

White River Field Office Record of Decision and Approved Resource Management Plan Amendment For Oil and Gas Development



Mission Statement

It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.



United States Department of the Interior

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Dear Reader:

We are pleased to announce the availability of the Bureau of Land Management (BLM) White River Field Office (WRFO) Record of Decision (ROD) and Approved Resource Management Plan Amendment (RMPA) for Oil and Gas Development. This document has been completed after many years of hard work and collaboration. The Approved RMPA resources for the future management direction and appropriate use of the WRFO, located in Rio Blanco, Moffat and Garfield counties, Colorado. The document contains land use planning decisions to guide the BLM's management of oil and gas development.

This ROD and Approved RMPA have been developed in accordance with the National Environmental Policy Act of 1969, as amended, and the Federal Land Policy and Management Act of 1976, as amended. The approval of this ROD serves as the final decision for all land use planning decisions described in the enclosed WRFO Approved RMPA.

The Proposed RMPA/Final Environmental Impact Statement (EIS) was released for a 30-day public protest period and 60 day Governor's Consistency Review on March 27, 2015. The BLM Director appropriately reviewed and resolved all protests. One protest was granted that did not result in modifications to the planning decisions, but required commitment to evaluate Areas of Critical Environmental Concern. Some clarifications were made and are discussed in the Proposed RMPA Protest Resolution section of the ROD.

The ROD/Approved RMPA are available at www.blm.gov/co/st/en/fo/wrfo.html. Limited printed copies and CD copies are available by request at the WRFO at 220 East Market Street, Meeker, Colorado, 81641.

The BLM greatly appreciates all of those who contributed to the completion of the WRFO Approved RMPA for Oil and Gas Development, particularly its cooperating agencies. The extensive public interest and involvement in this planning effort has ensured that the Approved RMPA is of substantial quality and will provide for the continued use and enjoyment of public lands and resources by present and future generations.

Sincerely,



Ruth Welch
State Director

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Record of Decision

Introduction

This Record of Decision (ROD) documents the approval of the White River Field Office (WRFO) Resource Management Plan Amendment (RMPA) for oil and gas development. The Approved RMPA has been prepared by the Bureau of Land Management (BLM) WRFO in Meeker, Colorado. These documents are the culmination of a multi-year planning effort to amend the 1997 White River Resource Management Plan (RMP) to address oil and gas development.

The WRFO Planning Area for this Approved RMPA includes all lands, regardless of surface management or ownership, within the WRFO geographic boundary. The WRFO Planning Area includes approximately 2.7 million acres of BLM, National Park Service (NPS), U.S. Forest Service (USFS), state, and private lands located in northwestern Colorado, primarily in Rio Blanco County, with additional tracts located in Garfield and Moffat counties. Within the WRFO Planning Area, the BLM administers approximately 1.5 million surface acres and 2.2 million acres of federal oil and gas minerals (subsurface) estate. Management decisions in the ROD and Approved RMPA would apply only to BLM-administered lands and subsurface minerals in the WRFO Planning Area.

Approximately 1.7 million acres of Federal oil and gas mineral estate is open to leasing and would be subject to lease stipulations and other management actions developed during this planning effort (i.e., are BLM-leasable acres and are not associated with Wilderness Study Areas or surface estate managed by the NPS or USFS).

Decision

The decision is hereby made to approve the attached RMPA for Oil and Gas Development in WRFO Planning Area. The Approved RMPA was prepared under the authority and regulations implementing the Federal Land Policy and Management Act (FLPMA) of 1976 (43 Code of Federal Regulations [CFR] 1600). An environmental impact statement was prepared for this plan amendment in compliance with the National Environmental Policy Act (NEPA) of 1969. The Approved RMPA with a few minor changes carries forward the land use planning decisions presented as Alternative E in the Proposed RMPA and Final Environmental Impact Statement (EIS) released to the public on March 27, 2015. Specific management decisions for public lands under the jurisdiction of the WRFO are presented by resource in Chapter 2 of the Approved RMPA and in Appendices 1 through 7.

Major decisions include:

- Using thresholds to promote clustered development in order to allow for year-round drilling while reducing habitat loss due to behavioral avoidance by big game;
- Identification of specific success criteria for reclamation;
- Adoption of the Dinosaur Trail Master Leasing Plan (MLP); and
- Using a tiered approach to managing lands with wilderness characteristics units.

Modifications and Clarifications

During preparation of the Approved RMPA, minor changes were made following the publication of the Proposed RMPA to correct errors and to clarify decisions. Additionally, some management actions were grouped together under different headings to reduce duplication and improve understanding of the management direction provided in the Approved RMPA for reclamation, travel management, and the Dinosaur Trail MLP. Clarifications and corrections made since the publication of the Proposed RMPA/Final EIS are described below and hereby adopted by this ROD and Approved RMPA.

Chapter 2 Management Decisions

Air and Atmospheric Values

In the Final EIS, the air and atmospheric values management action in Table 2-1, Record 10 specified, "At construction sites, interim reclamation would be required within two years." This should have been noted in the Final EIS as an assumption for analysis rather than a management action. It has not been carried forward into the Approved RMPA because it conflicts with direction provided in the Surface Reclamation Plan (Appendix 3, Section 3.1.2.1) and Onshore Order Number 1 (Section XII.B, 2007).

Vegetation – Reclamation

Management actions related to reclamation were found under various resource programs in the Final EIS, including vegetation (Table 2-3), big game (Table 2-4), special status animals (Table 2-9), special status plants (Table 2-10), minerals (Table 2-17), realty (Table 2-20), special designations (Table 2-21), and lands with wilderness characteristics (Table 2-22). To aid in implementation and to provide comprehensive management direction related to reclamation, all of the reclamation-related management actions are grouped together under Vegetation (Section 2.4.3) of the Approved RMPA.

Wildlife - Big Game

Language was updated in the management action in Section 2.5.3 and timing limitations for both big game severe winter and summer ranges (Appendix 1) that pertains to the areas defined by CPW as Restricted Development Areas. The clarification explains how these areas would be managed in context of the threshold strategies.

Wildlife – Grouse

In the Final EIS, the timing limitation stipulation for Columbian sharp-tailed grouse winter range habitat (as described in Chapter 2, Table 2-6, Record 21) was inadvertently omitted from Appendix A but has been included in Appendix 1 of the Approved RMPA.

Forestry and Woodland Products

As noted in Section 1.2.1 of the Proposed RMPA/Final EIS, many of the elements in the 1997 White River RMP remain valid and there would be no changes to those management decisions unless specifically identified in this ROD. In order to provide comprehensive management direction for oil and gas exploration and development and to continue to disclose to operators that they would not qualify for free use under 43 CFR 5510.0-3(b), the management action related to "purchase of

woodlands removed as a result of commercial development” on page 2-22 of the 1997 White River RMP has been included in Section 2.16.3 of the Approved RMPA.

Comprehensive Trails and Travel Management

Management actions related to effective road density, restrictions on the use of oil and gas access routes, and cross-country travel were found in various resource programs in the Final EIS, including big game (Table 2-4) and special status animal species (Table 2-9). To aid in implementation and to provide comprehensive management direction related to travel management, all of the access-related management actions are grouped together under Section 2.20.3, Comprehensive Trails and Travel Management, of the Approved RMPA.

Oil Spring Mountain Wilderness Study Area

The six wilderness study areas (WSAs) within the WRFO are closed to leasing. However, there are existing oil and gas leases within the Oil Spring Mountain WSA. Valid existing rights, such as mineral lease activities, that existed when the FLPMA was approved on October 21, 1976 may continue in the same manner and degree as on that date, even if the use would impair wilderness suitability.

The BLM’s recommendation to Congress was that the Oil Spring Mountain WSA should not be carried forward as wilderness. If Congress were to release the Oil Spring Mountain WSA from further wilderness review, it would be managed as the Oil Spring Mountain Area of Critical Environmental Concern and be available for leasing with a controlled surface use stipulation (see Appendix 1, WR-CSU-22).

Lands with Wilderness Characteristics

The four lands with wilderness characteristics units adjacent to Wilderness Study Areas (WSA) have been renamed since the release of the Proposed RMPA/Final EIS to avoid confusion with WSAs when referencing these units. These units are renamed as follows:

| Unit | Proposed RMPA/Final EIS Unit Name | Approved Unit Name |
|-------------|--|---------------------------|
| 32 | Willow WSA Adjacent | Willow Creek South |
| 33 | Bull WSA South Adjacent | Bull Canyon South |
| 34 | Bull WSA North Adjacent | Bull Canyon North |
| 35 | Oil Spring Mountain WSA Adjacent | Wild Rose |

Dinosaur Trail Master Leasing Plan

All of the resource-based management decisions developed for the WRFO Planning area will also apply within the Dinosaur Trail MLP if those resources are present. (See Approved RMPA, Table 2.) Additionally, since the Dinosaur Trail MLP was not included in the Draft RMPA/EIS, there are several management actions that only apply to the MLP, but are found under other resource programs in the Final EIS, including vegetation (Table 2-3), special status animal species (Table 2-9), and cultural resources (Table 2-12). To reduce duplication and to improve understanding of how management in the MLP differs from that of the rest of the WRFO Planning Area, management actions that only apply within the MLP are found under the Dinosaur Trail MLP in Section 2.24 of the Approved RMPA, with the exception of management for black-footed ferrets. All of the ferret

management areas within the WRFO are found exclusively within the MLP, since management of ferrets is dependent upon management of white-tailed prairie dogs (which also occur outside of the MLP). Ferret habitat management can be found under Special Status Animal Species (Section 2.10 of the Approved RMPA).

Chapter 5 Section 5.2 Glossary

To improve understanding of the management direction in the Approved RMPA, the term “avoid” has been added to the glossary and the definition for right-of-way (ROW) “avoidance area” has been refined. The definition of the term “avoid” is based on the definition of “avoidance area” provided in the Proposed RMPA/Final EIS, where the intention is to relocate activities where feasible but to acknowledge that the BLM would consider allowing for activities in these areas if intensive mitigation was developed that would prevent adverse impacts. The definition of the term “right-of-way avoidance area” has been updated to be more consistent with the definition provided in BLM Manual Section 2800 and the Land Use Planning Handbook (H-1601-1).

Appendix 1 – Oil and Gas Lease Stipulations and Lease Notices

The definitions for no surface occupancy (NSO), controlled surface use (CSU), and timing limitations (TL) have been updated to be more consistent with the definition provided in the BLM Handbook H-1624-1 glossary; Planning for Fluid Mineral Resources.

Lease stipulations have been renumbered in the Approved RMPA to be consecutive with the 1997 White River RMP.

Appendix 2 – Best Management Practices

To avoid confusion about which management actions are required and which measures are recommended as Best Management Practices, management actions that were identified in Chapter 2 and duplicated in Appendix B of the Proposed RMPA/Final EIS are only shown as management actions in the Approved RMPA.

There were two BMPs in Appendix B of the Proposed RMPA/Final EIS that were very similar, but not verbatim, to the management action in Chapter 2, which specified that operators would be required to prevent migratory bird use of pits that store fluids, which may pose a risk to birds. The management action in the Approved RMPA eliminates redundancy and inconsistencies by providing comprehensive management direction on migratory bird use of oil and gas facilities that store fluids (see Section 2.8.3).

Appendix 6 - Hazardous Materials Management Plan

In Section 2.1 of Appendix 6, references to venting and flaring of natural gas were modified to be consistent with the management action for air quality that limits venting of natural gas to emergency situations (see Section 2.2.3 Approved RMPA).

Implementation Decisions

Implementation decisions (or activity-level decisions) are management actions tied to a specific location that implement land use plan decisions. Implementation decisions generally constitute the BLM’s final approval, allowing on-the-ground actions to proceed and require appropriate site-specific planning and NEPA analysis. Such decisions may be incorporated into implementation plans (activity or project plans) or may exist as stand-alone decisions. Unlike land use plan decisions, implementation decisions are not subject to protest under the planning regulations. Instead,

implementation decisions are subject to various administrative remedies, particularly appeals to the IBLA (under 43 CFR, 4.410). Examples of oil and gas implementation decisions would be issuing a lease or approval of a well. The Approved RMPA does not include any implementation decisions.

Valid Existing Rights

Because of the long history of public land management, numerous rights and privileges have been established on public lands under law, regulation, or planning decisions. The decisions included in this ROD and Approved RMPA supersede the 1997 White River RMP for oil and gas exploration and development. All BLM lands and Federal mineral estate within the WRFO remain subject to valid existing rights as well as the stipulations and conditions of approval (COAs) associated with the given right at the time it was granted. This includes the right of reasonable access to surface and sub-surface parcels leased for the development of the mineral interest.

Oil and gas lease stipulations and lease notices in the Approved RMPA will be applied as appropriate to mitigate resource concerns to all new leases and to expired leases that are reissued.

The BLM may apply mitigation measures to surface use activities associated with existing land use authorizations as a COA. The BLM has the discretion to modify surface operations to change or add specific mitigation measures when supported by scientific analysis. All mitigation/conservation measures not already required as stipulations will be analyzed in a site-specific NEPA document, and be incorporated, as appropriate, into conditions of approval of the permit, plan of development, and/or other use authorizations. In discussing surface use rights, 43 CFR 3101.1-2 states that the lessee has the right “to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource” but lessees are still subject to lease stipulations, nondiscretionary statutes, and “such reasonable measures as may be required by the Authorized Officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed”. Lessees are also required to conduct operations in a manner that not only “results in maximum ultimate economic recovery of oil and gas with minimum waste” but also “protects other natural resources and environmental quality” (43 CFR 3162.1). While it would not be consistent with lease rights granted to preclude any development of the lease, the BLM may require relocation of proposed operations by more than 660 feet and may prohibit surface disturbing operations for more than 60 days when such action has been deemed necessary, through a site-specific NEPA analysis, to minimize adverse impacts to other resource values, land uses, or users.

New lease stipulations resulting from the ROD and Approved RMPA could be applied to other oil and gas related authorizations (i.e., other than oil and gas leases operations) as COAs in order to maintain or achieve desired resource conditions. Lease suspensions could be used as a tool by the BLM as an incentive for operators to proactively manage drilling activities and operations. Circumstances that warrant a lease suspension are found under Section 17 or Section 39 of the Mineral Leasing Act (MLA), as amended. Lease suspensions, would be directed by the Authorized Officer or consented to by the lessee of active oil and gas leases in the interest of the conservation of natural resources or in cases where the lessee is prevented from operating by matters beyond the reasonable control of the lessee.

Additional NEPA Reviews

Additional environmental analyses will be conducted, as appropriate, for project- and site-specific actions proposed in the geographic area currently defined as the WRFO Planning Area (e.g., lease sales, Applications for Permits to Drill, Sundry Notices, and ROW applications, etc.). However, the site-specific evaluations would be facilitated by the planning and programmatic evaluation of impacts disclosed in the Final EIS supporting this ROD and Approved RMPA.

Alternatives Considered

This section summarizes the five alternatives analyzed in detail in the Proposed RMPA/Final EIS. These alternatives presented a range of reasonable management actions analyzed to assist decision makers and the public in understanding the potential environmental consequences of each alternative. In 2007 the BLM prepared an updated Reasonably Foreseeable Development (RFD) Scenario to project the maximum levels and types of industry activity, and the associated surface disturbance that could occur on all land ownerships in the WRFO Planning Area. The RFD Scenario is a “tool prepared by an interdisciplinary group of technical and scientific specialists” that “serves as an analytical baseline for identifying and quantifying direct, indirect, and cumulative impacts, which provide the premise for formulating alternatives to a proposed action and strategies for mitigating adverse impacts” (WO-IM-2004-89) (BLM 2004). The Interior Board of Land Appeals (IBLA) has stated, “Where BLM establishes a reasonably foreseeable development scenario for the purposes of land use planning and environmental review, that scenario is not a land use decision establishing a binding maximum to which BLM must conform. A subsequent decision to exceed such a scenario does not violate the land use plan, FLMPA, or the rules at 43 CFR Subpart 1610” (DOI OHA 2008).

Alternative A (No Action)

The management focus for Alternative A incorporates the current management goals, objectives, and direction as specified in the 1997 White River RMP; however, the analysis updates the 20-year development projection from the 1997 White River RMP to reflect the current rate of about 220 new drilling permits per year with modifications through plan maintenance consistent with 43 CFR 1610.5-4 guidance. The alternative continues current allowable uses and management actions for resources and resource programs under the levels and locations of future oil and gas development projected in the 2007 RFD Scenario.

Implementation of Alternative A assumed to result in up to 4,603 new wells on 550 new well pads and approximately 6,600 acres of associated disturbance from well pads, roads, and other facilities (i.e., gas plants, pipelines, and other infrastructure) during the 20-year period of analysis.

Alternative B

This alternative emphasizes conservation and protection of other resources and resource uses, concurrently with oil and gas production. The implementation of Alternative B would limit the duration and overall extent of development activities in order to maintain existing resource conditions throughout all phases of development (i.e., from initial construction through post-production). The BLM would apply additional management actions to further protect these resources.

The managed development approach utilized under Alternative B is a significant distinction from Alternative A. A key element of the managed development approach evaluated under this alternative is limiting the spatial extent of surface disturbance. The overall vision for a managed development approach described for this alternative would be to cluster, collocate, and consolidate surface facilities

and other ground disturbing activities to manage the acute or collective degree of effects from the proposed development. Limitations would be achieved in part by managing the extent of big game seasonal range subjected to cumulative adverse behavioral effects (e.g., harassment, avoidance) attributable to oil and gas activities. The managed development approach offers operator incentives for concentrated development. This approach includes establishing big game thresholds, for cumulative adverse behavior effects, to be applied by each Game Management Unit (GMU), by each mule deer seasonal range as defined by Colorado Parks and Wildlife (CPW) and the BLM (see Map 2-4), and by leaseholder (e.g., a threshold of a certain percentage of big game crucial winter range occurring within a leaseholding). Under Alternative B, the goal would be to manage big game habitat utility and suitability to sustain at least 90 percent of CPW long-term population objectives throughout active development.

Implementation of Alternative B is assumed to result in up to 9,191 new oil and gas wells on 1,100 new well pads and 13,200 acres of associated disturbance from well pads, roads and other facilities during the 20-year period of analysis.

Alternative C (Preferred Alternative in the Draft RMPA/EIS)

Alternative C emphasizes short-term use of the environment (i.e., in the construction/development phase) and the maintenance and enhancement of long-term community function and ecological integrity (from initial construction to post-production). The management focus for Alternative C is similar to Alternative B; however, Alternative C places management emphasis on maintaining long-term community function and ecosystem integrity. For example, disturbance thresholds for acute effects (i.e., short-term impacts associated with well construction, drilling, and completion) under this alternative would be higher, and more exceptions and modifications to lease stipulations may be granted compared to Alternative B.

Under Alternative C, the BLM's management goal for big game habitat would be to manage big game habitat utility and suitability to sustain at least 70 percent (versus 90 percent in Alternative B) of CPW's long-term population objective throughout active development. All seasonal big game ranges within the WRFO would be subject to timing limitations that could extend up to 90 days (versus 120 days in Alternative B) within established windows. Timing limitations would be applied through COAs for existing leases and through stipulations on new leases. Similar to Alternative B, exceptions to timing limitations would be offered contingent on development remaining within the thresholds for acute and collective cumulative adverse behavior effects (evaluated by total leaseholdings within a GMU).

Implementation of Alternative C is assumed to result in up to 15,042 new oil and gas wells on 1,800 new well pads and 21,600 acres of associated disturbance from well pads, roads and other facilities during the 20-year period of analysis.

Alternative D

The management focus of Alternative D is the development of oil and gas resources. Management under Alternative D emphasizes the production of oil and gas resources under the environmental protection for other resources afforded by applicable laws, regulations, and BLM policy. The BLM would not apply management actions to provide environmental protection for other resources other than what is consistent with applicable laws and policy (e.g., Clean Air Act regulations, Section 7 of the Endangered Species Act [ESA], National Pollutant Discharge Elimination System [NPDES] guidelines).

Implementation of Alternative D is assumed to result in up to 21,200 new oil and gas wells on 2,556 new well pads and about 30,700 acres of associated disturbance from well pads, roads and other facilities during the 20-year period of analysis.

Alternative E (Proposed Plan Amendment in the Proposed RMPA/Final EIS)

The BLM considered issues identified from public comments, the established planning criteria, and resource management goals and objectives in formulating this alternative. Management of oil and gas development under this alternative combines elements of Alternatives A, B, C, and D. In acknowledging a trend for an increasing number of wells per pad, Alternative E reflects surface disturbance associated with development that would be similar to Alternative B (1,100 well pads or 13,200 acres) while allowing for well numbers anticipated under Alternative C (15,040 wells). The majority of development is expected to occur within the Mesaverde Play Area (MPA), with approximately 972 well pads within the MPA and 128 well pads outside the MPA.

Under Alternative E, the BLM's management goal for big game habitat would be to ensure big game habitats provide components and conditions necessary to sustain big game populations at levels commensurate with multiple use objectives and state-established population objectives (as in Alternative A). All seasonal big game ranges within the WRFO would be subject to timing limitations that could extend up to 120 days (as in Alternative B) within established windows. Timing limitations would be analyzed and applied as warranted through COAs for existing leases and through stipulations on new leases. Similar to Alternatives B and C, exceptions to timing limitations would be offered contingent on development remaining within the thresholds for acute and collective cumulative adverse behavior effects (evaluated by total leaseholdings within a GMU).

Alternatives Considered but not Carried Forward for Detail Analysis

The Council on Environmental Quality (CEQ) regulations for implementing the NEPA requires Federal agencies to analyze all "reasonable" alternatives that substantially meet the purpose and need for the proposed action. Also, for alternatives considered but eliminated from detailed analysis in an EIS, CEQ regulations require a brief explanation as to why they were eliminated (40 CFR 1502.14).

Current Management using 1997 Reasonable Foreseeable Development Scenario

The BLM considered an alternative that reflected the continuation of current management under the projections for oil and gas activity presented in the 1997 RFD Scenario (BLM 2007). However, the BLM determined that such an alternative would not meet the purpose and need for the RMPA/EIS, which is, in part, to address the substantial changing oil and gas resource conditions in the WRFO Planning Area and the need to manage the impacts of the projected increase in oil and gas activity in relation to other resources within the WRFO Planning Area.

Phased Development in the Piceance Basin

The BLM considered applying the concepts for "phased development" of oil and gas resources as an alternative to addressing the duration, intensity, and extent of development activity in the Piceance Basin. Traditionally, "phased development" refers to prescribing the sequence of drilling operations by geographic area to allow for the development of certain areas while resting or temporarily restricting development of other areas. Subsequent development occurs as areas developed earlier are completed and reclaimed. After further consideration, the BLM determined that phased development was not feasible for the WRFO Oil and Gas RMPA/EIS, since the majority of acres within the Planning Area are already leased.

Single Well Pads

The BLM considered an alternative that would evaluate the impacts of the use of (only) single well pads, as was considered in the 1997 White River RMP. However, information obtained from oil and gas operators in updating the 2007 RFD Scenario (BLM 2007) indicated most oil and gas companies plan to implement technology for multi-well drilling from each well pad, as this has become economically feasible. Federal regulations (43 CFR §3160) require lessees to attain maximum economic recovery of the leased resource. The regulations also require the operator to exercise due care and diligence to assure that leasehold operations do not result in undue damage to surface or subsurface resources or surface improvements. Therefore, an alternative based on single well pads was dropped from detailed analysis as it would not meet the economic criteria of the federal regulations or reduce impacts.

Reduced or Limited Pace of Oil and Gas Drilling

The BLM considered an alternative to set or control the pace of oil and gas development but determined, through a review of the federal regulations, that the holders of federal oil and gas leases have the right to develop those leases; consequently, it was dropped from detailed analysis as it does not meet the purpose and need in terms of responding to the changing conditions (i.e., the projected increase in oil and gas activity) within the WRFO Planning Area. 43 CFR §3101.1-2 states “the lessee shall have the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, and dispose of all the leased resource in a leasehold.” The 43 CFR §3160 regulations also require lessees to attain maximum economic recovery of the leased resource, and for leaseholders to conduct their operations in a manner that prevents undue and unnecessary impact. It is not possible at a planning level to determine whether a lease would actually be developed, and if it is what well spacing or level of development would be necessary to achieve the requisite maximum economic recovery of the oil and gas resource. Well spacing can vary from development area to development area. The pace of development would vary significantly between these scenarios. Pace of development, including reduced or limited rates of development, would be more appropriately projected and evaluated in project- or field-specific NEPA analysis.

Limit on Number of Well Pads or Wells

As stated in the previous section, federal regulations state that the holders of federal oil and gas leases have the right to develop those leases; consequently, this alternative was dropped from detailed analysis due to policy considerations. 43 CFR §3101.1-2 states “the lessee shall have the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, and dispose of all the leased resource in a leasehold.” The 43 CFR §3160 regulations also require lessees to attain maximum economic recovery of the leased resource. The number of well pads or wells would be more appropriately projected and evaluated in project- or field-specific NEPA analysis. Instead of limiting the number of wells or well pads, Alternatives B and C apply thresholds that could ultimately limit the number of wells or well pads that are developed.

Limiting Cumulative Total Surface Disturbance

The BLM considered an alternative that would limit the total acreage of surface disturbance associated with oil and gas activities at any one time. However, such an alternative would be difficult to apply equitably and monitor across the WRFO Planning Area, and would have limited effectiveness in achieving management objectives, as resource conditions vary throughout the planning area. The BLM would have to decide which areas to develop at any given time. In an area with multiple lessees, the BLM would also have to choose which lessee could drill at any given time, which could conflict with granted lease rights. This alternative is not consistent with the BLM’s oil

and gas leasing policies and regulations and could restrict the economic development of leases. Instead of limiting cumulative total surface disturbance, Alternatives B and C apply thresholds which may ultimately limit the number of acres that are disturbed.

Greater Sage-Grouse National Technical Team Report Alternative

The BLM published a Notice of Intent in the Federal Register on December 9, 2011, initiating a range-wide planning process that would analyze the National Technical Team (NTT) Report Alternative in detail. The BLM's Northwest Colorado District Office released the Northwest Colorado Greater Sage-Grouse Draft Land Use Plan Amendment and EIS on August 16, 2013, and a Proposed Plan Amendment and Final EIS on May 28, 2015. This document considered and analyzed this alternative in detail, which will address BLM-administered public lands in the White River Field Office Planning Area for activities.

The NTT Report presented guidance related to the fluid minerals program but also a wide range of other land use programs including travel and transportation management, recreation, lands and realty, range, wild horses, solid minerals, locatable minerals, salable minerals, vegetation treatments, and fire management. Addressing changes to other programs besides fluid minerals and the creation of special designations is outside the scope of this planning effort. Further, the BLM is not making allocation decisions related to areas open or closed to oil and gas leasing during this planning effort. Therefore, the Greater Sage-Grouse NTT Report Alternative has been considered but eliminated from detailed analysis for this planning process.

