the agency's early involvement and increase the chances for resolution during informal consultation.

Biological Evaluation (BE) - A document prepared by an agency if a proposed action is likely to affect a listed species or critical habitat. The document reports the agencies evaluation of the likely effects of the action. The USFWS uses this information along with any other available information to decide if concurrence with the agency's determination is warranted.

Biological soil crust (BSC) - Lichens, mosses, green algae, fungi, cyanobacteria, and bacteria growing on or just below the surface of soils.

Biomass - Vegetative material leftover from stand treatments. This term usually refers to such material that can be gathered and transported to cogeneration plants, and there utilized for production of electricity.

Board feet - A unit of solid wood one foot square and one inch thick.

Boundary road - Within the wilderness inventory context this term describes a vehicle route which has been determined to have been improved and maintained by mechanical means to ensure relatively regular and continuous use. As a result, the road has been used to define a wilderness inventory unit boundary (*see Road* and *Roadless* definitions).

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

Browse - To graze a plant (*verb*); also, can refer to the tender shoots, twigs, and leaves of trees and shrubs used as food by livestock and wildlife (*noun*).

Buffer - A protective area adjacent to an area of concern requiring special attention or protection. In contrast to riparian zones which are ecological units, buffers can be designed to meet varying management concerns.

Bunchgrass - Individual grasses that have the characteristic growth habit of forming a "bunch" as opposed to having stolons or rhizomes or single annual habit.

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

BLM-administered land - Land or interest in land owned by the U.S. and administered by the Secretary of Interior through the BLM.

Bureau sensitive species - Native species designated by the state director as sensitive because they are found on BLM-administered lands and are eligible for federal listing, candidate species, state-listed, or state candidate status.

C_3 photosynthetic pathway – Dark reaction pathway of the photosynthesis process in plants where energy rich molecules are used up for the synthesis of carbohydrates from carbon dioxide. The first stable product formed in the C_3 photosynthesis cycle is a three-carbon compound. The photosynthetic efficiency of C3 plants is comparatively less than plants that use a C_4 photosynthetic pathway due to the high rate of photorespiration. About 95% of all plants on earth use this photosynthetic pathway.

Candidate species - Any species included in the *Federal Register* notice of review that are being considered for listing as threatened or endangered under the Endangered Species Act by the U.S. Fish and Wildlife Service.

Casual use - mining activities ordinarily resulting in no, or negligible disturbance of public lands or resources (does not include mechanized earth moving equipment, truck mounted drilling equipment, motorized vehicles in areas designated as Closed to OHV, chemicals, or explosives (*see* 43 CFR 3809.11(c)(5)).

Categorical Exclusion – a category of actions (identified in agency guidance) that do not individually or cumulatively have a significant effect on the human environment, and for which neither and environmental assessment (EA), nor an environmental impact statement (EIS) is required (40 CFR 1508.4).

Channel - An open conduit either naturally or artificially created which periodically or continuously contains moving water or forms a connecting link between two bodies of water.

Channel stability - A term describing the ability of stream channel walls or bottom to withstand erosion or movement due to waterflow.

Chemical (control) - The application of a chemical (such as herbicide) to control, contain or eliminate or reduce populations of invasive plants.

Cherrystem road - A road that extends into a wilderness study area (WSA), but is excluded from the WSA by means of drawing the WSA boundary around the edge of the road.

Clay – Mineral soil particulate less than 0.0022mm in diameter.

Clean Water Act of 1972 (as amended) – Federal legislation governing water pollution control.

Climax community - The culminating stage in plant succession for a given site where vegetation has reached a highly stable condition.

Closed/closure - Generally denotes that an area is not available for a particular use or uses. For example, areas may be closed to livestock grazing, motorized vehicle (OHV) use, energy or mineral leasing, or mineral disposal. However, BLM's authority to implement various types of closures are found in various laws, regulations, or policy guidance for individual resource programs.

Closed (OHV) area designation - An area where off-highway vehicle (OHV) use is prohibited to protect resources, promote visitor safety, or reduce use conflicts (*see* 43 CFR 8340.05). Access by means other than motorized vehicle may be permitted. Use of motorized vehicles in closed areas may be allowed for certain reasons (*see Off-highway vehicle* definition*).*

Commercial forest land - Forest land which is producing, or has a site capable of producing, at least 20 cubic feet/acre/year of a commercial tree species. (*See* also *forest land* definition).

Commercial use – Use of the public lands for commercial purposes such as mineral, timber, and agricultural production, as well as some forms of recreation.

Communication Site – Sites that include broadcast types of uses (e.g., television, AM/FM radio, cable television, and broadcast translator) and non-broadcast uses (e.g., commercial or private mobile radio service, cellular telephone, microwave, local exchange network, and passive reflector).

Comprehensive Travel Management Plan (CTMP) - The document that describes the process and decisions related to the selection and management of the Transportation Network.

Conditional suppression – Fire suppression actions based on pre-determined, stringent conditions (*i.e.* location, weather condition, fire-fighting forces available, and fire size). Monitoring is done throughout the fire's duration and direct suppression would occur if any one condition is exceeded.

Conservation agreement - A formal signed agreement between the USFWS or National Marine Fisheries Service and other parties that implements specific actions, activities, or programs designed to conserve the species by reducing threats to the species, stabilizing the species' populations, and maintaining its ecosystem. The primary purpose of the agreement is to conserve this species through interim conservation measures under the *Endangered Species Act of 1973*. These agreements can be developed at a State, regional, or national level and generally include multiple agencies, as well as Tribes.

Conservation strategy - A strategy outlining current activities or threats that are contributing to the decline of a species, along with the actions or strategies needed to reverse or eliminate such a decline or threats. Conservation strategies are generally developed for species of plants and animals that are designated as BLM sensitive species or

that have been determined by the USFWS or National Marine Fisheries Service to be Federal candidates under the *Endangered Species Act*.

Consistency – In the land use planning context, this term refers to a proposed land use plan that does not conflict with officially approved plans, programs, and policies of Tribes, other Federal agencies, and state, and local governments to the extent practical within Federal law, regulation, and policy (*see* 43 CFR 1601.0-5 and 1610.3-3).

Contiguous – Specific to a wilderness characteristic inventory unit and its relative location to an established area with wilderness characteristics within the planning area.
Control (vegetation) - Eradicating, suppressing, or reducing vegetation; a population that is not exposed to the potentially toxic agent in toxicology or epidemiology studies.

Cooperating Agency – Assists the lead federal agency in developing and environmental assessment (EA) or environmental impact statement (EIS). These can be any agency with jurisdiction by law or special expertise for proposals covered by NEPA (40 CFR 1501.6). Any tribe, or Federal, State or local government jurisdiction with such qualifications may become a cooperating agency by agreement with the lead agency.

Council on Environmental Quality (CEQ) – An advisory council to the President of the U.S., established by NEPA in 1969. The CEQ reviews federal programs to analyze and interpret environmental trends and information.

Critical growth period - A specified period of time in which plants need to develop sufficient carbohydrate reserves and produce *see*d. As an example, the months of May and June for bluebunch wheatgrass.

Critical habitat – Under the *Endangered Species Act*, this term refers to specific areas within the geographical area occupied by a threatened or endangered species that are designated at the time a species is listed because it contains physical or biological features which: (1) are essential to the conservation of the species and (2) may require special management considerations or protection; May also include specific areas located outside the geographical area occupied by the species at the time of listing, but has been determined to be essential for the conservation of the species by the Secretary (of Interior).

Crown (road)- The center of the road that is higher than the outer edges, creating a nearly flat, A-shape with a normal cross slope of ½" to ¾" per foot.

Cultural plant – Plant(s) traditionally used by Native Americans for subsistence, economic, or ceremonial purposes. These plants may be used for purification, ceremonial, subsistence, commercial, and medicinal purposes and for creating objects of personal use, trade, and gift-giving, or sale (FS and BLM 1996h).

Cultural resource - Fragile and non-renewable elements of the physical and human environment including archaeological remains (evidence of pre-historic or historic human activities) and socio-cultural values traditionally held by ethnic groups (sacred places, traditionally utilized raw materials, etc.). These can include archeological sites, historic sites, structures or features, and Native American traditional cultural properties (TCPs).

Cultural resource inventory - An inventory of existing cultural resources/sites within an area using a variety of data collection methods.

- *Class I Inventory*: literature and a profile of the current data base for cultural resources; frequently utilized to guide field inventories.
- *Class II Inventory:* A sample-oriented field inventory which is representative of the range of cultural resources within a finite study area.
- *Class III Inventory:* An intensive field inventory designed to locate and record, from surface and exposed profile, all cultural resources within a specified area.

Culvert - Enclosed channels of various materials and shapes designed to convey stream or ditch water under and away from the roadway.

Cumulative effect or impact - the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions (40 CFR § 1508.7, in effect prior to September 14, 2020)

Deferment - The withholding of livestock grazing until a certain stage of plant growth is reached.

Deferred/Deferred Use – To set-aside or postpone a particular resource use or activity on BLM-administered lands to a later time.

Deferred grazing - Discontinuance of livestock grazing on an area for specified period of time during the growing season to promote plant reproduction, establishment of new plants, or restoration of the vigor of old plants.

Deferred rotation grazing system - A discontinuance of livestock grazing on various parts of a specified range in succeeding years, which allow each section of the range to rest successively during the growing season. This permits seed production, establishment of new seedlings, or restoration of plant vigor. Two, but more commonly three or more, separate pastures are required.

Designated Roads/Trails – specific roads and trails identified by the BLM (or another agency) where some type of motorized/non-motorized use is appropriate and allowed, either seasonally or year-long.

Diatomite - A sedimentary, siliceous rock made from an accumulation of microscopic siliceous skeletons of aquatic plants (diatoms) mixed with shell; also known as diatomaceous earth. The material can be used as a filter, absorbent, abrasive, filler, and insulation.

Ditch - A man-made channel adjacent to a road that is designed to divert water away from the road surface.

Director (BLM Director) - The national director of the BLM.

Dispersed recreation - Recreation activities of an unstructured type which are not confined to specific locations such as designated recreation sites. Example of these activities may be hunting, fishing, off-road vehicle use, hiking, and sightseeing.

Disposal - Any BLM authority which transfers title of surface lands or subsurface minerals out of public ownership.

Distribution - The uniformity of livestock over a given grazed area. Livestock distribution is affected by the availability of water, topography, and type and palatability of vegetation, as well as other factors.

Disturbance – activity that has the potential to accelerate erosion or mass movement; any activity that may disrupt the normal movement or habits of plants or wildlife.

Drainage - The property of a soil that permits the downward flow of excess water. Drainage is reflected in the frequency and duration of soil saturation.

Dry season - An annually variable period of time, starting after spring rains cease and when hillslope subsurface flow declines; drying intermittent streams and roadside ditches. Generally, June through October, but may start or end earlier depending on seasonal precipitation influences.

E-bike - A Class 1, 2, or 3 two- or three-wheeled cycle with fully operable pedals and an electric motor of not more than 750 watts (1 h.p.). Current BLM policy requires e-bikes to follow the requirements for off-highway vehicle (OHV) management. For purposes of this plan amendment, e-bike use will continue to managed as a class of motorized or off-road vehicle. Should the proposed e-bike regulation be approved in the future, the management of e-bikes will be further addressed in a Travel and Transportation Plan (TTMP) (see BLM 2020c).

Easement – permissions issued by BLM in replacement of an existing right-of-way grant.

Ecological site inventory (ESI) - The basic inventory of present and potential vegetation on BLM rangelands. Ecological sites are differentiated on the basis of significant differences in kind, proportion, or amount of plant

species present in the plant community. Ecological site inventories utilize existing soils, existing plant communities, and ecological site data to define the ecological site for a specific area, as well as assign the appropriate ecological status (*see* Appendix 6).

Ecological status - This is a measurement of the relative degree to which the kinds, proportions, and amounts of plants in an existing plant community resemble the potential natural community (PNC) or climax community of a given range site. Four classes are used to express the degree to which the current plant community reflects that of the PNC/climax:

- PNC 76–100%
- Late seral 51–75%
- Mid seral 26–50%
- Early seral 0–25%

Economically feasible - Actions that are practical or feasible from the economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.

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

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

Electric bike – *see E-bike*.

Emergency fire rehabilitation/stabilization – planned actions to stabilize and prevent unacceptable degradation to natural and cultural resources, to minimize threats to life or property resulting from the effects of a fire, or to repair/replace/construct physical improvements necessary to prevent degradation of land or resources. Emergency stabilization actions must be taken within one year following containment of a wildfire.

Endangered species - A plant or animal species whose prospects for survival and reproduction are in immediate jeopardy, as designated by the Secretary of the Interior, and as is further defined by the *Endangered Species Act*.

Endangered Species Act (ESA) - A law passed in 1973 to conserve species of wildlife and plants determined by the Director of the Fish and Wildlife Service or the NOAA Fisheries to be endangered or threatened with extinction in all or a significant portion of its range. Among other measures, ESA requires all federal agencies to conserve these species and consult with the Fish and Wildlife Service or NOAA Fisheries on federal actions that may affect these species or their designated critical habitat.

Environmental assessment - One type of document prepared by Federal agencies in compliance with the *National Environmental Policy Act* (NEPA) which describes the environmental consequences of proposed Federal actions which are not expected to have significant impacts on the human environment. (*See* 40 CFR 1508.9).

Environmental impact statement (EIS) - One type of document prepared by Federal agencies in compliance with NEPA which describes the environmental consequences of proposed major Federal actions which are expected to have significant impacts on the human environment (*see* 40 CFR 1508.11).

Environmental justice population - For purposes of this analysis, a minority individual is one whose race is other than White, or whose ethnicity is Hispanic/Latino, or both. In other words, everyone other than a white, non-Hispanic/Latino is a minority. The U.S. Census Bureau measures race separately from ethnicity. Race is defined most basically as American Indian or Alaska Native, Asian, Native Hawaiian or other Pacific Islander, Black or African American, White, some other race (other than White), or a combination of two or more races. Ethnicity is defined as either being Hispanic/Latino or not, regardless of race. On the census, people self-identify both their race and ethnicity.

Ephemeral stream - A stream that flows water only after rains or during snowmelt.

Erosion - The wearing away of the land surface by running water, wind, ice, or other geological agents.

Evaporite - A sedimentary rock composed primarily of minerals produced from a saline solution as a result of extensive or total evaporation of seawater or inland lakes.

Exchange of use - Grazing authorization issued to a permittee free of charge for unfenced, intermingled private lands within an allotment.

Exclosure (livestock) - An area closed to livestock grazing and intended to remain closed to grazing for a set period of time.

Exclusion area (right-of-way) - Areas with sensitive resource values where rights-of-way and 302 permits, leases, and easements would not be authorized.

Existing routes – The roads, trails or ways that are used by motorized vehicles (e.g., jeeps, all-terrain vehicles, and motorized dirt bikes), mechanical uses, (e.g., mountain bikes, wheelbarrows, and game carts), pedestrians, (e.g., hikers), and/or equestrians (e.g., horseback riders), and are, to the best of BLM's knowledge, in existence at the time of RMP/EIS publication.

Extensive Recreation Management Area (ERMA) - Areas where significant recreation opportunities and problems are limited and explicit recreation management is not required. Minimal management actions related to the Bureau's stewardship responsibilities are adequate in these areas.

Extirpated - Population of a species that has been removed from a specific geographic area where it formerly existed.

Federal candidate species - See *Special status species* definition.

Federal Register – The official daily publication for rules, proposed rules, and notices of federal agencies and organizations, as well as executive orders and other presidential documents.

Federally listed species - Species listed as threatened or endangered under the Endangered Species Act.

Facility Asset Management System (FAMS) - The BLM's official database for the storage and management of transportation system, management facilities, and other structural assets.

Federal Land Policy and Management Act of 1976 (FLPMA) - often referred to as the BLM' s "Organic Act," which provides the majority of the BLM's legislative authority, direction, policy, and guidance for the administration of public lands.

Fine scale - A small landscape area, such as a watershed, sub-watershed, or project area.

Fire (control) – A method of invasive plant control utilizing prescribed fire to control or eliminate invasive plants.

Fire frequency – A general term referring to the recurrence of fire in a given area over time.

Fire management plan (FMP) - A strategic implementation plan to manage wildland and prescribed fires which tiers to, or steps-down the fire management direction from the approved land use plan. The plan may be supplemented by operational procedures such as preparedness plans, pre-planned dispatch plans, prescribed fire plans, and prevention plans.

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

Fire regime - Periodicity and pattern of naturally occurring fire in a particular area or vegetative type, described in terms of frequency, biological severity, and area extent.

Fire return interval - The average time between fires in a given area.

Fire suppression – Activities connected with fire extinguishing operations, beginning with the discovery and continuing until the fire is completely extinguished.

Flask – Unit of measure for mercury which is sold in iron flasks holding 76 lbs. (metric, 34.5 kg), volume about 2.5 liters.

Floodplain - The relatively flat area or lowlands adjoining a body of standing or flowing water which has been or might be, covered by floodwater. It is equivalent to flood prone width (Rosgen 1994). Floodplains are typically associated with streams, lakes, ponds, wetlands, and riparian zones.

Forb - Annual or perennial herbaceous plant other than a grass or shrub.

Forest land - Land that is now, or has the potential of being, at least 10% stocked by commercial forest tree species (based on crown closure), or 16.7% stocked (based on tree stocking).

Fossil - Mineralized or petrified form of previously living organisms from a past geologic age.

Four-wheel drive vehicle - A passenger vehicle or truck having power available to all four wheels.

Fragile soils - Fragile soils are defined as those that are either: hydric (riparian and wetland soils), present on very steep slopes (greater than 65%), or are prone to mass movement. Characteristics of fragile soils render them sensitive to ground disturbing management activities.

Fuels – includes living and dead plant materials that are capable of burning.

General Mining Law of 1872 - provides for claiming and gaining title to locatable minerals on BLM-administered lands. Also referred to as the "General Mining Laws" or "Mining Laws."

Geographic information system (GIS) - A computer system capable of storing, displaying, and analyzing digital and tabular data for physical and biological resources/features for a given geographic area.

Geotextile - A geo-synthetic fabric or textile manufactured from synthetic plastic polymers, not biodegradable, in woven or non-woven types, and used for various purposes ranging from reinforcement and separation to drainage filtration and sediment control.

Geothermal energy - The use of steam and hot water generated by heat from the Earth to do work.

Gravel - in soil, particle sizes between 2 and 64 mm in diameter.

Grazing system – A defined method of managing livestock grazing to accomplish a desired result.

Grazing case file - File for each grazing permittee that contains the grazing permit, bills, records, and direction for each permittee.

Grazing allotment file - File that contains surveys, inventories, monitoring data, and other records pertaining to a specific allotment.

Grazing district - means the specific area within which the public lands are administered under section 3 of the *Taylor Grazing Act*. Public lands outside grazing district boundaries are administered under section 15 of the *Taylor Grazing Act* (*see* 43 CFR 4100.0-5).

Grazing permit - Grazing permit means a document authorizing use of the public lands within an established grazing district. Grazing permits specify all authorized use including livestock grazing, suspended use, and conservation use. Permits specify the total number of AUMs apportioned, the area authorized for grazing use, or both (*see* 43 CFR 4100.0-5).