Master Leasing Plans Submitted by Citizen Groups

In August 2010, the Wilderness Society, the Southern Utah Wilderness Alliance, the Center for Native Ecosystems, and the Colorado Environmental Coalition submitted recommendations that the BLM prepare an Eastern Book Cliffs/Piceance Basin MLP and a Dinosaur Lowlands MLP. The Eastern Book Cliffs/Piceance Basin MLP proposal encompasses 847,500 acres within areas managed by the WRFO and the Vernal Field Office (VFO). The Dinosaur Lowlands MLP proposal encompasses 999,400 acres within areas managed by the WRFO, the VFO, and the Little Snake Field Office (LSFO).

In the Oil and Gas Development Draft RMPA/EIS, the BLM provided an extensive discussion of these two MLP proposals in Appendix I, which is incorporated by reference into this FEIS. In summary, there are four criteria to consider when evaluating MLPs. The BLM has determined that both MLP proposals meet three of the four criteria since there is a majority federal mineral interest; the oil and gas industry has expressed a specific interest in leasing and there is a moderate or high potential for oil and gas development confirmed by the discovery of oil and gas in the general area; and additional analysis or information is needed to address likely resource impacts. Neither MLP proposal meets the criterion that a substantial portion of the area is not currently leased.

Even if the proposals do not meet the criteria, the BLM may still choose to prepare MLPs or similar plans. The WRFO Oil and Gas Development RMPA/EIS is different than other types of amendments or plan revisions since the sole purpose of the planning effort is to examine management decisions related to oil and gas development. Thus, the BLM is able to conduct a much more detailed analysis of a range of development levels and management actions through the RMPA/EIS across the entire planning area. Since the RMPA/EIS considers protective measures designed to minimize resource conflicts both inside and outside of both the MPA and the MLPs, the WRFO does not intend to further develop either the Dinosaur Lowlands MLP or the Eastern Bookcliffs/Piceance Basin MLP.

However, the BLM has taken another hard look at the Dinosaur Lowlands MLP and adjusted the boundaries to create a new MLP proposal, the Dinosaur Trail MLP. The Dinosaur Trail MLP not only meets all four of the criteria outlined in WO-IM-2010-117 but also considers what areas are most likely to have the greatest resource conflicts. In creating the Dinosaur Trail MLP, the BLM also considered management feasibility of well-established and developed fields (e.g., the Coal Oil Basin and White River Dome areas) and did not include them in the MLP area.

Planning Process

The NEPA requires federal agencies to prepare an EIS for a major federal action significantly affecting the quality of the human environment. The environmental analysis of alternatives and the proposed RMPA are part of the resource management planning process to develop the proposed RMPA and related EIS which are published as a single document called the WRFO Oil and Gas Development Proposed RMPA/Final EIS. This EIS analyzes analyzed the impacts of five alternatives, including the No Action Alternative (current management). The CEQ regulations direct that an EIS explore and objectively evaluate a range of reasonable alternatives, including the Proposed Action and a No Action Alternative, and describe any alternatives considered, but eliminated from detailed analysis with the rationale for elimination (40 CFR 1502.14 (a)). Each action alternative represents different management decisions that fulfill the purpose and need, address unresolved conflicts related to the proposed action, and include relevant mitigation measures to avoid or minimize impacts associated with oil and gas development.

Consistency with Local Land Use Plans

The BLM's land use planning regulations require that RMPs be consistent with local land use plans so long as they are consistent with "the purposes, policies and programs of Federal laws and regulations applicable to public lands" (43 CFR 1610.3-2(a)). These regulations also require that these entities notify the BLM in writing of apparent inconsistencies (43 CFR 1610.3-2(a)).

Moffat, Rio Blanco, and Garfield Counties have identified that management of Tier 1 and Tier 2 lands with wilderness characteristics areas with NSO and CSU stipulations and as rights-of-way exclusion and avoidance areas are inconsistent with their local land use plans. Moffat and Rio Blanco counties also identify that deferring leasing of sage-grouse habitat within the Dinosaur Trail MLP until the BLM has issued a ROD for the Northwest Colorado Greater Sage-Grouse Land Use Plan Amendment is inconsistent with their plans. The Counties state that these proposed management approaches are inconsistent with their local land use plans because they interfere with oil and gas development and the right of federal, state, and private mineral interest owners and lessees to access their mineral rights. They claim that these restrictions and special designations conflict with their plan's support of mixed uses of the land and continued access to public lands for landowners and developers.

The Approved RMP has taken these apparent inconsistencies into consideration and has determined that the management decisions identified by the counties are necessary to meet our legal mandates under the FLMPA and the purposes for which this plan was developed. The FLPMA requires the BLM to consider both multiple use and sustained yield when managing public land. FLPMA authorizes the Secretary of the Interior to use land use planning as a mechanism for allocating resource use, including wilderness character management, amongst the various resources in a way that provides for current and future generations. It is BLM policy to identify and consider management of lands with wilderness characteristics and the WRFO has identified management intended to protect some areas for their wilderness characteristics consistent with BLM policy (BLM

Manual 6320). Additionally, the WRFO has analyzed and considered the potential impacts to access and resource development from the applied management prescriptions in the RMPA and considers these actions warranted to meet our legal mandates. The Approved RMPA acknowledges valid existing rights and allows for access consistent with our legal authorities.

Management Considerations

Extensive public involvement was provided and considered throughout the development of the Approved RMPA to assure compliance with NEPA as described in the Proposed RMPA/Final EIS. The BLM considered issues identified from public comments, the established planning criteria, and resource management goals and objectives in formulating the Approved RMPA. Management of oil and gas development under the Approved RMPA combines elements of the four alternatives addressed in the Draft RMPA/EIS, reflecting surface disturbance associated with development of 13,200 acres, while assuming development of 15,040 wells. Approximately 972 well pads are expected to occur within MPA, with 128 well pads occurring outside the MPA.

The Approved RMPA seeks the best combination of management decisions to meet the purpose and need for this land use plan amendment in consideration of the planning issues and management concerns identified through the planning process. It is prepared to ensure that the public lands in the planning area are managed in accordance with FLPMA under the principles of multiple use and sustained yield. The commitment to multiple use does not mean that all land will be open for all uses. Some uses may be excluded on some land to protect specific resource values or uses, as directed by FLPMA (43 USC 35§1712[c][3]). Any such exclusion however, will be based on laws or regulations or be determined through a planning process subject to public involvement.

As discussed in more detail below, the BLM completed consultation requirements with the Colorado State Historic Preservation Office (SHPO) and the U.S. Fish and Wildlife Service (FWS) regarding potential impacts to cultural resources and federally listed species, respectively. The BLM will continue to work cooperatively and collaboratively with government agencies, as well as with interested groups and individuals and other members of the public, in implementing the land use plan amendment. The BLM will also continue to provide for ongoing consultation with Native American tribal governments and strategies for protecting recognized traditional uses.

Mitigation Measures

All practicable means to avoid or minimize environmental harm, commensurate to the landscape-level of planning, are included in the Approved RMPA and appendices. In developing the alternatives, the BLM used a variety of management methods and tools, including the identification of allowable uses, temporal, spatial, and/or methodological restrictions on uses, where specific uses would be prohibited, and specific actions that are needed to achieve the goals and objectives. Restrictions on land uses include seasonal closures, stipulations on surface disturbances, and the application of best management practices (BMPs).

Appendix 2 provides a list of BMPs that are applicable to land use activities authorized by the WRFO. Best management practices are state-of-the-art mitigation measures that may be applied on a site-specific basis to avoid, minimize, reduce, rectify, or compensate for adverse environmental or social impacts of land use activities. The BMPs included in this Approved RMPA are not intended to be a complete list but are displayed to show project proponents examples of commonly used practices the WRFO may require to reduce impacts of surface-disturbing activities, use, or occupancy. More explicit BMPs, based on local conditions and resource-specific concerns, could be developed once a

specific proposal is being evaluated through the environmental analysis process. Additional BMPs can be proposed by project applicants for activities on BLM lands.

Plan Amendment Monitoring

The BLM planning regulations (43 CFR Part 1610.4-9) call for the monitoring of RMPs on a continual basis with a formal evaluation done at periodic intervals. Implementation of the Approved RMPA will be monitored over the life of the plan, and plan evaluations conducted periodically. The BLM may work in cooperation with local, state, and other federal agencies or use data collected by other agencies and sources when appropriate and available. Monitoring and the evaluation process are described in more detail in Chapters 4 and 5 of the Approved RMPA.

Consultations and Coordination

Section 7 Consultation with the U.S. Fish & Wildlife Service

Section 7 of the ESA directs all federal agencies to use their existing authorities to conserve threatened and endangered species and, in consultation with FWS, to ensure that their actions do not jeopardize the continued existence of listed or proposed species or destroy or adversely modify critical habitat. The FWS has been a cooperating agency for this planning effort and has provided input to the BLM throughout the planning process, including input on endangered, threatened, proposed, and candidate species, and designated critical habitat in the WRFO that has been evaluated in the RMPA/EIS. The WRFO submitted a Biological Assessment (BA) based on the Proposed RMPA/Final EIS to the FWS on December 19, 2013 and a Revised Final BA on February 10, 2015. The BLM received a Letter of Concurrence from the FWS on March 18, 2015. If new information becomes available, new species are listed, or there are any changes to the Approved RMPA that alter its implementation or the extent of anticipated impacts from those described in the Revised Final BA, then the BLM would re-initiate Section 7 consultation with the FWS.

Tribal Consultation

The WRFO initiated consultation with Native American tribes for this planning effort in 2006. In addition to providing copies of the Draft RMPA/Draft EIS for review and comment, the WRFO Field Manager conducted formal face-to-face consultation with the Eastern Shoshone Tribe (July 2012), the Southern Ute Indian Tribe (September 2012), and the Ute Mountain Ute Tribe (September 2012, March 2013, and June 2013).

Coordination with the Colorado State Historic Preservation Office

The BLM cultural resource management program operates in accordance with the alternative procedures for 36 CFR 800 outlined under the National Programmatic Agreement, as implemented by the State Protocol (1997). Section IV of the Protocol requires the BLM to provide SHPO the opportunity to participate at the development stage and all subsequent phases of land use planning in accordance with 43 CFR 1610.3. The BLM coordinated with the SHPO on the Draft RMPA/Draft EIS. A copy of the Draft RMPA/Draft EIS was sent to the SHPO for review and comment.

Cooperating Agencies

The BLM coordinated with other agencies and the Northwest Resource Advisory Council during preparation of the RMPA/EIS. Cooperating agencies included the U.S. Army Corps of Engineers; the U.S. Fish and Wildlife Service; the U.S. Environmental Protection Agency (Region 8); the U.S.

Forest Service (White River National Forest); the U.S. Park Service (Intermountain Region); Moffat, Rio Blanco, and Garfield counties; and the towns of Meeker and Rangely. The State of Colorado was also a cooperating agency and the BLM coordinated with the following state agencies: the Department of Natural Resources (including Colorado Parks and Wildlife, Colorado Oil and Gas Conservation Commission, and the Colorado Natural Areas Program), the Department of Public Health and the Environment (including the Air Pollution and Water Quality Control Divisions), and the Department of Local Affairs. Other agencies that participated in the planning process included the U.S. Geological Survey, the Department of Energy, and History Colorado (the State Historic Preservation Office).

Governor's Consistency Review

The BLM initiated the Colorado Governor's Consistency Review required by 43 CFR 1610.3-2(e) by letter from the BLM State Director dated March 27, 2015. The Governor did not identify any inconsistencies with approved state or local plans, policies, or programs.

Proposed RMPA Protest Resolution

Pursuant to the BLM's planning regulations at 43 CFR 1610.5-2, any person who participated in the WRFO RMP amendment planning process and has an interest that may be adversely affected by the planning decisions may protest the proposed planning decisions within 30 days from the date the Notice of Availability (NOA) is published in the Federal Register by the United States Environmental Protection Agency (EPA). The 30-day protest period ended April 27, 2015. Eleven letters of protest, summarized below, were received by the BLM's Washington Office (WO), the office responsible for resolving the protest on behalf of the BLM Director. Of the 11 protesters all were determined to have standing as participants in the planning process.

The protest letters were categorized into 19 issue topics. Some of the concerns raised by protestors included violating the Energy Policy Act of 2005 by failing to apply the least restrictive lease stipulations, improperly narrowing the purpose and need to focus only on oil and gas development, failing to use the best available science including greater sage-grouse NTT Report, unreasonably ruled out alternatives that would limit oil and gas development in certain sensitive areas, and failing to analyze cumulative environmental and economic impacts of overlapping wildlife seasonal restrictions.

In summary, the Director concluded that the BLM Colorado State Director followed the applicable laws, regulations, and policies and considered all relevant resource information and public input in developing the Proposed RMPA in 18 of the 19 issue topics. The Director granted in part one protest regarding the BLM's ACEC Manual provision that the BLM will conduct a timely evaluation of ACEC nominations. The BLM failed to conduct a timely evaluation of the Rocky Mountain Wild ACEC nominations, submitted on January 21, 2003, and on March 9, 2007, that are located within the boundaries of the WRFO. The BLM will evaluate these nominated areas within one year of this ROD to determine whether they satisfy the relevance and importance criteria consistent with BLM's planning regulations and provide interim management for those areas found to meet the criteria. Each protesting party was notified in writing of the Director's findings and the disposition of their protests. The BLM Director's decisions on the protests are summarized in the "Director's Protest Resolution Report, White River Oil and Gas Proposed Resource Management Plan Amendment and Final Environmental Impact Statement," available on the BLM website at: http://www.blm.gov/wo/st/en/prog/planning/planning_overview/protest_resolution/protestreports.html.

Approval

Field Office Manager Recommendation

Having considered a full range of alternatives, associated impacts, and public and agency input, I recommend the adoption and implementation of the Approved Resource Management Plan Amendment for Oil and Gas Development in the White River Field Office.

Recommended:

AUG 17 2015



Kent E. Walter
Field Manager
White River Field Office

Date

District Manager Concurrence

I concur with the adoption and implementation of the Approved Resource Management Plan Amendment for Oil and Gas Development in the White River Field Office.

Concurrence:

AUG 17 2015



Joe Meyer
District Manager
Northwest District Office

Date

State Director Approval

In consideration of the foregoing, I approve the Approved Resource Management Plan Amendment for Oil and Gas Development in the White River Field Office.

Approved:

AUG 17 2015



Ruth Welch
Colorado State Director

Date

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**APPROVED RESOURCE MANAGEMENT PLAN
AMENDMENT**

**For Oil and Gas Development
In the
White River Field Office**

Prepared by:

**U.S. Department of the Interior
Bureau of Land Management
White River Field Office
Meeker, Colorado**

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Chapter 1.0 Introduction

1.1 Purpose and Need for the Plan

The FLPMA requires the BLM “develop, maintain, and when appropriate, revise land use plans...” (43 United States Code [USC]§1712). The BLM has amended the 1997 White River RMP to address changing conditions in the WRFO Planning Area that have raised new issues and concerns since approval of the 1997 White River RMP. The CEQ regulations (40 CFR 1502.13) require an EIS to “briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.”

1.1.1 Purpose of the Action

The purpose of this Amendment to the 1997 White River RMP is to provide effective management direction for public lands administered by the WRFO based on an analysis of oil and gas exploration and development in excess of levels evaluated in the 1997 White River RMP. During the development of the Draft RMPA/EIS, the BLM reviewed the decisions contained in the 1997 White River RMP. Many elements of the 1997 White River RMP are adequate and remain valid; there will be no changes to those management decisions. Only those management decisions specifically identified in the ROD and Approved RMPA will supersede existing management decisions in the 1997 White River RMP.

The BLM must establish guidance, objectives, policies, and management actions for lands and resources under the jurisdiction of the WRFO, in accordance with valid existing rights and obligations, to guide decision making for future site-specific actions. Decisions may be evaluated and revised as necessary to reflect changing conditions; however, any major changes in management would require additional NEPA analysis, as described in Section 1.3.2 of the Proposed RMPA/Final EIS.

The BLM identified a MLP during the preparation of the plan. Master leasing plans are areas that possess a majority of federal interest with medium to high potential for oil and gas occurrence, and wherein industry has expressed an interest in leasing the area. Implementation of the Dinosaur Trail MLP will ensure orderly, effective, timely, and environmentally responsible leasing of federal oil and gas resources within this area.

1.1.2 Need for the Action

The BLM has determined that the level of oil and gas activities and the primary area of development evaluated in the 1997 White River RMP has changed considerably. The BLM has determined it needs to update the 1997 White River RMP to reflect a greater RFD Scenario developed in 2007, and changes to where the primary oil and gas development activity would occur. This would include establishing appropriate goals, objectives, management actions, priorities, and procedures to manage the projected increase in oil and gas activity in relation to other resources within the WRFO Planning Area and to address the potential environmental and socioeconomic impacts of the predicted oil and gas development.

The Energy Policy and Conservation Act (EPCA) Reauthorization of 2000 directed the Department of the Interior (DOI) to produce a scientific inventory of oil and gas resources and reserves underlying federal lands. The resulting EPCA inventory identified the Uinta-Piceance Basin (Colorado and Utah)

as one of five sub-basins in the continental United States with large resources of undeveloped oil and gas energy potential. In addition to the EPCA inventory, oil and gas price change, development of interstate transportation pipelines, and improved drilling technology have also influenced increases in exploration, development, and production of oil and gas resources in the WRFO Planning Area.

The 1997 White River RMP projected and analyzed an RFD Scenario of 1,100 potential oil and gas wells that would encompass 10 acres of disturbance per well (including roads and pipelines) developed at a rate of approximately 55 single well pads per year, totaling 1,100 single well pads for a 20-year period (1997 through 2017). Disturbance was estimated to be approximately 11,000 acres over a 20-year period. The 1997 RFD Scenario also projected that nearly two-thirds of the oil and gas development activity would take place in the Douglas Creek Arch south of Rangely, Colorado, with the remaining activity dispersed throughout the rest of the WRFO Planning Area. While this projection has been fairly accurate for the activity south of Rangely, there has been a substantial increase in natural gas exploration and development in the MPA, located generally within the Piceance Creek Basin in the central portion of the WRFO Planning Area (Map 1-1).

An updated RFD Scenario was prepared in 2007 as a result of the changing conditions in oil and gas development to present a 20-year forecast of drilling activity on federal, state, and private lands within WRFO boundaries (BLM 2007). The 2007 RFD Scenario for potential oil and gas development activities in the WRFO Planning Area projected the potential need for the construction of between 550 and 2,556 multiple well pads, averaging eight drilled wells per pad, over a 20-year period (2009 through 2028), with the majority of development occurring in the Piceance Creek Basin of the WRFO Planning Area. Disturbance is estimated to range from 6,600 to 30,700 acres with an average of approximately 12 acres of total disturbance per well pad (including roads and pipelines) (BLM 2007). The 2007 RFD Scenario predicted an increase in oil and gas activities above the level evaluated in the 1997 White River RMP.

The 2007 RFD Scenario emphasizes the changing conditions in the WRFO Planning Area and the BLM has identified the need to manage the potential impacts of the projected increase in oil and gas activity in relation to other resources within the WRFO Planning Area and the BLM's mission of multiple use and sustained yield. Therefore, the BLM has determined that it will amend the 1997 White River RMP.

1.1.3 Description of the Planning Area

The WRFO Planning Area for the RMPA includes all lands, regardless of surface management or ownership, within the WRFO boundary shown in Map 1-1. The WRFO Planning Area includes approximately 2.7 million acres of BLM, NPS, USFS, state, and private lands located in northwestern Colorado, primarily in Rio Blanco County, with additional tracts located in Garfield and Moffat counties. The WRFO administrative office is located in the town of Meeker in northwestern Colorado.

Within the WRFO Planning Area, the BLM administers approximately 1.5 million surface acres and 2.2 million acres of federal oil and gas minerals (subsurface) estate. Management decisions made as a result of this RMPA/EIS process would apply only to BLM-administered lands in the WRFO

Planning Area (including Federal mineral estate) (Map 1-1)¹. Table 1 presents a summary of land ownership status (including split estate) as well as BLM surface and subsurface land ownership within the WRFO Planning Area.

As of March 2015, approximately 61 percent of federal mineral estate available for oil and gas leasing by the BLM within the WRFO Planning Area has been leased, including 80 percent of the leasable acres within the MPA and 26 percent of the leasable acres within the MLP. Decisions adopted in the Approved RMPA would apply to new oil and gas leases. Lease stipulations on existing oil and gas leases disclosed in the 1997 White River RMP would continue to apply to these leases. New or additional surface protective measures equivalent to the lease stipulations identified in the Approved RMPA may be applied as COAs to existing leases at the time of the Application for Permit to Drill (APD) approval or to ROW grants as terms and conditions when deemed necessary and appropriate by a site-specific NEPA analysis. (See Valid Existing Rights section in the ROD.)

Table 1. Surface and Subsurface Management Status in the WRFO Planning Area

| Surface Manager/Owner | Rio Blanco County (acres) | Moffat County (acres) | Garfield County (acres) | Total Acres |
|---|---------------------------|-----------------------|-------------------------|--------------------------|
| Surface | | | | |
| Federal: BLM | 1,151,100 | 232,700 | 74,300 ⁽¹⁾ | 1,458,100 ⁽²⁾ |
| Federal: NPS – Dinosaur National Monument | 0 | 71,500 | 0 | 71,500 |
| Federal: FS – White River National Forest | 246,900 | 0 | 129,200 | 376,100 |
| State: Colorado Parks and Wildlife, Colorado State Parks, Colorado State Land Board | 46,100 | 19,800 | 300 | 66,200 |
| County | 200 | 0 | 0 | 200 |
| Private | 480,500 | 99,800 | 124,900 | 705,200 |
| TOTAL | 1,923,100 | 423,700 | 328,700 | 2,675,600 |

¹ The Roan Plateau includes portions of the Colorado River Valley and White River Field Offices. The BLM is currently preparing a Supplemental EIS and RMP Amendment for management of the Roan Plateau. The Oil and Gas Development Approved RMPA does not amend or change any decisions made within the Roan Plateau RMP Amendment.

Table 1. Surface and Subsurface Management Status in the WRFO Planning Area

| Surface Manager/Owner | Rio Blanco County (acres) | Moffat County (acres) | Garfield County (acres) | Total Acres |
|--|---------------------------|-----------------------|-------------------------|--------------------------|
| Subsurface – Federal Oil and Gas Mineral Estate | | | | |
| Federal surface/Federal oil and gas minerals | 1,398,100 | 303,800 | 203,500 | 1,905,400 ⁽³⁾ |
| State surface/Federal oil and gas minerals | 16,700 ⁽⁴⁾ | 0 | 0 | 16,700 ⁽⁴⁾ |
| County surface/Federal oil and gas minerals | 200 | 0 | 0 | 200 |
| Private surface/Federal oil and gas minerals | 195,400 | 48,400 | 60,000 | 303,800 ⁽²⁾ |
| TOTAL | 1,610,400 | 352,200 | 263,500 | 2,226,100 |

SOURCE: BLM 2006; BLM 2008; BLM 2015.

NOTES:

Sums may not equal totals due to rounding of individual cells. Acreages have been rounded to the nearest 100 acres.

⁽¹⁾The total acreage in Garfield County managed by the BLM includes 4,010 acres formerly managed by the Department of Energy (Naval Oil Shale Reserve).

⁽²⁾Current total adjusted for sales and exchanges.

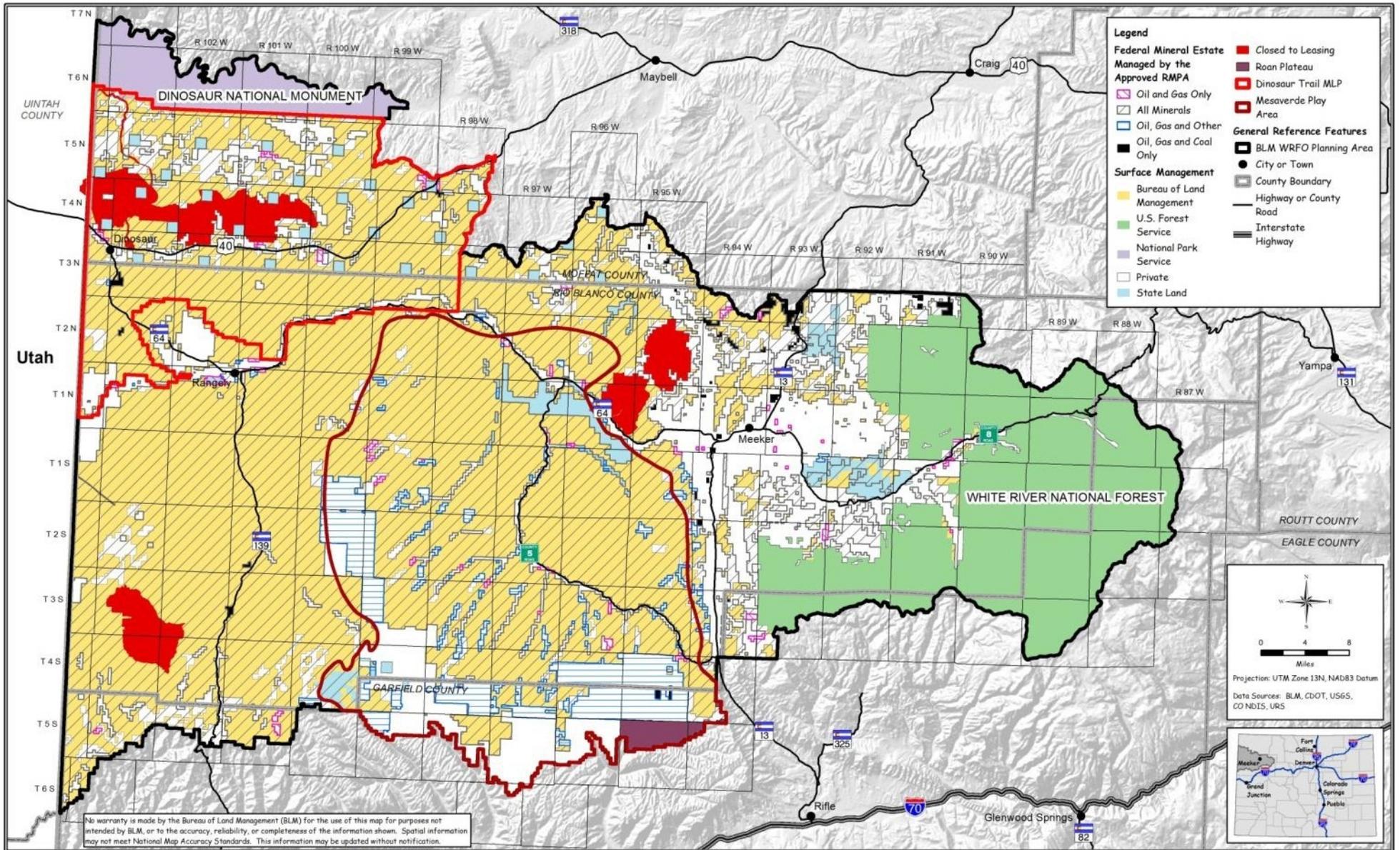
⁽³⁾Includes WSAs and NPS lands that are withdrawn from mineral entry, and mineral estate where the surface is managed by the FS.

⁽⁴⁾The state acres were adjusted to account for changes in Colorado Parks and Wildlife holdings.

1.1.4 Overall Vision

The BLM WRFO will provide for a level of oil and gas development that is appropriate to the Nation’s energy needs in a manner that respects local custom and culture and maintains the ecological integrity of the area and significant natural, cultural, social, and historical values.

Within the Dinosaur Trail MLP, the BLM will minimize impacts from oil and gas exploration and development to the area’s important natural resources and special areas including Areas of Critical Environmental Concern, Wilderness Study Areas, and Dinosaur National Monument by managing leasing opportunities in a phased approach in order to take advantage of new information and the best available technology.



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White River Field Office
Bureau of Land Management



Map 1-1
White River Field Office Planning Area and Mineral Estate

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Chapter 2.0 Management Decisions

2.1 Introduction

The BLM, with input from relevant agencies and the public, identified desired outcomes expressed in terms of specific goals and objectives for resources and resource uses. The BLM then identified allowable uses (land use allocations) and management actions to achieve the goals and objectives.

Desired outcomes are the future conditions expected to be produced by implementation of identified management actions. Goals and objectives provide overarching direction for the BLM's actions in most effectively meeting legal mandates, numerous regulatory responsibilities, national policy, and other resource or social needs.

- **Management goals** are broad statements of desired outcome, but are generally not measurable. An example of such a management goal would be to preserve and protect cultural and historic resources to ensure those resources are available for appropriate uses by present and future generations.
- **Management objectives** identify more specific desired outcomes for resources, and should include a measurable or quantifiable component and an established timeframe for achievement, if possible. Objectives are anticipated to achieve the stated management goals. An example of such a management objective would be to reduce imminent threats to cultural and historic resources from natural or human-caused deterioration or potential conflict with oil and gas activities.

Allowable uses identify surface lands and federal subsurface oil and gas mineral estate where uses are allowed, including any protective measures that would be needed to meet desired outcomes, and could exclude certain land uses to protect resource values.

- **Management actions** represent the actions anticipated to achieve desired outcomes. These actions include proactive measures or limitations intended to guide day-to-day activities occurring on public land (e.g., limiting vehicle use on BLM vehicle access networks in areas of concentrated development to that directly associated with oil and gas development, production, and maintenance).

These goals, objectives, and management actions are presented in this chapter (Sections 2.2 through 2.24) for each resource. Additional management decisions are found in Appendices 1 through 7.

2.2 Air and Atmospheric Values

2.2.1 Goals

Manage oil and gas activities to protect air resources from adverse impacts associated with BLM authorized/permitted actions in accordance with the methodology and provisions outlined in the Comprehensive Air Resource Protection Protocol (CARPP) (see Appendix 5).

Manage oil and gas activities to protect air quality and, within the scope of the BLM’s authority, minimize emissions that cause or contribute to violations of air quality standards or that negatively impact air quality-related values (AQRVs) (e.g., acid deposition, visibility).

Manage oil and gas activities to minimize emissions of greenhouse gases.

2.2.2 Objectives

Work cooperatively with local, state, federal, and Tribal agencies to enhance air monitoring efforts in order to provide a broader measure of spatially distributed air pollutant concentrations for the purposes of evaluating atmospheric conditions with respect to ambient air quality standards and air quality related values.

Limit air quality degradation from authorized activities on BLM-administered lands by providing appropriate analyses for compliance with applicable Colorado and National Ambient Air Quality Standards, applicable federal, state, and local air quality laws, rules, regulations, and implementation plans, and applicable federal land management guidance documents (e.g., FLAG 2010).

2.2.3 Management Actions

Implement adaptive management strategy for protecting air resources, to include the preceding actions, and tracking project specific emissions for comparison against the most recent regional air quality model results, as a means to provide context for any contemporaneous development period. Provide an annual activity and air quality summary report as described in the CARPP (see Appendix 5).

Well completions and recompletions would require use of green completion technology unless the need for an exemption could be documented. During well completions that do not use green completion technology, flaring of natural gas would be required. Venting of natural gas would not be allowed, except during emergency situations. Requirements would be consistent with New Source Performance Standard (NSPS) OOOO Regulations.

In addition to fugitive dust control plan implementation, construction sites and resource roads would be treated with water and/or a chemical dust suppressant during construction and drilling activities so that no dust plume is visible from construction sites or behind vehicles. All vehicles would abide by company or public speed restrictions.

Emission controls would be required for glycol dehydrators, condensate tanks, and produced water tanks, without regard to the location of the equipment or the quantity of uncontrolled volatile organic compound (VOC) emissions from the equipment.

Develop COAs for project specific surface-disturbing activities to prevent BLM permitted actions from causing or contributing to exceedances of ambient air quality standards or causing significant adverse impacts on air quality related values.

Drill rig engines and fracturing (frac) pump engines would meet EPA requirements. See Appendix 5, Section 3.5 Mitigation regarding COAs where the BLM may require all new and existing drill rig engines to meet EPA generator set Tier 4 (or more stringent) emission standards at the Project-level stage by year 2015.

Engines at field compression facilities would be required to meet applicable Colorado Department of Public Health and Environment (CDPHE), Air Quality Control Commission (AQCC) regulations, and EPA emission standards.

Where feasible, promote the use of three-phase gathering systems to transport natural gas, condensate, and produced water to consolidated facilities where dehydration, temporary tank storage, and truck loading would occur.

At Project-level analyses, the BLM will evaluate possible emissions control effectiveness for permitting any actions and any requirements would be applied as COAs.

A Lease Notice (LN) will be attached to new oil and gas leasing agreements to provide notice to operators of analysis and mitigation requirements that will be determined on a case-by-case basis at the permitting/development stage. (See Appendix 1, WR-LN-04.)

Participate in, conduct, or require air modeling analyses as described in the CARPP (see Appendix 5) as part of a comprehensive strategy to prevent BLM permitted activities from causing or contributing to violations of ambient air quality standards or causing significant adverse impacts on air quality related values.

2.3 Soil and Water Resources

2.3.1 Goals

Maintain and improve water quality and quantity in order to be compatible with existing and anticipated uses, to comply with applicable state and federal water quality standards, and to meet the goals contained in Standard 5 of the Colorado Public Land Health Standards.

Prevent, control, or remediate sources and causes of water pollution on federal lands in cooperation with other federal, local, and state agencies and private entities.

Identify and implement treatments for fragile watershed areas and minimize or control elevated levels of salt and sediment contribution from federal lands to river systems in the Planning Area.

Prevent impairment of soil productivity due to accelerated erosion and physical or chemical degradation resulting from surface use activities and maintain or improve soil productivity, including retention of topsoil quality and reestablishing soil capability, potential, and functionality when disturbed.

2.3.2 Objectives

Manage surface land use with oil and gas activities to maintain the timing, magnitude, and duration of peak, high, and low flows by minimizing surface disturbance, erosion, and sedimentation of streams.

Manage oil and gas activities to maintain the hydrologic and water quality conditions needed to support riparian and wetland areas; water quality standards; stream channel integrity; minimize levels of salt and sediment loading in watersheds; and complement meeting or achieving BLM's Colorado Public Land Health Standards.

Maintain surface and groundwater quality to achieve or exceed standards promulgated by the State Water Quality Control Commission.

Manage oil and gas activities to maintain soil quality and reestablishing soil function when disturbed.

2.3.3 Management Actions

The use of existing pipeline corridors and roads are requested and may be required depending on site-specific analysis.

Encourage, through planning, the implementation of produced water piping infrastructure to transport water to treatment and disposal locations.

Encourage, through planning, the implementation of detailed access route plans for specific geographic areas.

When submitting a development plan, operators will submit a water management plan by federal lease or unit area(s) that describes:

- Predicted water use for drilling, construction, and operations;
- Storage needs and methods;
- Recycling, treatment; and
- Disposal methods for fresh and produced water needed to develop or explore identified mineral resources.

Plans would be subject to BLM approval.

Use of evaporation facilities for the disposal of produced water would be evaluated on a case-by-case basis.

The BLM actions affecting surface waters will be conducted in compliance with state and federal laws, including:

- State of Colorado’s NPDES;
- Anti-Degradation Policy;
- State Water Quality Standards;
- U.S. Army Corps of Engineers, Section 404 permit requirements; and
- Section 319 (Non-point Source Management Program) of the Clean Water Act (CWA).

Surface discharge of produced water that meets state standards for water quality would be allowed. Individual projects would be considered on a site-specific basis.

Management actions support the goals provided as indicators in Standard 1 of the Colorado Public Land Health Standards.

Landslide areas as identified in the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) would be open to oil and gas leasing with an NSO stipulation (38,600 acres). (See Appendix 1, WR-NSO-11.)

On natural slopes greater than or equal to 35 percent but less than 50 percent, a CSU stipulation (231,500 acres) would be applied to surface-disturbing activities associated with all land use authorizations, permits, and leases granted in these areas that are associated with oil and gas development. (See Appendix 1, WR-CSU-10.)

On natural slopes greater than or equal to 50 percent an NSO stipulation (114,200 acres) would be applied to surface-disturbing activities associated with all land use authorizations, permits, and leases associated with oil and gas development. Surface occupancy could be granted if an environmental analysis showed that the proposal would not impact the features identified or when the land-use authorization holder or lease holder and the BLM have arrived at acceptable plan for mitigation of anticipated impacts. (See Appendix 1, WR-NSO-12.)

Identified saline soils would be open to leasing with a CSU stipulation that would require operators to consider the stability and productivity of these soils in surface use plans of operations for oil and gas activities (44,300 acres). (See Appendix 1, WR-CSU-11.)

A CSU stipulation would be applied to oil and gas leases and land use authorizations to avoid the following areas:

- Mapped 100-year floodplains (22,100 acres);
- Areas within 500 feet from perennial waters, springs, water wells, and wetland/riparian areas (55,300 acres); and
- Areas 100 feet from the inner gorge of ephemeral and/or intermittent stream channels (these would be identified during site-specific analysis).

(See Appendix 1, WR-CSU-12.)

Areas within 500 feet of state 303 (d) listed impaired stream segments in the MPA would be open to oil and gas leasing with an NSO stipulation (2,500 acres). These stream segments include:

- Duck Creek tributary to Yellow Creek;
- Yellow Creek from Barcus Creek to the White River;
- Piceance Creek from Willow Creek to Hunter Creek;
- Piceance Creek from Ryan Gulch to the White River; and
- Black Sulphur Creek.

(See Appendix 1, WR-NSO-13.)

Development in designated surface and groundwater source water protection zones for public water supplies (i.e., those identified by the Source Water Protection Plans for the towns of Meeker and Rangely) including new sole source aquifers as defined in the Safe Water Drinking Act would require a plan that addresses drinking water sources. This requirement would be added as a LN to leases. (See Appendix 1, WR-LN-05.)

Areas within 1/2 mile of groundwater public water supply wells for the town of Dinosaur, Dinosaur National Monument Headquarters, the town of Massadona, the town of Meeker and the primary protection area that includes the primary aquifer for Meeker would be open to oil and gas leasing with an NSO stipulation (1,500 acres)². (See Appendix 1, WR-NSO-14.)

² These acres do not include the primary protection aquifer for Meeker since there is not any federal mineral estate associated within the Meeker public water supply area.

2.4 Vegetation

2.4.1 Goals

Plant Communities (including Remnant Vegetation Associations)

Maintain the proper ecosystem function necessary to achieve the Desired Plant Community (DPC) in areas with oil and gas activities.

Assess sites to identify weed establishment risks, analyze potential treatment of sites at high-risk of weed establishment/spread, and identify prevention practices.

Manage vegetation communities to restore, maintain, or enhance vegetation community health, composition, and diversity to benefit multiple resources and their uses (consistent with ecological site description).

Riparian Areas and Wetlands

Ensure that riparian areas and wetlands on BLM-administered lands are in or making progress toward, proper functioning condition.

Noxious and Invasive Weeds

Incorporate Integrated Pest Management practices including Early Detection Rapid Response into all phases of oil and gas activities to stop or reduce the spread of noxious and invasive plant species.

2.4.2 Objectives

Plant Communities (including Remnant Vegetation Associations)

Manage oil and gas activities to maintain, restore, and enhance upland vegetation communities, riparian areas, and wetlands to facilitate meeting or progressing toward meeting Colorado Public Land Health Standards and DPC.

Maintain, restore, and enhance vegetation communities to facilitate a healthy mix of successional stages in areas with oil and gas activities (consistent with ecological site description or identified desired plant community).

Protect the ecological integrity of unique plant communities, with particular emphasis on maintaining the genetic integrity of native species in remnant vegetation associations (RVAs and ACECs).

Riparian Areas and Wetlands

Manage oil and gas activities for maintenance, restoration, and enhancement of riparian areas and wetlands to facilitate meeting or progressing toward meeting, Colorado Public Land Health Standards through achievement of proper functioning condition.

Noxious and Invasive Weeds

Control the spread of noxious and invasive weeds found on the most current State and County Noxious Weed priority lists, associated with oil and gas activities by using appropriate management actions (eradicate, contain, suppress). Involve appropriate partners (local, county, state, federal, and public land users) to facilitate timely and successful completion of each action.

2.4.3 Management Actions

Plant Communities (including Remnant Vegetation Associations)

Proposed activities would be analyzed to determine whether the objectives for the particular plant community affected could be met if the activity were approved. If plant community objectives could not be met, the BLM could deny the request or could require specific mitigation measures for the activity to ensure that plant community objectives are met.

In areas where a pinyon-juniper component has expanded into previous fire-disclimax (mid-seral) shrublands or is invading other ecological sites or sites degraded by cheatgrass domination, the BLM would utilize vegetation removal associated with oil and gas activities and related infrastructure combined with tailored reclamation to achieve specific management objectives.

In RVAs an NSO stipulation (4,800 acres) would be applied to all land use authorizations, permits, and leases associated with oil and gas development. (Appendix 1, WR-NSO-15.)

(Note: Additional management direction related to the use of native species in RVAs can be found under Reclamation in Section 2.4.3. Additional management direction related to deciduous browse communities on Blue Mountain can be found under the Dinosaur Trail MLP in Section 2.24.)

Riparian Areas and Wetlands

Management of riparian areas and wetlands would be based on the rating system for riparian areas identified in Appendix D, Tables 2-9 through 2-11 of the 1997 White River RMP. Riparian systems have been reprioritized according to risk factors associated with oil and gas activities. The following systems would be ranked as high priority: Bitter Creek, Fawn Creek (all), Piceance Creek, Bear Creek, and Big Duck Creek. The following systems would be ranked as medium priority: West Creek, Joe Bush Gulch, Segar Gulch, East Hunter Creek, West Hunter Creek, Middle Fork Stewart, Box Elder, and Corral Gulch. The following systems would be ranked as low priority: Collins Gulch and Cascade Gulch. Any 303 (d) (CWA) listed systems could be considered high or medium priority depending on its resource value. The remaining systems would retain the priority rankings as identified in Appendix D of the 1997 White River RMP.

Authorized surface-disturbing activities and/or facilities that are found to be negatively affecting riparian or wetland habitat may be required to undertake mitigation and, if impacts are not mitigated, then relocate activities/facilities outside riparian/wetland habitat.

(Note: Additional management direction related to wetland/riparian areas can be found under Soil and Water Resources, Section 2.3.)

Noxious and Invasive Weeds

Three contiguous areas encompassing 497,900 acres would be maintained as weed-free zones. Weed management would be emphasized through cooperation with private landowners and state and county governments. The areas would be identified on the ground with signs. The following special conditions would be attached to use authorizations approved within these areas:

- All construction equipment and vehicles would be cleaned prior to entering BLM Weed-Free Zones.
- All hay, straw, unprocessed feed, and seed used in BLM Weed-Free Zones must be certified free of specified noxious weeds listed in Colorado Weed-Free Forage Certification Standards.

- All authorized users of disturbed areas would be required to inventory for noxious weeds in both the spring and fall.

When noxious weeds and/or invasive winter annuals (e.g., cheatgrass) are present, prior to seeding, they would be treated/controlled to reduce their presence to a level that would not impair revegetation efforts.

On BLM lands, noxious weeds on the Colorado Department of Agriculture’s State Weed List A would be eliminated; noxious weeds on the Colorado Department of Agriculture’s State Weed B and C Lists would be controlled; and the spread of invasive species within the permitted area of direct and indirect use (as defined in Appendix 3) would be controlled and prevented. The following COAs would be attached to land use authorizations:

- All equipment that may act as a vector for weeds will be washed before entering the WRFO. Equipment would also be washed (e.g., with a portable pressure washer) when leaving and/or moving between work-sites if the pre-disturbance weed inventory indicated the presence of undesirable invasive or noxious weeds and there is a risk of transporting these weed seeds or root propagules;
- Certified weed-free mulches, as per state guidelines, would be used;
- All seed applied on BLM public lands would comply with BLM policy regarding seed testing and certified quality;
- All authorized users of disturbed areas including ROWs would be required to inventory the entire project area for noxious weeds and invasive species in both the spring and fall through final abandonment. Results of surveys would be provided to the BLM as described in Appendix 3;
- Operators would prepare and implement weed management plans for projects consistent with the WRFO Surface Reclamation Plan (see Appendix 3); and
- Operators to the extent possible would ensure all products placed on public lands (e.g., materials from gravel pits/quarries) are free of noxious weeds, including seeds or root material, listed on Colorado Department of Agriculture’s State Weed List for A and B listed species.

Reclamation

General Reclamation Management Direction

All surface disturbing activities related to oil and gas exploration and development on BLM-administered lands authorized after the signing of the ROD for the Oil and Gas Development RMPA would be subject to reclamation standards included in the WRFO Surface Reclamation Plan. For all such exploration and development authorized prior to the signing of the ROD, the WRFO Surface Reclamation Plan would be used as guidance for Reclamation Plans submitted as per Onshore Order No. 1. Reclamation is dynamic and the WRFO Surface Reclamation Plan will be revised through time to incorporate updated reclamation practices.

For APDs and ancillary facilities authorized after the signing of the ROD for the Oil & Gas Development RMPA, the BLM would require current leaseholders to follow the reclamation requirements in the WRFO Surface Reclamation Plan (see Appendix 3). For APDs and ancillary facilities authorized prior to the signing of the ROD, the WRFO Reclamation Plan would be used as guidance for authorizing Reclamation Plans submitted as per Onshore Order No. 1.

For land use authorizations (e.g., ROWs, leases, and permits) authorized after the signing of the ROD for the Oil & Gas Development RMPA, the BLM would require current holders to follow the reclamation requirements in the WRFO Surface Reclamation Plan (see Appendix 3). For land use authorizations (e.g., ROWs, leases, and permits) authorized prior to the signing of the ROD, the WRFO Reclamation Plan would be used as guidance for approving submitted Reclamation Plans.

The BLM would require final reclamation of abandoned wells and access routes including long-term (until termination of land use authorization) maintenance (e.g., weed control, vegetation establishment) of ROWs as defined in the WRFO Surface Reclamation Plan (see Appendix 3).

In areas under an existing lease, a program would be developed in cooperation with current leaseholders to apply (where appropriate) the most current reclamation standards and practices to existing well pads, roads, and pipelines. These standards and practices would be applied in annual increments that would allow for completed interim or final reclamation of active and inactive ROW corridors and producing, plugged, and abandoned wells and access routes within 20 years. This action would be most relevant to the Douglas/Evacuation Creek, Coal Oil Basin, Indian Valley, Crooked Wash, and White River Dome areas.

The BLM would require reclamation that would result in a functioning vegetation community, established on the reclaimed site, that is capable of persisting on the site without continued intervention and would allow for successional processes progressing toward a healthy mid-seral or late-seral community. An exception could be granted for areas where a specific cover type/seral stage is needed (e.g., wildlife habitat, fire management).

Acceptable DPCs would be managed to achieve an ecological status of late-seral or healthy mid-seral for all rangeland plant communities. Interim and final reclamation for oil and gas activities would have success criteria of 80 percent similarity of desired foliar cover, bare ground, and forb and/or shrub density in relation to the identified DPC. In the absence of specified DPC data, an agreed upon reference site or Assessment, Inventory and Monitoring Protocol (AIM) data would serve as the DPC. Vegetative cover values for woodland or shrubland sites are based on the capability of those sites in an herbaceous state. The resulting plant community must contain at least five desirable plant species and no one species may exceed 70 percent relative cover in the resulting plant community to ensure that site species diversity is achieved. Desirable species include native species from the surrounding site, species listed in the range/ ecological site description, or species from the BLM approved seed mix consistent with the WRFO Surface Reclamation Plan (see Appendix 3).

A reclamation status report for each site would be submitted electronically to the WRFO annually until it is determined that reclamation of the site has met all required objectives of the particular reclamation phase. (See Appendix 3, Section 4.2 for the minimum components to be included in the report.)

Reclamation data will be submitted via the most current BLM approved data management system.

Long-term facilities would be situated on the access route side of the well pad, unless otherwise approved by the BLM.

In locations where a standard well pad foot print configuration would require large cuts and fills, the BLM would encourage an adapted footprint configuration to match the topography of the surrounding landscape to reduce reclamation needs (e.g., fewer cut/fill areas).

The BLM would require the use of native plant materials and seeds in all reclamation activities unless the use of non-native, non-invasive introduced plant species would benefit the ecological integrity or meet specified management objectives of the site. Site-specific reclamation plans would be developed based on ecological site, DPC, and ecological integrity of the surrounding community.

Sterile hybrids or cereal grasses could be used on public lands for reclamation efforts where approved by the BLM.

Special Reclamation Management Direction

Big Game Habitat

On a case-by-case basis and in addition to standard interim and final reclamation measures, special reclamation components or techniques would be prescribed to restore or provide supplemental forage species that would aid in meeting big game objectives (e.g., deciduous browse). Native species would be used as general rule, but where unavailable or considered beneficial, non-native species with established value to big game that have no demonstrated tendency to persist as a dominant forb constituent on reclaimed lands for extended timeframes (e.g., more than 10 years) or disperse beyond the treatment area could be used. (See also complementary Management Action in Section 2.7.3, Grouse.)

Special Status Animal Species

BLM Sensitive Aquatic Vertebrates, including Native Cutthroat Trout

Require specialized reclamation techniques (e.g., seeding and soil conditioning techniques, reclamation protection, application of interim reclamation standards and monitoring) that promote or accelerate the establishment of interim ground cover sufficient to reduce sediment contribution to discountable levels in aquatic habitats supporting native fisheries and BLM-sensitive species (e.g., fish and amphibians). Remaining aquatic habitats will be managed to reduce sediment contribution to levels that do not compromise proper functioning condition.

Canada Lynx

Interim and final reclamation practices would be oriented toward enhancing habitat attributes considered most important for lynx prey or denning functions at the time of project submission. These site-specific determinations will be established in coordination with CPW and FWS in preparation for ESA Section 7 consultation proceedings.

Special Status Plant Habitat

Reclamation of suitable habitat of special status plant species would include replicating the existing soil horizons and subsoil dynamics (i.e., replace soil and sub-soil to their pre disturbance order) to allow for increased potential in possible occupation of these sites by special status plant species as well as achievement of late seral vegetation conditions.

Exclusion of Livestock

Where appropriate, as determined by BLM, livestock would be excluded from oil and gas well pads and related surface disturbance, including cut and fill slopes, until interim and final reclamation vegetation is successfully established. Operators would be responsible for construction, maintenance, and removal of fencing unless otherwise specified (see Appendix 3).

Where voluntary collaboration between operators, livestock grazing permittees, and resource managers has failed, as determined by the BLM at any time during the life of the project where conditions warrant, livestock would be excluded from linear ROWs and related surface disturbance until final reclamation vegetation is successfully established. Fencing would be installed in a manner that does not impair livestock or wildlife travel through the area (pass-through areas provided). Operators would be responsible for construction, maintenance, and removal of fencing unless otherwise specified (see Appendix 3).

Use of Native Plants in RVAs, ACECs, and WSAs

Reclamation of surface disturbance resulting from authorized activities within RVAs would use only locally gathered or genetic stock from locally gathered native species. Locally collected seed or genetic stock from locally gathered seed would be used for reclamation and available in adequate quantity for reclamation needs prior to issuance of the notice to proceed. If such seed is not available in adequate quantity, then collection from the site of disturbance would be required. All seed collection, storage, or increase would be conducted in accordance with approved collection, storage, and seed increase protocols. If three growing seasons pass without adequate collection to provide the quantity necessary for reclamation needs, the impact of using non-local native species on the genetic integrity of native species would be evaluated by the BLM and mitigated through site-specific environmental analysis.

Native plant species would be used for reseeding disturbed areas within Areas of Critical Environmental Concern (ACECs). Exceptions may be considered if an environmental analysis indicates that the use of non-native species is compatible with the resources for which the ACEC was designated. Exceptions would not be considered in those ACECs which were designated for special status plant species.

Reclamation of surface disturbance resulting from authorized activities within ACECs designated for special status plant species would use only locally gathered or genetic stock from locally gathered native species. In cases where locally gathered native species are not available, the impact of using non-local native species on the genetic integrity of native species would be evaluated through site-specific environmental analysis.

Only native plant species would be used for reseeding disturbed areas within WSAs.

2.5 Fish and Wildlife - Big Game

2.5.1 Goals

Ensure that big game habitats provide components and conditions necessary to sustain big game populations at levels commensurate with multiple-use objectives and state-established population objectives.

2.5.2 Objectives

Provide the forms, distribution, and extent of vegetation cover and forage that satisfies the physiological requirements and behavioral constraints (i.e., habitat utility) of big game.

Reduce and limit to prescribed geographic and/or habitat-based thresholds the duration, expanse, intensity, and frequency of big game harassment and avoidance-induced disuse (i.e., loss of utility of habitat) across all suitable habitats.

2.5.3 Management Actions

Significant reductions in essential winter forage bases would be minimized by limiting cumulative treatment of suitable sagebrush forage types on deer winter ranges and pronghorn overall ranges. Cumulative reductions of suitable forage types would be limited to 50 percent of suitable habitat within a 1-mile radius and would not exceed 20 percent of the total type within individual game management units (GMUs). Treatment of suitable sagebrush forage types on deer severe winter range and pronghorn winter ranges would be confined, where possible, to suboptimal stands and excess cover types. Cumulative reductions of suitable forage types on deer severe winter range and pronghorn winter range would be limited to 20 percent within a 1-mile radius where involvement is unavoidable.

Big game habitat enhancement/compensation practices to help offset forage losses and effect advantageous shifts in animal distribution (i.e., outside concentrated development areas) would remain consistent with the maintenance of climax or disclimax vegetation extent (or those guidelines established in the 1997 White River RMP) and community-specific successional perturbation rates (e.g., fire-return intervals). Treatment for the restoration of disclimax shrubland communities or restoration efforts targeting communities where understories are dominated by invasive annuals would not be limited.