Grazing preference - Grazing preference means an applicant has a superior or priority position over others for the purpose of receiving a grazing permit or lease. This priority is attached to the base property owned or controlled by a permittee or lessee (*see* 43 CFR 4100.0-5).

Grazing permit relinquishment - is the voluntary and permanent surrender by an existing permittee or lessee, (with concurrence of any base property lienholder(s)), of their priority to use a livestock forage allocation on public land, as well as their permission to use this forage. Relinquishments do not require the consent or approval by BLM.

Green-stripping - The practice of establishing or using patterns of fire resilient vegetation and/or material to reduce wildland fire occurrence and size. This practice also breaks up monocultures such as cheatgrass areas and creates some biodiversity.

Ground cover - Vegetation, mulch, litter, rock, etc. that covers the surface of the ground

Groundwater - Water contained in pore spaces of consolidated and unconsolidated subsurface material.

Guidelines - Actions or management practices that may be used to achieve desired outcomes, sometimes expressed as best management practices. Guidelines may be identified during the land use planning process, but they are not considered a land use plan decision unless the plan specifies that they are mandatory. Examples include guidelines for grazing administration defined under 43 CFR 4180.2.

Habitat - A specific set of physical conditions that surround a species, group of species, or a large community. In wildlife management, the major constituents of habitat are considered to be food, water, cover, and living space.

Herbicide - A pesticide used to control, suppress, or kill vegetation, or severely interrupt normal growth processes.

Herd area - The geographic area identified as having been used by wild horse or burro herds as their habitat in 1971.

Herd management area - Public land under the jurisdiction of the BLM that has been designated for the management or maintenance of an established wild horse herd.

Herd management area plan - An activity plan that prescribes measures for the protection, management, and control of wild horses and burros and their habitat on one or more herd management areas, in conformance with decisions made in management framework or resource management plans.

Hibernaculum – A shelter occupied during the winter by a dormant animal (such as an insect, snake, bat, or marmot).

Historic - Refers to period wherein non-native cultural activities took place, based primarily upon European people, having no origin in the traditional Native American culture(s).

Hydrothermal waters - Hot waters deep within the Earth's crust that quickly ascends to the surface, retaining their heat. Examples include hot springs and geysers.

Immuno-contraceptive - Contraceptive agents stimulated the body's immune response in the host animal against hormones or proteins essential for reproduction and in doing so they block pregnancy or some essential component of reproductive function. Immuno-contraception may include vaccines directed at either reproductive hormone, at sperm, or at ovum. Most wildlife applications include vaccines that are directed at blocking fertilization in the female production of antibodies against the zona pellucida (ZP) of the ovum.

Implementation decision – A decision that leads to on-the-ground actions that implement land use plans. These types of decisions are generally appealable to the Interior Board of Land Appeals under 43 CFR 4.40.

Implementation plan - A site-specific plan written to implement specific decisions previously made in a land use plan. Implementation plans are synonymous with "activity plans". Examples include habitat management plans and allotment management plans. (*See* also *Activity Plan*).

Incorporation by reference - Citation and summarization in a NEPA document of material from another reasonably available document that covers similar actions, issues, effects, or resources.

In-sloping - Constructing and maintaining the entire surface of the road toward the cut slope side of the road.

In-stream work period - periods of time established by Oregon Department of Fish and Wildlife guidelines (ODFW 2008) when in-stream work can be conducted with the least impact on important fish, wildlife, and habitat resources. Work periods are established to avoid the vulnerable life stages of fish including migration, spawning and rearing. Work periods are established for the named stream, all upstream tributaries, and associated lakes within a watershed.

Interior Columbia River Basin Ecosystem Management Project (ICBEMP) - A planning effort that examined the large-scale or regional effects of past and present land use activities in the Interior Columbia River Basin ecosystem and a small part of the Great Basin ecosystem (FS and BLM 1996a, 1997, 2000b).

Intermittent stream - A stream which flows most of the time, but occasionally is dry or reduced to pool stage.

Initial (fire) attack - An aggressive fire suppression action consistent with fire-fighter and public safety and values to be protected.

Instant Study Area (ISA) - A BLM primitive or natural area designated before November 1, 1975, the boundary of which was "instantly" defined as an inventory unit subject to wilderness review under section 603(a) of FLPMA. The only example of this in the Lakeview planning area is the Lost Forest ISA.

Inter-disciplinary - Involving more than one discipline or resource management program.

Invasive (post-settlement) juniper – western juniper trees or stands less than 140 years old, which have expanded into other vegetative sites (*i.e.* sagebrush steppe or riparian areas) following the time of European settlement due mainly to human exclusion of natural fire.

Invasive species - Invasive species are non-native plant or animal species with the potential to out-compete native species and cause significant damage to native ecosystems and/or cause significant economic losses.

Inventory unit – For wilderness characteristics inventory purposes an inventory unit is an area (polygon) that the BLM has determined is bounded by roads that meet the wilderness inventory definition of a boundary road, non-BLM land status, existing right-of-way, or a substantial unnatural feature. The resulting inventory unit may or may not meet the minimum size criterion or contain wilderness characteristics.

Irreversible and Irretrievable Commitment of Resources - commitments of resources that cannot be reversed or that are lost for a long period (40 CFR 1502.16; in effect prior to September 15, 2020).

Issue - A dispute, controversy, or opportunity related to, or regarding resource management which is typically identified through internal or public involvement in the planning or NEPA process (*see* 43 CFR 1601.0-5).

Known geothermal resource area (KGRA) - A specific area identified where geothermal resources are known to occur.

Lacustrine (wetland) - Wetland and deep-water habitats exceeding 2 meters at low water and lacking trees, shrubs, and persistent emergent vegetation (*see* also *Palustrine wetland* definition).

Land classification - A process required by law for determining the suitability of public lands for certain types of disposal or lease under the public land laws or for retention under multiple use management.

Land tenure – process including actions involving disposal of BLM-administered land, acquisition by the BLM of nonfederal lands; or the process of reviewing BLM's interests in specific tracts of land.

- *Zone 1* - high-value public land (such as WSAs and ACECs) that has been identified for retention in public ownership;
- *Zone 2* – public land outside of Zone 1 that has been identified generally for retention and consolidation of ownership; and
- *Zone 3* – public land that generally has low or unknown resource values, meets the disposal criteria of Section 203 of the FLPMA, and is suitable for disposal by a variety of means.

Land use allocation - The identification of the activities and foreseeable development that would be allowed, restricted, or excluded in a land use plan for all or part of the planning area.

Land use authorization - Realty-related authorizations such as leases, permits, and easements authorized under Section 302(b) of the FLPMA and the Recreation and Public Purpose Act.

Land use plan - A set of decisions that establish management direction for land within an administrative area, as prescribed under the planning provisions of FLPMA; an assimilation of land use plan level decisions developed through the planning process outlined in 43 CFR 1600. The term includes both resource management plans (RMPs) and management framework plans (MFPs) (BLM 2005a, 2005i).

Leasable minerals - Minerals that may be leased to private interests by the Federal government; includes oil, gas, geothermal, coal, and sodium compounds.

Leasing – Section 302 of the FLMPA provides the BLM's authority to issue leases for the use, occupancy, and development of BLM-administered land.

Lek – An area where male sage-grouse display during the breeding season to attract females (also referred to as strutting-ground).

Lentic – Water systems that contain standing waters such as lakes, ponds, and some wetlands.

Lotic – Water systems that contain flowing waters such as rivers and streams.

Limited (OHV) area designation - An area where motorized vehicle use is restricted or limited to meet specific resource management objectives. These restrictions may include limits on number of vehicles, type or mode of travel (motorized or non-motorized), type of vehicles (such as OHVs, motorcycles, ATVs, or high clearance), time or season of vehicle use, licensed or permitted use only, BLM administrative use only, use on existing roads and trails, use on designated roads and trails, or other restrictions (43 CFR 8340.05) (*see Off-Highway Vehicle* and *OHV Area Designation* definitions).

Livestock carrying capacity - The maximum stocking rate possible without damaging vegetation or related resources. It may vary from year to year on the same area due to fluctuating forage conditions (*see* 43 CFR 4100.0-5)

Livestock operation - The management of a ranch or farm so that a significant portion of the income is derived from the continuing production of livestock.

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

Low volume road - A road that is functionally classified as a resource road and has a design average daily traffic volume of 20 vehicles per day or less.

Maintenance level (road or trail) - Maintenance levels are assigned to all roads and trails within BLM's transportation plan and Facility Management Asset Management (FAMS) system. Maintenance levels range from 1 to 5 and are described further in Table 9-1 (Appendix 9).

Management action - an action taken to achieve a management goal(s) or resolve a management issue(s).

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

Management framework plan - Older generation of land use plans developed by the BLM that has been replaced by the resource management plan (RMP; *see* 43 CFR 1610.8).

Management goal - A broad statement of a desired outcome(s) or desired result(s) of management efforts. Goals are usually not quantifiable and may not have established time frames for achievement.

Manual (control) - The use of such techniques as pulling, digging, and grubbing weeks to control or eliminate invasive plants.

Mechanical (control) – The use of such techniques as pulling, digging, and grubbing weeds to control or eliminate invasive plants.

Mechanical transport – Any vehicle, device, or contrivance for moving people or material in or over land, water, snow, ice, or air that has moving parts as essential components of the transport and that has wheels, or otherwise applies a mechanical advantage, regardless of the power source. Examples include, but are not limited to bicycles, game carts, wagons, and wheelbarrows. Wheelchairs, as defined in the Americans with Disabilities Act, are not included in this definition.

Mineral entry - The location of mining claims by an individual to protect his right to explore and develop a valuable mineral.

Mineral estate - Refers to the ownership of minerals at or beneath the surface of the land.

Mitigation - The act of reducing or eliminating an adverse environmental impact (*see* 40 CFR 1508.20 and 43 CFR 1601.0-5). Methods or procedures used by a Federal agency to reduce the impacts of an action.

Modified fire suppression strategy - Fire suppression strategy intended to reduce suppression costs and increase resource benefits during the fire season and ensure that suppression costs are commensurate with values at risk. This is accomplished by three primary methods: initial attack, indirect attack and site-specific attack that can be used occasionally in combination with each other. Late season fires may simply be monitored. Land managers may request that initial attack be an indirect effort or that there be no initial attack.

Monitoring - The collection and analysis of data to evaluate the progress and effectiveness of on-the-ground actions in meeting the resource management goals contained in the resource management plan (RMP).

Motorcycle - Motorized vehicle with two tires and a seat designed to be straddled by the operator.

Motorized equipment - Any machine activated by a non-living power source (except small battery-powered, hand-carried devices).

Motorized travel – Travel by means of vehicles propelled by motors such as cars, trucks, OHV's, motorcycles, boats and aircraft. Movement incorporates machines that use a motor, engine, or other nonliving power sources (other than on rails, wheelchairs, or mobility devices).

Motorized vehicle - Any vehicle which is self-propelled or any vehicle which is propelled by electric power obtained from batteries. Synonymous with off-highway vehicle (OHV). Examples of this type of vehicle include cars, trucks, motorcycles, boats, all-terrain vehicles (ATV), Utility Type Vehicle (UTV), Sport Utility Vehicle (SUV), and snowmobiles (*see* definitions for these vehicles listed separately).

Multiple use - The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output (*see* 43 CFR 1601.0-5).

National Environmental Policy Act (NEPA) of 1969 - Law requiring all Federal agencies to evaluate the potential impacts of proposed major Federal actions with respect to their significance on the human environment and consider those effects during the decision-making process.

National Register of Historic Places - A register of districts, sites, buildings, structures, and objects, significant in American history, architecture, archaeology, and culture, established by the Historic Preservation Act of 1966 and maintained by the Secretary of the Interior.

National register potential - Status of a cultural resource which is deemed qualified for the National Register of Historic Places, prior to formal documentation and consultation; managed as if it were actually listed.

National wildlife refuge - An area administered by the U.S. Fish and Wildlife Service (USFWS) for the purpose of managing fish or wildlife species and their habitat.

Native American Tribe - Any native group in the conterminous United States that the Secretary of the Interior recognizes as possessing Tribal status (listed periodically in the *Federal Register*).

Native Seedings – any seeding mix with any amount of non-native seeds cannot be called a “native” seed mix.

Native vegetation – plant species which were found in a location prior to European contact, and consequently and in balance with these ecosystems because they have well-developed parasites, predators, and pollinators.

Natural condition (naturalness) – In the wilderness character inventory context a natural condition refers to an area which “must appear to have been affected primarily by the forces of nature, and any work of human beings must be substantially unnoticeable.” Apparent naturalness is considered rather than “natural integrity”. Apparent naturalness refers to whether or not an area appears to be in a natural condition to the average visitor who is not familiar with the biological composition of natural ecosystems versus human-affected ecosystems in a given area. Major influences on apparent naturalness are structures, evidence of past significant vegetative disturbance such as logging, and other obvious surface-disturbing activities. In contrast, natural integrity refers to the presence or absence of ecosystems that are relatively unaffected by human modern activity (BLM 2012e).

National Landscape Conservation System (NLCS) – Lands designated by Congress and the President that are administered by BLM for the benefit of current and future generations in order to conserve special features and offer the public exceptional opportunities for hunting, solitude, wildlife viewing, fishing, history exploration, scientific research and a wide range of traditional uses.

Natural heritage cell - A unique ecosystem type used by the Oregon Natural Heritage Program to inventory, classify, and evaluate natural areas. Cells must contain one or more ecosystem elements such as plant communities or ecosystems (terrestrial, aquatic, or wetland), special species (species of conservation interest because of their

rarity, risk of extirpation or extinction, or under representation in the statewide natural area system), or unique geologic features (landforms, outcrops, and other geologic units).

Nephelometer - An instrument that determines light scattering, usually measured hour to hour and directed into a computer analysis system. Light scattering is useful as it roughly correlates to the amount of fine particulate matter in the air.

No surface occupancy (NSO) - A major constraint where use or occupancy of the land surface for fluid mineral exploration or development and all activities associated with fluid mineral leasing (e.g., truck-mounted drilling and geophysical exploration equipment off designated routes, and construction of wells and pads) are prohibited to protect identified resource values. Areas identified as NSO are open to fluid mineral leasing, but surface occupancy or surface- disturbing activities associated with fluid mineral leasing cannot be conducted on the surface of the land. Access to fluid mineral deposits would require horizontal drilling from outside the boundaries of the NSO area.

Non-commercial forest land – Forest land which is not capable of producing 20 cubic feet per acre of wood per year of commercial tree species.

Non-commercial tree species - Species whose yields are not reflected in the allowable cut, regardless of their salability. Includes all hardwoods, juniper, and mountain mahogany.

Non-discretionary closures - Areas closed to the operation of the land or mining laws by provisions of other laws, regulations, Secretarial decision, or Executive Order.

Non-motorized travel - Moving by foot, stock or pack animal, canoe, kayak, or rowboat, or mechanized vehicle (bicycle or hang-glider).

Non-operable forest lands – Forest lands that are unsuitable for any type of timber harvest activity due to their (1) physical features; for example, extremely rocky, boulder fields, rim rocks, rock outcrops and unsafe for logging operations and/or (2) forest lands on which logging activity would result in the loss of the site's potential for producing commercial tree species; for example loss of soil through erosion, slope failure and/or the inability to reforest the site within acceptable time limits (usually 5 to 15 years) even with special reforestation techniques.

Non-use - Available grazing capacity expressed in AUMs which is not permitted during a given time period.

Noxious weed - a subset of invasive plants that are county, State, or Federally-listed as injurious to public health, agriculture, recreation, wildlife, or public or private property.

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

Off-highway vehicle (OHV) - An OHV is synonymous with the term Off-Road Vehicle and is defined as any motorized vehicle capable of, or designed for, travel on or immediately over land, water or other natural terrain, excluding 1) Any non-amphibious registered motorboat; 2) Any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; 3) Any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved; 4) Vehicles in official use; and 5) Any combat or combat support vehicle when used in times of national defense emergencies (*see* 43 CFR 8340.0-5). Examples of OHVs include motorcycles, dune buggies, jeeps, four-wheel drive vehicles, snowmobiles, and ATVs.

Official use - use by an employee, agent, or designated representative of the Federal government or one of its contractors, in the course of his employment, agency, or representation.

OHV area designation - Refers to the land use plan decisions or allocations that permit, establish conditions, or prohibit OHV activities on specific areas of public lands. All public lands must be designated as either open, limited, or closed to off-highway vehicles. The definitions of open, limited, and closed are provided in 43 CFR 8340.0-5(f), (g), and (h), respectively (*see* also *Closed (OHV) Area Designation, Limited (OHV) Area Designation, and Open (OHV) Area Designation* definitions).

Old-growth forest – Commercial forest stands meeting, or having the capability to meet the following criteria:

- At least 40 contiguous acres.
- Contain mature trees with at least 15 trees per acre greater than 20 inches in diameter.
- Having a multi-layered forest canopy with two or more age classes.
- Contain snags and down woody material.
- Contain understory plants.

Old-growth juniper woodland – Old-growth juniper woodlands contain groups of pre-settlement trees (in existence prior to 1850) older than 170 years that are typically located on shallow rocky soils, rocky ridges, and other fire-protected sites. Structural characteristics typical of old trees include rounded or asymmetrical tops that may be sparsely limbed, deeply furrowed, fibrous bark, multiple large main trunks with hollows and cavities, and dead limbs (FS and BLM 2018). Old-growth juniper stands can be further characterized as having > 6 standing dead trees and >1 of down wood/ha, > 10% canopy decadence, and an abundance of lichen in the tree canopies (Waichler *et al*. 2001).

Open – A designation that denotes an area is available for a particular use or uses. One must refer to specific program definitions found in law, regulations, or policy guidance for the application of this term to individual resource management programs.

Open (OHV) area designation - An area where all types of motorized vehicle use is permitted at all times, because there are no compelling resource protection needs, user conflicts, or public safety concerns warranting cross-country travel limitations (*see* 43 CFR 8340.05 and *Off-Highway Vehicle* and *OHV Area Designation* definitions).

Outstanding – In the wilderness inventory context this term is defined as, standing out among others of its kind; conspicuous; prominent; superior to others of its kind; distinguished; excellent (BLM 2012h).

Out-sloping - Constructing and maintaining the entire surface of the road toward the fill slope side of the road.

Paleontology - The science of studying past life forms from fossil remains.

Palustrine (wetland) - All non-tidal wetlands dominated by trees, shrubs, and persistent emergent vegetation and water depth in the deepest part of the basin less than 2 meters at low water.

Perennial stream - A stream that ordinarily has running water on a year-round basis.

Period of use - The time of livestock grazing on a range area based on type of vegetation or stage of vegetative growth.

Perlite - A siliceous volcanic glass having numerous concentric spherical cracks that give rise to an onion-skin structure. The material can be heated and expanded to form a solid, foam-like material used in ceiling tiles, potting soil, and other applications.

Permit/lease (grazing) - Under section 3 of the Taylor Grazing Act, a permit is a document authorizing use of public lands within grazing district for the purpose of grazing livestock. Under section 15 of the Taylor Grazing Act, a lease is a document authorizing livestock grazing use of public lands outside grazing districts (*see* 43 CFR 4100.0-5).

Permit relinquishment (grazing) – see *grazing permit relinquishment* definition.

Permitted use (grazing) - The forage (expressed in animal unit months; AUMs) allocated by, or under the guidance of, an applicable land use plan for livestock grazing in an allotment under a permit or lease.

Permit value (grazing) - The market value of a BLM grazing permit which is often included in the overall market value of the ranch.

Petroglyph - A figure, design, or indentation carved, abraded, or pecked into a rock.

Pictograph - A figure or design painted onto a rock.

Plan amendment – A change to a RMP due to the need to consider monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or a proposed action that may result in a change in the scope of resource uses or a change in the terms, conditions, and decisions of the approved plan (*see* 43 CFR 1601.0-5). Typically, only one or two new issues are considered or the proposed change involves only a portion of the RMP planning area.

Plan evaluation – An internal BLM process of periodically reviewing the land use plan and plan monitoring reports to determine whether the land use plan is being implemented as intended and determine if the management decisions and NEPA analysis are still valid. Federal agencies must consider new information that becomes available after a NEPA analysis has been completed to determine if it is relevant to the ongoing action and/or would substantially alter the impact analysis or lead to the need to alter an existing decision (*see* 50 CFR Part 1502.9(c)). For a land use plan this is accomplished through the plan evaluation process. Examples of new information include new research or monitoring studies that are conducted during the life of the plan. New information could lead to the need to amend or revise an existing plan through preparation of a publicly-reviewed plan revision or amendment and associated NEPA document.

Plan maintenance - Resource management plans must be maintained, as necessary, to reflect minor changes in data or clarifications in planning direction. Plan maintenance actions are limited to refining or documenting a previously approved decision from the plan. Maintenance actions cannot expand the scope of the resource uses or restrictions, or alter the terms, conditions, or approved decisions in the plan. Maintenance actions do not require public or agency involvement, but must be documented (*see* 43 CFR 1601.0-5 and 1610.5-4). The public may be informed of plan maintenance actions through documentation placed on BLM's ePlanning or similar webpage or through updating the metadata associated with BLM datasets made available to the public.

Plan conformance - A proposed implementation management action that is specifically identified in the land use plan or is clearly consistent with the goals, objectives, or decisions in the land use plan (*see* 43 CFR 1601.0-5(b)).

Plan revision - The process of completely rewriting the land use plan due to changes in the planning area affecting major portions of the existing plan or the entire plan (*see* 43 CFR 1601.0-5 and 1610.6-7).

Planning area – The geographic area utilized during the preparation of a resource management plan (*see* 43 CFR 1601.0-5). In this specific instance, the Lakeview Resource Area boundary represents the planning area boundary.

Planning criteria - The standards, rules, and other factors developed by managers and interdisciplinary teams for their use in forming judgments about decision making, analysis, and data collection during planning. Planning criteria streamline and simplify the resource management planning actions.

Playa (lakebed) - A shallow lake that is seasonally dry; these lake beds are typically dry more often than inundated. Soils on the lake bottom are usually quite alkaline.

PM2.5 - Particulate matter with a diameter of 2.5 microns or less.

PM10 - Particulate matter with a diameter of 10 microns or less.

Potential natural community (PNC) - The biotic community (living organisms) that would become established on a given site if all successional sequences were completed without interference by man or natural disturbances.

Precious metal - A metal superior in value to commercial metals (copper, lead, and zinc) such as gold, platinum, and silver.

Preferred alternative - The alternative in the EIS which the agency has selected because it best fulfills the agency's statutory mission and responsibilities and offers the most acceptable resolution of the planning issues and management concerns (*see* 40 CFR 1502.14(e)).

Pre-historic - Refers to the period of time where Native American cultural activities took place and were not yet influenced by contact with historic non-native culture(s).

Prescribed fire - The use of fire in an area under controlled conditions for the purpose of achieving specific management objectives (*i.e.* vegetation manipulation, fuel reduction, habitat improvement, etc.).

Pre-suppression - All actions involved in the location or allocation of suppression resources in order to be prepared to suppress wildland fires.

Prevention – To detect and ameliorate conditions that cause or favor the introduction, establishment, or spread of invasive organisms or conditions

Primitive and unconfined recreation - Non-motorized, non-mechanized (except as provided by law), and undeveloped types of recreational activities. In the wilderness character inventory context BLM must determine that an area has an "outstanding opportunity" for primitive and unconfined type of recreation based on the potential for dispersed, undeveloped recreation activities which do not require facilities, motor vehicles, motorized equipment, or mechanized transport. Examples of primitive and unconfined types of recreation include hiking, backpacking, fishing, hunting, spelunking, horseback riding, climbing, rafting, cross-country skiing, snowshoeing, dog sledding, photography, bird watching, canoeing, kayaking, sailing, and sight-seeing for botanical, zoological, or geological features. An area may possess outstanding opportunities for a primitive and unconfined type of recreation through either the diversity in primitive and unconfined recreational activities possible in the area or the outstanding quality of one opportunity (BLM 2012e).

Primitive road - A linear route managed for use by four-wheel drive or high-clearance vehicles. These routes do not customarily meet any BLM road design standards (BLM 2016a).

Primitive route - A linear transportation feature managed located within a WSA or lands with wilderness characteristics designated for protection by a land use plan and not meeting the wilderness inventory road definition (BLM 2016a).

Proper Functioning Condition (PFC) – The condition of riparian and wetland areas when adequate vegetation, landform, or large woody debris are present to dissipate stream energy associated with high water flows. This reduces erosion and improves water quality; filters sediment, captures bedload, and aids in floodplain development; improves floodwater retention and groundwater recharge; develops root masses that stabilize streambanks against cutting; develops diverse ponding and channel characteristics to provide habitat and water depth, duration, and temperature necessary for fish production, avian breeding habitat, and other uses; and supports greater biodiversity.

Proper use - The degree and time of use of the current year's plant growth which, if continued, will either maintain or improve the range condition consistent with conservation of other natural resources.

Public access – The public's opportunity to approach, enter, or make use of public lands.

Public domain – The term applied to any or all areas of land ceded to the federal government by the original states, and to lands acquired by treaty, purchase, or cession, and are disposed of only under the authority of Congress.

Public lands - Land or interest in land owned by the United States and administered by the Secretary of the Interior through the BLM, except lands located on the outer continental shelf, and land held for the benefit of Indians, Aleuts, and Eskimos (*see* 43 CFR 1601.0-5 and 4100.0-5).

Range improvement - means an authorized physical modification or treatment which is designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; restore, protect and improve the condition of rangeland ecosystems to benefit livestock, wild horses and burros, and fish and wildlife. The term includes, but is not limited to, structures, treatment projects, and use of mechanical devices or modification achieved through mechanical means (*see* 43 CFR 4100.0-5).

Range improvement fund - A fund established by Congress in FLPMA comprised of 50 percent of the grazing fees collected by the U.S. Treasury. This fund is to be used for on-the-ground rehabilitation, protection, and improvement of the public lands that will arrest rangeland deterioration and improve forage conditions with resulting benefits to wildlife, watershed protection, and livestock production (*see* 43 CFR 4120.3-8).

Range condition trend - The direction of change in range condition (vegetation and soil).

Raptor - Bird of prey with sharp talons and strongly curved beaks (such as hawks, owls, vultures, and eagles).

Reclamation – Rehabilitation of a disturbed area to make it acceptable for designated uses. This normally involves re-contouring, replacement of topsoil, re-vegetation, and other work necessary to ensure eventual restoration of the site.

Reasonably foreseeable action - Action for which there are existing decisions, funding, formal proposals, or which are highly probable, based on known opportunities or trends.

Record of Decision (ROD) – The final step or decision resulting from the environmental impact statement process that states the decision, identifies the alternatives considered (including the environmentally preferred alternative), and discusses the required mitigation and monitoring commitments.

Recreation and Public Purposes Act - This act authorized the Secretary of the Interior to lease or convey public lands for recreational and public purposes under specified conditions of states or their political subdivisions, and to nonprofit corporations and associations.

Recreational opportunity - Those outdoor recreation activities which offer satisfaction in a particular physical, social, or management setting. Examples include hunting, fishing, wildlife viewing, photography, boating, and camping.

Recreation opportunity spectrum (ROS) - A framework for defining and stratifying classes of outdoor recreation environment, activities, and experience opportunities. These are defined along a continuum or spectrum divided into seven classes: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded modified, roaded natural, rural, and urban.

- *Primitive:* An unmodified natural environment of fairly large size where motorized vehicle use is prohibited. There is a very high probability of experiencing isolation, closeness to nature, and self: reliance on outdoor skills. Activities may include such things as hiking, nature study, fishing, cross: country skiing, and float boating.
- *Semi-primitive Non-motorized:* This is a predominantly natural or natural: appearing environment of moderate to large size. Minimum onsite controls and restrictions may be present. Motorized vehicle use is prohibited. There is a high probability of experiencing isolation, closeness to nature, and self: reliance in outdoor skills. Activities may include such things as camping, hunting, snowshoeing, and float boating.
- *Semi-primitive Motorized:* This is a predominantly natural or natural-appearing environment of moderate to large size. User interaction is low, but there is evidence of other users. Minimum onsite controls and restrictions may be present. Motorized vehicle use is permitted. There is a moderate probability of experiencing isolation, closeness to nature, and self-reliance in outdoor skills. Activities may include such things as boating, motor biking, specialized land craft use, mountain climbing, driving for pleasure, camping, and picnicking.
- *Roaded Natural:* This is a predominantly natural-appearing environment with moderate evidence of humans that usually harmonizes with the natural environment. Conventional motorized vehicle use is allowed. There is an equal probability to experience affiliation with other user groups and for isolation and interaction with the natural environment. Challenge and risk opportunities are not very important, although testing of outdoor skills may be. Opportunities for both motorized and non-motorized recreation are available. Activities may include such things as bus touring, water skiing, walking, canoeing, sledding, and driving for pleasure.
- *Rural:* This is a substantially modified environment. Resource modifications and utilization practices are to enhance specific recreation activities. Facilities are designed for use by a large number of people.

Motorized use and parking opportunities are available. The probability of user interaction is moderate to high, as is the convenience of sites and opportunities. These factors are generally more important than the physical setting. Experiencing natural environments and testing of outdoor skills are generally unimportant. Activities may include such things as interpretive services, swimming, bicycling, recreation cabin use, and skiing.

- *Urban:* This is a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resource modernization and urbanization practices are to enhance specific recreation opportunities. Vegetative cover is often exotic and manicured. Large numbers of users can be expected onsite and in nearby areas. Facilities for highly intensified motor vehicle use and parking are available. The probability of user interaction is high, as is the convenience of sites and opportunities. Experiencing natural environments and uses of outdoor skills are relatively unimportant. Opportunities for competitive and spectator sports and for passive uses are common. Activities may include such things as resort lodging, ice skating, team sports participation, tour boat use, and picnicking.

Recreational river - A river or sections of a river that have been designated as "recreational" under the *Wild and Scenic Rivers Act* because they offer a recreational experience and are readily accessible by road or railroad. Such rivers may have some development along their shorelines and may have undergone some impoundment or diversion in the past.

Recreation site – An area where management actions are required to provide a specific recreation setting and activity opportunities, to protect resource values, provide public visitor safety and health, and/or to meet public recreational use demands and recreation partnership commitments. A site may or may not have permanent facilities.

Rehabilitate; rehabilitation – Management actions that return disturbed lands as near to its pre-disturbed condition as is reasonably practical or as specified in an approved plan or permit.

Required design feature (RDF) – Mandatory measures or practices that must be included in a project or management proposal to reduce or avoid adverse environmental impacts.

Research Natural Area (RNA) - An area where natural processes predominate and which is preserved for research and education; under current BLM policy, these areas must meet the relevance and importance criteria of ACECs and are managed as ACECs.

Resident fish – Fish that spend their entire life in freshwater (*e.g.*, bull trout on or near a specific location).

Residual ground cover - That portion of the total vegetative ground cover that remains after the livestock grazing season.

Resiliency (economic or social) - The ability of a community to respond to externally induced changes such as larger economic or social forces.

Resource advisory council (RAC) - A formally chartered council established by the Secretary of the Interior to provide advice or management recommendations to the BLM.

Resource area - The on-the-ground BLM administrative management unit comprised of BLM-administered public land within a specific geographic area. The term is used synonymously with field office.

Resource management plan (RMP) – A land use plan as described under Section 202 of the FLPMA. It consists of a set of decisions that establish management direction for public land within an administrative area, as prescribed under the planning provisions of FLPMA; an assimilation of land use plan level decisions developed through the planning process outlined in 43 CFR 1600, regardless of the scale at which the decisions were developed (BLM 2005i, p. 4; *see* also 43 CFR 1601.0-5(n)). The resulting decision can be protested to the BLM Director.

Restoration – Implementation of a set of actions that promotes plant community diversity and structure that allows plant communities to be more resilient to disturbance and invasive species over the long-term.

Restricted/restricted use – A limitation or constraint on BLM-administered land uses and operations. Restrictions can be of any kind, but most commonly apply to certain types of vehicle use, temporal and/or spatial constraints, or certain authorizations.

Rhyolite - A group of extrusive igneous rocks with the same composition as its intrusive equivalent, granite.

Right-of-way (ROW) - A permit or an easement which authorizes the use of public lands for certain specified purposes, commonly for pipelines, roads, telephone lines, electric lines, reservoirs, etc. Also refers to the lands covered by such an easement or permit. Can be further defined into 2 categories as follows:

- *Minor right-of-way:* a right-of-way that is typically less than about 15 miles in length and does not exceed about 52 acres of disturbance (BLM 2015a).

- *Major right-of-way:* any right-of-way that is larger than a minor right-of-way (BLM 2015a).

Right-of-way (ROW) corridor - A parcel of land that has been designated by law, Secretarial Order, through a land use plan, or by other management decision, as being the preferred location for existing and future right-of-way grants which are similar, identical, or compatible.

Riparian area – See *riparian habitat* definition.

Riparian conservation area (RCA) - Riparian conservation areas are portions of watersheds where aquatic and riparian-dependent resources receive primary emphasis for maintenance, protection, or restoration of ecosystem functions, and where management activities are subject to specific standards and guidelines. Riparian conservation areas include traditional riparian corridors, wetlands, intermittent streams, and other areas that help maintain the integrity of aquatic ecosystems by (1) influencing the delivery of coarse sediment, organic matter, and woody debris to streams; (2) providing root strength for channel stability; (3) shading the stream; and (4) protecting water quality.

Riparian habitat - Riparian habitat is defined as a specialized form of wetland restricted to areas along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams. Also includes periodically flooded lake and reservoir shore areas, as well as lakes with stable water levels with characteristic vegetation.

Rock art site – See *Petroglyph* and *Pictograph* definitions.

Rock shelter - Naturally-formed recess in a rock formation which provided shelter to prehistoric occupants.

Road - A linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use (BLM 2016b; see also *Boundary Road* definition).

Road Closure –

- *Temporary/Seasonal/Limited Access:* These are typically resource roads, closed with a gate or barrier. The road will be closed to public vehicular traffic but may be open for BLM/Permittee commercial activities. The road may or may not be closed to BLM administrative uses on a seasonal basis depending upon impacts to the resources. Drainage structures will be left in place.
- *Decommission (long-term):* The road segment would be closed to vehicles on a long-term basis, but may be used again in the future. Prior to closure the road would be left in an erosion-resistant condition by establishing cross drains, eliminating diversion potential at stream channels, and stabilizing or removing fills on unstable areas. Exposed soils will be treated to reduce sediment delivery to streams. The road will be closed with an earthen barrier or its equivalent. This category can include roads that have been or will be closed due to a natural process (abandonment) and may be opened and maintained for future use.
- *Full Decommission (permanent):* Roads determined to have no future need may be subsoiled (or tilled), seeded, mulched, and planted to reestablish vegetation. Cross drains, fills in stream channels, and unstable areas will be removed, if necessary, to restore natural hydrologic flow. The road will be closed with an earthen barrier or its equivalent. The road will not require future maintenance. This category includes roads

that have been closed due to a natural process (abandonment) and where hydrologic flow has been naturally restored.

- *Obliteration (full site restoration/permanent):* Roads receiving this level of treatment have no future need. All drainage structures will be removed. Fill material used in the original road construction will be excavated and placed on the subgrade in an attempt to reestablish the original ground line. Exposed soil will be vegetated with native trees or other native vegetation. Road closure by obliteration is rarely used.

Roadless - For the purpose of wilderness inventory, this refers to the absence of roads which have been improved and maintained by mechanical means to ensure relatively regular and continuous use (BLM 2012d). Phrases used in the above definition of roadless are defined as follows (*see* also the *Boundary Road* and *Way* definitions):

- *Improved and maintained:* Actions taken physically by man to keep the road open to vehicular traffic. "Improved" does not necessarily mean formal construction. "Maintained" does not necessarily mean annual maintenance.
- *Mechanical means:* Use of hand or power machinery or tools.
- *Relatively regular and continuous use:* Vehicular use which has occurred and will continue to occur on a relatively regular basis. Examples are access roads for equipment to maintain a stock water tank or other established water sources, access roads to maintained recreation sites or facilities, or access roads to mining claims.

Route - Generically, the term route collectively includes all of the linear components of the transportation system including roads, primitive roads, temporary routes, and trails (BLM 2006b).

Runoff - The water that flows on the land surface from an area in response to rainfall or snowmelt. Runoff from an area becomes stream flow when it reaches a stream channel.

Sagebrush Focal Area (SFA) – Areas identified by the FWS that represent recognized "strongholds" for Greater Sage-grouse that have been noted and referenced by the conservation community as having the highest densities of Greater Sage-grouse habitat and other criteria important for the persistence of the species.

Sagebrush steppe – A type of shrub-steppe habitat; a diverse plant community found in the Intermountain West of the U.S., characterized by the presence of shrubs, usually dominated by sagebrush, any of several species in the genus *Artemisia*.

Salinity - A measure of the mineral substances dissolved in water.

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

Salmonid - Fish of the family Salmonidae, including salmon, trout, chars, whitefish, ciscoes, and grayling.

Sand – In soil, particles 0.05 to 2mm in diameter.

Scablands - Areas with low sagebrush and other forb communities on extremely shallow, stony soils usually subtended by basalt or clay.

Scale - Refers to the geographic area and data resolution used in an assessment or planning effort.

Scenic byways – Highways or roads which have roadsides or corridors of special aesthetic, cultural, or historic value. An essential part of the byway is its adjacent scenic corridor. The corridor may contain outstanding scenic vistas, unusual geologic features, or other natural elements.

Scenic quality - The degree of visual harmony, contrast, and variety within a landscape.

Scenic river - A river or section of a river that has been designated as "scenic" under the *Wild and Scenic Rivers Act* because it is free of impoundments and has shorelines that are largely undeveloped. Such rivers are accessible in places by roads.

Scoping - The process of identifying the range of issues, management concerns, preliminary alternatives, and other components of an environmental impact statement or land use planning document. It involves both internal and external, or public involvement (*see* 40 CFR 1501.7).

Seasonal (season-long) grazing - Grazing use throughout a specific season.

Sediment - Soil, rock particles, and organic or other debris carried from one place to another by wind, water, or gravity.

Seeding - The process of establishing vegetation by mechanical dissemination of seed (*verb*). An area that has been seeded (*noun*) to re-establish desirable vegetation.

Sensitive species – see *Bureau sensitive species* definition.

Setback – A buffered section of a unit that borders an established boundary or road.

Seral stage - See *Ecological Status* definition.