In wildlife movement corridors defined by CPW, modified siting of surface facilities and application of activity restrictions (i.e., up to 60 day activity deferment) would be used, where appropriate, as a management tool to enable secure big game movement between and within seasonal ranges.

All seasonal big game ranges within the WRFO (see Map 2-4) would be subject to the following timing limitations. These timing limitations would be applied through lease stipulations or as COAs that could extend up to 120 days within the following windows, unless otherwise noted from:

- December 1 through April 30 in defined big game severe winter range (673,100 acres) (see Appendix 1, WR-TL-12);
- May 15 through August 15 in defined big game summer range (420,300 acres) (see Appendix 1, WR-TL-13); and
- Defined big game winter range and winter concentration areas (604,500 acres): deferrals of up to 60 days within the period of December 1 through April 30 in stratified zones of seasonal use (refined set of seasonal use timeframes developed in coordination with CPW). (See Appendix 1, WR-TL-14.)

Exceptions, waivers, or modifications could be granted (see Appendix 1), but the criteria would be narrowly defined and timing limitations would typically be applied regardless of weather conditions (i.e., address of chronic influences).

In an effort to encourage clustered development and reduce the extent of seasonal ranges subject to cumulative adverse behavioral effects (i.e., harassment, avoidance) attributable to oil and gas development, exceptions to timing limitations would be offered contingent on development remaining below the following threshold allowance (based on deer seasonal range encompassed by an entity's total leaseholdings within a GMU). (An entity is the primary lessee, unit operator, or other common entity, that provides BLM the most cohesive and effective source with interest in developing the federal mineral estate and performing reclamation.) The threshold allowances are a predetermined percentage of each seasonal range within a leaseholding (i.e., listed below). To qualify for timing limitation exceptions, fluid mineral development activity, as measured by the area encompassed by 660-foot buffers surrounding development features (i.e., routes,

pipelines, pads) within a leaseholding, must not exceed the acreage represented by those threshold allowances.

Acute Thresholds:

- 20 percent of deer winter range;
- 15 percent of deer severe winter range;
- 15 percent of deer summer range; and
- 20 percent of deer winter concentration area.

The area of acute effects would be defined by the physical footprint of those concentrated, intensive activities associated with, for example, pad and pipeline construction and well drilling and completion operations, buffered by 660 feet on all seasonal ranges.

Collective Thresholds:

- 20 percent of deer winter range;
- 20 percent of deer severe winter range;
- 20 percent of deer summer range; and
- 20 percent of deer winter concentration area.

The area of collective effects would include the area of acute effects in addition to all residual and incomplete lease development activities buffered as above, including but not limited to: access corridors, multiple-well pads awaiting further drilling or not meeting interim reclamation success criteria (as defined in the WRFO Reclamation Plan), linear ROWs that support vehicle traffic after final reclamation, and facilities receiving frequent visitation (i.e., an average greater than seven vehicle trips per pad per week).

The area of acute effects would be exempt from big game seasonal timing limitations as long as lease development activities are managed within the threshold allowance for both collective and acute effects. Minor work involving lower intensity activity (e.g., installation of production facilities, reclamation) within the area of remaining collective effects would be subject to Timing Limitations, where practical. Adverse effects that exceed either threshold would nullify the timing limitation exemptions and subject all leaseholding development to timing limitations as established above.

It is WRFO's intent that threshold limits be refined when necessary and through appropriate means, based on animal response or the influence of compensatory mitigation in meeting long-term population objectives, as determined through monitoring.

Construction activity that is unrelated to the exercise of lease rights would continue to be subject to timing limitations as established above. Development activities that may affect adjoining leaseholders' acreage would be assessed against the proponent's threshold calculation.

Access or other features and facilities used in common may be prorated by operator. All reclamation in a leaseholding will be subject to Appendix 3 reclamation criteria when operating within the threshold concept.

A grace period of 5 years from the time of the RMPA ROD approval would be provided to allow compliance in the event leaseholder/operator activity exceeds threshold allowances at the time of ROD approval.

In areas defined by CPW as Restricted Development Areas (e.g., North Ridge, approximately 10,700 acres), collective effects would be limited to 5 percent. Because there is no allowance for acute activity (i.e., 0 percent) in Restricted Development Areas, the manner in which these areas would be

managed in the context of the threshold strategies differs from its application elsewhere. In these cases, intensive development activities normally assigned to the “acute” effects category would generally be allowed only during those timeframes outside the period of animal occupation (i.e., similar to traditional application of timing limitations). Allowance for acute effects during the period of animal occupation could be granted. Restricted Development Areas are those geographic areas that offer inordinately high value as big game habitat (as determined by the CPW) or those that must remain relatively free of development influences to serve as experimental controls for long-term population or effects monitoring (e.g., North Ridge). (See Appendix 1, WR-TL-12.)

Protocols and criteria for lessees, cooperating agencies, or affected stakeholders would be established to implement compensatory mitigation to offset reductions in big game habitat capacity (e.g., year-round drilling). In coordination with CPW and industry, an adaptive method (based on monitoring) would be developed and implemented to quantify direct and indirect effects on big game as the basis for applying compensatory mitigation to achieve or maintain long-term population objectives.

The extent and continuity of coniferous forest, aspen, chokecherry (with special emphasis on stands within 1,300 feet of water on summer ranges), mature pinyon -juniper woodlands, and arborescent stands of Gambel oak would be maintained as much as practicable through avoidance (through aggressive use of moving surface facilities and ROW corridors up to 660 feet to avoid key vegetation types). Authorized exceptions would be subject to special reclamation or management practices to ensure that long-term community integrity is regained as soon as possible.

Federal mineral estate within the Oak Ridge (including associated BLM lands designated in the 1997 White River RMP), Jensen, and Piceance Creek (all units) State Wildlife Areas would be open to oil and gas leasing with an NSO stipulation (20,900 acres). (See Appendix 1, WR-NSO-16.)

(Note: Additional management direction related to reclamation of big game habitat can be found under Reclamation in Section 2.4.3. Additional management direction related to effective road densities and vehicular access in big game habitat can be found under Comprehensive Trails and Travel Management in Section 2.20.3.)

2.6 Fish and Wildlife - Raptors

2.6.1 Goals

Maintain the short-term utility and promote the continued long-term development and availability of suitable raptor habitats, including prey base, nest sites, and other special habitat features necessary to allow increases in regional raptor populations, where appropriate.

2.6.2 Objectives

Reduce the risk of direct mortality by removing or modifying potentially harmful features or preventing raptor access to hazards.

Minimize disruptions to ongoing raptor nest attempts that have potential to fail or reduce the success of annual breeding efforts.

Maintain the short-term utility and minimize long-term modifications in the extent and continuity of woodland/forest stands that show indications or have a documented history of nesting use as a means of maintaining the long-term development and availability of woodland raptor habitats, including

prey base, nest sites, and other special habitat features necessary to help maintain regional woodland raptor populations.

2.6.3 Management Actions

The most current raptor protection guidelines would be incorporated into power line designs in an attempt to prevent raptor electrocution (e.g., Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 [APLIC 2006]). Where perching deterrence is not an issue (e.g., sage-grouse or black-footed ferret habitats), providing adequate conductor separation would be the preferred method of protection.

Where appropriate, power line design would be required to incorporate features that enhance conductor visibility and reduce the potential for line strikes (e.g., swan diverters).

Physical barriers would be used to prevent the use of or contact with stored fluids that may pose a risk to raptors. These barriers would be installed immediately after a drilling rig has moved off-site and would remain in place through completion and until the pits are reclaimed. Methods could include netting or other alternative methods that effectively prevent use and that meet BLM approval. The use of “bird-balls” would be discouraged.

Long-term, undesirable reduction or deterioration in the extent or continuity of aspen, spruce-fir, Douglas-fir, or mature pinyon -juniper woodland communities would be avoided through facility relocation of up to 660 feet and design modifications developed on a site-specific basis.

Development proponents conducting raptor nest inventories in affected nest habitats would be required to provide survey information consistent with the most current WRFO raptor survey protocols. Consultants performing raptor nest surveys must demonstrate, to the BLM Authorized Officer, their professional expertise and experience in conducting raptor nest surveys and in producing credible reports and analysis. When possible, inventories would allow for an investigation of a full nesting sequence prior to project implementation.

Permitted land use activities within 1/4 mile of functional raptor nest sites (including woodland sites) or within 1/2 mile of the nests of special-status raptor species would be subject to relocation or design modifications to preclude, or reduce to acceptable levels, surface occupancy or use that reduces or deteriorates the extent and continuity of nest and foraging habitat.

Surface occupancy would not be allowed within 990 feet of functional nest sites of those raptors that are not considered special-status (120,700 acres) (see Appendix 1, WR-NSO-18) or within 1/2 mile of functional nest sites of golden eagle and prairie falcon. (59,900 acres) (See Appendix 1, WR-NSO-19.)

Surface-disturbing and disruptive activities would not be allowed within 1/4 mile of active nest sites of those raptors that are not considered special-status (see Appendix 1, WR-TL-15) or within 1/2 mile of active nest sites of golden eagle and prairie falcon during the period from nest territory establishment to dispersal of young from the nest (145,000 acres). (See Appendix 1, WR-TL-17.)

(Note: Additional management direction for special status raptor species can be found in Section 2.10.)

2.7 Fish and Wildlife – Grouse

2.7.1 Goals

Restore, maintain, or enhance habitat conditions and features conducive to the maintenance or expansion of native grouse population abundance and distribution, and in particular, maintain or expand the number of greater sage-grouse lek complexes (Western Association of Fish & Wildlife Agencies (WAFWA)-defined) in each identified population within the WRFO Planning Area.

2.7.2 Objectives

Restore the suitability of former sage-grouse habitat that suffers from successional advance or depauperate understory development to help offset impacts of oil and gas development.

In cooperation with industry, plan development so as to confine activity to discrete geographic areas with simple and common access requirements in order to: (1) reduce the areal extent of occupied habitat subjected to acute disturbance during the period of use; and (2) minimize the long-term influences on potential habitat that, with restoration work, could allow expansion of sage-grouse distribution and compensate for reductions in the extent of suitable habitat.

Maintain sufficient undisturbed or minimally disturbed native grouse habitats to provide for long-term species sustainability within the WRFO Planning Area.

Limit overall reductions in habitat utility of occupied grouse habitats and, particularly in the Piceance-Parachute-Roan (PPR) population area, maintain effective continuity of ridgeline habitats.

2.7.3 Management Actions

Surface occupancy and long-term conversion or adverse modification of the following sage-grouse habitat (450,700 acres) within a leaseholding would be limited to 2 percent within each of most-currently mapped Priority and General Habitats that are characterized by, or capable of redeveloping (e.g., burns) sagebrush-dominated stands:

- With ≤ 50 percent canopy and ≤ 40 inches in height; and
- On slopes ≤ 20 percent in defined winter use areas or stands showing evidence of winter use.

In coordination with CPW, these areas and habitats could be refined consistent with site-specific evaluation of seasonal use functions and updated information or science, including functionally equivalent habitat classification systems adopted by the BLM and CPW. Reclaimed habitat that does not meet minimum functional habitat properties would be assessed against the threshold acreage limitation (see below). (See Appendix 1, WR-NSO-22.)

Surface occupancy and surface-disturbing and disruptive activities within 0.6 mile of active (i.e., used by displaying males in the previous 5 years) and inactive (i.e., evidence of use within previous 10 years, but not within previous 5 years) strutting grounds (i.e., leks) would be prohibited, with narrow criteria for exception or modification (14,100 acres). If existing facilities are within 0.6 mile of such leks, alternate access routes would be devised and/or surface facilities removed to the extent practicable within 5 years of approval of the ROD. (See Appendix 1, WR-NSO-23.)

Occupation or removal of suitable sagebrush cover within 660 feet of mesic or wet meadow habitats encompassed by the most-currently mapped Priority Habitat for sage-grouse would be avoided.

Unless qualifying for an exception by working within the disturbance threshold criteria (see below), surface-disturbing and disruptive activities would be prohibited in the following areas during the seasonal use periods identified:

- December 1 through March 15 in those areas most currently defined by CPW as serving important winter use functions for sage-grouse (450,100 acres) (see Appendix 1, WR-TL-22); and
- April 1 through July 15 in suitable sage-grouse nesting/brood-rearing habitat within most-currently mapped Priority or General Habitat (450,100 acres). (See Appendix 1, WR-TL-23.)

In an effort to encourage clustered development, accommodate year-round well development, and reduce the extent of sage-grouse range subject to cumulative adverse modification and behavioral effects (e.g., avoidance) attributable to fluid mineral development, exceptions to timing limitations may be offered contingent on development effects remaining within the following threshold allowances (evaluated by the most-currently mapped Priority and General Habitats encompassed by an entity's(1) total leaseholdings within a CPW-defined sage-grouse population or sub-population area). The extent of sage-grouse habitat subject to cumulative adverse habitat and behavioral effects (i.e., reduced habitat extent/ continuity, harassment/ avoidance) attributable to oil and gas development would not exceed the following thresholds:

- 10 percent of suitable habitat within most-currently mapped Priority Habitat (or equivalent habitat classification system adopted by CPW and BLM); and
- 20 percent of suitable habitat within most-currently mapped General Habitat (or equivalent habitat classification system adopted by CPW and BLM).

An identified land base key to any given subcomplex (defined by CPW) may be subject to additional conservation measures in an effort to retain an effective source population of grouse in the subcomplex. These measures may include, but would not be limited to: well pad density limits, strict development schedules and timeframes, and facility siting that may involve moves of more than 660 feet.

The extent of adverse behavioral effects is defined by collective development activity or facility footprint buffered by 660 feet, in addition to any habitat parcels that become physically or behaviorally isolated by development features and are unavailable for effective use by sage-grouse (e.g., barriers to movement).

Development activity includes, but is not limited to:

- Pad and access construction, drilling, and completion operations;
- Trunk and gathering pipeline construction and reclamation;
- Unrestricted access tracks along ROW corridors;
- Wells receiving frequent visitation (i.e., average of more than seven vehicle trips per pad per week); and
- Well pads not fully developed or reclaimed to interim standards.

Reclaimed habitat that does not meet minimum functional habitat properties would be assessed against the threshold. Reclamation success on sage-grouse habitats would be contingent on evidence of successful establishment of desired sagebrush forms on disturbed acreage or achieving minimum functional capacity to serve sage-grouse cover and forage needs based on site capability and seasonal habitat use and allowing, where appropriate, for surrogate (e.g.,

herbaceous) forms of cover as per Appendix 1, “Structural Habitat Guidelines” from Colorado Greater Sage-grouse Conservation Plan (Colorado Greater Sage-Grouse Steering Committee 2008).

Cumulative development-related effects that exceed any of the threshold allowances would nullify the exceptions and subject all lease development to established timing limitations applied through lease stipulations or COAs that exceed 60 days (i.e., nesting/early brood functions, April 1 through July 15; winter use areas, December 1 through March 15).

For effectiveness in achieving management objectives for sage-grouse, the BLM would encourage the voluntary application of this strategy to private holdings. Acreage on fee land holdings below the occupied habitat threshold that are considered by CPW to be of comparable or higher sage-grouse value could be substituted for federally administered acreage with the approval of the WRFO Authorized Officer.

Sage-grouse thresholds would be considered separately but would also be integral with more expansive big game thresholds.

Additional conservation measures could be applied as COAs at the time of permitting of oil and gas drilling or related operations or other activities.

Threshold allowances are intended to accommodate directional, multi-well drilling technologies that can be managed to dramatically reduce long-term impacts on grouse populations and habitat. Threshold strategies and TL exceptions may not be offered in instances (e.g., exploratory, obligation wells, routine and non-emergency production, maintenance, and operation activities) where fluid mineral development activity can be reasonably scheduled to avoid interfering with important seasonal use activities of sage-grouse. (See Appendix 1, WR-TL-22 and WR-TL-23.)

In defined sage-grouse population areas identified by CPW, special management and operation refinements (e.g., integral with Wildlife Mitigation Plans) may be required to establish protocols to authorize exceptions or modifications to activity or surface use restrictions. These refinements would be developed jointly by BLM, CPW, and the leaseholder/operator, and as appropriate, other regulatory or scientific entities, within the framework of the threshold strategy.

The BLM would utilize lease notices as the vehicle for imposing management actions that mimic lease stipulations (i.e., >660-foot moves, >60-day activity deferrals) on sage-grouse habitat features that are variable through time (e.g., leks), and/or may undergo distributional shifts through time (e.g., expansion onto restored ranges). (See Appendix 1, WR-LN-08.)

The following methods would be used to minimize the frequency and extent of long-term vehicular activity (production phase) on sage-grouse ranges and to help maintain effective continuity along ridgeline habitats: (1) project siting considerations; (2) using development designs that reduce production facilities on the pad and maximize interim reclamation opportunity; and (3) employing practices that accelerate development and maintenance of vegetative cover that provides for ground movements through or across surface developments. Practices that accelerate the recovery of functional sagebrush canopies (e.g., sagebrush seeding and/or transplanting, fencing) on surface disturbance associated with oil and gas development would be required to be incorporated during interim and final (particularly pipeline) reclamation.

Unless specifically authorized exceptions are granted in coordination with CPW, local accessions of sagebrush (i.e., material collected on-site or seed propagated from “local” collections) would be used where appropriate and as specified by the BLM to accelerate the redevelopment of sagebrush where canopies have been removed or adversely modified. The extent and level of reestablishment would be designed to generally not exceed initial mature canopy densities of 10 percent and, if considered

appropriate, would be intermittently (i.e., areal extent less than 50 percent) applied along linear ROWs.

Consistent with existing land use decisions, adapted forms of forbs with recognized utility as sage-grouse forage or cover would be included in interim and final seed mixes applied to surface disturbances in suitable sage-grouse nesting/early brood-rearing and late brood habitats. Native species would be used as a general rule, but where unavailable or considered beneficial, non-native species with established value to sage-grouse that have no demonstrated tendency to persist as a dominant forb constituent on reclaimed lands for extended timeframes (e.g., more than 10 years) or disperse beyond the treatment area could be used.

Protocols and means for lessees, cooperating agencies, or affected stakeholders to implement compensatory mitigation to offset reductions in sage-grouse habitat capacity (i.e., behavioral and physical) would be established. In coordination with CPW, industry, and as appropriate, other scientific or regulatory entities, an adaptive method (based on monitoring) would be developed and implemented that would quantify direct and indirect effects on sage-grouse as the basis for establishing a compensatory mitigation guidelines to maintain viable population levels and/or achieve long-term population objectives.

Lands would be made available for sage-grouse habitat enhancement/ compensation efforts by industry and other wildlife interests to help offset behavioral or physical loss of habitat and, where appropriate, effect advantageous shifts in animal distribution (i.e., outside concentrated development areas). Consideration of public land treatment would remain consistent with the maintenance of climax or disclimax vegetation extent and community-specific successional perturbation rates (e.g., fire-return intervals). There would be no treatment limit on the restoration of disclimax shrubland communities or restoration efforts targeting communities whose understories are dominated by invasive weeds.

Employment of noise-reduction methods would be required on development facilities (e.g., drilling and completion equipment, compressors, and gas processing facilities) that have the potential to generate noises that may adversely influence sage-grouse reproductive functions (i.e., lekking and nesting). Appropriate methods could include, but would not be limited to:

- Abiding by current BMPs;
- Increasing separation of noise-generating equipment and sensitive habitat (e.g., locating compressor stations at least 2,500 feet from leks);
- Enclosure of equipment;
- Installation of hospital-grade muffling devices;
- Orientation of noise projection away from sensitive habitats; or
- Siting facilities to take advantage of natural barriers or vegetation filters.

Long-term seral or type conversions of all aspen, Douglas-fir, spruce-fir, and deciduous shrub communities as important components of dusky grouse habitats would be avoided. Where unavoidable, special COAs requiring reclamation practices that maintain site potential, restore desired plant composition, and/or accelerate development of the community's desired seral state would be applied. Seral manipulations (e.g., vegetation treatments) of aspen and conifer types would be limited to those specifically designed to restore natural successional processes or achieve riparian management objectives. Where applicable, manipulations would maintain a minimum 50 percent of an individual stand in mature to over-mature age classes.

Surface occupancy and surface-disturbing and disruptive activities within 0.4 mile of active (i.e., used by displaying males in the last 5 years) strutting grounds (i.e., leks) of Columbian sharp-tailed grouse would be prohibited (15 acres). (See Appendix 1, WR-NSO-24.)

Surface-disturbing and disruptive activities would be prohibited within 1.25 miles of active leks or mapped nesting habitat for Columbian sharp-tailed grouse from March 1 through July 30 (see Appendix 1, WR-TL-25) and in important, CPW-defined, winter range habitat from December 1 through March 15 (1,500 acres). (See Appendix 1, WR-TL-24.)

2.8 Fish and Wildlife - Migratory Birds

2.8.1 Goals

Avoid adverse impacts on migratory birds to the extent practicable and minimize detrimental alteration of their habitat consistent with the Migratory Bird Treaty Act, Executive Order 13186, and the Memorandum of Understanding between the FWS and BLM “To Promote the Conservation of Migratory Birds” (April 2010).

2.8.2 Objectives

Reduce the risk of direct mortality by removing or modifying potentially harmful features or preventing access by migratory birds to hazards.

Apply conservation measures to avoid or minimize the unintentional take of migratory birds attributable to oil and gas development and minimize adverse alterations in nesting habitat, with specific focus on BLM sensitive species, U.S. Fish and Wildlife Service (FWS) Birds of Conservation Concern, BLM Priority Migratory Birds, and the Colorado Partners in Flight high priority species for the Colorado Plateau and Southern Rocky Mountains physiographic regions.

2.8.3 Management Actions

Operators would be required to prevent migratory bird use of, or access to, reserve pits, evaporation ponds, or other oil and gas-related features that store or are expected to store fluids that may pose a risk to birds (as defined in the Migratory Bird Treaty Act) consistent with WO-IM-2013-033 or most current BLM policy. Physical barriers that prevent access to such fluids must be in place and functional within 5 days of the drilling rig moving off the location and will remain effective until such fluid storage features are removed, reclaimed, or incapable of storing fluids. The BLM’s preferred method involves the use of properly installed and maintained netting that prevents aerial and ground entry and remains free of the pit surface at all times (e.g., including during snow load sag). Unless the method is standardized and integrated with the proposed action, it would be the responsibility of the operator to notify the BLM, at least 2 weeks prior to the scheduled date for removal of the drilling rig, of the method to be used to prevent impacts on birds. All lethal and non-lethal events that involve migratory birds would be reported immediately to the AO and FWS Special Agent in Grand Junction, Colorado.

Facility and ROW siting would minimize the direct involvement (i.e., surface occupancy and vegetation clearing) of those habitat associations identified as having higher value for nesting migratory birds through the application of COAs (i.e., less than 660 foot moves) or moves negotiated during on-site inspections:

- Mature arboreal oakbrush;

- Riparian (all elevations);
- Spruce-fir (including Douglas-fir);
- Aspen;
- Mature stands of pinyon-juniper;
- Potential natural community (PNC), late seral and good condition mid-seral Wyoming and mountain big sagebrush communities; and
- Localized habitat parcels that support BLM sensitive species, BLM Priority Migratory Birds, and FWS Species of Conservation Concern (e.g., mat/Gardner saltbush association sage sparrow, loggerhead shrike; Utah juniper/black sagebrush gray vireo).

Avoid or, where impractical, minimize the disruption of migratory bird nesting activity by scheduling or prioritizing vegetation clearing, facility construction, and concentrated operational activities (e.g., drilling, completion, utility installation) to avoid involvement of better quality nesting habitats (e.g., siting on edge-of-type, avoiding better developed/more mature/more extensive and contiguous habitat parcels, consolidating with pre-existing disturbance) during the core migratory bird nesting season (generally from May 15 to July 15; applied as 60 day COA with the potential for 2-week shifts depending on elevation) (818,100 acres).

2.9 Fish and Wildlife – Fish

2.9.1 Goals

In cooperation with CPW, manage public land to provide sufficient quantity and quality of fisheries habitat and to maintain or enhance fish populations and biological diversity.

2.9.2 Objectives

Reduce cumulative oil and gas-related influences on systems that support or contribute to aquatic habitats supporting native fisheries and BLM sensitive species (e.g., fish and amphibians) to discountable levels and restore such communities adversely affected by past development.

2.9.3 Management Actions

Apply COAs to oil and gas development activity that prevents or, where avoidance is impractical, minimizes deterioration (e.g., surface disturbance/occupation, seasonal barriers to passage, contamination, sedimentation) of riparian, channel, and aquatic conditions in lotic and lentic aquatic systems that support native aquatic communities (e.g., measures that enhance vegetation expression and reestablishment, installation of protective fencing, use of impermeable reserve pit liners or fluid containment systems, facility relocation, ANS decontamination). (See Appendix 1, WR-CSU-12.)

The BLM will work cooperatively with the Colorado Water Conservation Board (CWCB) to identify private water rights owners who may be interested in voluntarily working with the CWCB to improve stream flow conditions for all native fisheries through leases, donations, or sales of their water rights. The BLM will cooperate with the CWCB and CPW to establish instream flow water rights on streams that support native and special status fisheries, noting that these fisheries are coextensive with all sport-water fishery opportunities in the WRFO.

2.10 Special Status Animal Species

2.10.1 Goals

Manage public land to maintain, restore, improve, or enhance habitats to conserve, recover, and maintain populations of federally endangered, threatened, proposed, and candidate species, and to preclude the need for federal listing of proposed and candidate species; Colorado state endangered, threatened, and special-status species; or BLM sensitive species.

Participate in achieving national goals for black-footed ferret recovery by establishing a viable population of free-ranging black footed ferrets (i.e., no fewer than 30 breeding adults) in the northwestern Colorado/northeastern Utah nonessential experimental population area.

2.10.2 Objectives

Maintain, restore, or enhance special-status species wildlife habitat, in coordination and consultation with FWS and other local, state, and federal agencies, consistent with other agency plans, policies, and agreements.

The BLM-administered lands within designated ferret management areas would be managed to enhance black-footed ferret survival and recruitment by maintaining or enhancing the capability of the sites to achieve national ferret recovery objectives.

Activities within the Wolf Creek Ferret Management Area would be conducted with the objective of maintaining at least 15,500 acres of occupied prairie dog habitat on BLM-administered lands.

2.10.3 Management Actions

Black-footed Ferret and White-tailed Prairie Dog

The placement of aboveground power lines within sight of habitat showing past or recent evidence of prairie dog occupation would be avoided. Raptor deterrents would be installed, where appropriate, on power lines within 1/4 mile of occupied and suitable (including unoccupied) prairie dog habitat.

To limit disturbance to prairie dogs during the breeding and young-rearing period, surface-disturbing and disruptive activities on prairie dog colonies would be avoided from March 1 to May 1.

Seismic activity would be avoided within active prairie dog colonies, particularly from March 1 to July 1.

Development of lease parcels that include mapped prairie dog towns could require the following conservation measures prior to and during lease development:

- Participating in the preparation of a surface use plan of operations with BLM, FWS, and CPW to integrate and coordinate long-term lease development with measures necessary to minimize adverse impacts on black-footed ferrets or their habitat.
- Abiding by special daily and seasonal activity restriction on construction, drilling, product transport, and service activities.
- Incorporating special modifications to facility siting, design, construction, and operation.
- Providing in-kind compensation for habitat loss and/or displacement (e.g., special on-site rehabilitation/revegetation measures or off-site habitat enhancement).

Within all ferret management areas (58,600 acres), surface disturbing and disruptive activities associated with land use authorizations, permits, and leases issued on BLM-administered lands would be subject to a CSU stipulation that incorporates those provisions established in A Cooperative Plan for Black-footed Ferret Reintroduction and Management, Wolf Creek and Coyote Basin Management Areas, Moffat and Rio Blanco Counties, Colorado (Wolf Creek Work Group et al. 2001). (See Appendix 1, WR-CSU-25.)

- About 6,000 acres along Snake John Reef (between the Utah border and the town of Dinosaur) would be identified as part of the WRFO's black-footed ferret management area (pending concurrence of the Wolf Creek Work Group). This area is a natural and logical extension of the Snake John Reef Management Area in Utah, which is currently managed for black-footed ferret recovery and occupied by ferrets. The Snake John Reef area would be subject to the same oil and gas development provisions as the Wolf Creek and Coyote Basin black-footed ferret management areas.
- The BLM would consider acquisition, from willing landowners, of private mineral and surface estate with high black-footed ferret habitat value within ferret management areas and would apply applicable management provisions and lease notice and lease stipulations pertinent to oil and gas development activities.

(Note: Additional management direction related to effective road densities and vehicular access in black-footed ferret habitat can be found under Comprehensive Trails and Travel Management in Section 2.20.3.)

Endangered Fish of the Upper Colorado River Basin

To minimize the risk of entrapment of endangered fishes at diversion and intake structures, the BLM could require that screens or baffles be incorporated, as identified through ESA Section 7 consultation with the FWS.

Require that any surface use activity be consistent with the restoration or maintenance of proper functioning condition on BLM-administered riverine parcels that are designated critical habitat for Colorado pikeminnow (100 year floodplain), consistent with parcel potential.

Critical or occupied habitat for federally listed fish species (e.g., 100-year floodplain of the White River below Rio Blanco Lake) would be open to oil and gas leasing with an NSO stipulation (1,100 acres). An NSO stipulation would be applied to surface-disturbing and disruptive activities associated with all land use authorizations, permits and leases issued on BLM-administered lands. Exceptions including, but not limited to the following, could be granted:

- Pipelines could not be constructed in sites identified by the CPW or FWS as important for Colorado pikeminnow reproduction and recruitment of young.
- Pipelines transporting potential contaminants would be equipped with automatic shut off valves and may be required to be double-walled where they cross the White River's 100-year floodplain or the lower mile of its larger perennial tributaries (e.g., Piceance Creek, Yellow Creek, Crooked Wash).
- Proponent would be required to prepare a spill/leak contingency plan that would be integrated with BLM's biological assessment to the FWS.
(See Appendix 1, WR-NSO-17.)

BLM Sensitive Aquatic Vertebrates, including Native Cutthroat Trout

Native cutthroat trout habitat would be open to oil and gas leasing and permitted surface use activities with a CSU stipulation (108,900 acres). (See Appendix 1, WR-CSU-13.)

The BLM-administered portions of Black Sulphur Creek would be managed as Colorado River cutthroat trout recovery waters subject to CSU provisions for native cutthroat fisheries (2,700 acres). (See Appendix 1, WR-CSU-13 and WR-NSO-13.)

Pursue acquisition or cooperative management of privately owned fisheries to compensate for cumulative impacts on aquatic habitats and/or promote recovery of BLM sensitive aquatic species. Where appropriate (e.g., where public lands are unavailable), recognize permanent stream restoration or improvements on private lands in the context of habitat banking.

Apply WR-CSU-12 (see Appendix 1) and/or COAs to oil and gas development activity that prevents or, where impractical, minimizes deterioration (surface disturbance/occupation or seasonal barriers to passage, contamination, and sedimentation) of riparian, channel, and aquatic conditions in lotic and lentic aquatic systems that support native aquatic communities (e.g., measures that enhance vegetation expression and reestablishment, installation of protective fencing, use of impermeable reserve pit liners or fluid containment systems, facility relocation).

In cooperation with current leaseholders, identify and apply restorative measures to previously authorized (or unauthorized) oil and gas development facilities or influences that are or have the potential to reduce the extent or adversely influence the physical or biological components of aquatic habitats associated with BLM sensitive aquatic species (e.g., channel modifications or obstructions; unlined pits in contributing valley alluvium; road/pipeline crossings that inhibit stream recovery; abandoned piping and material; road/pipeline runoff; culverts that inhibit fish passage; unreclaimed well pads, equipment, or infrastructure associated with non-producing wells).

(Note: Additional management direction related to reclamation of aquatic habitats supporting native fisheries and BLM sensitive species can be found under Reclamation in Section 2.4.3. Additional management direction related to water rights and instream flows can be found under Fish and Wildlife (Fish) in Section 2.9.3.)

Special Status Raptors

Surface occupancy would not be allowed within 1/2 mile of functional nests of special status raptor species (29,700 acres). (See Appendix 1, WR-NSO-19.)

Surface occupancy would also not be allowed within 330 feet of abandoned bald eagle nests (i.e., unoccupied for five consecutive years but with all or part of the nest remaining) (60 acres). (See Appendix 1, WR-NSO-20.)

Surface occupancy would not be allowed within 1/4 mile of identified bald eagle critical night roosts (as defined by the FWS) (1,000 acres). (See Appendix 1, WR-NSO-21.)

Identified bald eagle nest, roost, and perch habitat would be open to oil and gas leasing and permitted surface use activities with a CSU stipulation (930 acres). Use authorization would be contingent on the following conditions:

- Mature and regenerating cottonwood communities would be avoided;
- Special reclamation techniques would be required to accelerate recovery and for reestablishment of habitat commensurate with deterioration;

- Long-term site potential as a properly functioning riverine riparian community would be maintained or restored; and
- Short- and long-term utility as bald eagle habitat would be maintained. (See Appendix 1, WR-CSU-14.)

Timing limitation stipulations would be applied, as follows, to all surface disturbing activities associated with land use authorizations, permits, and leases issued on BLM administered lands:

- November 15 through July 31 or until fledgling and dispersal of young within 1/2 mile of identified bald eagle nests (800 acres) (See Appendix 1, WR-TL-19.);
- February 1 through August 15 or until fledgling and dispersal of young, within 1/2 mile of identified special status raptor nest sites (5,200 acres) (see Appendix 1, WR-TL-16), and within 1 mile of identified ferruginous hawk nests (66,900 acres) (see Appendix 1, WR-TL-18); and
- November 15 through March 15, within 1/2 mile of identified bald eagle critical night roosts (see Appendix 1, WR- TL-20) and within 1/4 mile of identified winter hunting perches (2,800 acres). (See Appendix 1, WR-TL-21.)

The felling of any native tree with a diameter at breast height (dbh) greater than 12 inches that is located within 100 feet of a river bank or defined bald eagle foraging area would be prohibited. Any activity that has the potential to kill perch trees or impede utilization of riverine foraging areas would also be prohibited.

Minimize the risk of line-strikes by enhancing the visibility of static lines and/or conductors with best available technology in areas of concentrated bald eagle use or movement corridors.

Canada Lynx

Oil and gas development activities on BLM-administered lands would not be allowed to contribute disproportionately to FS management thresholds applied to lynx habitat (i.e., no more than 30 percent of mapped habitat within a lynx analysis unit [LAU] in unsuitable condition and less than 15 percent of habitat within an LAU converted to unsuitable condition within a 10 year period; also, maintenance of greater than 10 percent of habitat suitable for denning).

Surface-disturbing and disruptive activities that have the potential to reduce the utility of habitat parcels suitable for lynx denning functions would not be allowed from March 15 to July 15 (3,400 acres). (See Appendix 1, WR-TL-26.)

Development and production facilities would be sited to avoid occupation of important lynx habitat features (e.g., prey-rich foraging areas, denning habitat, and movement corridors) and, to the extent practicable, minimize adverse influences on the utility of such features or habitats through the operational life of the facility.

(Note: Additional management direction related to reclamation of lynx habitat can be found under Reclamation in Section 2.4.3. Additional management direction related to oil and gas access routes, snow compaction, and the use of over-the-snow vehicles can be found under Comprehensive Trails and Travel Management in Section 2.20.3.)

2.11 Special Status Plant Species

2.11.1 Goals

Manage public land to maintain, restore, improve, or enhance habitats to sustain, conserve, and recover populations of special status plant species (federally endangered, threatened, proposed, and candidate species; BLM sensitive plant species) and designated critical habitat. This includes proactive management to preempt and preclude the need for federal listing of BLM sensitive species.

Manage all oil and gas activities authorized by the BLM in occupied and suitable habitats in order to sustain and recover special status plant species and their habitats.

Manage environmental risks, reclamation, and associated effects in a manner compatible with sustaining special status plant species and their habitats.

2.11.2 Objectives

Maintain, restore, improve, or enhance special status plant species habitat, in coordination and consultation with FWS and other local, state, and federal agencies, consistent with other agency plans, policies, and agreements, including collaborative research and monitoring of BLM special status plant species.

Maintain special status plant species communities, occupied and suitable habitats in a continuous and connected pattern on a landscape scale including consideration of short- and long-term disturbance, climate change, and population changes.

The Dudley Bluffs bladderpod (*Physaria congesta*) and Dudley Bluffs twinpod (*Physaria obcordata*) would be managed to meet species recovery goals and to limit other impacts from surface disturbance associated with oil and gas development, including fugitive dust and noxious weeds.

2.11.3 Management Actions

Prior to approving surface-disturbing or potentially impacting activities within occupied, suitable, potential or critical habitat for special status plant species a plant inventory conducted by a qualified botanist and an environmental analysis would be required for the proposed action. Based on the results of the plant survey, Section 7 consultation with FWS may be necessary, and appropriate conservation measures may be required to avoid or minimize impacts on federally listed species or critical habitat. Typically, Section 7 consultation would be required prior to surface disturbing and similar activities within occupied or critical habitat for federally listed and proposed plants.

Maintenance of existing roads and/or ROWs within occupied, suitable and/or critical habitat for federally listed, proposed, and candidate species may be subject to Section 7 consultation or conference with the FWS.

Management of populations of special status plants existing outside of ACECs would be emphasized and subject to the stipulations, COAs, and BMPs for special status plants and associated habitats. These areas include, but are not limited to, east of the Duck Creek ACEC, north of the Duck Creek ACEC on Pinto Mesa, east of the Dudley Bluffs ACEC, Calamity Ridge, and along Yellow Creek.

Areas within 330 feet of occupied habitat of federally listed and proposed plant species would be exclusion areas for new ROW authorizations.

Areas within 330-660 feet of occupied habitat or within 660 feet of suitable habitat, or within critical habitat for federally listed, proposed or candidate plant species would be avoidance areas for new ROW authorizations.

Areas within 660 feet of occupied and suitable habitat for federally listed, proposed, and candidate species, including any new habitat mapped as a result of future surveys, would be open to oil and gas leasing with an NSO stipulation (32,400 acres). (See Appendix 1, WR-NSO-25.) Areas within 330 feet of occupied habitat would have limited exceptions. Additionally, within 1,970 feet of occupied habitat other COAs (see below) would be applied to minimize indirect impacts to pollinator habitat.

Potential and critical habitat for federally listed, proposed, and candidate species would be open to oil and gas leasing with a LN. This includes any areas that are found in the future to contain currently unknown features (e.g., soil, geologic, vegetative) that would qualify as potential habitat for federally listed, proposed, or candidate species (91,400 acres). (See Appendix 1, WR-LN-07.)

Areas within 330 feet from the edge of occupied and suitable habitat for BLM sensitive plant species, including any new habitat mapped as a result of future surveys would be open to oil and gas leasing with an NSO stipulation. An NSO stipulation would be applied to surface-disturbing activities and other land use authorizations, permits, and leases associated with oil and gas development (7,300 acres). (See Appendix 1, WR-NSO-26.)

Conditions of Approval identified as appropriate through environmental analysis to mitigate the impacts to pollinator habitat for special status plant species would be applied to land use authorizations, permits, and leases that fall within the plant consideration area (e.g., within 1,970 feet of occupied habitat) of the affected plant species. Possible mitigation strategies may include, but are not limited to:

- Adjusting the location of the disturbance outside of the plant consideration area;
- Minimizing the area of disturbance;
- The use of dust abatement measures;
- Requiring construction to occur outside of the blooming season (i.e., construction could occur September through March), involving possibly delaying the project by more than 60 days;
- Using a higher percentage of forbs in the reclamation seed mix to promote pollinator habitat; and
- Non-native or invasive species monitoring and control.

Prioritize the treatment of noxious weeds in occupied, suitable, and critical habitat for special status plant species. Control methods and design criteria would utilize Integrated Pest Management (IPM) strategies for weed control as specified in the WRFO's Integrated Weed Management Plan.

Intensive control of fugitive dust within 330 feet from the edge of occupied and/or suitable special status plant habitat would be achieved using BLM approved dust suppression methods (preferably water) to be determined on a case-by-case basis. The goal of this measure would be to reduce and control the dust plumes created by traffic during construction, drilling and well completion, and maintenance stages of a project.

(Note: Additional management direction related to reclamation of suitable habitat for special status plant species can be found under Reclamation in Section 2.4.3. Additional management direction

related to travel restrictions within ACECs for threatened and endangered (T/E) plants can be found under Comprehensive Trails and Travel Management in Section 2.20.3.)

2.12 Wild Horse Management

2.12.1 Goals

Manage the wild horse herd within the Piceance-East Douglas Herd Management Area (HMA) so that a thriving ecological balance is maintained for all plant and animal species on that range.

2.12.2 Objectives

Wild horses would be managed to provide a healthy population with a diverse age structure.

Recognize and proactively respond to potential conflicts, as they occur, between the wild horse herd and other resources.

Maintain quality of habitat for wild horses in areas with oil and gas development.

2.12.3 Management Actions

Piceance-East Douglas HMA would be managed for a wild horse herd of 135 to 235 animals (as per the adjustment derived from the WRFO Wild Horse Program Analysis and Operational Plan [BLM 1999]) on 190,100 acres within the Piceance-East Douglas HMA so that a thriving ecological balance is maintained for all plant and animal species on that range.

A lease notice would be added to leases that encompass portions of a wild horse herd management area. In order to protect wild horses within this area, intensive development activities may be delayed for a specified 60-day period within the spring foaling period between March 1 and June 15.

The lessee may be required to perform special conservation measures within the wild horse herd management area including:

- Habitat improvement projects within the HMA in areas adjacent to development if such development displaces wild horses from crucial habitat.
- Disturbed watering areas would be replaced with an equal source of water, having equal utility.
- Activity/improvements would provide for unrestricted movement of wild horses between summer and winter ranges.

(See Appendix 1, WR LN 10.)

2.13 Cultural Resources

2.13.1 Goals

Identify, preserve, and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations.

2.13.2 Objectives

Preserve and protect cultural and historic resources in accordance with existing laws and regulations.

Reduce imminent threats from natural or human-caused deterioration or potential conflict with oil and gas activities.

Develop cultural resource project plans for the Canyon Pintado National Historic District (NHD) and Dragon Trail/Douglas Arch area south of Rangely, Colorado.

2.13.3 Management Actions

Permits will be required for all third-party consultants conducting fieldwork on BLM-administered lands. Applicants for permits must meet the eligibility requirements at 43 CFR 7.6 and BLM Manual 8151.

The following LN will be added to all new leases: This lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, Executive Order 13007, or other statutes and executive orders. The BLM will not approve any ground disturbing activities that may affect any such properties or resources until it completes its obligations (e.g., SHPO and tribal consultation) under applicable requirements of the NHPA and other authorities. The BLM may require modification to exploration or development proposals to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized, or mitigated. (See Appendix 1, WR-LN-11.)

Oil and gas exploration and development activities that produce vibrations would be restricted with a CSU stipulation within 660 feet of rock art or standing architecture (13,900 acres) such as cabins, rock structures, or wickiups. (See Appendix 1, WR-CSU-15.)

Approximately 3 acres within and adjacent to the Duck Creek Wickiup Village, listed on the National Register of Historic Places, would be protected with an NSO stipulation. (See Appendix 1, WR-NSO-27.)

Federal mineral estate occurring within the Texas-Missouri-Evacuation Creek areas would be open to oil and gas leasing with a CSU stipulation. A CSU stipulation would be applied to surface-disturbing and disruptive activities associated with all land use authorizations, permits, and leases issued in these areas (19,300 acres). (See Appendix 1, WR-CSU-16.)

Protect cultural resource values in the Texas-Missouri-Evacuation Creek area by designating the area as an avoidance area for major new ROWs for pipelines, power lines, etc.

The Thornburgh/Battle of Milk Creek, National Register listed site, would be open to oil and gas leasing with an NSO stipulation (110 acres). An NSO stipulation would be applied to surface-disturbing and disruptive activities associated with all land use authorizations, permits and leases issued within the site. (See Appendix 1, WR-NSO-28.)

The Thornburgh/Battle of Milk Creek viewshed would be open to oil and gas leasing with a CSU stipulation (5,800 acres). A CSU stipulation would be applied to surface-disturbing and disruptive activities associated with all land use authorizations, permits, and leases issued in these areas (See Appendix 1, WR-CSU-17.)

The Thornburgh/Battle of Milk Creek viewshed would be an avoidance area for new ROWs (e.g., power lines, pipelines, roads, etc.) to protect cultural resources.

The Canyon Pintado NHD would be an avoidance area for new ROWs, power lines, pipelines, or roads to protect cultural resources.

Mineral material sales (e.g., sand and gravel) related to oil and gas activities would not be allowed within the Canyon Pintado NHD.

Any new surface disturbance within the Canyon Pintado NHD would be required to be monitored by an approved and qualified archaeologist for the following conditions:

- Activity occurs in the vicinity of known resources;
- Activity occurs in the alluvial bottoms along Douglas Creek and its tributaries; and
- Activity occurs in deep alluvial soils.

A cultural resource project plan (CRPP) for the Canyon Pintado NHD will be developed within five years of the ROD for the Oil and Gas Development RMPA. The Canyon Pintado NHD CRPP will be the basis for analysis, and alteration of management decisions in a future RMP revision or amendment (BLM Manual 8130.42). At a minimum, the CRPP will document:

- Measured impacts of oil and gas exploration and development on National Register of Historic Places (NRHP)-eligible sites and sites contributing to the Canyon Pintado NHD;
- Measured impacts of livestock grazing on NRHP eligible and contributing sites;
- Measured impacts of current authorized and unauthorized recreation on NRHP eligible and contributing sites; and Measured impacts of other authorized and unauthorized land uses on NRHP eligible and contributing sites.
- Based on this, the CRPP will establish a concise list of qualities and resources for management of the Canyon Pintado NHD to:
 - Be consistent with the Canyon Pintado NHD’s listing on the NRHP;
 - Identify a management boundary for the Canyon Pintado NHD based on aliquot portions that wholly contain the Canyon Pintado NHD’s National Register boundary;
 - Identify management goals and recommended uses or restrictions for federal surface estate in the Canyon Pintado NHD; and
 - Establish a site monitoring plan for sites in the Canyon Pintado NHD.

After the CRPP is completed, if the existing plan does not adequately provide long-term protection of cultural resources, the plan will be amended.

A CRPP for the Dragon Trail/Douglas Arch area south of Rangely, Colorado will be developed within six years of the ROD for the Oil and Gas Development RMPA. The CRPP will be the basis for analysis, and alteration of management decisions in a potential future RMP revision or amendment (BLM Manual 8130.42). At a minimum, the CRPP will document:

- Measured impacts of oil and gas exploration and development on National Register of Historic Places (NRHP)-eligible sites;
- Measured impacts of livestock grazing on NRHP eligible sites;
- Measured impacts of current authorized and unauthorized recreation on NRHP eligible sites; and
- Measured impacts of other authorized and unauthorized land uses.

- Based on this, the CRPP will establish a concise list of qualities and resources for management of Dragon Trail/Douglas Arch to:
 - Consider the feasibility of additional special management areas (e.g., ACECs, historic districts);
 - Identify management goals and recommended uses or restrictions for federal surface estate in potential boundary areas; and
 - Establish a site monitoring plan for sites in the area.

After the CRPP is completed, if the existing plan does not adequately provide long-term protection of cultural resources, the plan will be amended.

(Note: Additional management related to the Mellen Hill sites can be found under the Dinosaur Trail MLP, Section 2.24.)

2.14 Paleontological Resources

2.14.1 Goals

Identify and protect the integrity of the scientific value of paleontological resources from indiscriminant loss.

2.14.2 Objectives

Reduce imminent threats from natural or human-caused deterioration or potential conflict with oil and gas activities.

2.14.3 Management Actions

Monitoring by a qualified paleontologist would be required at all times during surface-disturbing activities authorized within potential fossil yield classification (PFYC) 5 and PFYC 4 areas. In PFYC 3 areas, the BLM will require spot-checking of the exposed unit, including the spoil or storage piles, at key times. These times would depend on the activity, but would typically include when bedrock is initially exposed, occasionally during active excavation, and when the maximum exposure is reached and before backfilling has begun. Monitoring and spot-checking by a qualified paleontologist or a BLM-approved representative would be required.

Permits would be required for all third-party consultants conducting work in the field, in accordance with applicable laws and regulations.

An on-the-ground survey would be required prior to approval of surface-disturbing activities to avoid resource bearing strata for PFYC 4 and PFYC 5 formations. Currently, there are no identified PFYC 4 formations within the WRFO.

The following formations are listed as PFYC 5: Morrison, Wasatch, Chinle, Glen Canyon, Mowry Shale, Parachute Creek and Douglas Creek Members of the Green River Formation, Browns Park Formation, Williams Fork Formation, Iles Formation, Mesaverde Group, and Uinta Formation.

Formations or members of formations could be added or removed from this list as additional data become available. Exceptions to the survey requirement in these areas could be granted in areas having vertical to near-vertical (i.e., unsafe) slopes, areas of soil development, and areas covered

with much vegetation, as these areas would be unlikely to produce recoverable fossils. For larger projects, an on-the-ground survey sample may be required of some likely fossiliferous PFYC 3 areas (e.g., Fort Union and Mancos Shale formations). (See Appendix 1, WR-LN-12.)

2.15 Visual Resources

2.15.1 Goals

Protect and maintain visual and aesthetic qualities in sensitive areas while allowing for changes to visual quality in less sensitive areas.

2.15.2 Objectives

Manage changes in the landscape to maintain and protect visual values as identified by visual resource management (VRM) class objectives.

2.15.3 Management Actions

Stipulations or COAs identified as appropriate through environmental analysis for the protection of visual qualities would be applied to land use authorizations, permits, and leases, to mitigate impacts on visual resources in all VRM classes. Areas of primary concern (i.e., sensitive landscapes) would include but not be limited to:

- VRM Class I and II areas;
- Canyon Pintado NHD;
- Corridors along Highways 13, 40, 64, and 139;
- National and State Scenic Byways; and
- Thornburgh/Battle of Milk Creek viewshed.

(Note: Additional management direction for visual resources within the Dinosaur Trail MLP can be found in Section 2.24.)

2.16 Forestry and Woodland Products

2.16.1 Goals

Manage oil and gas activities within forest stand communities for health, composition, and diversity (considering density, basal area, canopy cover, age class, stand health, and understory) through forest management practices and to provide late successional vegetation while providing for multiple uses.

Manage oil and gas activities in woodland communities (such as pinyon-juniper) for a healthy mix of successional stages within the range of natural variability.

Manage for retention of old growth forest and woodland stands in areas with oil and gas development.

2.16.2 Objectives

Manage to retain mature forest and woodland communities with high potential of old growth character in areas with oil and gas development.

Minimize ground disturbance in existing old growth forest and woodland stands.

2.16.3 Management Actions

In areas with oil and gas development, a full range of silviculture practices (treatments) would be utilized to thin new growth, promote old growth, maintain desired understory and maintain desired age classes (e.g., old growth) for pinyon-juniper, Douglas-fir, aspen, and ponderosa pine woodland communities.

Clearing of woodlands attributed to oil and gas activities would be limited to an annual disturbance of 260 acres or 2,600 acres per decade and primarily conducted in early or mid seral woodland areas.

Commercial and non-commercial woodlands removed as a result of oil and gas development will be appraised and purchased prior to removal.

Areas with Douglas-fir and aspen on slopes greater than 25 percent would be open to oil and gas leasing with an NSO stipulation (61,900 acres). (See Appendix 1, WR-NSO-29.)

Manage old growth and areas with high potential for old growth characteristics with a CSU stipulation. The CSU stipulation would help retain stands with old growth characteristics or high potential to develop old growth characteristics. (See Appendix 1 WR-CSU-18.)

Old growth forest and woodland stands would be avoidance areas for land use authorizations.

New pipelines in mature pinyon-juniper woodland communities and existing old growth forest and woodland stands would be required to be located within previously authorized areas of disturbance to the extent practicable.

The ROW disturbance widths in old growth forest and woodland stands, identified through site specific analysis, would be required to be 25 feet or less.

2.17 Livestock Grazing

2.17.1 Goals

Manage oil and gas activities in a manner that reduces overall effects on the livestock grazing program and maintains rangeland health.

2.17.2 Objectives

Develop and implement mitigation actions to minimize cumulative impacts on livestock grazing (including cumulative livestock forage loss and reduction in operation capabilities and production performance) where opportunities exist.

Maintain or enhance a healthy rangeland vegetative composition and species diversity, capable of supplying forage at a sustained yield to meet the demand for livestock grazing.

Identify opportunities and facilitate or implement projects to improve rangeland vegetation to sustain and enhance livestock grazing and meet Colorado Public Land Health Standards in cooperation, consultation, and coordination with grazing permittees and the interested public.

Encourage grazing permittees and affected interests to participate with the BLM to monitor and evaluate rangeland health to determine appropriate management actions in light of oil and gas development.

2.17.3 Management Actions

Administrative actions could be combined (e.g., adjustments in season of use; livestock exclusion; stocking level adjustments) and rangeland projects (e.g., fences, ponds, vegetation treatments) implemented to direct livestock use to meet resource objectives and Colorado Public Land Health Standards, in cooperation, consultation and coordination with grazing permittees and other affected interests.

Allotment management and/or permitted Animal Unit Months (AUMs) would be adjusted where oil and gas activity conflicts with grazing operations, Colorado Public Land Health Standards, and rangeland management objectives. Conflicts could include loss of forage, unsuccessful reclamation of disturbed areas, invasive species, safety hazards, improper livestock distribution, or other circumstances.

Adjustments in livestock grazing use would be implemented based on monitoring results and through consultation, coordination, and cooperation with grazing permittees, other affected interests, and state agencies.