Settlement Agreement (2010) – A 2010 agreement resulting from a judgement of the U.S. Court of Appeals for the Ninth Circuit 2008 case ONDA v. BLM.

Shrub - A low-growing, woody plant, usually with several stems, that may provide food and/or cover for animals.

Shrub steppe – A type of low-rainfall natural grassland, where plant species have developed particular adaptations to low annual precipitation and summer drought conditions, and where the primary ecological processes have historically been drought and fire.

Significant factor – Principal causal factor in the failure to achieve the land health standard(s) and conform with guidelines.

Significant impact – an effect that is of sufficient context and intensity that an environmental impact statement is required. The CEQ regulations list 10 considerations for evaluating intensity (*see* 40 CFR 1508.27(b)).

Siliceous - Containing silica (silicon dioxide).

Silt – In soil, particles between 0.002 and 0.05mm in diameter.

Silviculture - The science and art of producing and tending a forest.

Slash - The branches, bark, tops, cull logs, and broken or uprooted trees left on the ground after logging has been completed.

Social resiliency - See *Resiliency* definition.

Social science - The study of society and of individual relationships in and to society, generally including one or more of the academic disciplines of sociology, economics, political science, geography, history, anthropology, and psychology.

Soil survey – A field investigation resulting in a soil map showing the geographic distribution of various kinds of soil and an accompanying report that describes the soil types and interpretation of findings.

Solitude - The state of being alone from others; isolation; a lonely or secluded place. In the wilderness character inventory context BLM must determine that an area has an "outstanding opportunity" for solitude based on a

visitor's opportunity to avoid the sights, sounds, and evidence of other people in the area. Factors or elements that influence solitude may include size, configuration, topographic and vegetative screening, and ability of the visitor to find seclusion. It is the combination of these and similar elements upon which BLM makes an overall solitude determination (BLM 2012d).

Special recreation management area (SRMA) - Areas which require explicit recreation management to achieve the Bureau's recreation objectives and provide specific recreation opportunities. Special management areas are identified in the RMP, which also defines the management objectives for the area. Major BLM recreation investments are concentrated in these areas.

Special status species - Includes the following (defined in IM-OR-91-57, *Oregon-Washington Special Status Species Policy*):

- *Threatened and endangered (T&E) species:* are those officially listed as threatened or endangered by the Secretary of the Interior under the provisions of the "Endangered Species Act". A final rule for the listing has been published in the Federal Register.
- *Proposed species*: are species that have been officially proposed for listing as threatened or endangered by the Secretary of the Interior. A proposed rule has been published in the Federal Register.
- *Candidate species:* are those species designated as candidates (Categories 1 and 2) for listing as threatened or endangered by the USFWS/National Marine Fisheries Service (NMFS). A list has been published in the Federal Register.
- *State-listed species:* are those proposed for listing or listed by a state in a category implying potential endangerment or extinction. Listing is either by legislation or regulation.
- *Bureau sensitive species:* are those designated by a State Director, usually in cooperation with the state agency responsible for managing the species, as sensitive. They are those species that are either: (1) under status review by the USFWS/NMFS; (2) whose numbers are declining so rapidly that Federal listing may become necessary; (3) with typically small and widely dispersed populations; or (4) those inhabiting ecological refugia or other specialized or unique habitats.
- *Assessment species:* are species which are not presently eligible for official Federal or state status, but are of concern in Oregon and may need protection or mitigation in BLM actions

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

Sport utility vehicle (SUV) - A street legal, high-clearance vehicle used primarily on-highway, but designed to be capable of off-highway travel.

Standard - A description of the physical and biological conditions or degree of function required for healthy, sustainable lands (e.g., land health standards).

State-listed species - Any plant or animal species listed by the State of Oregon as threatened or endangered under the Oregon Revised Statutes 496.004, 498.026, or 564.040.

Step-down - The process of applying broad scale science findings and land use decisions to site-specific areas using a hierarchical approach of understanding current resource conditions, risks, and opportunities.

Stocking rate - The amount of animal units on a specified area at a specific time; usually expressed in acres/AUM.

Substantive comment – a comment provided during the NEPA process that does one or more of the following:

- Questions, with a reasonable basis, the accuracy of information in the EIS;
- Questions, with a reasonable basis, the adequacy of, methodology for, or assumptions used for the environmental analysis;
- Presents reasonable alternatives other than those presented in the EIS;
- Prompts the agency to consider changes or revisions in one or more of the alternatives.

Suitable (for preservation as wilderness) - Refers to a recommendation that certain Federal lands satisfy the definition of wilderness in the *Wilderness Act* and have been found appropriate for designation as wilderness on the basis of an analysis of the existing and potential uses of the land.

Sunstone - A semiprecious gemstone; a feldspar crystal found in basalt.

Surface disturbance – Suitable habitat is considered "disturbed" when it is removed and unavailable for immediate use.

Surface Use - Various activities that may be present on the surface or near-surface (*e.g*., pipelines), of the BLM-administered lands. It does not refer to those subterranean activities (*e.g*., underground mining, etc.) occurring on the BLM-administered lands or federal mineral estate.

Suspended non-use - Temporary withholding of a grazing preference from active use.

Sustained yield – Refers to the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources from public lands, consistent with the principles of multiple use (*see* 43 CFR 1601.0-5).

Targeted grazing - The careful application of grazing or browsing prescriptions (*i.e*., specified grazing intensities, seasons, frequencies, livestock species, and degrees of selectivity) to achieve natural resource objectives. Livestock production is a secondary or nonobjective when using prescribed grazing as a natural resource management tool.

Temporary non-renewable (TNR) grazing use - Livestock grazing use authorized when forage is temporarily available due to non-use, climatic conditions, range improvements, or other factors. When the amount of forage for livestock grazing increases temporarily, a nonrenewable permit may be issued if the increased use is consistent with multiple use objectives, and use does not interfere with existing livestock operations (*see* 43 CFR 4100.0-5).

Temporary route - A short-term use route (road, primitive road, or trail) authorized for the development of a project that has a finite lifespan (*e.g.* a mine access sale spur route). Temporary routes are not part of the permanent, designated transportation plan/network and must be reclaimed when their intended purpose has been fulfilled (BLM 2006b, 2007a).

Thermal cover - Vegetation or topography that prevents radiation heat loss, reduces wind chill during cold weather, and intercepts solar radiation during warm weather.

Threatened species - Any plant or animal species defined under the *Endangered Species Act* as likely to become endangered within the foreseeable future throughout all or a significant portion of its range; listings are published periodically in the *Federal Register*.

Thriving natural ecological balance - The condition of the public range that exists when management objectives have been achieved that would: (1) sustain healthy populations of wild horses and burros, wildlife, and livestock on public land, and (2) protect the desired plant community from deterioration.

Tiering - using the coverage of general matters in broader NEPA documents in subsequent, narrower NEPA documents, allowing the tiered NEPA document to narrow the range of alternatives and concentrate solely on the issues not already addressed.

Timber – Standing trees, downed trees, or logs which are capable of being measured in board feet.

Timber base - Commercial forest land judged to be environmentally and economically suitable and available for the continuous production of timber; the land from which the allowable cut is calculated and harvested.

Total dissolved solids - The dry weight of dissolved material, organic and inorganic, contained in water.

Total maximum daily load (TMDL) - An estimate of the total quantity of pollutants (from all sources: point, nonpoint, and natural) that may be allowed into waters without exceeding applicable water quality criteria.

Total preference - The total number of animal unit months of livestock grazing on public lands, apportioned and attached to base property owned or controlled by a permittee or lessee. The active preference and suspended preference are combined to make up the total grazing preference.

Tradition - Long-standing, socially conveyed, customary patterns of thought, cultural expression, and behavior, such as religious beliefs and practices, social customs and land or resource uses (e.g., root gathering). Traditions are shared generally within a social and/or cultural group and span generations.

Traditional Cultural Property (TCP) - Cultural site(s) eligible for inclusion in the National Register of Historic Places because of association with cultural practices or beliefs of a living community that is: (1) rooted in the community's history, and (2) important to maintaining the continuing cultural identity of the community.

Trail - Linear route managed for human-powered, stock, or off-road vehicle forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles (BLM 2006a).

Transportation system/plan - The roads, primitive roads, and trails officially designated as transportation assets and included in BLM's Facility Asset Management System (FAMS) database. This does not always include all of the existing network of routes on BLM-administered lands.

Travel Management Areas (TMA) - Polygons or delineated areas where a rational approach has been taken to classify areas open, closed or limited, and have identified and/or designated a network of roads, trails, ways, landing strips, and other routes that provide for public access and travel across the planning area.

Treatment – Application of any method of vegetation manipulation or soil stabilization measure (such as prescribed fire, reseeding, mechanical juniper removal, chainsaw, mowing, herbicide application, furrowing, water spreading, etc.), to move a resource toward desired future conditions (*see* Chapter 2, BLM 2003b).

Treaty Rights - Tribal rights or interests reserved in treaties, by Native American tribes for the use and benefit of their members. The uses include such activities as described in the respective treaty document. Only Congress may abolish or modify treaties or treaty rights.

Trespass - Any unauthorized use of BLM-administered land

Tribe - See definition of *Native American Tribe*.

Turbidity - The cloudiness exhibited by water carrying sediment; or the degree to which suspended sediment interferes with light passage through water.

Unallotted lands - Public lands open to livestock grazing which currently have no authorized grazing use occurring.

Understory – that portion of a plant community growing underneath the taller plants on the site.

U.S. Department of Interior (DOI) - Government department which oversees many agencies including the BLM.

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

User-day - Any calendar day, or portion thereof, for each individual recreating on BLM lands.

Upland – Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Utility corridor - A designated parcel of land that is either linear or areal in character. Utility corridors are not usually wider than five miles; are limited by technological, environmental, and topographical factors; and are set in

width as identified by the special use permit or ROW issued. Designation criteria are set forth in Section 503 of F FLPMA for special use permits and ROWs; and 43 CFR 2802.11 for ROWs.

Utility type vehicle (UTV) - Any recreational motor vehicle other than an ATV, motorcycle, or snowmobile, designed for and capable of travel over designated unpaved roads, which travels on four (4) or more low-pressure tires, has a maximum width less than seventy-four (74) inches, a maximum weight usually less than two thousand (2,000) pounds, or has a wheelbase of ninety-four (94) inches or less. UTVs do not include vehicles specially designed to carry a person with disabilities.

Utilization - The proportion of the current year's forage production that is consumed or destroyed by grazing animals. This may refer either to a single key forage plant species or to a whole vegetative complex. Utilization is expressed as a percent by weight, height, or numbers within reach of the grazing animals.

Vandalism - Willful or malicious destruction or defacement of public or private property. This includes damages done for personal gain, particularly unauthorized destructive activities (looting) that damage cultural resources.

Vegetation treatment – Management practice that changes the vegetation structure to a different state of development. Vegetation treatment methods can include such things as managed wildfire, prescribed fire, chemical application, mechanical, biological, manual, seeding and planting.

Visitor-day - Twelve visitor-hours, which may be aggregated continuously, intermittently, or simultaneously by one or more persons. Visitor-days may occur either as recreation visitor-days or as non-recreation visitor-days.

Visual resource - The land, water, vegetation, animals, and other features that are visible on public lands.

Visual resource contrast rating system - The basic philosophy underlying the system is the degree to which a management activity affects the visual quality of a landscape depends on the visual contrast created between a proposed project and the existing landscape. The contrast can be measured by comparing project features with the major features in the existing landscape. The basic design elements of form, line, color, and texture are used to make this comparison and to describe the visual contrast created by the project. This assessment process provides a means for determining potential visual impacts and for identifying measures to mitigate these impacts (BLM 1985d).

Visual Resource Inventory (VRI) - An inventory process which provides the BLM with a basis for determining the relative value of visual resources in the planning area. Classes I and II being the most valued, Class III representing a moderate value, and Class IV being of least value. Class I is assigned to areas where management decisions have been made to preserve natural landscapes (such as national wilderness areas, wild sections of national wild and scenic rivers, and other congressionally and administratively designated areas). Classes II, III, and IV are assigned to areas based on a combination of scenic quality, sensitivity levels, and distance zones. Class objectives are described in the next section (BLM 1986c).

Visual Resource Management (VRM) class objectives - All public land is classified into one of four VRM classes. The management objective for each class are described below.

- *Class I:* The objective is to preserve the existing character of the landscape. This class provides for natural ecological changes and allows limited management activity. The level of change should be very low and must not attract attention. Class I is assigned to those areas where a management decision has been made to preserve a natural landscape. This includes areas such as wilderness, WSAs, the wild sections of WSRs, and other congressionally and administratively designated areas.
- *Class II:* The objective is to retain the existing character of the landscape. The level of change to landscape characteristics should be low. Management activities may be seen, but should not attract the attention of a casual observer. Any changes must conform to the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.
- *Class III:* The objective is to partially retain the existing character of the landscape. Moderate levels of change are acceptable. Management activities may attract attention, but should not dominate the view of a

casual observer. Changes should conform to the basic elements of the predominant natural features of the characteristic landscape.

- *Class IV:* The objective is to provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and become the focus of viewer attention. However, every effort should be made to minimize the impact of these activities through careful location, minimal disturbance, and designing the project(s) to conform to the characteristic landscape.

Waters of the State - Includes lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private which are wholly or partially within or bordering the State or within its jurisdiction (*see* ORS § 468B.005(10)).

Water quality - The chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

Watercraft - A watercraft is a vehicle, vessel or craft designed to move across (or through) water, including saltwater and freshwater, for pleasure, recreation, physical exercise, commerce, transport and military missions. Most watercraft would be described as either a ship or a boat. However, there are a number of craft which many people would consider neither a ship nor a boat, such as canoes, kayaks, rafts, barges, catamarans, hydrofoils, windsurfers, surfboards (when used as a paddle board), underwater robots, torpedoes, and jet skis.

Watershed - All lands which are enclosed by a continuous hydrologic drainage divide and lie upslope from a specified point on a stream.

Way - A vehicle route maintained solely by the passage of vehicles. These routes are associated only within the interior of Wilderness Study Areas (WSAs).

Wetland - Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined by the *Federal Clean Water Act of 1972*. These wetlands generally meet the jurisdictional wetland criteria.

Wild and Scenic River (WSR) - Rivers designated in the National Wild and Scenic Rivers System that are classified in one of three categories (wild, scenic, or recreational), depending on the extent of development and accessibility along each section. In addition to being free flowing, these rivers and their immediate environments must possess at least one outstandingly remarkable value: scenic, recreational, geologic, fish and wildlife, historical, cultural, or other similar values.

Wilderness - An area that has been officially designated by Congress to preserve its wilderness character.

Wilderness characteristics – The key characteristics of wilderness, as listed in section 2(c) of the Wilderness Act of 1964 include: roadless areas greater than 5,000 acres in size that appear natural to the casual observer and contain either outstanding opportunities for solitude or outstanding opportunities for primitive and unconfined recreation (BLM 2012h).

Wilderness characteristics unit – A distinct area (polygon) where the BLM has determined that the key characteristics of wilderness, as listed in section 2(c) of the Wilderness Act of 1964, are present.

Wilderness Study Area (WSA) - Public land under the jurisdiction of the BLM which has been studied for wilderness values and is currently in an interim management status awaiting official wilderness designation or release from wilderness study by the Congress.

Wildfire - Any unwanted wildland fire. May be caused by either human or natural ignition.

Wildfire intensity – A measure of available heat of combustion per unit area of ground and the rate of spread of the fire.

Wildland fire - Any non-structure fire, other than prescribed fire, that occurs in the wildland.

Wildland fire situation analysis - A decision-making process that evaluates alternative management strategies against safety, environmental, social, economic, political, and resource management objectives.

Wildland Urban Interface (WUI) - An area where structures and other human development inter-mingle with undeveloped wildlands or vegetative fuels.

Withdrawal - Withholding of an area of Federal land from settlement, sale, location, or entry under some or all of the general land or mineral laws, for the purpose of maintaining other public values in the area or reserving the area for a particular public purpose or program; or transferring jurisdiction over an area of Federal land from one department, bureau, or agency to another.

Woodland - A forest community occupied primarily by non-commercial species such as mountain mahogany, quaking aspen, or old-growth western juniper.

Appendix 9 – Off-Highway Vehicle Use and Travel Management

Table of Contents

List of Tables

Authority

Executive Order 11644 requires each Federal agency to designate areas and trails for off-road vehicle use or restriction. The BLM's regulations (43 CFR 8340) require all BLM-administered lands be designated as open, limited, or closed to off-highway vehicle (OHV) use.

Secretarial Order 3347 directs the BLM to identify actions that would expand public access for recreational hunting and fishing, as well as encourage, promote, and facilitate greater public access to public lands (consistent with applicable laws).

Travel Management Planning

Travel management planning is a two-step process that is addressed by a combination of off-highway vehicle (OHV) area designations made at the land use plan level and route-specific management decisions made at the travel management planning level (BLM 2012f, 2016b). OHV area designations established through the land use planning process provide the broad-scale management direction for motorized vehicle use within blocks or areas of public land in a manner that meets the public demand for motorized activities, protects natural resources, ensures public safety, and minimizes conflicts among users.

In contrast, a Travel Management Plan (TMP) is an implementation level plan that establishes a comprehensive set of management decisions for the entire motorized and non-motorized transportation network (roads, primitive roads, and trails) that is consistent with the broader OHV area designation decisions made at the land use plan level. While the designation of an area as "Limited" is a land use planning decision, the specific types of limitations that may be applied to the area represent an implementation level decision. This is typically done during the development of a travel management plan (BLM 2016b, p. 3-2). Current BLM policy requires development of a TMP within 5 years of completing a land use plan (BLM 2005a, 2012f, 2016b).

Provisions 14(c), 26(b), and 26(c) of the 2010 Settlement Agreement require the BLM to consider a full range of OHV area allocations (open, limited, and closed) within this plan amendment. For these reasons, the range of alternatives analyzed in this plan amendment (see Chapter 2) address OHV area designations only.

Management Goals and Objectives

The following OHV management goal from the *Lakeview RMP/ROD* (BLM 2003b) would apply to all alternatives:

Off-Highway Vehicle Management Goal: *Manage motorized use to provide off-highway vehicle (OHV) opportunities where appropriate, promote public access and safety, protect other resource values, and minimize conflicts among various users of the public lands.*

The following OHV objectives were also established by the *Oregon Greater Sage-grouse Approved RMP Amendment* (BLM 2015a) and would apply within Sage-grouse habitat under all alternatives:

TTM Objective 1: *Manage OHV (area) designations (Open, Limited, and Closed) to conserve Greater Sage-grouse habitat and populations by taking actions that create neutral or positive responses (BLM 2015a, p. 2-30).*

TTM Objective 2: *Reduce disturbance to Greater Sage-grouse by evaluating or modifying OHV (area) designations and route selection in accordance with minimization criteria (BLM 2015a, p. 2-30).*

Management Direction Common to All Alternatives

General OHV Operations

All OHVs operating on public lands in the planning area would be required to operate in accordance with applicable state laws and regulations, and BLM vehicle operation standards (see 43 CFR 8343.1).