The BLM will actively pursue opportunities and facilitate voluntary collaboration between operators and grazing permittees to identify and implement projects and actions to increase flexibility in livestock grazing management in areas temporarily impacted by oil and gas development and to enhance reclamation success.

Livestock grazing in affected allotments could be temporarily suspended or modified (for portions of or entire allotments) throughout the period of intensive oil and gas development if oil and gas activity increases to a level where the two activities are incompatible.

When oil and gas activities preclude effective implementation of a grazing plan, compensatory mitigation by oil and gas operators commensurate with the impact to the livestock operation could be recommended.

(Note: Additional management direction related to exclusion of livestock pending successful reclamation of sites can be found under Reclamation in Section 2.4.3.)

2.18 Minerals

2.18.1 Goals

Reduce potential conflicts of oil and gas activities with other resource uses while promoting efficient recovery of oil and gas resources.

Promote environmental stewardship among oil and gas operators.

2.18.2 Objectives

Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values.

Manage oil and gas activities to prevent degradation of resources (including oil and gas resources).

Manage oil and gas activities to complement or contribute to improving trends in achieving Colorado Public Land Health Standards.

Establish partnerships with cooperating entities to develop and adapt BMPs in response to site-specific conditions and other resource objectives.

2.18.3 Management Actions

There are 1,696,000 acres of BLM oil and gas mineral estate open to oil and gas leasing and development; 83,300 acres of BLM federal oil and gas mineral estate would be closed to leasing. Areas closed to leasing include WSAs and the National Park Service’s Harpers Corner Road withdrawal.³

Zero acres of federal mineral estate would be open to leasing with standard lease terms.

The 1,696,000 acres of BLM federal oil and gas mineral estate open to oil and gas leasing are subject to lease stipulations (see Appendix 1), including NSO stipulations (405,600 acres⁴), CSU stipulations (514,400 acres), and timing limitations (1,696,000 acres)⁵.

The BLM has the discretion to modify surface operations to change or add specific mitigation measures when supported by scientific analysis. All mitigation/conservation measures not already required as stipulations would be analyzed in a site-specific NEPA document, and be incorporated, as appropriate, into conditions of approval of the permit, plan of development, and/or other use authorizations.

Encourage industry to submit development plans that would direct time-referenced, managed activities intended to concentrate development, promote effective reclamation, and to reduce the cumulative adverse resource effects attributable to oil and gas activities.

The BLM would discourage the use of reserve, production, and completion/re-completion pits. Onsite burial of drill cuttings meeting COGCC 900 Series Rule would be allowed.

An NSO stipulation would be applied to oil and gas leases on existing and future Oil Shale Research, Development and Demonstration tracts in the MPA (approximately 1,100 acres). (See Appendix 1, WR-NSO-30.)

A CSU stipulation would be applied to oil and gas leases for development activities on commercial oil shale leases and for blocks greater than 640 acres within the available area for oil shale and multi-mineral leasing, as determined in the March 2013 “Approved Land Use Plan Amendments/Record of Decision (ROD) for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming and Final Programmatic Environmental Impact Statement” (approximately 17,500 acres), to protect oil shale resources in the

³ These are non-discretionary closures.

⁴ Total NSO acreage does not include WR-NSO-22 (Appendix 1) since the stipulation does not preclude development from taking place on any land within a lease, but rather limits the amount of disturbed lands that are rendered unsuitable for use by sage-grouse.

⁵ NSO and CSU stipulation acres reflect a hierarchy analysis which prioritized areas with overlapping NSO and CSU stipulation areas as an NSO stipulation. The CSU stipulation acres reflect areas that are only CSU stipulations; these areas contain no overlap. TL stipulations acres are not calculated using a hierarchy analysis and include all acres which would have a TL stipulation applied.

Green River Formation. There are currently no areas leased for commercial oil shale development but if existing Preference Right Lease Areas are converted to commercial oil shale leases this could increase the area up to 39,700 acres. (See Appendix 1, WR-CSU-19.)

An NSO stipulation would be applied to oil and gas leases in areas with active sodium mining (approximately 980 acres) in the MPA. Conditions of approval would be applied to permits for oil and gas drilling on existing sodium leases to protect sodium resources throughout the MPA. (See Appendix 1, WR-NSO-31.)

The area included in the approved permit area for the Deserado Coal Mine Permit Area as well as areas adjacent to and south of the approved Deserado Coal Mine Permit Area would be managed with a CSU stipulation (approximately 17,700 acres). The oil and gas lessee would be required to reach an agreement with the federal coal lessee on the placement of wells or surface facilities within the coal mine permit area. Surface occupancy may not be allowed within the mine permit area. (See Appendix 1, WR-CSU-20.)

(Note: Additional management direction related to reclamation, including placement of long-term facilities and using adapted footprint configurations to minimize cut/fill areas, can be found under Reclamation in Section 2.4.3. Additional management direction related to the disposal of produced water can be found under Soil and Water Resources in Section 2.3.3.)

2.19 Recreation

2.19.1 Goals

Until recreation resources and uses can be allocated and designated through the land use planning process as part of an RMP revision, the WRFO will continue to provide a broad spectrum and diversity of recreation opportunities to meet expected increased demand due to the continued growth of the oil and gas industry.

2.19.2 Objectives

Manage the White River Extensive Recreation Management Area (ERMA) to support, sustain and promote existing principal opportunities for dispersed, self-directed recreation while allowing for the production of oil and gas resources.

In order to continue to provide backcountry/middlecountry oriented recreational opportunities on BLM lands as oil and gas development increases, areas will be managed to preserve public access, limit resource damage, and retain the physical, social, and managerial conditions of these recreation setting classifications while still allowing for the production of oil and gas resources.

2.19.3 Management Actions

The White River ERMA will retain the qualities and conditions of the physical, social, and operational components of the existing Recreation Opportunity Spectrum (ROS) classifications within the White River ERMA as defined in the 1997 White River RMP.

Either an NSO or CSU stipulation would be applied to surface-disturbing activities associated with all land use authorizations, permits, or leases granted in these areas.

- Approximately 3,600 acres would be open to oil and gas leasing with an NSO stipulation. These two areas are:

- Anderson Gulch (2,000 acres);
- LO7 Hill (1,600 acres) (see Appendix 1, WR-NSO-32);
- Approximately 4,200 acres would be open to oil and gas leasing with a CSU stipulation on:
 - 3 Mile Gulch (4,200 acres). (See Appendix 1, WR-CSU-21.)

2.20 Comprehensive Trails and Travel Management

2.20.1 Goals

Provide access for oil and gas development consistent with public health and safety and other resource value concerns.

2.20.2 Objectives

Manage motorized travel on public lands to provide for public need and demand, protect natural resources, provide for the safety of public land users, and minimize conflicts among various users of public lands.

Provide needed and appropriate ingress, egress, and access routes to and across public lands for oil and gas activities.

Reclaim or mitigate erosion impacts on transportation corridors.

2.20.3 Management Actions

General Travel Management Direction

Motorized vehicle travel for oil and gas activities (including pre-construction survey work) would be limited year-round to authorized routes or to existing routes that are limited seasonally in the 1997 White River RMP, identifiable from the 2011 National Agriculture Imagery Program (NAIP) digital data sets (921,000 acres). Routes newly constructed for oil and gas activities would be closed except to uses defined by the Authorized Officer. Those uses would generally be limited to compliance, maintenance, drilling, and production activities.

Well access routes would generally be unavailable for public vehicular access, including BLM permittees, not expressly associated with oil and gas development, production, monitoring, and maintenance. Exceptions would be evaluated on a case-by-case basis in the context of disturbance thresholds established for each seasonal range and leaseholding. Access routes developed for well and facility access would also generally be subject to complete abandonment once its intended use is complete.

In areas of concentrated development (e.g., the geography encompassing acute/collective activity), vehicle use on BLM vehicle access networks (including existing roads, trails, and ways), where logistically practicable, would be temporarily limited to that associated directly with oil and gas development, production, and maintenance. Use by other BLM authorized land users could be considered, as determined by the Authorized Officer, consistent with big game management objectives. To be effective, this mitigation should control the use of vehicle access networks in areas of concentrated development rather than relying on controls applied to individual well access routes.

Road abandonment and use limitations would be used to limit effective road densities in the long term to an average maximum 1.5 miles per square mile in higher value big game habitat (i.e.,

defined severe winter range and summer range) and 3 miles per square mile on other big game ranges.

Access routes constructed for oil and gas activities that are considered redundant or unneeded would be obliterated and reclaimed.

In coordination with counties and authorized users, temporary route closures would be applied in areas with concentrated oil and gas development as needed to meet public health and safety or other resource concerns.

The design of utility corridors would be required to avoid the need for regular vehicular access for inspection by the ROW holder/lessee and would be conditioned by the holder/lessee to effectively preclude all subsequent vehicular travel throughout the term of the grant/lease. In the event continued access is required, the corridor would remain closed to public vehicular access and the holder/lessee would be responsible for installing and maintaining effective vehicle deterrents that would be functional beyond final abandonment of the grant/lease.

Special Travel Management Direction

Ferret Management Areas

Use of newly developed well access routes in black-footed ferret habitat would be limited to activities associated directly with oil and gas development, production, and maintenance. Access routes would be reduced to minimum standards during production and eliminated upon project completion.

Motorized vehicle use associated with oil and gas development within the Wolf Creek black-footed ferret management area (including Coyote Basin and Snake John Reef units) would be restricted to authorized roads and trails area. Effective route and trail densities of no more than 1.5 miles per square mile would remain open for public vehicular travel in these areas.

Canada Lynx Habitat

Use of newly developed well access routes in lynx habitat would be limited to that associated directly with oil and gas development, production, and maintenance activity. Access routes would be reduced to minimum standards during production and eliminated upon project completion.

The BLM would request that maximum efforts be applied to reduce the extent and effective utility of snow compaction or removal activities in lynx habitat as travel corridors for competitive carnivores. Use of over-the-snow vehicles would be prohibited for use in lynx habitat during project-related reconnaissance, on-site inspections, or surveys.

Wilderness Study Areas

Except for permitted uses, WSAs would be closed to motorized/mechanized use. If WSAs are released by Congress for management for multiple uses, motorized vehicle travel would be limited to designated roads and trails.

Wilderness Study Areas would remain closed to motorized and mechanized vehicle use until Congress either designates them as wilderness or releases them for multiple uses.

Areas of Critical Environmental Concern

Motorized vehicle travel within ACECs for T/E plants will be limited to designated roads and trails. Roads or trails in these areas not designated for use will be abandoned and reclaimed. Off road motorized vehicle travel will be prohibited in these areas.

2.21 Lands and Realty

2.21.1 Goals

Manage BLM public lands, including the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that balances the needs of oil and gas development with the management for other resource values.

2.21.2 Objectives

Respond to internal and external requests for land use authorizations (e.g., pipelines, access routes, utility lines, communication sites, leases, and permits).

Emphasize efficient use of and colocation with existing ROWs to protect resources and resource uses. Consider the establishment of new ROW corridors to meet demand for oil and gas activities.

2.21.3 Management Actions

All ROW corridors designated in the 1997 White River RMP would be carried forward in the RMPA. A section of the Colorow-Greasewood corridor that starts at the intersection of State Highway 64 (SH 64) and goes north towards Colorow Mountain would be eliminated as a designated corridor since the West-wide Energy Corridor (WWEC) amendment⁶ provided an alternate northern route for this corridor.

New designated ROW corridors could be established only when the capacities of existing ROW corridors (including energy corridors established by the 2009 Approved RMP Amendments/ROD for Designation of Energy Corridors on BLM-Administered Lands in the 11 Western States) have been exhausted, or when such designation would enable management objectives.

Applications for new communication sites would be considered on a case-by-case basis if: (1) it is determined that the facility would fill a need to improve public safety and information transfer and (2) no existing site would meet the applicant's needs. The site at Moosehead Mountain would not be available for additional authorizations.

Companies would be encouraged to request smaller ROW widths for pipeline installation, as well as placing pipelines under newly constructed energy-associated roads. Pipelines could be placed within a roadbed only if resource and topographic conditions dictate, and would be discouraged for county roads. Such placement must consider safety and maintenance.

⁶ The 2009 Approved RMP Amendments/ROD for Designation of Energy Corridors on BLM-Administered Lands in the 11 Western States is commonly referred to as the West-wide Energy Corridor amendment.

Timing limitation stipulations identified in Appendix 1 could be applied as Terms and Conditions to oil and gas-associated ROW grants.

The Rangely District Hospital R&PP lease/patent (20 acres) would be open to oil and gas leasing subject to an NSO stipulation. (See Appendix 1, WR-NSO-33.)

A lease notice will be used to inform lessees of Public Land Order 7582 (for the Rio Blanco Test Site) withdrawing 200 acres of public land from surface entry and mining and 160 acres of reserved federal mineral interest from mining. If the Department of Energy modifies the Rio Blanco Test Site withdrawal in the future, the LN will be updated to reflect the current acreage and restrictions included in the withdrawal.

Land use authorizations (e.g., ROWs, leases, and permits) will be denied in exclusion areas, with the exception of short-term land use permits involving no development and projects that are consistent with management objectives for the area.

The following areas would be classified as exclusion areas for land use authorizations:

- Wilderness Study Areas;
- South Cathedral Bluffs, Raven Ridge, Coal Draw, and Black's Gulch ACECs;
- Moosehead Mountain;
- Tier 1 lands with wilderness characteristics that will be managed to protect wilderness characteristics as a priority over other multiple uses (i.e., NSO areas); and
- Within 330 feet of occupied habitat for federally listed and proposed plants.

The following areas would be classified as avoidance areas for land use authorizations:

- All areas included in NSO or CSU stipulations (Appendix 1);
- Areas within 330-660 feet of occupied habitat or within 660 feet of suitable habitat, or within critical habitat for federally listed, proposed or candidate plant species;
- Harpers Corner Road; and
- Canyon Pintado National Historic District.

The remainder of the Resource Area would be classified as open for land use authorizations.

(Note: Additional management direction related to reclamation can be found under Reclamation in Section 2.4.3.)

2.22 Special Designations

2.22.1 Goals

Protect the integrity of unique resource values, preserve historical significance, and provide opportunity for other uses, where appropriate.

2.22.2 Objectives

Wilderness Study Areas

Manage WSAs to avoid impairment of suitability characteristics until either designated as wilderness or released by Congress for other uses.

Manage designated wilderness areas to preserve ecosystems and wilderness qualities in perpetuity.

Areas of Critical Environmental Concern

Protect areas that contain relevant and important historic, cultural, scenic, and natural values as ACECs while managing for multiple uses.

Manage ACECs in cooperation with interested agencies, landowners, and other parties to prevent degradation of the relevant and important values for which they were established.

Maintain the genetic integrity of native species in ACECs.

Maintain environmental quality to prevent undue degradation to the values that make the site or locale unique.

Maintain, restore, and enhance areas within ACECs to meet Colorado Public Land Health Standards.

2.22.3 Management Actions

Wilderness Study Areas

Six WSAs (Bull Canyon, Willow Creek, Skull Creek, Oil Spring Mountain, Windy Gulch, and Black Mountain) would be managed under BLM Manual 6330- Management of Wilderness Study Areas. Except for certain valid existing rights, activities that would impair wilderness values or the areas' suitability for preservation as wilderness would not be allowed to occur in WSAs. If WSAs are released by Congress for management for multiple uses, the areas would be managed as VRM Class II.

(Note: As discussed under Minerals in Section 2.18.3, the WSAs are closed to leasing. Additional management direction related to reclamation and the use of native species in WSAs can be found under Reclamation in Section 2.4.3. Additional management direction related to WSAs being closed to motorized/mechanized use can be found under Comprehensive Trails and Travel Management in Section 2.20.3.)

Areas of Critical Environmental Concern

The following ACECs would be open to oil and gas leasing with an NSO stipulation (see Appendix 1, WR-NSO-34):

- Dudley Bluffs (1,600 acres);
- Yanks Gulch/Upper Greasewood Creek (2,700 acres);
- Lower Greasewood Creek (200 acres);
- Raven Ridge (5,000 acres);
- South Cathedral Bluffs (1,300 acres);
- Deer Gulch (1,800 acres);

- Ryan Gulch (1,400 acres);
- Blacks Gulch (800 acres);
- Coal Draw (1,800 acres);
- Moosehead Mountain (8,900 acres);
- Duck Creek (3,400 acres); and
- White River Riparian (950 acres).

The following ACECs would be open to oil and gas leasing with a CSU stipulation (see Appendix 1, WR-CSU-22):

- Coal Oil Rim (3,200 acres);
- Oil Spring Mountain (18,300 acres); and
- East Douglas Creek (47,600 acres).

Site-specific management of ACECs would be developed in individual activity plans. Existing ACEC activity plans (i.e., Dudley Bluffs, South Cathedral Bluffs, and Raven Ridge) will be revised to be consistent with the decisions contained in the Approved RMPA. As integrated activity plans are initiated, ACECs occurring within those areas will be incorporated into that activity plan process. The integrated activity plan will then replace the need for an individual ACEC activity plan.

Harpers Corner Road (500 feet on either side of centerline) would be classified as an avoidance area for land use authorizations.

(Note: Additional management direction related to reclamation and the use of native species in ACECs can be found under Reclamation in Section 2.4.3.)

2.23 Lands with Wilderness Characteristics

2.23.1 Goals

Maintain lands with wilderness characteristics (naturalness, outstanding opportunities for solitude, or outstanding opportunities for primitive and unconfined recreation) where possible, considering manageability and the context of competing resource demands.

2.23.2 Objectives

Manage lands with wilderness characteristics in the following tiers (Map 2-9):

- Tier 1 areas will be managed to protect wilderness characteristics as a priority over other multiple uses.
- Tier 2 areas will be managed to emphasize other multiple uses while applying management restrictions to reduce impacts to wilderness characteristics.
- Tier 3 areas will be managed to emphasize other multiple uses as a priority over protecting wilderness characteristics.

2.23.3 Management Actions

Lands with wilderness characteristics inventories will be maintained for the WRFO on an ongoing basis. Inventories will be reviewed and updated prior to issuing any land use authorizations, permits, or leases for proposed actions.

For lands with wilderness characteristics the BLM will apply the following:

- Tier 1 areas would be open to leasing with an NSO stipulation (71,500 acres) (see Appendix 1, WR-NSO-35);
- Tier 2 areas would be open to leasing with a CSU stipulation (66,200 acres) (see Appendix 1, WR-CSU-23); and
- Tier 3 areas would be open to leasing without any lease stipulations designed to protect wilderness characteristics (164,000 acres).

For ROW authorizations the following will apply:

- All Tier 1 areas will be managed as ROW exclusion areas;
- All Tier 2 areas will be managed as ROW avoidance areas; and
- All Tier 3 areas will be open for ROWs and other land use authorizations.

New road construction or improving/maintaining primitive roads would not be allowed within Tier 1 areas, and would be allowed in Tier 2 and Tier 3 areas. Appropriate COAs (as described below) may be applied.

Construction of new facilities would not be allowed within Tier 1 areas; and would be allowed in Tier 2 and Tier 3 areas. Appropriate COAs (as described below) may be applied.

Consistent with existing lease rights and the management objective for each tier, COAs may be applied to leased acreage in Tier 1, 2 and 3 areas that contain wilderness characteristics. Examples of such COAs could include, but are not limited to:

- Roads will not bisect the unit;
- Visual resources will be managed similar to VRM Class II;
- Siting of facilities will be considered in facility design (topographic screening may be applied); and
- Timing restrictions on use of helicopters may be applied during big game hunting seasons.

(Note: Additional management direction related to restoring the appearance of naturalness can be found under Reclamation in Section 2.4.3.)

2.24 Dinosaur Trail Master Leasing Plan⁷

2.24.1 Goals

Reduce potential conflicts of oil and gas activities with other resource uses while promoting efficient recovery of oil and gas resources.

Promote environmental stewardship among oil and gas operators.

2.24.2 Objectives

Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values.

Manage oil and gas activities to prevent degradation of resources (including oil and gas resources).

Manage oil and gas activities to complement or contribute to improving trends in achieving BLM's Colorado Public Land Health Standards.

Establish partnerships with cooperating entities to develop and adapt BMPs in response to site-specific conditions and other resource objectives.

2.24.3 Management Actions

Apply an MLP to 422,700 acres in the Dinosaur Trail area. All management decisions, goals, and objectives developed for the WRFO planning area would apply within the Dinosaur Trail MLP, however specific management decisions developed for the MLP would take precedence if there were conflicting guidance. A lease notice will be used to inform lessees that additional resource protection measures may be required to reduce environmental impacts within the MLP area. (See Appendix 1, WR-LN-14.)

There are 357,800 acres of BLM oil and gas mineral estate included in the Dinosaur Trail MLP; 42,200 acres of BLM federal oil and gas mineral estate would be closed to leasing⁸. Areas closed to leasing include the Bull Canyon, Skull Creek, and Willow Creek WSAs and the National Park Service's Harpers Corner Road withdrawal.⁹

Zero acres of federal mineral estate would be open to leasing with standard lease terms.

⁷ Note: The goals and objectives for the Dinosaur Trail MLP are the same as Minerals in Sections 2.18.1 and 2.18.2, respectively. All of the resource-based management decisions developed for the WRFO Planning area would also apply within the Dinosaur Trail MLP if those resources are found to be present (see Table 2); lease stipulations and ROW avoidance/exclusion areas that are unique to the Dinosaur Trail MLP area are highlighted in this section. The Dinosaur Trail MLP was placed at the end of Chapter 2 rather than with the Minerals Section to improve understanding since management in the previous resource sections also applies within the MLP.

⁸ These acres are included in the estimates given in the Minerals Section 2.18.3.

⁹ These are non-discretionary closures.

The 315,600 acres of BLM federal oil and gas mineral estate open to leasing are subject to lease stipulations (see Appendix 1), including NSO stipulations (83,100 acres¹⁰), CSU stipulations (186,700 acres), and timing limitations (315,600)¹¹.

Leasing within the MLP would progress in phases to address resource values and concerns. Leasing would first occur in the southern portion of the MLP, where the oil and gas occurrence potential is rated medium to high. Leasing within sage-grouse habitat, areas of low oil and gas potential, or areas adjacent to Dinosaur National Monument would occur once the BLM has completed additional analysis and planning. Within sage-grouse habitat in the MLP, sage-grouse management would be emphasized and leasing would only occur after the BLM has issued the Record of Decision for the Northwest Colorado Greater Sage-Grouse RMPA (193,000 acres). In areas of the MLP that are outside of sage-grouse habitat, but are within either low oil and gas potential or adjacent to Dinosaur National Monument Headquarters leasing would only occur after the BLM has completed a RMP Revision and determined whether or not leasing is appropriate given considerations such as the potential impacts to visual resources, night skies, and soundscapes (25,300 acres).

Master Development Plans would be required for all oil and gas activities, including exploratory drilling, within the Dinosaur Trail MLP. Specific resource protection measures would be evaluated when an operator submits a Master Development Plan. Examples of resource protection measures that will be considered to reduce environmental impacts within the MLP area include:

- Planned or required unitization of federal lands to eliminate redundant infrastructure, thereby reducing habitat fragmentation;
- Phased development may be appropriate where it is important to leave areas of habitat undisturbed by ongoing construction and drilling activity while other areas are developed;
- Limitations on surface disturbance (pending acceptable interim/final reclamation) may be placed on the percentage of bare ground allowed in a developed area at any one time in order to preserve habitat in important wildlife areas or reduce erosion in areas with highly erosive soils;
- Multiple wells per pad may be required to limit the number of surface locations in scenic areas, fragile soil areas, or important wildlife habitat while still allowing the necessary number of downhole locations;
- Liquids gathering pipeline systems feeding centralized offsite production facilities to reduce year-round fluids haul traffic during the life of the field in areas of important wildlife habitat;
- New technologies to reduce/capture emissions to ensure full field development does not contribute to eventual nonattainment of National Ambient Air Quality Standards under the Clean Air Act or adversely impact Air Quality Related Values, such as visibility;
- Practices to protect scenic quality by reducing the visual contrast of development, such as (1) siting roads to follow the contours of the landscape; (2) siting well locations where they are less visible and where cuts and fills can be minimized; (3) consolidating and using low profile

¹⁰ Total NSO acreage does not include WR-NSO-22 (Appendix 1) since the stipulation does not preclude development from taking place on any land within a lease, but rather limits the amount of disturbed lands that are rendered unsuitable for use by sage-grouse.

¹¹ NSO and CSU stipulation acres reflect a hierarchy analysis which prioritized areas with overlapping NSO and CSU stipulation areas as an NSO stipulation. The CSU stipulation acres reflect areas that are only CSU stipulations; these areas contain no overlap. TL stipulations acres are not calculated using a hierarchy analysis and include all acres which would have a TL stipulation applied.

equipment; (4) screening, disguising, or placing equipment offsite; (5) painting equipment to blend with the background; and (6) burying pipelines and power lines in existing disturbed areas;

- Placing all linear disturbances (e.g., power lines, pipelines, roads) in common corridors and development of a comprehensive area wide planned transportation network to eliminate unnecessary cross-country clearing and resulting fragmentation of habitat;
- Extensive interim reclamation of roadway disturbance up to or including the road surface and reclamation of pads to the well head/production facilities to minimize long-term surface disturbance; and
- Final reclamation that fully restores the original landform and re-establishes the native plant community.

All of the resource-based management decisions developed for the WRFO Planning area would also apply within the Dinosaur Trail MLP if those resources are found to be present (see Table 2).

The following lease stipulations and ROW avoidance/exclusion areas are unique to the Dinosaur Trail MLP area and focus on the key resources identified for management:

- Federal mineral estate with surface estate identified as, adjacent to, or surrounded by VRM Class II within the Dinosaur Trail MLP would be open for oil and gas leasing with a CSU stipulation to minimize impacts to visual resources, night skies, and soundscapes (154,200 acres). (See Appendix 1, WR-CSU-26.)
- VRM Class III areas adjacent to Dinosaur National Monument headquarters would be open for oil and gas leasing with a CSU stipulation to minimize impacts to viewsheds, night skies, and soundscapes (50 acres). (See Appendix 1, WR-CSU-27.)
- Aspen, serviceberry, and chokecherry communities associated with Blue Mountain (57,600 acres) would be managed with a CSU stipulation in order to maintain the distribution, condition, and functional capacity of deciduous browse and aspen communities integral to high priority big game and dusky grouse (formerly known as blue grouse) habitats. Prior to authorizing activities in these areas, the applicant would be required to submit a plan of development to demonstrate:
 - Associations have been avoided to the extent possible;
 - Special reclamation measures or design features would promote accelerated recovery and establishment of desirable plant community components;
 - The potential or capacity of the area to support viable, self-sustaining aspen, serviceberry, and chokecherry communities has not been diminished; and
 - Involvement of community derived values are mitigated through project life commensurate with projected impacts.
 - Surface disturbance or occupation within aspen, serviceberry, and chokecherry communities may be prohibited. (See Appendix 1, WR-CSU-24.)
- Within all ferret management areas (58,600 acres), surface-disturbing and disruptive activities associated with land use authorizations, permits, and leases issued on BLM-administered lands would be subject to a CSU stipulation (see Appendix 1) that incorporates those provisions established in A Cooperative Plan for Black-footed Ferret Reintroduction

and Management, Wolf Creek and Coyote Basin Management Areas, Moffat and Rio Blanco Counties, Colorado (Wolf Creek Work Group et al. 2001). (See Appendix 1, WR-CSU-25.)