Route Closures

Those routes currently designated as closed under the *Lakeview RMP/ROD* would remain closed (Table 10, p. 60, and Maps SMA-5 to SMA-23, SMA-25 to SMA-31; BLM 2003b, as maintained). In addition, approximately 288 miles of exiting BLM routes would continue to be seasonally closed (12/1 to 3/31) within mule deer winter range within the northwest corner of the planning area in cooperation with the ODFW (Map OHV-1; see also Map SMA-24, BLM 2003b, as maintained).

Additional routes that are no longer needed or are causing irreparable resource damage would be evaluated by an ID Team, either on an individual case-by case basis, or through the travel management plan (TMP) process. Based on such an evaluation, actions would be taken to either: 1) correct the cause of the resource damage (and leave the route open), or 2) close and rehabilitate the road where irreparable damage has occurred. Routes could be closed using emergency road closure procedures and be physically barricaded, signed, or actively rehabilitated over time, as budget and staff allow. Roads within riparian conservation areas would be removed and/or relocated where an ID team determines they are contributing to less than desirable riparian habitat conditions (p. 32, 44, 98-99, BLM 2003b, as maintained).

Routes discovered after signing the *Lakeview RMP/ROD* (BLM 2003b, as maintained) within open or limited areas would remain open unless the BLM determines through a subsequent ID Team analysis or TMP process that they are not needed or are causing resource damage. Routes discovered or created after 2003 within WSAs with limited or closed area designations would be closed and rehabilitated as soon as possible after discovery.

Fire lines created by wildfire management activities would be closed and rehabilitated as soon as possible after the fire suppression activities cease. The objective would be to return the closed route surface to a condition that would no longer be recognizable as a route or traversable by the public. Some closed routes could be designated as open, non-motorized trails during a subsequent TMP.

Emergency Area Closures

Future emergency area closures may be implemented where BLM determines that OHVs are causing considerable adverse effects upon resources or there is a public safety concern in a specific geographic area. Such closures would be issued in accordance with regulation (43 CFR 8364) and current guidance (e.g. BLM 2016g) and would typically be for a specified period of time (e.g. during a wildfire suppression action or following a wildfire rehabilitation project). Emergency closures do not have to be approved through the land use planning process, but would be announced via a notice published in the *Federal Register* and in local newspapers.

Route Maintenance Level

Maintenance Level is a management tool used in the existing *Transportation Plan* (BLM 1981e) to identify which routes should be prioritized for the most maintenance attention. The maintenance level assigned to a given route is reflective of the purpose or need for the route and the amount of maintenance

that best fits the travel management objective(s). Maintenance priority for each route is determined by assigning a maintenance level designation between 1 and 5 (Table A9-1).

Table A9-1. Route Maintenance Levels

Level 1	This level is assigned where minimum maintenance is required to protect adjacent lands and resource values. These routes are no longer needed and are typically closed to traffic/use. The objective is to remove these routes from the transportation plan and FAMS database.
Level 2	This level is assigned where the management objectives require route to be open for limited administrative traffic/use. Roads are typically passable by high-clearance vehicles. Trails have low use with little or no contact between parties and have little or no monitoring or management of visitor use. Trail users may encounter obstructions like brush and deadfall.
Level 3	This level is assigned where the management objectives require road be open seasonally or year-round for commercial, recreation, or administrative access. Generally, these roads have a natural or aggregate surface and have a defined cross section with drainage structures such as dips, culverts, or ditches. These roads may be navigated by passenger cars traveling at prudent speeds. User comfort and convenience are not a high priority in determining when to maintain. Trails have moderate use with visitor use on a seasonal and/or peak use period and frequent contact between parties. Trail management is conducted with occasional monitoring or management of visitor use. Trail users are not likely to encounter obstructions.
Level 4	This level is assigned where management objectives require road to be open all year (may be closed or have limited access due to snow conditions) and which connect major administrative facilities (recreation sites, local road systems, or administrative sites) to county, state, or federal roads. They may be single or double lane, aggregate or asphalt surface, with a higher volume of commercial and recreational traffic than administrative use. Trails receive high use during specific times of the year with high frequencies of contact between parties. These trails have regularly scheduled monitoring or management of visitor use.
Level 5	This level is assigned where management objectives require road be open all year and receive the highest traffic volume of all roads in the transportation system. Trails with high use trail with routine monitoring or management of visitor use.

OHV Area Designation Considerations

To address both the requirements of Provision 26 of the 2010 Settlement Agreement and current national policy, the BLM inter-disciplinary (ID) Team identified a full range of OHV area allocation alternatives for consideration in this plan amendment. Open, Limited, and Closed area designations for each alternative were evaluated in accordance with the following designation (minimization) criteria. A discussion of how each alternative met these criteria is included in Chapter 3.

National Policy

Open OHV Areas

The policy contained in the *Travel and Transportation Manual* states that Open OHV areas should be:

- Designated to aid in the achievement of a specific recreational goal or objective;
- Limited to a size that can be effectively managed and geographically identifiable; and
- Offer a quality OHV opportunity for participants.

Open OHV area designations should also:

- Support a user need or demand;
- Address the designation (minimization) criteria and the goals and objectives identified in the RMP (BLM 2016b, p. 3-1 to 3-2).

Limited OHV Areas

The Limited OHV area designation represents the BLM's default area designation for motorized vehicle use. While limited areas may be restricted at certain times of the year, to certain areas, and/or to certain types of vehicles or users, the specific limitations that may be applied to a Limited area are determined during the TMP process rather than the land use planning process. The Limited OHV area designation is intended to prohibit new surface disturbance, such as cross-country vehicle travel (BLM 2016b, p. 3-2) and can be used to reduce resource or user conflicts.

Closed OHV Areas

The Closed OHV area designation should be used when the OHV Limited area designation will not suffice to protect resources, promote visitor safety, or reduce use conflicts (BLM 2016b, p. 3-2).

Designation Criteria

OHV area designations must be evaluated based on their ability to protect the resources of the public lands, promote the safety of all users of the public lands, minimize user conflicts, and address the following designation criteria from 43 CFR 8342.1:

- Areas (and trails) shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability.
- Areas (and trails) shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention should be given to protect endangered or threatened species and their habitats.
- Areas (and trails) shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.
- Areas (and trails) shall not be located in officially designated wilderness areas or primitive areas. Areas shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established.

Evaluation of Area Designation Criteria

The following discussion presents a rationale for which OHV area designation criteria from 43 CFR 8342.1 and national policy are relevant to making OHV area designation decisions specifically within the planning area. This discussion lists the criteria and how they were used in designating areas as either Open, Limited, or Closed. Where the criterion is not relevant to the planning area, a supporting rationale is provided.

Areas shall be located to:

1) Minimize damage to soil

Within the planning area, areas with highly erodible soils or steep slopes that are potentially subject to high erosion have been identified in the REASON fields in Table A9-2.

Table A9-2. Proposed OHV Area Designations and Designation Criteria for Alternative D

Area ID	Area Name	Proposed OHV Designation	Limited Area Designation Detail	Comments	Reason 1*	Reason 2	Reason 3	Opportunity for Developed Recreation	Opportunity for Undeveloped Recreation	Meet Increase in Recreation Demand**	Capable of Providing an OHV Opportunity	Public Safety Concern	Minimize Recreation Conflicts	Protect Other Resources	Accessible ***	Acres
1	Crane Mountain	Closed		Wildlife; forested	SSFLORA	MANAGE		N	Y	N	N	NA	N	Y	Y	1040.5
3	Alkali Lake Hazardous Waste Site	Closed		Public Safety issue; fenced	HAZMAT			N	N	N	N	Y	N	N	N	272.7
4	Buck Creek Education Area	Closed		Fish (Redband)	RECSITE	SSFAUNA		Y	N	N	N	NA	Y	Y	Y	584.8
5	Fossil Lake ACEC	Closed		Other resources (Paleo)	ACEC	CULT		N	Y	INC PRIM	N	NA	Y	Y	Y	8986.6
6	Green Mountain	Closed		Vegetation (SS plant)	SSFLORA			N	Y	N	N	NA	N	Y	Y	184.7
7	Chewaucan Alkali Flat	Open		Playa and small dunes; bounded by roads and fence; documented OHV use	OPEN PLAY	BLM OPEN		N	Y	INC. MOTOR	Y	NA	Y	N	Y	4440.2
8	Priday Reservoir	Limited	Existing roads and trails	Gravel pit; adjacent private land; small	BLM	RECSITE		N	Y	CAMP/FISH	N	NA	Y	N	Y	111.3
9	Lakeview Inter-Agency Fire Center	Open		Administrative site	ADMIN. SITE			N	N	N	N	NA	NA	NA	NA	10.1
10	Proposed National Guard Training Area	Limited	Existing roads and trails	Patches GHMA; Minimal resource conflicts	BLM	MANAGE		N	N	N	N	NA	Y	NA	MOD	19061.7
13	Greaser Flat	Open		Playa and gravel pits; recent mowing; meets future OHV need	BLM OPEN	ROW		N	N	INC. MOTOR	Y	NA	Y	N	Y	2099.2
15	Soda Lake	Open		Playa and gravel pits; Meet future OHV need; minimal resource conflicts	BLM OPEN	OPEN PLAY		N	N	INC. MOTOR	Y	NA	Y	N	Y	365.2
17	Gravel Pit	Open		Gravel pit; routes present; potential staging area	BLM OPEN	OPEN PLAY		N	N	INC. MOTOR	Y	NA	Y	N	Y	9.8
19	Silver Lake Landing Strip	Open		Landing Strip	ADMIN. SITE	MANAGE	SRMA	N	N	N	N	Y	N	NA	NA	26.5
21	Reclaimed Diatomite Mine	Open		Bounded by roads/private land; old routes; meet future OHV need	BLM OPEN	OPEN PLAY		N	Y	INC. MOTOR	Y	NA	Y	NA	Y	161.6
22	Sand Dunes WSA	Open		non-impairment; sand dunes; documented OHV use	OPEN PLAY	WSA		N	Y	INC. MOTOR	Y	NA	Y	N	Y	10484.2
23	Christmas Lake Flat	Open		Playa; adjacent private land; meet future OHV need	BLM OPEN	OPEN PLAY	SRMA	N	Y	INC. MOTOR	Y	NA	Y	N	Y	11488.8
24	PP&L powerline	Limited	Existing roads and trails	Minimal resource conflicts	BLM	ROW		N	N	N	N	NA	N	NA	Y	3525.8
29	North Alkali Lake Gravel Pit	Open		Gravel pit; routes present; fenced; meet future OHV need	BLM OPEN	ROW		N	Y	INC. MOTOR	Y	NA	Y	NA	Y	109.9

Area ID	Area Name	Proposed OHV Designation	Limited Area Designation Detail	Comments	Reason 1*	Reason 2	Reason 3	Opportunity for Developed Recreation	Opportunity for Undeveloped Recreation	Meet Increase in Recreation Demand**	Capable of Providing an OHV Opportunity	Public Safety Concern	Minimize Recreation Conflicts	Protect Other Resources	Accessible ***	Acres
30	Alkali Lake Landing Strip	Open		Landing strip	ADMIN. SITE			N	N	N	N	Y	NA	NA	N	114.7
31	Buckaroo Lake	Open		Playa and small dunes; minimal resource conflicts; bounded by roads and fence	BLM OPEN	OPEN PLAY	SOIL	N	Y	INC. MOTOR	Y	NA	Y	NA	Y	6005.9
32	North Alkali Lake	Open		Playa and small dunes; bounded by roads; meet future OHV need	BLM OPEN	OPEN PLAY	SEED	N	Y	INC. MOTOR	Y	NA	Y	N	Y	3368.1
36	Warner Valley	Open		Playa and small dunes; minimal resource conflicts; saltbrush; meet future OHV need	BLM OPEN	OPEN PLAY		N	N	INC. MOTOR	Y	NA	Y	NA	Y	4461.0
37	Sunstone Area	Open		Sunstone mines; documented off-road use; no mapped GSG seasonal habitats	BLM OPEN	OPENMMS	SEED	N	N	INC. MOTOR	Y	NA	Y	N	Y	16892.8
38	Fandango Gravel Pit	Open		Gravel pit; disturbed; routes present	BLM OPEN	OPEN PLAY	SGHAB	N	N	INC. MOTOR	Y	NA	Y	NA	Y	23.4
39	Summer Lake Gravel Pit	Open		Gravel pit; portion GHMA; adjacent private; meet future OHV use	BLM OPEN			N	N	INC. MOTOR	Y	NA	Y	NA	Y	14.5
40	ODOT MAT ROW	Open		Gravel pit; OHV use present	BLM OPEN	OPEN PLAY		N	Y	INC. MOTOR	Y	NA	Y	NA	Y	25.1
43	Sand Hollow MAT ROW	Open		Gravel pit; Meets future OHV need	BLM OPEN	SEED		N	Y	INC. MOTOR	Y	NA	Y	N	Y	348.9
52	Proposed National Guard Training Area	Limited	Existing roads and trails	Minimal resource conflicts; fenced; not SG habitat	BLM	SEED	MANAGE	N	N	N	N	NA	Y	NA	Y	29536.2
56	None	Limited	Existing roads and trails	Wildlife (GSG/sagebrush); patches of seeding	SGHAB	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	14714.6
60	ODOT MAT ROW	Open		Gravel pit; adjacent state land	BLM OPEN	OPEN PLAY	ROW	N	N	INC. MOTOR	Y	NA	Y	N	Y	60.4
61	Lehmann MAT ROW	Open		Gravel pit; routes present; adjacent private land; meet future OHV need	BLM OPEN	ROW		N	N	INC. MOTOR	Y	NA	Y	NA	Y	100.6
63	Peter Creek Gravel Pit	Open		Gravel pit; routes present; minimal resource conflict; meets future OHV need	BLM OPEN			N	N	INC. MOTOR	Y	NA	Y	NA	Y	76.0
64	Beeler Well Gravel Pit	Open		Gravel pit; Meets future OHV need	BLM OPEN			N	Y	INC. MOTOR	Y	NA	Y	NA	Y	40.1
65	Fort Rock Gravel Pit	Open		Gravel pit; meets future OHV need	BLM OPEN			N	N	INC. MOTOR	Y	NA	Y	NA	Y	32.1
66	North Lake SRMA	Limited	Existing roads and trails	GHMA; adjacent private land	SRMA	SGHAB	ROW	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	12854.9
67	Pitcher Lane Gravel Pit	Open		Gravel pit; bounded by roads/fence; meets future OHV need	BLM OPEN			N	Y	INC. MOTOR	Y	NA	Y	NA	Y	80.7

Area ID	Area Name	Proposed OHV Designation	Limited Area Designation Detail	Comments	Reason 1*	Reason 2	Reason 3	Opportunity for Developed Recreation	Opportunity for Undeveloped Recreation	Meet Increase in Recreation Demand**	Capable of Providing an OHV Opportunity	Public Safety Concern	Minimize Recreation Conflicts	Protect Other Resources	Accessible ***	Acres
69	West Silver Lake Gravel Pit	Open		Gravel pit; fenced; OHV use present; meet future OHV use	BLM OPEN	OPEN PLAY	SRMA	N	N	INC. MOTOR	Y	NA	Y	N	Y	40.4
72	Proposed National Guard Training Area	Limited	Existing roads and trails	BPA powerline; Minimal resource conflicts;	BLM	SEED	ROW	N	N	N	N	NA	Y	NA	MOD	5842.8
77	Proposed National Guard Training Area	Limited	Existing roads and trails	Gentle slopes; Minimal resource conflicts; fenced	BLM	SEED		N	N	N	N	NA	Y	NA	MOD	12714.1
82	Proposed National Guard Training Area	Limited	Existing roads and trails	patches of GHMA; fenced; gentle slopes; minimal resource conflicts	BLM	SEED	MANAGE	N	N	N	N	NA	Y	NA	MOD	4743.6
87	North Lake SRMA	Limited	Existing roads and trails	Portion GHMA	SGHAB	SRMA		N	Y	N	ON-ROAD ONLY	NA	Y	Y	Y	2427.2
88	Sand Hollow Gravel Pit	Open		Gravel pit; Meets future OHV need	BLM OPEN	OPEN PLAY		N	N	INC. MOTOR	Y	NA	Y	N	Y	14.5
89	Miners Draw North Gravel Pit	Open		Gravel pit; GHMA; meets future OHV need	BLM OPEN			N	N	INC. MOTOR	Y	NA	Y	N	Y	10.3
90	Miners Draw Gravel Pit	Open		Gravel pit; GHMA; meets future OHV need	BLM OPEN			N	N	INC. MOTOR	Y	NA	Y	N	Y	25.5
91	ODOT Material Site ROW	Open		PHMA; gravel pit; meets future OHV need; fenced	BLM OPEN	OPEN PLAY		N	N	INC. MOTOR	Y	NA	Y	NA	Y	12.4
92	Coleman Lake	Open		Large playa; scattered GHMA; mudbogging opportunity	BLM OPEN	OPEN PLAY		N	N	INC. MOTOR	Y	NA	Y	N	Y	3518.4
93	ODOT Material Site ROW	Open		PHMA; gravel pit; meets future OHV need	BLM OPEN			N	N	INC. MOTOR	Y	NA	Y	NA	Y	79.5
94	Walnut Orchard Gravel Pit	Open		Gravel pit and seeding; disturbed	BLM OPEN	OPEN PLAY		N	N	INC. MOTOR	Y	NA	Y	N	Y	22.3
99	Rabbit Basin	Limited	Existing roads and trails	Flat; old burn and seedings; scattered sagebrush; Minimal resource conflicts	BLM	SEED		N	Y	INC. PRIM	N	NA	Y	NA	Y	2458.1
101	Fort Rock Landing Strip	Open		Landing Strip	ADMIN. SITE	MANAGE		N	N	N	N	Y	NA	NA	NA	12.8
102	Fort Rock Guard Station	Open		Fire Station	ADMIN. SITE	MANAGE		N	N	N	N		NA	NA	NA	38.7
105	Green Mountain Fire Lookout	Open		Fire Lookout	ADMIN. SITE	MANAGE		N	N	N	N		NA	NA	NA	7.0
106	Sand Dunes Helipad	Open		Helipad	ADMIN. SITE	MANAGE		N	N	N	N	Y	NA	NA	NA	0.3
110	Rincon WSA	Limited	Existing roads and trails	Non-impairment	WSA			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	3351.6
111	Abert Rim ACEC	Limited	Existing roads and trails	Other resources (cultural)	ACEC	CULT		N	Y	NA	ON-ROAD ONLY	NA	Y	Y	Y	193.2