- Approximately 360 acres within and adjacent to the Mellen Hill sites (5RB227, 5RB279, 5RB489, etc.) would be protected with an NSO stipulation. (See Appendix 1, WR-NSO-36.)
- The following ACECs would be open to oil and gas leasing with an NSO stipulation (see Appendix 1, WR-NSO-34):
 - Raven Ridge (5,000 acres);
 - Moosehead Mountain (8,900 acres); and
 - White River Riparian (600 acres).
- The following ACEC would be open to oil and gas leasing with a CSU stipulation (see Appendix 1, WR-CSU-22):
 - Coal Oil Rim (3,200 acres).
- The following special designation areas are classified as exclusion areas for land use authorizations:
 - Bull Canyon, Willow Creek, and Skull Creek WSAs; and
 - Raven Ridge and Moosehead Mountain ACECs.
- The following special designation areas are classified as avoidance areas for land use authorizations:
 - White River Riparian and Coal Oil Rim ACECs.
- A lease notice will be used to inform lessees of regulations that restrict commercial use of Harpers Corner Road. (See Appendix 1, WR-LN-15.)
- Harpers Corner Road (500 feet on either side of center line) would be classified as an avoidance area for land use authorizations.
- For lands with wilderness characteristics, the BLM will apply the following:
 - Tier 1 areas would be open to leasing with an NSO stipulation and would be managed as a ROW exclusion area (see Appendix 1, WR-NSO-35):
 - 20 – Upper Coal Rim (12,100 acres);
 - 21 – Coal Ridge (8,800 acres);
 - 26 – Moosehead Mountain (7,800 acres);
 - 32 – Willow Creek South (4,700 acres);
 - 33 – Bull Canyon South (700 acres); and
 - 34 – Bull Canyon North (900 acres).
 - Tier 2 areas would be open to leasing with a CSU stipulation and be managed as a ROW avoidance area (see Appendix 1, WR-CSU-23):
 - 16 – Raven Ridge (5,800 acres);
 - 20 – Upper Coal Rim (1,600 acres);
 - 21 – Coal Ridge (200 acres);

- 22 – Coal Oil Gulch (13,000 acres);
- 25 – Lower Wolf Creek (11,600 acres);
- 27 – MF Mountain (9,100 acres);
- 32 – Willow Creek South (1,200 acres); and
- 34 – Bull Canyon North (200 acres).

Table 2. Lease Stipulations within the Dinosaur Trail MLP

| Stipulation Number | Resource | Acreage | Comment |
|-------------------------------------|---|---------|---|
| Soil and Water Resources | | | |
| NSO-11 | Landslide areas | 0 | This resource is located outside the MLP. |
| NSO-12 | Steep slopes $\geq 50\%$ | 7,200 | |
| NSO-13 | Impaired Waters in MPA | 0 | This resource is located outside the MLP. |
| NSO-14 | Source Water Protection | 1,500 | |
| CSU-10 | Steep slopes $\geq 35\%$ but $< 50\%$ | 14,500 | |
| CSU-11 | Saline Soils | 20,500 | |
| CSU-12 | Flood plain, Perennial Waters, Springs, Wells, and Riparian | 10,552 | |
| Vegetation | | | |
| NSO-15 | Remnant Vegetation | 0 | This resource is located outside the MLP. |
| CSU-12 | Riparian/wetland habitats | 130 | Also under soil and water |
| N/A | Weed Free Zones | 194,400 | |
| Fish and Wildlife – Big Game | | | |
| NSO-16 | CPW State Wildlife Areas | 0 | This resource is located outside the MLP. |
| TL-12 | Big game severe winter range | 89,900 | |
| TL-12 | CPW Restricted Development Areas | 0 | North Ridge is located outside the MLP. |
| TL-13 | Big game summer range | 76,800 | |
| TL-14 | Big game winter range, winter concentration areas | 183,100 | |
| Fish and Wildlife – Raptors | | | |
| NSO-18 | Raptor nests other than special status | 4,300 | |
| TL-15 | Raptor nest sites – other | 6,600 | |

Table 2. Lease Stipulations within the Dinosaur Trail MLP

| Stipulation Number | Resource | Acreage | Comment |
|--------------------------------------|--|---------|--|
| Fish and Wildlife – Grouse | | | |
| NSO-22 | Sage-grouse habitat | 191,400 | |
| NSO-23 | Sage-grouse lek sites | 4,700 | |
| NSO-24 | Sharp-tailed grouse leks | 0 | This resource is presently located outside the MLP. |
| TL-22 | Sage-grouse winter concentration areas | 191,400 | |
| TL-23 | Sage-grouse nesting/ early brood rearing habitat | 191,400 | |
| TL-24 | Sharp-tailed grouse nesting habitat | 0 | This resource is presently located outside the MLP. |
| Special Status Animal Species | | | |
| NSO-17 | Endangered Colorado River fish | 640 | |
| NSO-19 | Special status raptor nests, golden eagle and prairie falcon nests | 30,600 | |
| NSO-20 | Bald eagle nests – abandoned | 0 | This resource is not currently known to be present in the MLP. |
| NSO-21 | Bald eagle critical nocturnal roosts | 650 | |
| CSU-13 | Native cutthroat trout habitat | 0 | This resource is located outside the MLP. |
| CSU-14 | Bald eagle nest, roost, and perch habitat | 600 | |
| CSU--25 | Black-footed ferret management areas | 58,600 | This resource occurs only within the MLP. |
| TL-16 | Special status raptor nests | 14,000 | |
| TL-18 | Ferruginous hawk nests | 76,000 | |
| TL-19 | Bald eagle nests | 990 | |
| TL-20 | Bald eagle critical night roosts and winter concentration areas | 650 | |
| TL-21 | Bald eagle winter hunting perches | 160 | |
| TL-26 | Canada lynx denning habitat | 0 | This resource is located outside the MLP. |
| Special Status Plant Species | | | |
| NSO-25 | Federally listed and candidate plant species | 2,700 | |
| NSO-26 | BLM sensitive plants | 1,800 | |

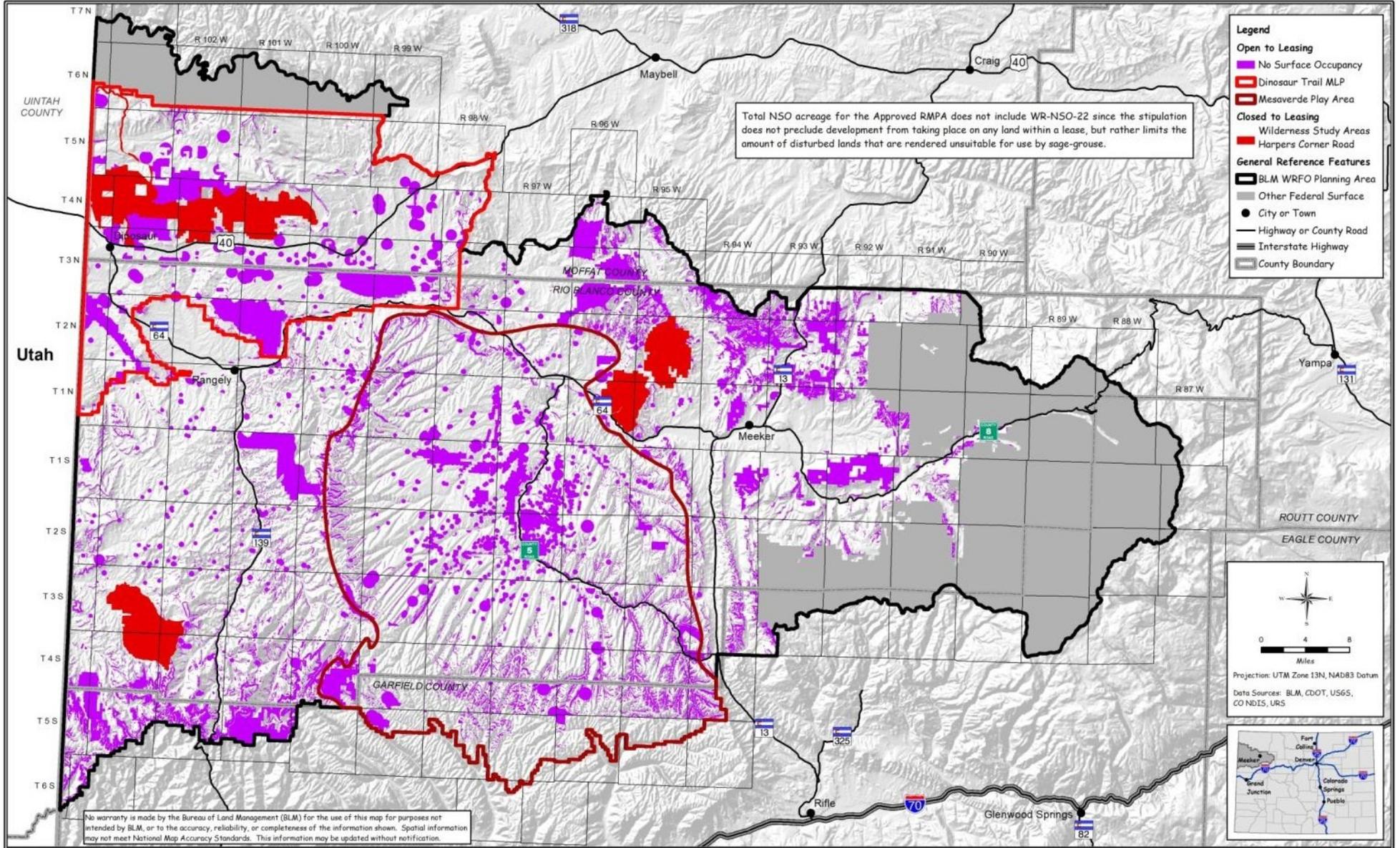
Table 2. Lease Stipulations within the Dinosaur Trail MLP

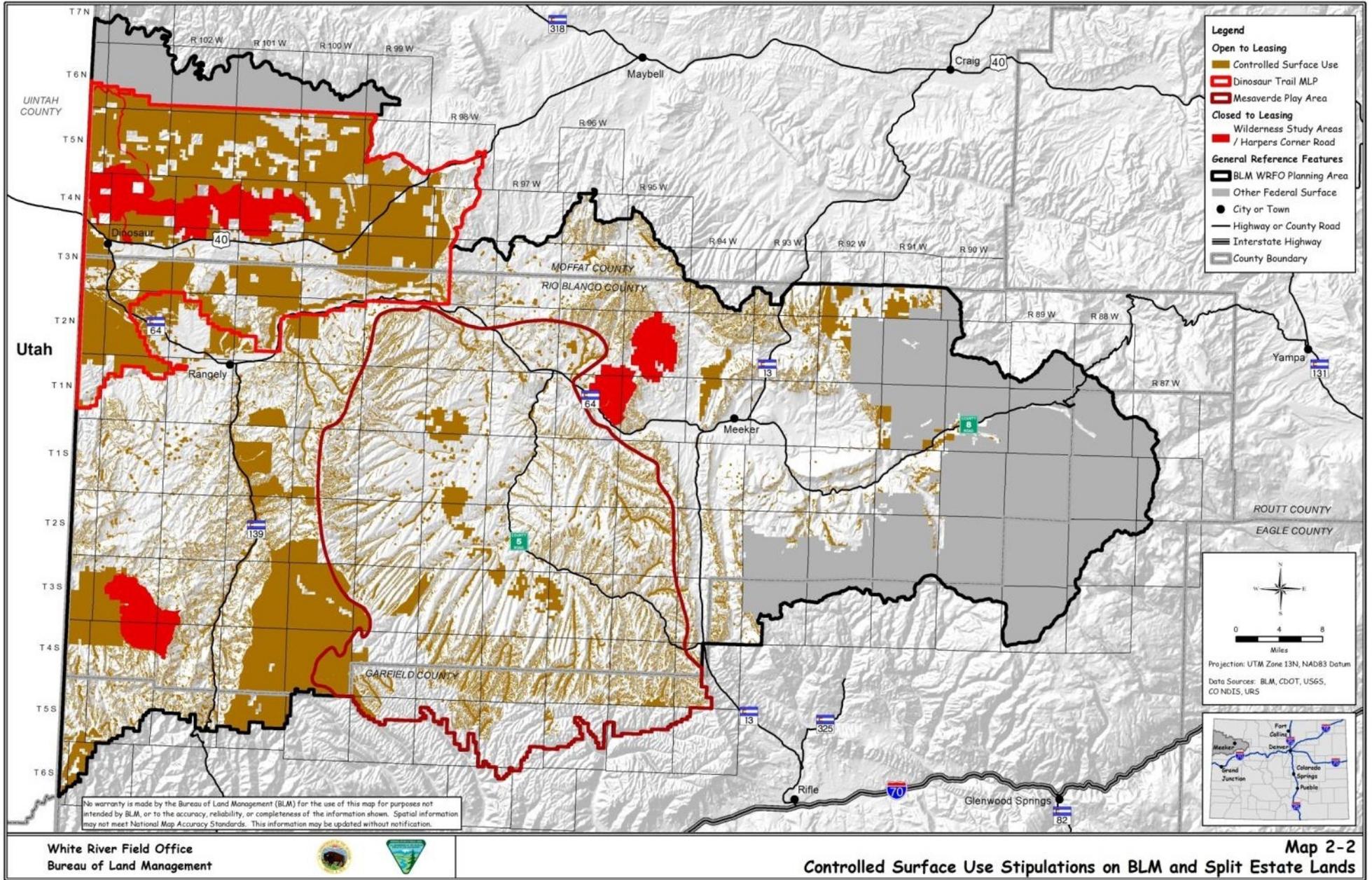
| Stipulation Number | Resource | Acreage | Comment |
|--|---|------------|---|
| Cultural Resources | | | |
| NSO-27 | Duck Creek wickiup | 0 | This resource is located outside the MLP. |
| NSO-28 | Thornburgh/Battle of Milk Creek site | 0 | This resource is located outside the MLP. |
| CSU-15 | Rock art and structural features | 1,100 | |
| CSU-16 | Texas-Missouri-Evacuation Creek | 0 | This resource is located outside the MLP. |
| CSU-17 | Thornburgh/Battle of Milk Creek viewshed | 0 | This resource is located outside the MLP. |
| Forestry and Woodland Products | | | |
| NSO-29 | Douglas-fir/aspen on slopes >25% | 130 | |
| CSU-18 | Old growth | Not mapped | |
| Minerals | | | |
| NSO-30 | Oil shale RD&D leases | 0 | This resource is located outside the MLP. |
| NSO-31 | Active sodium mining areas | 0 | This resource is located outside the MLP. |
| CSU-19 | Areas available for oil shale and multi-mineral leasing | 0 | This resource is located outside the MLP. |
| CSU-20 | Coal areas | 14,200 | |
| Minerals: Master Leasing Plans – Dinosaur Trail | | | |
| NSO-36 | Mellen Hill sites | 360 | This resource occurs only within the MLP. |
| CSU-24 | Blue Mountain Vegetation | 57,600 | This management action applies only within the MLP. |
| CSU-26 | VRM Class II in MLP | 154,200 | This management action applies only within the MLP. |
| CSU-27 | VRM Class III in MLP | 50 | This management action applies only within the MLP. |
| Recreation | | | |
| NSO-32 | Anderson Gulch and LO7 Hill recreation areas | 0 | This resource is located outside the MLP. |
| CSU-21 | 3 Mile Gulch recreation area | 0 | This resource is located outside the MLP. |
| Lands and Realty | | | |
| NSO-33 | Rangely District Hospital R&PP | 0 | This resource is located outside the MLP. |

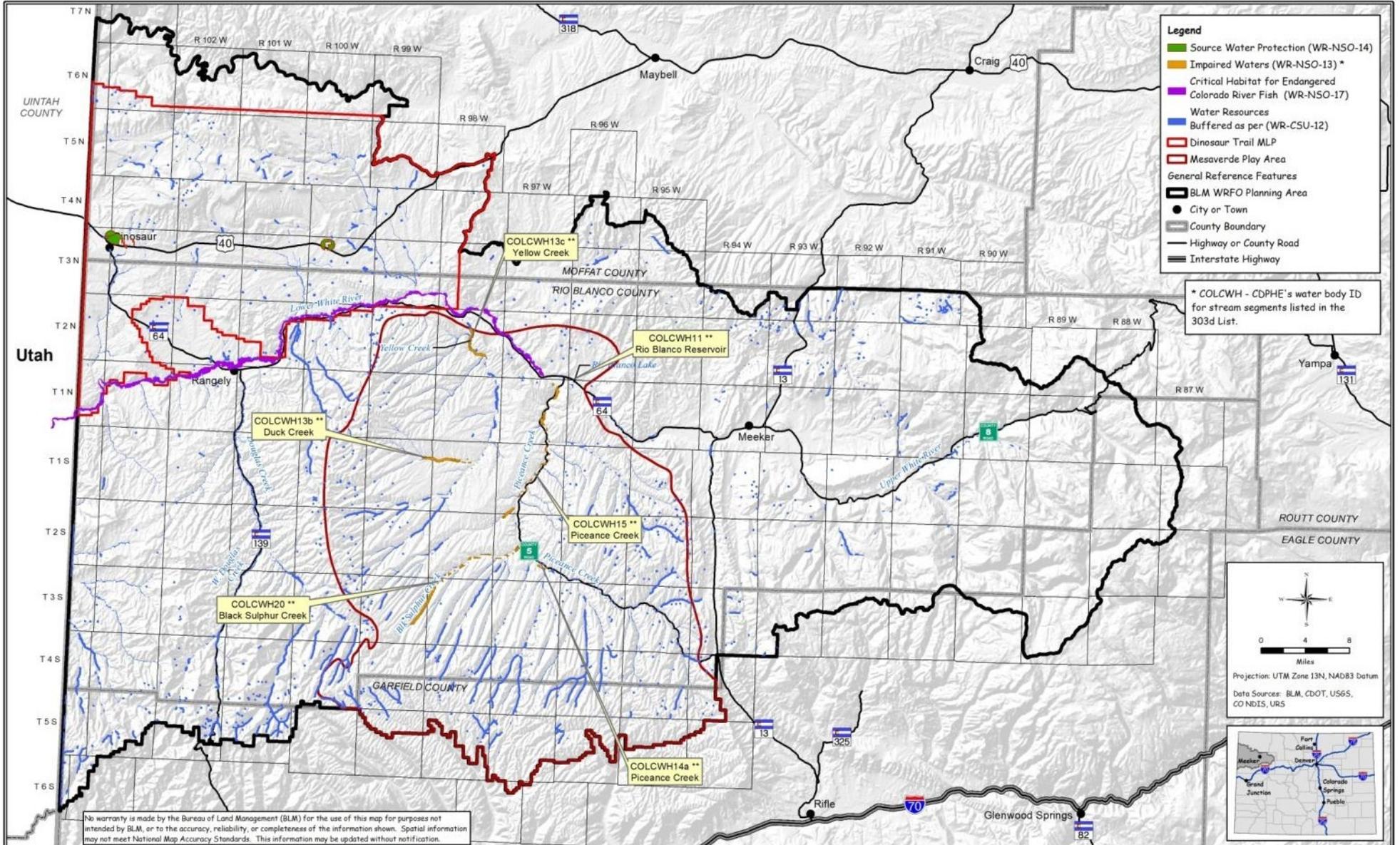
Table 2. Lease Stipulations within the Dinosaur Trail MLP

| Stipulation Number | Resource | Acreage | Comment |
|--|--|---------|---------|
| Special Designations | | | |
| NSO-34 | ACECs | 14,500 | |
| CSU-22 | ACECs | 3,200 | |
| Lands with Wilderness Characteristics | | | |
| NSO-35 | Tier 1 lands with wilderness characteristics | 35,000 | |
| CSU-23 | Tier 2 lands with wilderness characteristics | 38,800 | |

SOURCE: BLM GIS data, 2013.







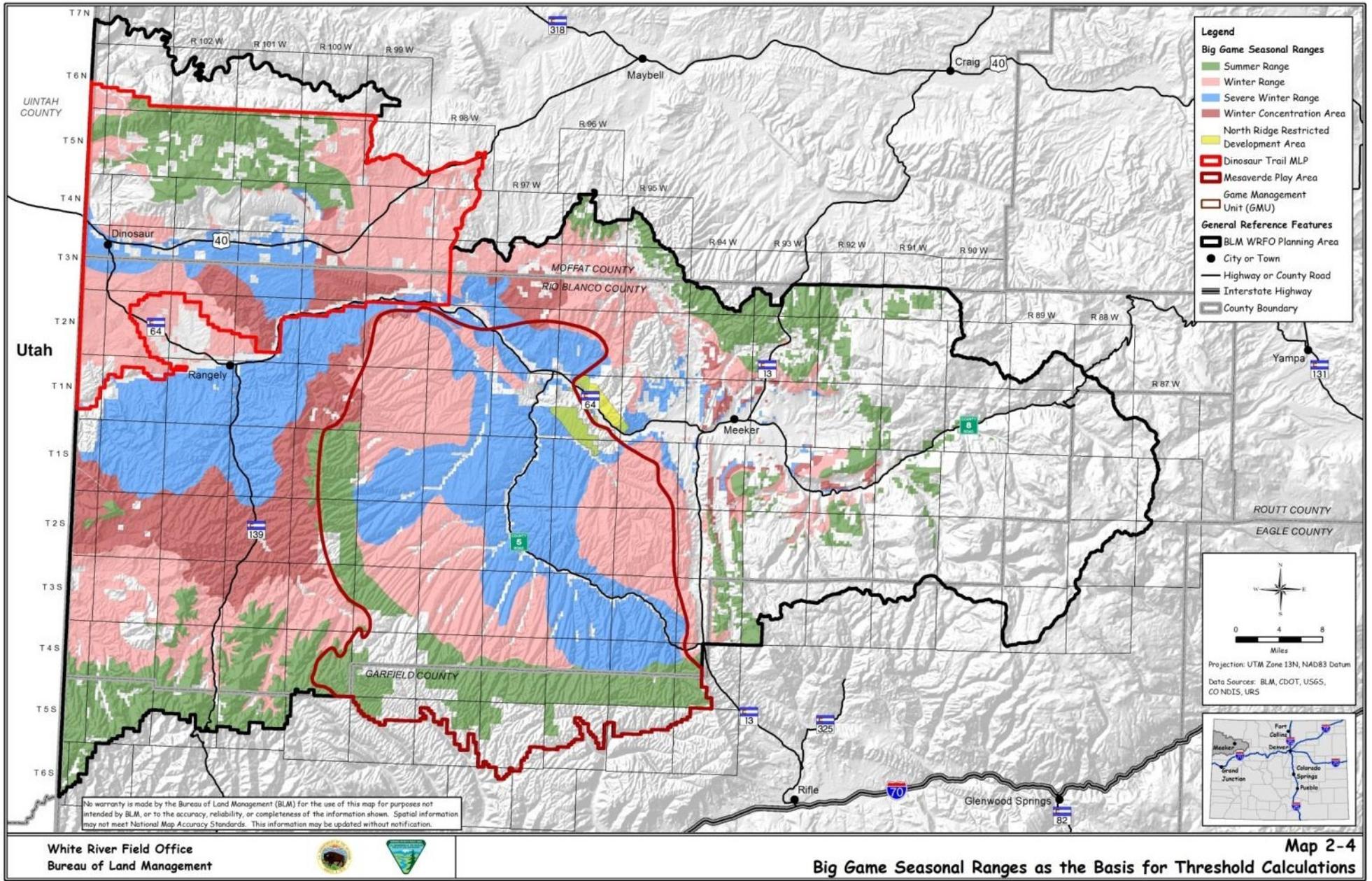
- Legend**
- Source Water Protection (WR-NSO-14)
 - Impaired Waters (WR-NSO-13) *
 - Critical Habitat for Endangered Colorado River Fish (WR-NSO-17)
 - Water Resources Buffered as per (WR-CSU-12)
 - ▭ Dinosaur Trail MLP
 - ▭ Mesaverde Play Area
 - ▭ General Reference Features
 - ▭ BLM WRFO Planning Area
 - City or Town
 - ▭ County Boundary
 - Highway or County Road
 - Interstate Highway

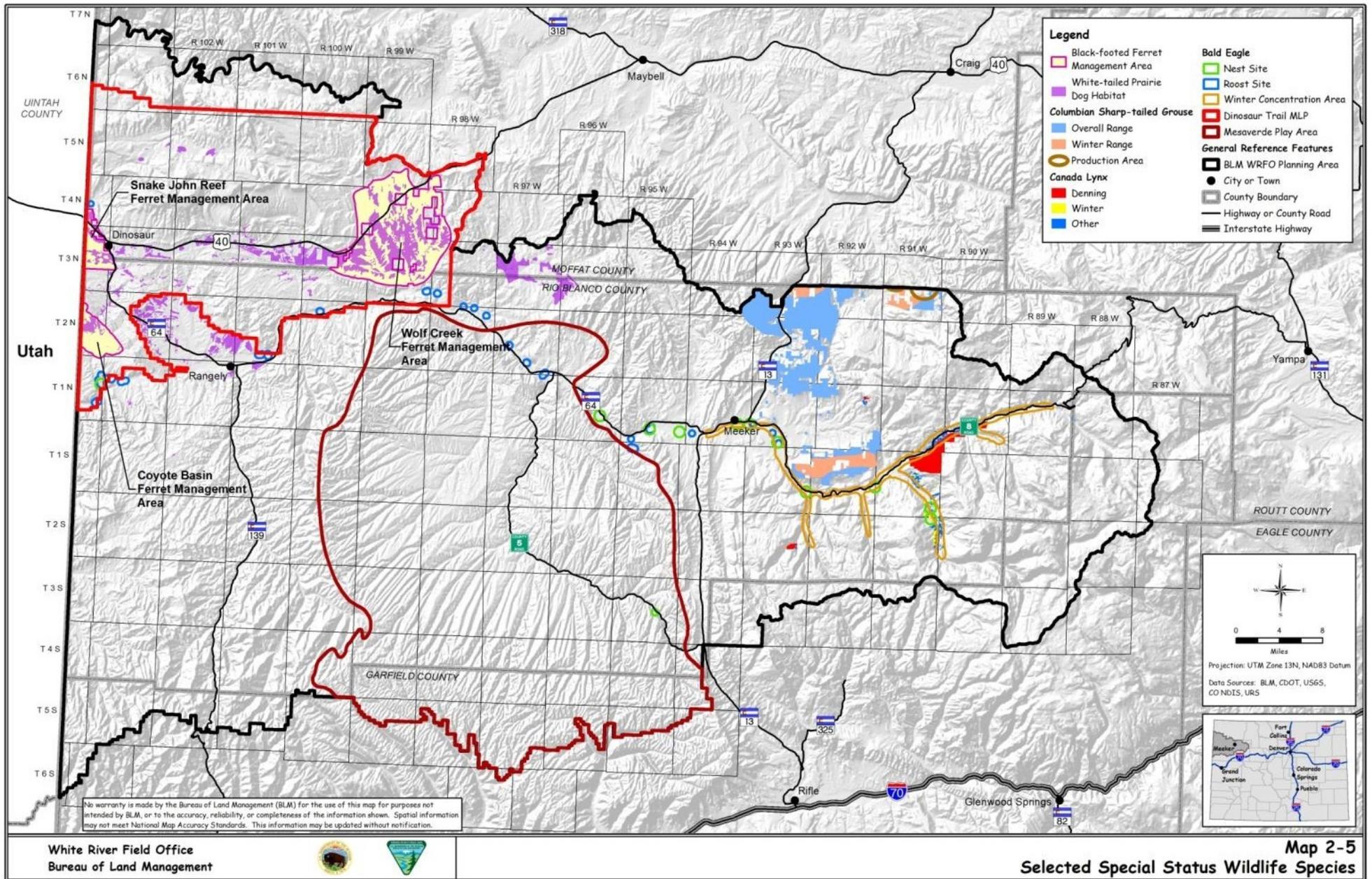
* COLCWH - CDPHE's water body ID for stream segments listed in the 303d List.