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112	Lake Abert ACEC	Limited	Existing roads and trails	Wildlife (migratory birds/Snowy plover)	ACEC	SSFAUNA	RIPARIAN	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	102.9
113	Black Hills ACEC/RNA	Limited	Designated roads and trails	Natural area; SS plant	ACEC	SSFLORA		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	3049.0
114	Orejana WSA	Limited	Existing roads and trails	Non-impairment; PHMA/GHMA	WSA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	24163.3
115	Hawk Mountain & Sagehen Hills WSAs	Limited	Designated roads and trails	Non-impairment; portions natural area; PHMA/GHMA	WSA	ACEC	SGHAB	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	53477.2
116	Lake Abert ACEC	Limited	Existing roads and trails	NRHD; Wildlife (migratory birds/Snowy plover)	ACEC	CULT	SSFAUNA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	42618.4
117	Guano Creek WSA/ACEC/RNA	Limited	Designated roads and trails	Non-impairment; natural area; PHMA; SS plant	WSA	ACEC	SGHAB	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	11210.9
118	Fish Creek Rim ACEC/RNA	Limited	Designated roads and trails	Natural area; SS plant; PHMA	ACEC	SGHAB	SSFLORA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	1133.5
119	Devils Garden WSA/ACEC	Limited	Designated roads and trails	non-impairment; Wildlife (big game winter habitat)	WSA	ACEC		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	29455.1
120	Twelvemile Creek WSR	Limited	Designated roads and trails	Fish (Warner Sucker/Redband); Soil (slope)	WSR	SSFAUNA	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	852.1
121	Abert Rim WSA/ACEC	Limited	Designated roads and trails	Non-impairment; PHMA/GHMA	WSA	ACEC	CULT	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	25207.1
122	Red Knoll ACEC	Limited	Designated roads and trails	Other resources (cultural); SS plant	ACEC	SGHAB	CULT	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	11122.4
123	Twelvemile Creek WSR	Limited	Designated roads and trails	Soil (slope); no road access	WSR	RECSITE	SOIL	N	Y	INC. PRIM	N	NA	Y	Y	N	10.7
124	Foley Lake ACEC/RNA	Limited	Designated roads and trails	Natural area; SS plant; Other (cultural)	ACEC	SGHAB	SSFLORA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	2254.8
125	Juniper Mountain ACEC/RNA	Limited	Designated roads and trails	Natural area; GHMA;	ACEC	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	6328.3
126	Connley Hills ACEC/RNA	Limited	Designated roads and trails	Natural area; SS plant; Soil (erosion)	ACEC	CULT	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	3600.5
127	High Lakes ACEC	Limited	Designated roads and trails	Other resources (cultural); Wildlife (GSG)	ACEC	SGHAB	CULT	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	38968.0
128	Basque Hills WSA	Limited	Existing roads and trails	Non-impairment; PHMA/GHMA	WSA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	68406.7
129	Four Craters Lava Bed WSA	Limited	Existing roads and trails	Non-impairment; GHMA	WSA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	12472.4
130	Lost Forest RNA/ISA	Limited	Designated roads and trails	Non-impairment; natural area	WSA	ACEC	CULT	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	8921.2
131	Fish Creek Rim WSA	Limited	Designated roads and trails	Non-impairment; PHMA; portion natural area	WSA	SGHAB	CULT	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	19884.0

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132	Rahilly-Gravelly ACEC	Limited	Existing roads and trails	Natural area; PHMA; SS plant; Other resources (cultural)	ACEC	SGHAB	CULT	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	18705.6
133	Spanish Lake ACEC/RNA	Limited	Designated roads and trails	Natural area; SS plant	ACEC	SGHAB	SSFLORA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	4693.5
134	Table Rock ACEC	Limited	Designated roads and trails	Other resources (cultural); SS plant; GHMA	ACEC	CULT	SSFLORA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	5585.2
135	Warner Wetlands ACEC	Limited	Designated roads and trails	Wildlife (migratory birds); Fish (Warner Sucker)	ACEC	FEDLIST	SSFLORA	Y	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	52113.4
136	Sq__ Ridge Lava Bed WSA	Limited	Existing roads and trails	Non-impairment	WSA			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	28713.0
138	Diablo Mountain WSA	Limited	Existing roads and trails	Non-impairment; portion GHMA	WSA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	118768.1
139	Spaulding WSA	Limited	Existing roads and trails	Non-impairment; PHMA	WSA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	68419.3
140	Fossil Lake/Sand Dunes/Lost Forest ACEC	Limited	Designated roads and trails	Soil (erosion); Vegetation (damage)	ACEC		SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	6605.2
141	Sand Dunes WSA	Limited	Designated roads and trails	Non-impairment	WSA			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	693.6
142	None	Limited	Existing roads and trails	Wildlife (sagebrush)	SGHAB	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	11729.4
143	North Lake SRMA	Limited	Existing roads and trails		SRMA			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	247.8
144	None	Limited	Existing roads and trails	Wildlife (sagebrush)	BLM	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	3035.0
145	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	1930.0
146	East Greaser	Limited	Existing roads and trails	Soil (slope)	SEED		SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	227.7
147	East Priday	Limited	Existing roads and trails		BLM	MANAGE		N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	59.9
148	Silver Lake Deer Winter Range Closure	Limited	Designated roads and trails	Big game winter hab.; fenced with private play area	BIG GAME	SRMA		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	4.9
149	Forest Service Tree Nursery	Open		Inaccessible	ADMIN. SITE			N	N	N	N	N	NA	NA	N	82.2
150	South 31	Limited	Existing roads and trails	Vegetation (Weeds)	SEED			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	572.2
151	Northwest Warner	Limited	Existing roads and trails	Wildlife (sagebrush)	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	450774.4
152	Warner Mountains	Limited	Existing roads and trails	Wildlife (GSG); Fish (Warner Sucker/ Redband Trout)	SGHAB	FEDLIST	SSFAUNA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	79123.7

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153	None	Limited	Existing roads and trails	Wildlife (GSG); no road access	SGHAB			N	Y	INC. PRIM	N	NA	NA	Y	N	29.2
155	Reclaimed Diatomite Mine	Limited	Existing roads and trails	Other resources (cultural); no legal access	SRMA	SGHAB	CULT	N	N	N	N	NA	NA	Y	N	79.1
156	North Lake SRMA	Limited	Existing roads and trails	No legal access	SRMA			N	N	N	N	NA	NA	Y	N	79.2
157	None	Limited	Existing roads and trails	Other resources (riparian)	RIPARIAN			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	435.4
158	Clover Flat	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	1840.7
159	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	1290
160	None	Limited	Existing roads and trails	Soil (slope); dense forest; GHMA; no legal access	MANAGE	SGHAB	SOIL	N	N	N	N	NA	NA	Y	N	40.2
161	None	Limited	Existing roads and trails	Wildlife (GSG); fenced with private land	SGHAB	RIPARIAN		N	N	N	N	NA	NA	Y	Y	8.3
162	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	604.0
163	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	648.6
164	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	643.5
165	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	1296.3
166	Hawk Valley Seeding	Limited	Existing roads and trails	Wildlife (GSG); not sage-grouse habitat	SGHAB	SEED		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	6643.1
167	None	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	Y	N	ON-ROAD ONLY	NA	NA	Y	Y	281.2
168	Twelvemile Creek (Honey Creek Trib.)	Limited	Existing roads and trails	Wildlife (GSG); Fish (Redband Trout); no legal access	SGHAB	SSFAUNA		N	N	N	N	NA	NA	Y	N	475.9
171	North Bull Pen	Limited	Existing roads and trails	Wildlife (sagebrush); Bullpen corral	BLM	MANAGE		N	N	INC. PRIM	ON-ROAD ONLY	NA	NA	N	MOD	983.0
172	Tucker Hill Mine	Limited	Existing roads and trails	Wildlife (GSG); Mine; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	829.4
173	None	Limited	Existing roads and trails	Soil (slope); Vegetation (forest); access from Forest Service	BLM	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	78.1
174	West Abert	Limited	Existing roads and trails	Wildlife (GSG); Soils (slopes)	SGHAB		SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	439.2
176	North Lake SRMA	Limited	Existing roads and trails		SRMA	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	388.8

Area ID	Area Name	Proposed OHV Designation	Limited Area Designation Detail	Comments	Reason 1*	Reason 2	Reason 3	Opportunity for Developed Recreation	Opportunity for Undeveloped Recreation	Meet Increase in Recreation Demand**	Capable of Providing an OHV Opportunity	Public Safety Concern	Minimize Recreation Conflicts	Protect Other Resources	Accessible ***	Acres
177	North Lake SRMA	Limited	Existing roads and trails	GHMA; sagebrush; scattered private inholdings	SRMA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	363982.3
178	Silver Lake Deer Winter Range Closure	Limited	Designated roads and trails	Wildlife (big game winter habitat); no legal access	BIG GAME	SRMA		N	N	N	N	NA	NA	Y	N	916.0
179	North Lake SRMA	Limited	Existing roads and trails	No legal access	SRMA			N	N	N	N	NA	NA	Y	N	40.2
181	North Lake SRMA	Limited	Existing roads and trails	No legal access	SRMA			N	N	N	N	NA	NA	Y	N	80.4
182	North Lake SRMA	Limited	Existing roads and trails	Small tract	SRMA			N	N	N	ON-ROAD ONLY	NA	Y	Y	Y	680.7
183	North Lake SRMA	Limited	Existing roads and trails	GHMA; no legal access	SRMA	SGHAB		N	N	N	N	NA	NA	Y	N	80.8
184	North Lake SRMA	Limited	Existing roads and trails		SRMA			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	1588.1
185	None	Limited	Existing roads and trails	Other resources (riparian); no legal access	RIPARIAN			N	N	N	N	NA	NA	Y	N	39.7
186	None	Limited	Existing roads and trails	Access from FS	BLM	MANAGE		N	Y	Y	ON-ROAD ONLY	NA	NA	Y	MOD	313.1
187	Drake	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	361.5
188	Rosebriar	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	123.0
189	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	628.7
190	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	647.5
191	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	647.2
192	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	645.9
193	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	645.1
194	None	Limited	Existing roads and trails	Soil (slope/erosion); no legal access	BLM	MANAGE	SOIL	N	Y	N	N	NA	NA	Y	N	745.0
195	Summer Lake	Limited	Existing roads and trails	Lake bottom; no land access	RIPARIAN			N	N	N	N	NA	NA	Y	N	331.8
196	Summer Lake	Limited	Existing roads and trails	Lake bottom	RIPARIAN			N	Y	INC. PRIM	N	NA	NA	Y	N	463.2
197	Twelvemile Creek	Limited	Existing roads and trails	Wildlife (GSG); Fish (Redband Trout); adjacent private land	SGHAB	SSFAUNA		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	241.2

Area ID	Area Name	Proposed OHV Designation	Limited Area Designation Detail	Comments	Reason 1*	Reason 2	Reason 3	Opportunity for Developed Recreation	Opportunity for Undeveloped Recreation	Meet Increase in Recreation Demand**	Capable of Providing an OHV Opportunity	Public Safety Concern	Minimize Recreation Conflicts	Protect Other Resources	Accessible ***	Acres
198	None	Limited	Existing roads and trails	Fish (Warner Sucker/Redband); no land access	RIPARIAN	FEDLIST	SSFAUNA	N	N	N	N	NA	NA	Y	N	60.4
200	None	Limited	Existing roads and trails	Old burn; patches sagebrush/GHMA	SGHAB	BLM	MANAGE	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	9799.2
201	Honey Creek	Limited	Existing roads and trails	Wildlife (GSG); Fish (Warner Sucker/ Redband Trout); no legal access	SGHAB	FEDLIST	SSFAUNA	N	N	N	N	NA	NA	Y	N	656.4
202	Honey Creek	Limited	Existing roads and trails	Wildlife (GSG); Fish (Warner Sucker/ Redband Trout); no legal access	SGHAB	FEDLIST	SSFAUNA	N	N	N	N	NA	NA	Y	N	642.6
203	None	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	7653.9
204	None	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	652.0
205	None	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	644.1
206	North Highway 140	Limited	Existing roads and trails	Wildlife (GSG); limited access; small	SGHAB			N	N	N	N	NA	NA	Y	N	555.8
207	North Lake SRMA	Limited	Existing roads and trails	Small tract	SRMA			N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	39.9
208	North Lake SRMA	Limited	Existing roads and trails	Fenced with private land	SRMA	RIPARIAN		N	N	N	N	NA	NA	Y	Y	6.0
209	North Lake SRMA	Limited	Existing roads and trails	GHMA; no legal access	SRMA	SGHAB		N	N	N	N	NA	NA	Y	N	160.4
210	North Lake SRMA	Limited	Existing roads and trails		SRMA			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	81.7
211	North Lake SRMA	Limited	Existing roads and trails	No legal access	SRMA			N	N	N	N	NA	Y	Y	N	161.3
212	North Lake SRMA	Limited	Existing roads and trails	Adjacent to ACEC	SRMA			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	326.3
213	North Lake SRMA	Limited	Existing roads and trails	GHMA; no legal access	SRMA	SGHAB		N	N	N	N	NA	Y	Y	N	321.8
214	North Lake SRMA	Limited	Existing roads and trails	portion GHMA/sagebrush; adjacent private land	SRMA	SGHAB		N	N	NA	N	NA	NA	Y	MOD	40.2
215	North Lake SRMA	Limited	Existing roads and trails	Portion GHMA/ sagebrush; small; adjacent private land	SRMA	SGHAB		N	N	NA	N	NA	NA	Y	MOD	40.8
216	Proposed Deer Winter Range Closure	Limited	Existing roads and trails	Wildlife (big game winter habitat); portion GHMA	BIG GAME	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	11235.0

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217	North Lake SRMA	Limited	Existing roads and trails	GHMA; no legal access	SRMA	SGHAB		N	N	N	N	NA	NA	Y	N	75.7
218	None	Limited	Designated roads and trails	Wildlife (big game winter habitat); access from FS	BIG GAME			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	40.4
219	None	Limited	Existing roads and trails	Fenced with state land	BLM			N	N	INC. PRIM	ON-ROAD ONLY	NA	NA	N	Y	52.2
220	Drews Reservoir	Limited	Existing roads and trails	Mostly lake bottom; no legal access from land	BLM	MANAGE		N	Y	BOAT. OPP.	N	NA	NA	Y	MOD	479.1
230	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	161.4
231	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	40.2
232	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	119.2
233	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	474.3
234	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	80.6
235	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	1012.7
236	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	276.7
237	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	658.9
238	None	Limited	Existing roads and trails	Forested; hillside; not SG habitat; no legal access	SGHAB	SOIL		N	N	N	N	NA	NA	Y	N	39.4
239	North Sagehen Creek	Limited	Existing roads and trails	Wildlife (GSG); no legal access; 2 parcels	SGHAB			N	N	N	N	NA	NA	Y	N	75.0
240	None	Limited	Existing roads and trails	Forested; not SG habitat	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	75.0
241	West Drake Creek	Limited	Existing roads and trails	Steep; no legal access	BLM	MANAGE		N	N	N	N	NA	NA	Y	N	40.7
242	None	Limited	Existing roads and trails	Wildlife (GSG); Soil (slope); no legal access	SGHAB		SOIL	N	N	NA	N	NA	NA	Y	N	160.7
243	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	607.1
244	None	Limited	Existing roads and trails	Forested; not SG habitat; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	80.5

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245	None	Limited	Existing roads and trails	Wildlife (GHMA/sagebrush);	SGHAB	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	9153.7
246	None	Limited	Existing roads and trails	Soil (slope/erosion); GHMA; Veg (forest); access from FS	MANAGE	SGHAB	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	1060.3
247	State Block	Limited	Existing roads and trails	Several parcels fenced with state land	BLM	MANAGE		N	N	N	N	NA	NA	NA	Y	100.3
248	Southwest Rogger Peak	Limited	Existing roads and trails	Soil (slope); forested; steep; foot access from FS	BLM	MANAGE	SOIL	N	Y	INC. PRIM	N	NA	Y	Y	N	115.5
249	Deadman Canyon	Limited	Existing roads and trails	Soil (slope); forested; no legal access; 2 parcels	BLM	MANAGE	SOIL	N	N	N	N	NA	NA	Y	N	279.4
250	Honey Creek	Limited	Existing roads and trails	Wildlife (GSG); Fish (Warner Sucker/ Redband Trout); no legal access	SGHAB	FEDLIST	SSFAUNA	N	N	N	N	NA	NA	Y	N	673.4
251	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	442.3
252	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	641.3
253	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	1790.7
254	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	476.3
255	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	638.0
256	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	640.6
257	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	199.2
258	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	672.4
259	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	670.6
260	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	641.9

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261	Stone Corral	Limited	Existing roads and trails	Wildlife (GSG); portions GHMA	RIPARIAN	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	512.0
262	North Lake SRMA	Limited	Existing roads and trails	Small tract; adjacent private land	SRMA			N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	23.5
263	North Lake SRMA	Limited	Existing roads and trails	No legal access	SRMA			N	N	N	N	NA	NA	Y	N	40.8
264	North Lake SRMA	Limited	Existing roads and trails	Flat; small tract	SRMA			N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	80.1
265	Reclaimed Diatomite Mine	Limited	Existing roads and trails	Other resources (cultural); adjacent private land	SRMA	SGHAB	CULT	N	N	NA	ON-ROAD ONLY	NA	NA	Y	Y	605.5
266	None	Limited	Designated roads and trails	Wildlife (big game winter habitat)	BIG GAME	SRMA		N	Y	N	N	NA	Y	Y	Y	115.0
267	North Lake SRMA	Limited	Existing roads and trails	GHMA; flat	SRMA	SGHAB		N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	119.9
268	North Lake SRMA	Limited	Existing roads and trails	Adjacent to ACEC/private lands	SRMA			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	81.3
269	North Lake SRMA	Limited	Existing roads and trails	Portion GHMA; sagebrush; adjacent private land	SRMA	SGHAB		N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	649.0
270	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	645.0
271	Honey Creek	Limited	Existing roads and trails	Wildlife (GSG); Fish (Warner Sucker/ Redband Trout)	SGHAB	FEDLIST	SSFAUNA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	2376.8
272	Twelvemile Creek	Limited	Existing roads and trails	Wildlife (GSG); Fish (Redband Trout); adjacent private land	SGHAB	SSFAUNA		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	405.5
273	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	520.2
274	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	643.7
275	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	636.6
276	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	623.7
277	South Crane Mountain	Limited	Existing roads and trails	Forested; Fish (Redband Trout)	MANAGE	SSFAUNA		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	39.8
278	North Lake SRMA	Limited	Existing roads and trails	GHMA	SRMA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	97464.1
279	North Lake SRMA	Limited	Existing roads and trails	Access from FS	SRMA			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	78.8
281	North Lake SRMA	Limited	Existing roads and trails	GHMA; no legal access	SRMA	SGHAB		N	N	N	N	NA	NA	Y	N	586.7

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282	North Lake SRMA	Limited	Existing roads and trails	Portion GHMA; adjacent private land/ACEC	SRMA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	395.6
283	North Lake SRMA	Limited	Existing roads and trails	GHMA; partial burn	SRMA	SGHAB	ROW	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	15185.9
284	North Lake SRMA	Limited	Existing roads and trails	GHMA; playa; small; no legal access	SRMA	SGHAB		N	N	N	N	NA	NA	Y	N	121.8
285	North Lake SRMA	Limited	Existing roads and trails	GHMA; small; playas; adjacent private land	SRMA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	874.0
286	North Lake SRMA	Limited	Existing roads and trails	GHMA; adjacent private land	SRMA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	1880.6
287	North Lake SRMA	Limited	Existing roads and trails	Lava; no legal access	SRMA			N	N	N	N	NA	NA	Y	N	40.5
288	Silver Lake Deer Winter Range Closure	Limited	Designated roads and trails	Wildlife (big game winter habitat); north portion GHMA	BIG GAME	SRMA	SGHAB	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	80895.2
289	None	Limited	Existing roads and trails	Wildlife (GSG); small	SGHAB			N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	119.7
290	None	Limited	Existing roads and trails	Steep; forested; no legal access	BLM	MANAGE		N	N	N	N	NA	NA	Y	N	80.6
291	Dicks Creek	Limited	Existing roads and trails	Fish (Redband Trout); forested; Soil (slope)	SSFAUNA	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	368.8
292	Rivers End	Limited	Existing roads and trails	Wildlife (GSG); Fish (Redband); no legal access	SGHAB	SSFAUNA		N	N	N	N	NA	NA	Y	N	40.7
293	Tim Long Creek	Limited	Existing roads and trails	Soil (slope); dense forest; no legal access	BLM	MANAGE	SOIL	N	Y	N	N	NA	NA	Y	N	83.8
294	Tucker Hill	Limited	Existing roads and trails	No legal access; Minimal resource conflicts	BLM			N	N	N	N	NA	NA	N	N	1290.6
295	None	Limited	Existing roads and trails	No legal access	BLM	RIPARIAN		N	N	N	N	NA	NA	Y	N	40.3
296	None	Limited	Existing roads and trails	Wildlife (GSG); Fish (Warner Sucker/ Redband Trout)	SGHAB	FEDLIST	SSFAUNA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	1248.0
298	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	641.4
299	None	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	203.1
300	North Summer Lake	Limited	Existing roads and trails	Soils (erosion); Vegetation (damage); adjacent state land	BLM	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	278.0
301	Hadley Creek	Limited	Existing roads and trails	Soil (slope); steep; no legal access	BLM	MANAGE	SOIL	N	N	N	N	NA	NA	Y	N	40.0

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302	None	Limited	Existing roads and trails	Wildlife (GSG); adjacent Forest Service/private lands	SGHAB	SOIL		N	Y	INC. PRIM	N	NA	NA	Y	N	234.3
303	Crump Lake	Limited	Existing roads and trails	Fish (Warner Sucker/ Redband Trout); no legal access from land	FEDLIST	RIPARIAN		N	Y	BOAT. OPP.	N	NA	NA	Y	N	103.5
304	Horse Creek	Limited	Existing roads and trails	Wildlife (GSG); adjacent private lands; no roads	SGHAB			N	Y	INC. PRIM	N	NA	NA	Y	N	459.7
305	Twelvemile Creek (Honey Creek Trib.)	Limited	Existing roads and trails	Wildlife (GSG); Fish (Redband Trout); adjacent private land	SGHAB	SSFAUNA		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	639.2
306	None	Limited	Existing roads and trails	Wildlife (GSG); adjacent to WSA	SGHAB			N	Y	INC. PRIM	N	NA	NA	Y	N	39.6
307	None	Limited	Existing roads and trails	Wildlife (GSG); Fish (Redband Trout); no legal access	SGHAB	SSFAUNA		N	N	N	N	NA	NA	Y	N	52.7
308	None	Limited	Existing roads and trails	Wildlife (GSG); small tract; fenced with private land	SGHAB			N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	25.5
310	Northeast Warner Wetlands	Limited	Existing roads and trails		BLM	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	1234.3
311	South Tandy Creek	Limited	Existing roads and trails	No legal access	BLM	MANAGE	SOIL	N	N	N	N	NA	NA	Y	N	77.6
313	Parker Creek	Limited	Existing roads and trails	No legal access	BLM	MANAGE		N	N	N	N	NA	NA	Y	N	79.7
314	South Loveless Creek	Limited	Existing roads and trails	No legal access	BLM	MANAGE		N	N	N	N	NA	NA	Y	N	40.6
316	None	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	80.7
317	None	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	636.4
318	None	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	566.0
319	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	646.2
320	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	MOD	651.5
321	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	638.3
322	None	Limited	Existing roads and trails	Soils (erosion); no legal access	BLM	SOIL		N	N	N	N	NA	NA	Y	N	39.3
323	None	Limited	Existing roads and trails	Wildlife (sagebrush); partially seeded	SGHAB	MANAGE	SEED	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	6551.0

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324	None	Limited	Existing roads and trails	Soils (erosion); Vegetation (damage)	BLM	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	8374.1
325	None	Limited	Existing roads and trails	Wildlife (GSG/sagebrush)	SGHAB	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	8853.0
326	Southwest Paisley	Limited	Existing roads and trails	Soil (slope); GHMA; no legal access	MANAGE	SGHAB	SOIL	N	N	N	N	NA	NA	Y	N	80.5
327	South Summer Lake	Limited	Existing roads and trails	Wildlife (GSG); adjacent to WSA; access on foot	SGHAB			N	Y	INC. PRIM	N	NA	Y	Y	N	159.1
328	Worlow Creek	Limited	Existing roads and trails	Soil (slope/erosion); Fish (Redband); some forest	SOIL	SSFAUNA	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	8451.4
329	East Crane Mountain	Limited	Existing roads and trails	Forested; adjacent to Forest Service	BLM	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	31.1
330	None	Limited	Existing roads and trails	Fish (Warner Sucker/Redband); Soil (slope)	FEDLIST	SSFAUNA	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	704.3
331	West Devils Garden	Limited	Existing roads and trails	Wildlife (GSG); access on foot	SGHAB			N	Y	INC. PRIM	N	NA	Y	Y	MOD	254.5
332	Silver Lake Deer Winter Range Closure	Limited	Designated roads and trails	Wildlife (big game winter habitat); no legal access	BIG GAME	SRMA		N	N	N	N	NA	NA	Y	N	39.5
333	Buck Creek Marsh	Limited	Existing roads and trails	No legal access	SRMA	RIPARIAN		N	N	N	N	NA	NA	Y	N	78.3
334	None	Limited	Designated roads and trails	Wildlife (big game winter habitat); no legal access	BIG GAME	SRMA		N	N	N	N	NA	Y	Y	N	79.1
335	Reclaimed Diatomite Mine	Limited	Existing roads and trails	Other resources (cultural); no legal access	SRMA	SGHAB	CULT	N	N	N	N	NA	NA	Y	N	80.2
336	North Lake SRMA	Limited	Existing roads and trails	sagebrush; adjacent private land; flat	SRMA			N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	36.0
337	North Lake SRMA	Limited	Existing roads and trails	Adjacent to ACEC	SRMA			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	222.1
338	Northeast Crane Mountain	Limited	Existing roads and trails	forested; Fish (Redband Trout); adjacent private lands	MANAGE	SSFAUNA		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	39.4
339	None	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	307.9
340	None	Limited	Existing roads and trails	Wildlife (GSG); no legal access; adjacent private land	SGHAB			N	N	N	N	NA	NA	Y	N	159.2
341	None	Limited	Existing roads and trails	Wildlife (GSG); adjacent private land	SGHAB			N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	121.5
342	None	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	243.3

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343	None	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB	ROW		N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	40.5
344	None	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB	RIPARIAN		N	N	N	N	NA	NA	Y	N	12.7
345	None	Limited	Existing roads and trails	Fish (Warner Sucker); no legal access	FEDLIST			N	N	N	N	NA	NA	Y	N	17.7
346	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	664.1
347	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	644.1
348	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	646.8
349	None	Limited	Existing roads and trails	Soils (erosion); Vegetation (damage)	BLM	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	1019.5
350	Winter Ridge	Limited	Existing roads and trails	Soil (slope); foot access from FS	BLM	MANAGE	SOIL	N	Y	INC. PRIM	N	NA	NA	Y	N	79.8
351	Winter Ridge	Limited	Existing roads and trails	Soil (slope); foot access from FS	BLM	MANAGE	SOIL	N	Y	INC. PRIM	N	NA	NA	Y	N	44.2
352	None	Limited	Existing roads and trails	Wildlife (GSG); Fish (Redband Trout)	SGHAB	SSFAUNA		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	3288.8
353	None	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	271.9
354	None	Limited	Existing roads and trails	No legal access	RIPARIAN			N	N	N	N	NA	NA	Y	N	81.9
355	None	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	10.7
356	None	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	1283.9
357	None	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	87.2
358	None	Limited	Existing roads and trails	no legal access	BLM	MANAGE		N	Y	INC. PRIM	N	NA	NA	Y	N	155.3
359	None	Limited	Existing roads and trails	Wildlife (GSG); small; no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	26.4
360	None	Limited	Existing roads and trails	Fish (Warner Sucker); GHMA; no legal access	RIPARIAN	FEDLIST	SGHAB	N	N	N	N	NA	NA	Y	N	158.3
362	Coleman Valley	Limited	Existing roads and trails	No legal access	BLM			N	N	N	N	NA	NA	Y	N	41.2
363	None	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	257.2

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365	Silver Lake Deer Winter Range Closure	Limited	Designated roads and trails	Wildlife (big game winter habitat); access from FS	BIG GAME	SRMA		N	Y	INC. PRIM	N	NA	Y	Y	MOD	155.6
366	North Lake SRMA	Limited	Existing roads and trails	agriculture pivot; adjacent private land; no legal access	SRMA			N	N	N	N	NA	NA	Y	N	39.4
367	South Paulina Marsh	Limited	Existing roads and trails	No legal access	SRMA	RIPARIAN		N	N	N	N	NA	NA	Y	N	38.2
368	North Lake SRMA	Limited	Existing roads and trails	GHMA; no legal access	SRMA	SGHAB		N	N	N	N	NA	NA	Y	N	164.6
369	None	Limited	Existing roads and trails	Juniper; hillside/slope	BLM		SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	87.3
370	North Lake SRMA	Limited	Existing roads and trails	GHMA; small; adjacent private land	SRMA	SGHAB		N	N	NA	N	NA	NA	Y	MOD	40.6
371	Ennis Creek	Limited	Existing roads and trails	Soil (slope); dense forest; foot access from FS	BLM	MANAGE	SOIL	N	Y	N	N	NA	NA	Y	MOD	42.7
372	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	643.7
373	Checkerboard	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	3928.9
374	Honey Creek	Limited	Existing roads and trails	Wildlife (GSG); Fish (Warner Sucker/ Redband); adjacent private land	SGHAB	FEDLIST	SSFAUNA	N	N	N	N	NA	NA	Y	N	620.0
375	None	Limited	Existing roads and trails	Wildlife (GSG/ sagebrush); soils (rim/slope); fenced	SGHAB	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	9782.7
377	None	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	2108.0
378	None	Limited	Existing roads and trails	Wildlife (GSG); Fish (Warner Sucker/Redband)	SGHAB	FEDLIST	SSFAUNA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	134.2
379	None	Limited	Designated roads and trails	Other resources (cultural); adjacent private land	CULT			N	N	NA	ON-ROAD ONLY	NA	NA	Y	Y	120.6
380	Silver Lake Deer Winter Range Closure	Limited	Designated roads and trails	Wildlife (big game winter habitat); foot access from FS	BIG GAME	SRMA		N	Y	INC. PRIM	N	NA	Y	Y	N	77.5
381	North Lake SRMA	Limited	Existing roads and trails	GHMA; playa; no legal access	SRMA	SGHAB		N	N	N	N	NA	NA	Y	N	40.6
382	North Lake SRMA	Limited	Existing roads and trails	GHMA; no legal access	SRMA	SGHAB		N	N	N	N	NA	NA	Y	N	163.2
383	North Lake SRMA	Limited	Existing roads and trails	No legal access	SRMA			N	N	N	N	NA	NA	Y	N	80.5
384	Loveless Creek	Limited	Existing roads and trails	Fish (Redband); no legal access	SSFAUNA	MANAGE		N	N	N	N	NA	NA	Y	N	241

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385	None	Limited	Existing roads and trails	Soil (slope); dense forest; no legal access	BLM	MANAGE	SOIL	N	N	N	N	NA	NA	Y	N	43.6
386	None	Limited	Existing roads and trails	Soil (slope); dense forest; no legal access	BLM	MANAGE	SOIL	N	N	N	N	NA	NA	Y	N	158.9
387	None	Limited	Existing roads and trails	Soil (slope); Other resources (riparian); no legal access	BLM	MANAGE	SOIL	N	Y	N	N	NA	NA	Y	N	14.1
388	North Coon Hollow	Limited	Existing roads and trails	Soil (slope); no legal access	BLM	MANAGE	SOIL	N	N	N	N	NA	NA	Y	N	39.9
389	None	Limited	Existing roads and trails	Wildlife (GSG); Playa	SGHAB			N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	64.4
390	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	646.7
391	Beaty Checkerboard	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	1293.9
392	None	Limited	Existing roads and trails	Soils (erosion); no legal access	BLM	MANAGE	SOIL	N	N	N	N	NA	NA	Y	N	160.8
393	None	Limited	Existing roads and trails	Fish (Warner Sucker/Redband); no land access	RIPARIAN	FEDLIST	SSFAUNA	N	Y	N	N	NA	Y	Y	N	239.4
394	West Summer Lake	Limited	Existing roads and trails	Soil (slope); foot access from FS	BLM	MANAGE	SOIL	N	Y	N	N	NA	NA	Y	N	560.6
395	None	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	6082.5
396	North Crane Mountain	Limited	Existing roads and trails	Steep slopes; foot access from BLM	SOIL	MANAGE		N	Y	INC. PRIM	N	NA	Y	Y	MOD	387.6
397	None	Limited	Existing roads and trails	GHMA; playa; riparian;	SGHAB	RIPARIAN		N	Y	N	ON-ROAD ONLY	NA	Y	Y	Y	614.8
398	None	Limited	Existing roads and trails	Fish (Warner Sucker/Redband); Soil (slope)	FEDLIST	SSFAUNA	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	792.2
399	Hawk Mountain North Addition	Limited	Existing roads and trails	Category C unit	WILDCHAR			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	50.6
400	Guano Rim	Limited	Existing roads and trails	Category C unit	WILDCHAR			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	4620.1
401	North Lake SRMA	Limited	Existing roads and trails	Patch of GHMA; adjacent private land/ACEC	SRMA			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	5400.8
402	None	Limited	Existing roads and trails	Fish (Redband); Chewaucan access	BLM	SSFAUNA		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	58.8
404	North Burma	Limited	Existing roads and trails	Wildlife (GSG); sagebrush	SGHAB	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	122092.0
405	None	Limited	Existing roads and trails		RIPARIAN			N	Y	N	ON-ROAD ONLY	NA	NA	Y	Y	10.5

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406	None	Limited	Existing roads and trails	Fish (Warner Sucker)	RIPARIAN	FEDLIST		N	Y	N	ON-ROAD ONLY	NA	Y	Y	MOD	12.0
407	Greaser	Limited	Existing roads and trails		RIPARIAN			N	Y	N	ON-ROAD ONLY	NA	NA	Y	Y	4.2
408	Twentymile Slough	Limited	Existing roads and trails	Fish (Warner Sucker)	RIPARIAN	FEDLIST		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	31.9
409	Greaser Reservoir	Limited	Existing roads and trails	Fish (Warner Sucker)	RIPARIAN	FEDLIST		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	1551.8
410	None	Limited	Existing roads and trails	lake bottom; playa	RIPARIAN			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	67.3
411	None	Limited	Existing roads and trails		RIPARIAN			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	335.0
412	Lake Abert	Limited	Existing roads and trails	Fish (Redband); no legal access	BLM	SSFAUNA		N	N	N	N	NA	Y	Y	N	181.9
413	Reclaimed Diatomite Mine	Limited	Existing roads and trails	Other resources (cultural)	SRMA	CULT		N	Y	NA	ON-ROAD ONLY	NA	NA	Y	Y	160.5
414	North Bluejoint	Limited	Existing roads and trails	Adjacent private lands	BLM	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	5710.9
415	None	Limited	Existing roads and trails	Wildlife (GSG); adjacent private lands	SGHAB			N	N	N	ON-ROAD ONLY	NA	Y	Y	MOD	108.1
416	None	Limited	Existing roads and trails	Wildlife (sagebrush)	BLM			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	5985.2
417	South Hogback	Limited	Existing roads and trails	Fenced with state land	BLM	MANAGE		N	N	N	ON-ROAD ONLY	NA	NA	Y	Y	74.8
418	None	Limited	Existing roads and trails	Fenced with state land	BLM	MANAGE		N	N	N	N	NA	NA	NA	N	114.7
420	None	Limited	Existing roads and trails	Wildlife (sagebrush); patches GHMA	BLM	SGHAB	SEED	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	18226.3
421	None	Limited	Existing roads and trails	Wildlife (scattered sagebrush/GHMA)	BLM	SGHAB	MANAGE	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	97821.3
422	None	Limited	Existing roads and trails	Wildlife (GSG); GHMA	SGHAB	MANAGE	SEED	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	246.4
423	None	Limited	Existing roads and trails		BLM	MANAGE	SEED	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	2019.0
424	None	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	58298.2
425	None	Limited	Existing roads and trails	Wildlife (sagebrush)	BLM	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	1627.1
426	None	Limited	Existing roads and trails	Fenced with state land	BLM	MANAGE		N	N	N	N	NA	NA	NA	Y	8.3
427	None	Limited	Existing roads and trails	Fenced with state land	BLM	MANAGE		N	N	N	N	NA	NA	NA	Y	15.7

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429	None	Limited	Existing roads and trails	Wildlife (sagebrush); Soil (slope)	BLM	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	2837.3
430	BPA powerline	Limited	Existing roads and trails	Wildlife (sagebrush); Soil (slope)	ROW		SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	4112.2
431	None	Limited	Existing roads and trails	Fenced with state land	BLM	MANAGE		N	N	N	ON-ROAD ONLY	NA	NA	N	MOD	112.3
432	None	Limited	Existing roads and trails	Wildlife (sagebrush)	BLM	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	2310.8
433	None	Limited	Existing roads and trails	Wildlife (sagebrush); adjacent state land	BLM			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	802.9
434	Venator Butte	Limited	Existing roads and trails	Soil (slopes); not all SG habitat	SGHAB	SOIL	SEED	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	5180.8
436	South Horse Mountain	Limited	Existing roads and trails	Soils (slope); seeding; patches sagebrush	BLM	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	5797.2
437	None	Limited	Existing roads and trails	Wildlife (sagebrush)	SGHAB	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	6667.7
438	South Coleman Valley	Limited	Existing roads and trails	Adjacent private lands	BLM	RIPARIAN	MANAGE	N	Y	N	N	NA	NA	Y	Y	128.2
439	South Coleman Valley	Limited	Existing roads and trails		BLM	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	372.4
440	Dougherty Slide	Limited	Existing roads and trails	Wildlife (GSG); steep slopes; playas	SGHAB	SOIL		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	1613.8
441	Paiute Reservoir	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	360.4
442	South 140	Limited	Existing roads and trails	Wildlife (GSG; sagebrush)	SGHAB	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	39831.4
443	Beaty Butte	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	292418.2
444	Coleman Seeding	Limited	Existing roads and trails	Vegetation (Weeds); patches GHMA	BLM	SGHAB	SEED	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	5327.1
445	East Warner Valley	Limited	Existing roads and trails	Fish (Warner Sucker/Redband)	RIPARIAN	FEDLIST	SSFAUNA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	676.9
446	Mud Lake	Limited	Existing roads and trails	Wildlife (GSG)	SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	39858.4
450	Foskett Dace Exclosures and Shoreline	Closed		Wildlife (Foskett Dace); exclosures	SSFAUNA	RIPARIAN		N	Y	INC. PRIM	N	NA	NA	Y	Y	215.5
451	Mulkey Wells	Limited	Existing roads and trails	Seeding; portion GHMA; small	SGHAB	MANAGE	SEED	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	626.7
452	Rim	Limited	Existing roads and trails	Soil (slopes)	SOIL	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	1059.2
453	Rim	Limited	Existing roads and trails	Soils (slopes); scattered sagebrush/GHMA	SOIL	SGHAB		N	Y	INC. PRIM	N	NA	NA	Y	MOD	731.0

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455	Venator Butte	Limited	Existing roads and trails	Soils (slopes)	SOIL			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	1972.2
456	Horse Mountain	Limited	Existing roads and trails	Soils (slopes); Wildlife (sagebrush)	SOIL			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	1644.5
457	Alkali Valley	Limited	Existing roads and trails	Wildlife (sagebrush); patches GHMA; some seeding	BLM	MANAGE	SEED	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	10011.9
458	Alkali Buttes	Limited	Existing roads and trails	Soils (slopes)	SOIL			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	3927.3
459	Silver Lake Deer Winter Range Closure	Limited	Designated roads and trails	Wildlife (big game winter habitat); Fish (Redband Trout)	BIG GAME	SRMA	SSFAUNA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	16795.3
461	Warner Valley	Limited	Existing roads and trails	Wildlife (sagebrush); scattered GHMA	BLM	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	25540.0
462	Rabbit Hills	Limited	Existing roads and trails	Soils (slopes); patches of sagebrush	BLM	SEED	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	21600.2
463	Northeast Coyote Hills	Limited	Existing roads and trails	Soils (slopes)	BLM	SEED	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	2348.5
464	East Alkali Lake	Limited	Existing roads and trails	Soils (slopes); fenced with state land	SOIL			N	N	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	183.8
465	None	Limited	Existing roads and trails	Wildlife (sagebrush); patch of GHMA	BLM	SGHAB	MANAGE	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	8902.4
466	North Lake SRMA	Limited	Existing roads and trails	Flat	SRMA	ROW		N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	2271.4
467	Beaty Butte	Limited	Existing roads and trails	Wildlife (GSG); no legal access	SGHAB			N	N	N	N	NA	NA	Y	N	644.3
468	State Block	Limited	Existing roads and trails	Fenced with state land	BLM	MANAGE		N	N	N	N	NA	NA	Y	Y	62.6
469	Coleman Hills	Limited	Existing roads and trails	Soil (slope)	BLM	MANAGE	SOIL	N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	4000.5
472	North Leehman	Limited	Existing roads and trails	Soils (slopes)	SOIL			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	173.7
474	Abert Rim	Limited	Existing roads and trails	Soils (slopes)	SOIL			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	6750.4
475	Alkali Valley	Limited	Existing roads and trails	Wildlife (sagebrush); scattered GHMA	BLM			N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	12949.3
477	Alkali Buttes	Limited	Existing roads and trails	Soils (slopes)	SOIL			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	6509.2
478	None	Limited	Existing roads and trails	Fenced with private land	BLM			N	N	N	ON-ROAD ONLY	NA	NA	N	Y	288.6
479	None	Limited	Existing roads and trails	Fenced	BLM	RIPARIAN		N	Y	INC. PRIM	ON-ROAD ONLY	NA		Y	MOD	9.1

Area ID	Area Name	Proposed OHV Designation	Limited Area Designation Detail	Comments	Reason 1*	Reason 2	Reason 3	Opportunity for Developed Recreation	Opportunity for Undeveloped Recreation	Meet Increase in Recreation Demand**	Capable of Providing an OHV Opportunity	Public Safety Concern	Minimize Recreation Conflicts	Protect Other Resources	Accessible ***	Acres
480	None	Limited	Existing roads and trails	Fenced; playa	BLM	MANAGE	RIPARIAN	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	1719.4
481	None	Limited	Existing roads and trails	Patchy GHMA/sagebrush	BLM	MANAGE	SGHAB	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	2069.2
482	BPA powerline	Limited	Existing roads and trails	Wildlife (sagebrush)	BLM	MANAGE	ROW	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	MOD	1099.7
483	North Lake SRMA	Limited	Existing roads and trails	Portion GHMA; adjacent private land; backscatter	SRMA	SGHAB	MANAGE	Y	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	Y	11819.6
484	North Lake SRMA	Limited	Existing roads and trails	Portion GHMA; playa; adjacent unfenced private land	SRMA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	12.0
485	North Lake SRMA	Limited	Existing roads and trails	Portion GHMA; playa; adjacent unfenced private land	SRMA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	72.0
486	North Lake SRMA	Limited	Existing roads and trails	Portion GHMA; playa; adjacent unfenced private land	SRMA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	2078.3
500	South Hogback	Limited	Existing roads and trails	Flat; old burns and seeding; Minimal resource conflicts	BLM	SEED	MANAGE	N	N	INC. PRIM	ON-ROAD ONLY	NA	Y	NA	Y	228.2
501	West Rabbit Hills	Open		Patches of brush; bounded by roads & fence; meet future OHV need	BLM OPEN			N	Y	INC. MOTOR	Y	NA	Y	N	Y	1529.5
502	North Warner Valley	Limited	Existing roads and trails	Flat; old burn and seeding; scattered sagebrush; Minimal resource conflicts	BLM	SEED		N	Y	INC. PRIM	N	NA	Y	NA	Y	10604.1
503	Northwest Warner	Limited	Existing roads and trails		SGHAB			N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	N	587.0
506	Coleman Lake East	Limited	Existing roads and trails	Fenced out of Coleman Lake bottom	BLM	MANAGE		N	N	INC. PRIM	N	NA	Y	N	N	550.9
507	Wagontire Gravel Pit	Open		Gravel pit; minimal resource conflicts; meet future OHV need	BLM OPEN	OPEN PLAY		N	Y	INC. MOTOR	Y	NA	Y	NA	Y	174.9
508	North Lake SRMA	Limited	Existing roads and trails	Adjacent private land; patches of GHMA	SRMA	MANAGE		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	N	Y	52.5
509	North Lake SRMA	Limited	Existing roads and trails	Portion GHMA; playa; adjacent private land	SRMA	SGHAB		N	Y	INC. PRIM	ON-ROAD ONLY	NA	Y	Y	MOD	325.0
510	North Christmas Lake	Open		Playa; unfenced private land on east; documented OHV use	BLM OPEN	OPEN PLAY	SRMA	N	Y	INC. MOTOR	Y	NA	Y	N	Y	4152.5
511	West Warner	Limited	Existing roads and trails	Wildlife (sagebrush); Fish (Warner Sucker/Redband)	SGHAB	FEDLIST	SSFAUNA	N	Y	INC. PRIM	ON-ROAD ONLY	NA	NA	Y	Y	142602.8

Area ID	Area Name	Proposed OHV Designation	Limited Area Designation Detail	Comments	Reason 1*	Reason 2	Reason 3	Opportunity for Developed Recreation	Opportunity for Undeveloped Recreation	Meet Increase in Recreation Demand**	Capable of Providing an OHV Opportunity	Public Safety Concern	Minimize Recreation Conflicts	Protect Other Resources	Accessible ***	Acres
513	Proposed National Guard Training Area	Limited	Existing roads and trails	Patchy sagebrush/GHMA; bounded by roads/topography/ fence	BLM	SEED	MANAGE	N	N	N	N	NA	Y	NA	Y	22889.1

* Reasons contributing to the proposed OHV designation include:
ADMIN. SITE – Existing administrative site.
BIG GAME – Big game habitat present; primarily mule deer winter range.
BLM – Limited is the default value for BLM-administered lands.
BLM OPEN – Area meets the BLM's policy for an open area designation.
CULT – Cultural, historic, or paleontological resource present.
FEDLIST – Federally listed species present.
MANAGE – Area was designated in part to provide or improve on-the-ground manageability.
OPEN PLAY – Area currently provides a quality OHV opportunity or would provide such an opportunity in response to increased future demand.
RECSITE – Existing recreation site.
RIPARIAN – Riparian habitat present.
ROW – Major utility right-of-way present.
SEED – Area has been seeded, typically with non-native species during past wildfire restoration activities.
SGHAB – Greater Sage-grouse habitat designation from *Oregon Greater Sage-Grouse RMPA.* Includes General Habitat Management Areas and Priority Habitat Management Areas (GHMA/PHMA; BLM 2015b).
SSFAUNA – Special status fauna present.
SSFLORA – Special status flora present.
SOIL – Potential erodible soil present due to soil characteristics or steep slopes.
SRMA – Special Recreation Management Area present.
** Y – Yes; N – No; NA – Not applicable
INC MOTOR – Area could provide for an increase in motorized recreational opportunities/demand.
INC PRIM – Area could provide for an increase in primitive, non-motorized recreational opportunities/demand.
ON-ROAD ONLY – Area could provide for an increase in motorized recreational opportunities/demand on existing routes only.
*** Y – Area is readily accessible from Federal, State, or county highways; No – Area has no legal or ready access from an existing route.
MOD – Area is accessible from a BLM road or primitive road.

2) Minimize damage to vegetation

Sagebrush Steppe - within the planning area, OHV area designations for important sagebrush steppe vegetation communities have already been identified and addressed as Greater Sage-grouse habitats (GHMA, PHMA, and SFA) in the *Oregon Greater Sage-Grouse Approved Resource Management Plan Amendment* (BLM 2015a). While sagebrush (Sage-grouse) habitat has been identified in the REASON fields in Table A9-2, the existing OHV Limited area designation decisions from the *Oregon Greater Sage-Grouse Approved Resource Management Plan Amendment* (BLM 2015a) is not being revisited within this plan amendment. For this reason, this criterion (sagebrush-steppe habitat) will not be considered further under any alternative.

Riparian/Wetlands - this resource has been identified in the REASON fields for Alternative D in Table A9-2. This resource overlaps some with special status fish habitat, which is addressed separately.

Forest - forested stands are limited primarily to about 15,000 acres of transitional lands between National Forest lands and drier sagebrush steppe habitats. Many forested stands are located in relatively small tracts, inaccessible areas, on steep slopes, or within special management areas. As a result of these factors and on-site tree densities, these areas have little potential to serve as OHV Open play areas. For this reason, these areas were not considered further for the OHV Open area management category and were typically placed in the OHV Limited area category for Alternative D.

Special Status Plants – these plants are typically found in small, scattered locations around the planning area and are generally not appropriate for OHV Open area management. The presence of this resource has been identified for specific areas in the REASON fields for Alternative D in Table A9-2. This criterion was one of the factors that contributed to specific areas being placed into the OHV Limited or Closed area management categories.

3) Minimize damage to watershed

Within the planning area, the combination of soil, vegetation (including riparian/wetlands), and fish habitat criteria collectively address areas with potential watershed or water quality concerns. Therefore, this criterion was not addressed individually.

4) Minimize damage to air

Air quality is not addressed in this plan amendment for reasons described in Chapter 1. The only portion of the planning area where air quality could potentially be an issue of relevance for OHV area designations is the Goose Lake Valley immediately surrounding the town of Lakeview. This area has been identified by the Oregon Department of Environmental Quality as a non-attainment area for both PM10 and PM 2.5, primarily due to the use of wood stoves (smoke) during the winter months when air layer inversions are common and, to a lesser extent, due to smoke from wildfires within and outside of the planning area during the summer months. There are only small, scattered parcels of BLM-administered lands in this non-attainment area surrounding Lakeview (see Map A-1, BLM 2003a). Motorized vehicle use on these parcels is limited due to lack of accessibility, and weather and road conditions and, therefore has little potential to influence air quality particularly during the winter months. For this reason, this criterion is not relevant to the designation of OHV Open, Limited, or Closed areas in the planning area under any alternative and will not be considered further.

5) Minimize damage to other resources

Cultural/Paleontology - while exact locations are not identified, the presence of important cultural/paleo resources within specific areas has been identified in the REASON fields for Alternative D in Table A9-2.

Lands with Wilderness Characteristics - while these lands have similar values as WSAs or designated wilderness areas, there is no statutory requirement to manage them in a similar fashion. For this reason, they are addressed here under the "other resources" criterion.

The proposed changes in OHV area designations considered under Alternatives B-E were designed to provide varying levels of protection primarily for wilderness characteristics. Under Alternatives B and C, motorized vehicle use was either Closed or Limited within all lands with wilderness characteristics.

Under Alternatives D and E, all Category C units were identified for management as OHV Limited areas to minimize potential effects to these values. These areas have been identified in the REASON fields for Alternative D in Table A9-4. Category A and B units, and Category C unit setbacks retained their existing OHV area designations under these two alternatives.

6) Prevent impairment of wilderness suitability

Within the planning area only WSAs are managed under this standard as there are currently no designated wilderness areas. All or portions of 14 WSAs and 1 ISA occur in the planning area (Map WCI-1 and Map W-5, Appendix 1).

The proposed changes in OHV area designations considered under Alternatives B and C were designed to provide varying levels of protection for wilderness values specifically within WSAs. Under Alternatives B and C, motorized vehicle use was either Closed or Limited within all WSA/ISAs.

Under Alternatives D and E, all WSAs retained their existing OHV designations. These WSA/ISAs were specifically identified in the REASON fields for Alternative D in Table A9-2 and all except a portion of the Sand Dunes WSA would be Limited to existing or designated routes (Map OHV-4) to prevent impairment of wilderness suitability. The remaining portion of the Sand Dunes WSA would remain open to motorized vehicle use in accordance with current WSA management policy (BLM 2012h, p. 1-27, Sec. 6.b.i.A) and to meet a known motorized/OHV recreation need.

<u>Areas shall be located to:</u>

1) Minimize harassment of wildlife or significant disruption of wildlife habitat

Mule deer, elk, pronghorn, bighorn sheep, potential pygmy rabbit, and special status fish habitats have been mapped (Maps WLF-1 to WLF-4, Appendix 1) and addressed in this plan amendment. Mule deer winter range was an issue addressed during the *Lakeview RMP/ROD* and a seasonal OHV closure was identified and designated during that planning process (see Map R-7, BLM 2003b). This seasonal mule deer winter range closures has been carried forward in all alternatives in this plan amendment (Maps OHV-1 to OHV-5, Appendix 1). Much of this same area is limited to existing routes the rest of the year. Mule deer winter range has been identified in the REASON fields for Alternative D in Table A9-2.

Within the planning area OHV area designations for important Greater Sage-grouse habitats (GHMA, PHMA, and SFA) were previously addressed in the *Oregon Greater Sage-Grouse Approved Resource Management Plan Amendment* (BLM 2015a). While Greater Sage-grouse habitat has been identified in the REASON fields in Table A9-2, these existing OHV Limited area designation decisions are not being revisited in this plan amendment. For this reason, this criterion (sage-grouse habitat) will not be considered further under any alternative.

While OHV use has not been identified as an issue within pronghorn, elk, or pygmy rabbit habitats in the planning area, there is significant overlap of these wildlife habitats with Greater Sage-grouse habitats, which have already been addressed, as described in the preceding paragraph. In addition, bighorn sheep habitat tends to fall within areas with steep slopes that have already been identified as having a potential soil erosion issue in the REASON fields in Table A9-2. For this reason, these criteria (pronghorn, elk, or pygmy rabbit habitats) will not be considered further.

Foskett Speckled Dace (recent Federally de-listed species) and Redband Trout habitat occur in the planning area (Map WLF-3, Appendix 1). Both are special status aquatic species. These habitats have been identified in the REASON fields in Table A9-2. Under Alternative D, Foskett Speckled Dace habitat would be placed

into the OHV Closed area category due to its limited aerial extent and Redband Trout habitat would be placed in the OHV Limited area category (Map OHV-2, Appendix 1). These designations would minimize potential effects to these species and their habitats.

2) Protect threatened/endangered species and their habitats

There are no Federally-listed plant species or designated critical plant habitats in the planning area.

Warner Sucker (Federal threatened species) habitat (including designated critical habitat) occurs in the planning area (Map WLF-3, Appendix 1). This has been identified in the REASON fields in Table A9-2. Under Alternative D, this habitat would be placed in the OHV Limited area category to minimize potential effects (Map OHV-4, Appendix 1) to this species. There are no other Federally-listed animal species or designated critical habitats on BLM-administered lands in the planning area.

Areas shall be located to:

1) Minimize conflicts with other existing/proposed recreational uses

This criterion has been addressed by considering the following recreation and OHV management goals from the *Lakeview RMP/ROD* (BLM 2003b, p. 83 and 86, as maintained).

Recreation Management Goal

- Provide and enhance developed and undeveloped recreation opportunities while protecting resources;
- Manage the increasing demand for resource-dependent recreation activities.

OHV Management Goal

Manage OHV use to:

- Provide OHV use opportunities where appropriate;
- Minimize conflicts among various users;
- Promote public safety; and
- Protect resource values.

Each distinct polygon/area identified under Alternative D has been evaluated to determine if the proposed OHV area designation meets one or more of these criteria. This has been identified in various attributes listed in Table A9-2. While both goal statements call for protecting other resource values, this is addressed as a separate criterion in the table.

2) Ensure compatibility with conditions in populated areas (i.e. noise and other factors)

The largest population center in the planning area is the town of Lakeview. There are only small, scattered parcels of BLM-administered lands located several miles or more away from this town. Other smaller communities (Valley Falls, Paisley, Summer Lake, Silver Lake, Fort Rock, Christmas Valley, Adel, and Plush) in the planning area also have BLM-administered lands in the general vicinity, but do not border most of these communities. Motorized vehicle/OHV use, on or off-road, has little potential to cause excessive noise, traffic, or other incompatible conditions within or adjacent to these small communities. For this reason, this criterion is not relevant to the designation of OHV Open, Limited, or Closed areas within the planning area and was not considered further under any alternatives.

Proximity to populated areas and/or accessibility along existing travel routes were criteria the BLM considered when identifying potential new OHV Open areas capable of providing a quality OHV opportunity in the planning area (Table A9-2). While there are no large population centers within the planning area most of the Open OHV areas are readily accessible from main roads (Map OHV-4, Appendix 1) and are located in the general vicinity of existing communities. However, many OHV users currently travel long distances to be able to use OHVs in the Sand Dunes area (almost year-round) or throughout the planning area on existing routes during fall hunting activities. Close proximity to a major population center does not appear to be a factor limiting many public from visiting or using OHVs on public lands in the planning area.

Areas shall not be located in:

1) Officially designated wilderness areas or primitive areas

No designated wilderness areas occur in the planning area. While lands with wilderness characteristics could potentially be considered as a type of "primitive area", they are not officially designated as such, nor do they qualify as officially designated wilderness areas. These areas have been addressed under "other resources" instead. For these reasons, this criterion is not relevant to the identification or designation of OHV Open, Limited, or Closed areas within the planning area and will not be considered further under any alternative.

2) Natural areas (unless the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established)

Designated Research Natural Areas (RNAs) are the only areas within the planning area that meet the definition of "natural areas" as articulated in this criterion. There are 10 RNAs (with duel ACEC designations) in the planning area which were designated to provide special management direction for important native plant communities in relatively good ecological condition. OHV area designations within all RNAs were previously addressed within the *Lakeview RMP/ROD* (BLM 2003b, p. 57-70, as maintained, and Maps SMA-4 to SMA-21).

Under the No Action Alternative, and Alternatives A, C, D, and E, all RNAs in the planning area would continue to be limited to either existing or designated routes to minimize potential effects to the relevant and important values for which each individual RNA was designated (see *ACEC/RNA* section of Chapter 3). These areas have been identified in the REASON fields for Alternative D in Table A9-2. Under Alternative B, any RNAs that overlap with lands with wilderness characteristics units would be closed to OHV use.

Appendix 10 - Literature Cited

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