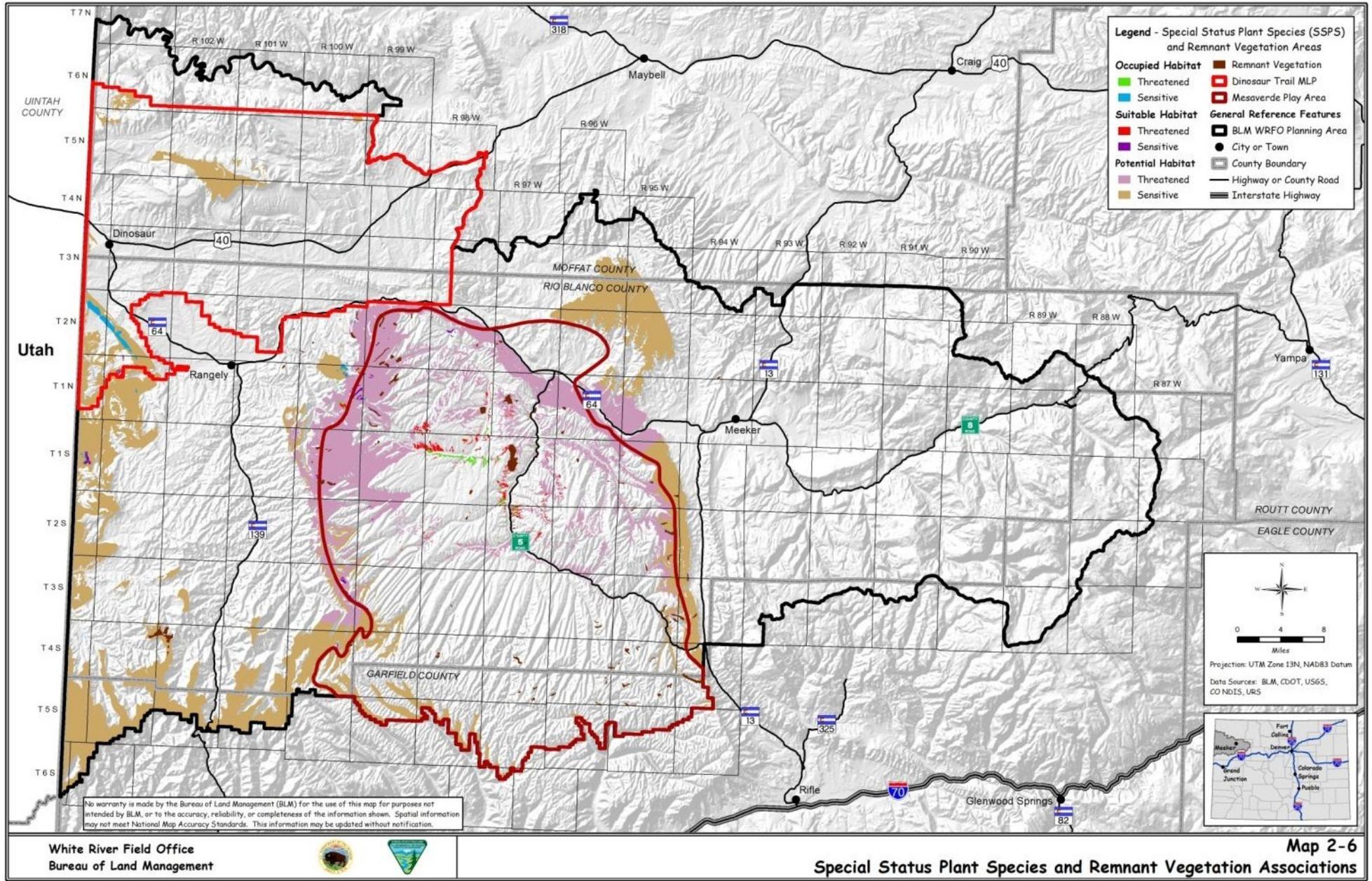
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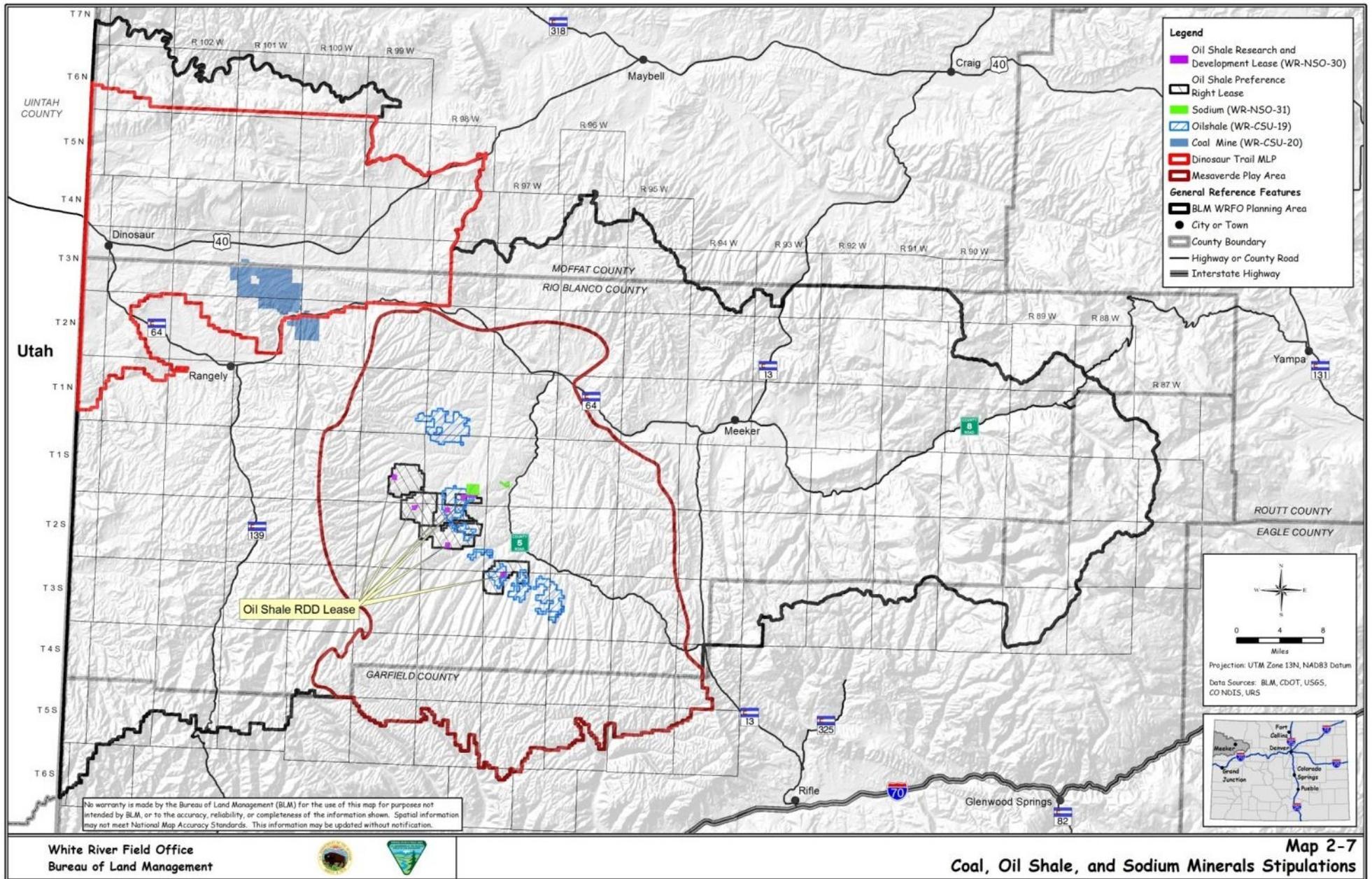
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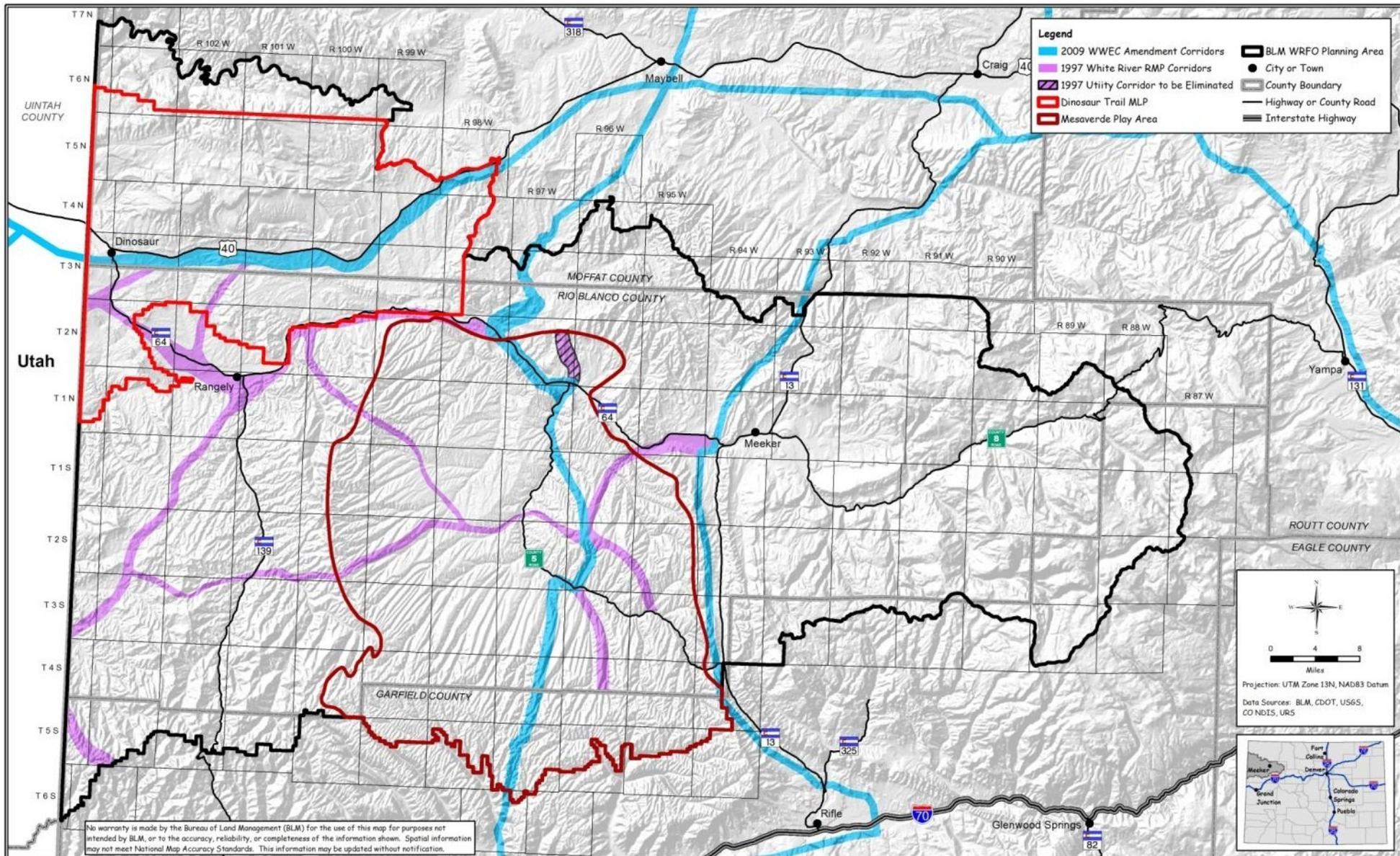






- Legend**
- Oil Shale Research and Development Lease (WR-NSO-30)
 - Oil Shale Preference Right Lease
 - Sodium (WR-NSO-31)
 - Oilshale (WR-CSU-19)
 - Coal Mine (WR-CSU-20)
 - Dinosaur Trail MLP
 - Mesaverde Play Area
- General Reference Features**
- BLM WRFO Planning Area
 - City or Town
 - County Boundary
 - Highway or County Road
 - Interstate Highway

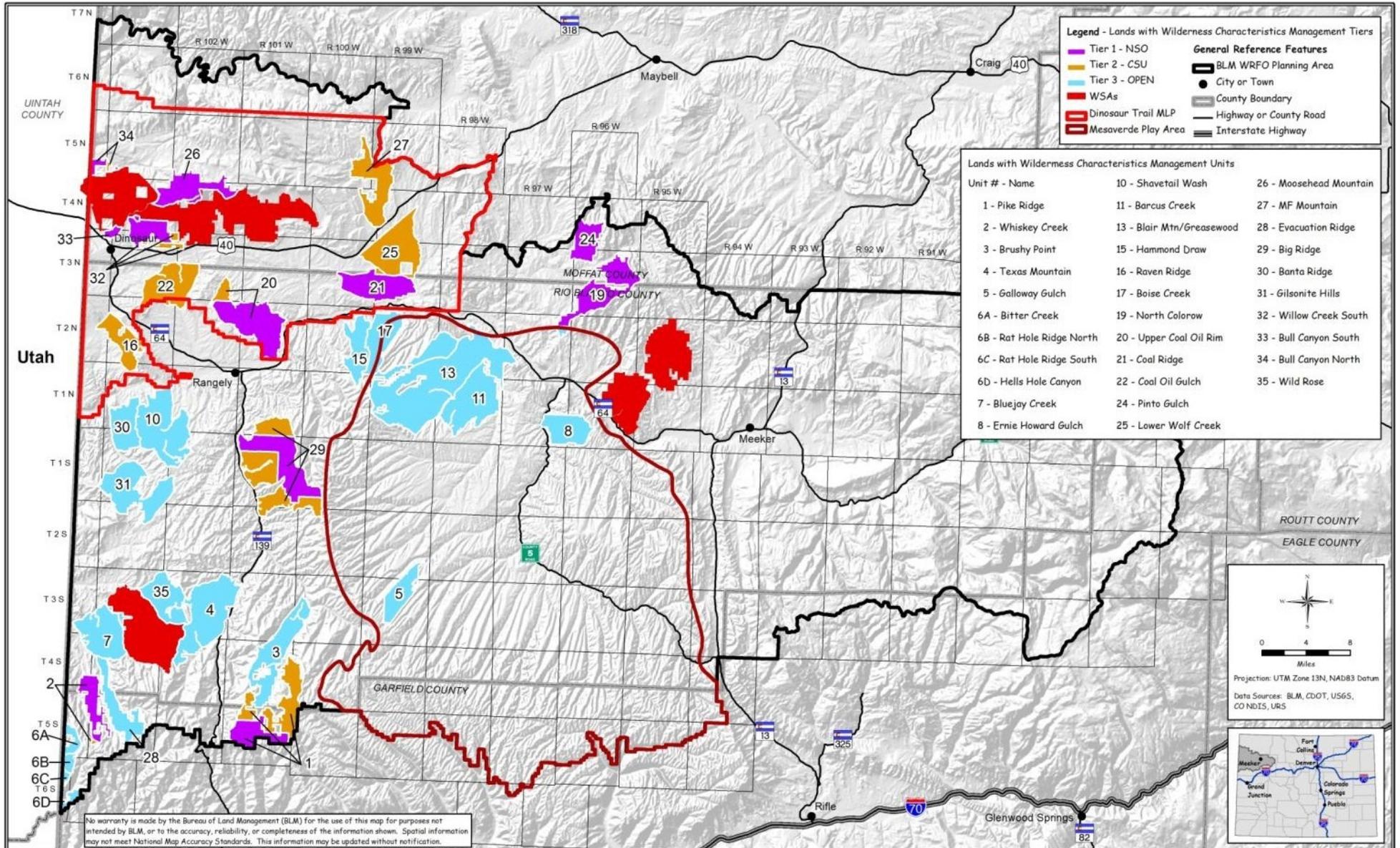
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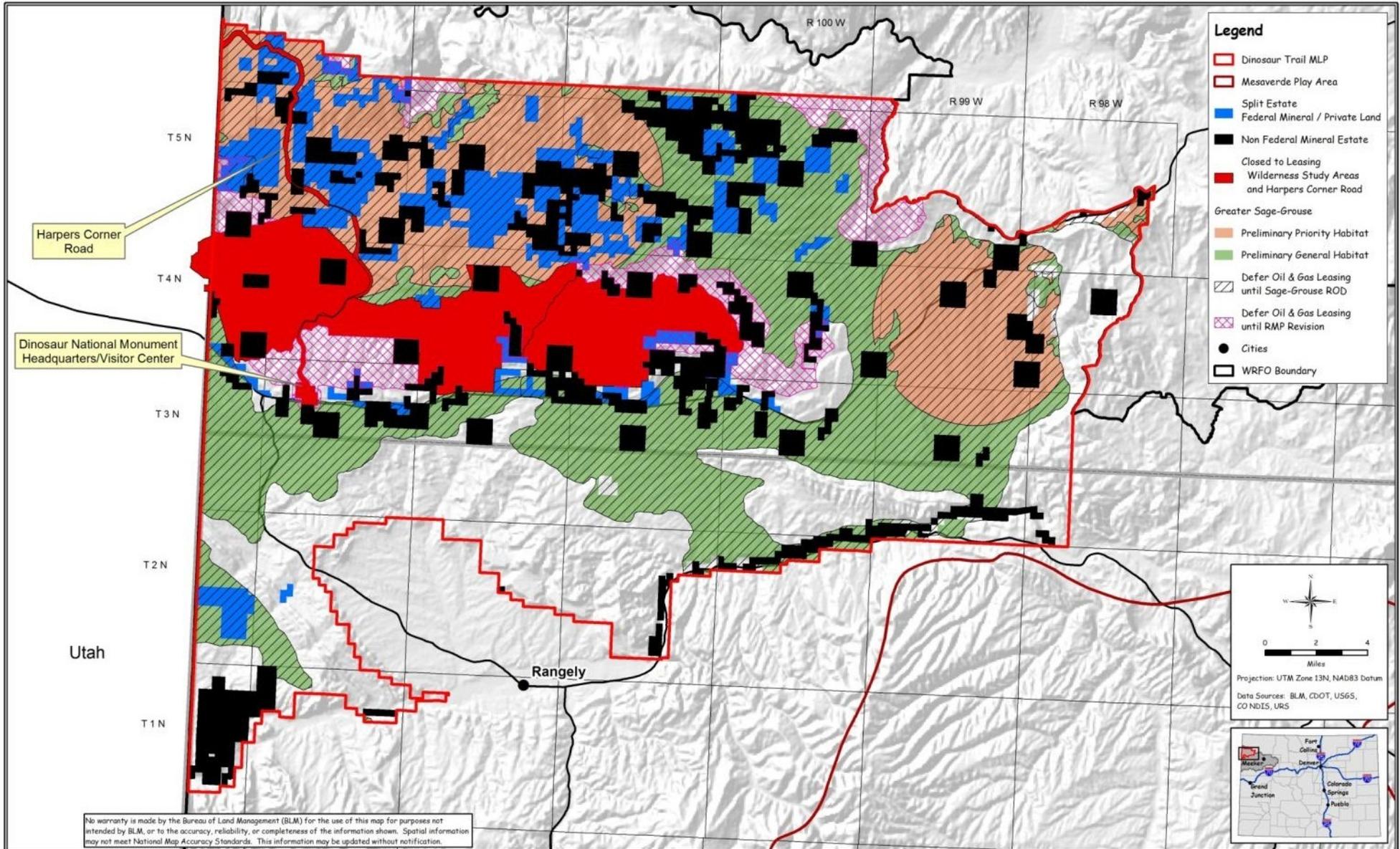
Map 2-8
Right-of-Way Corridors



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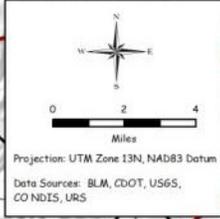
- Legend**
- Dinosaur Trail MLP
 - Mesaverde Play Area
 - Split Estate
 - Federal Mineral / Private Land
 - Non Federal Mineral Estate
 - Closed to Leasing
 - Wilderness Study Areas and Harpers Corner Road
 - Greater Sage-Grouse**
 - Preliminary Priority Habitat
 - Preliminary General Habitat
 - Defer Oil & Gas Leasing until Sage-Grouse ROD
 - Defer Oil & Gas Leasing until RMP Revision
 - Cities
 - WRFO Boundary

Harpers Corner Road

Dinosaur National Monument Headquarters/Visitor Center

Utah

Rangely

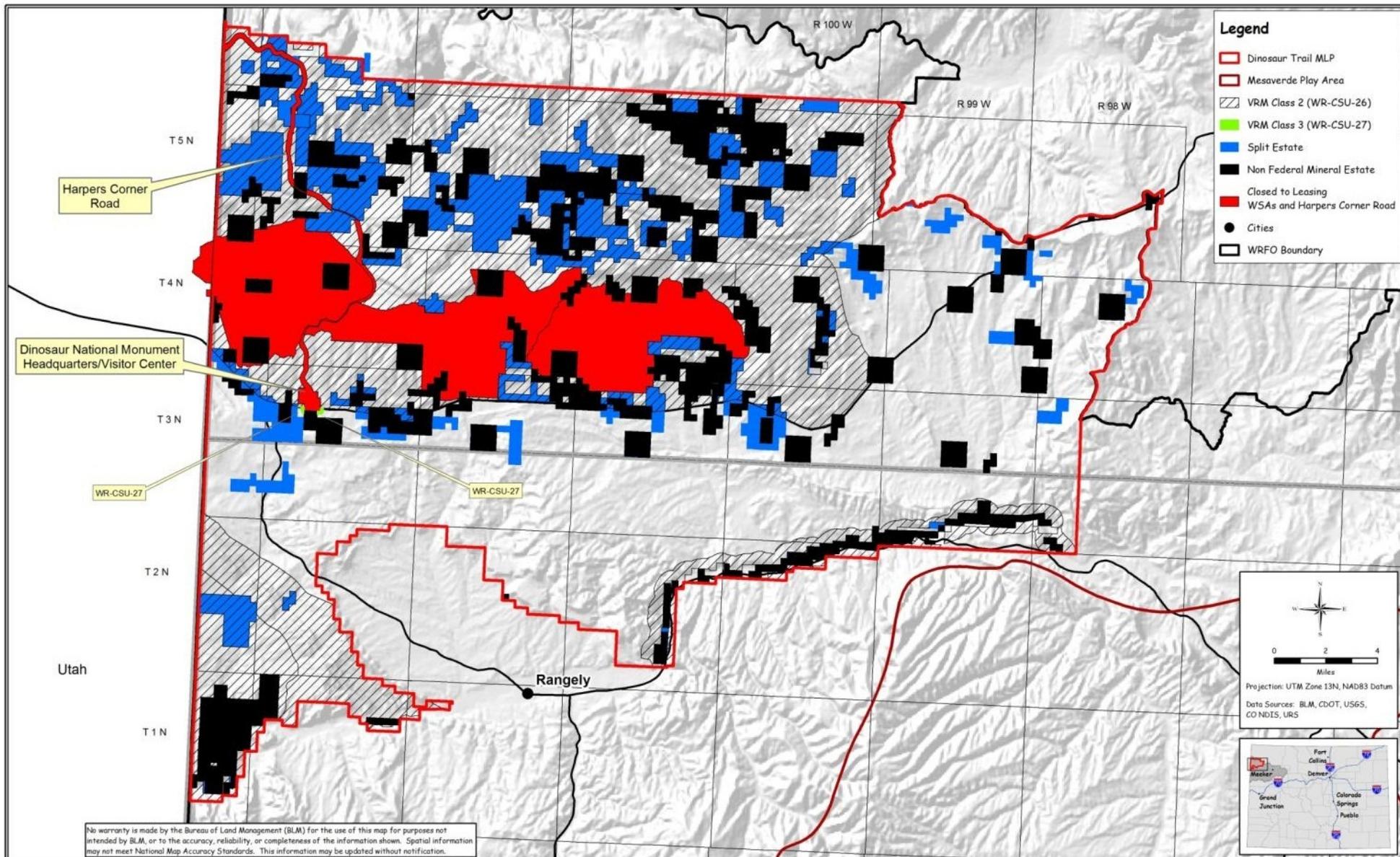


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Map 2-10
Phased Leasing in the Dinosaur Trail Master Leasing Plan Area



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Management of Visual Resources, Soundscapes, and Night Skies in the Dinosaur Trail Master Leasing Plan

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Chapter 3.0 Implementation and Monitoring

3.1 *General Plan Amendment Implementation*

Plan implementation is a continuous and active process. Decisions presented in Chapter 2 Management Decisions of this Approved RMPA are of three types: Immediate, One-Time, and Long-Term.

Immediate Decisions: These decisions go into effect upon signature of the Record of Decision and Approved RMPA. These include decisions such as the allocation of lands as available or unavailable for oil and gas leasing, phased leasing with the Dinosaur Trail MLP, management of lands with wilderness characteristics (i.e., Tier 1, 2, or 3), and use of the White River Surface Reclamation Plan. Immediate decisions require no additional analysis and provide the framework for any subsequent activities proposed in the planning area.

One-Time Decisions: These types of decisions include those that are implemented after additional site-specific analysis is completed, such as development of a cultural resource project plan (CRPP). One-time decisions usually require additional analysis and are prioritized as part of the Plan Implementation Strategy and BLM budget process. The development of an Implementation Strategy assists the field office in outlining the work needed to meet the goals and objectives of the plan amendment and set priorities for these projects in future years so that the field office can appropriately estimate budget and labor needs. The Implementation Strategy can also assist in discussions with partners and cooperators on mutual priorities and obtaining available assistance.

Priorities for implementation of “one-time” RMPA decisions will be based on several criteria, including:

- Current and projected resource needs and demands;
- National and Statewide BLM management direction and program emphasis;
- National, State, Tribal and Community Priorities; and
- Funding.

Long-Term Guidance/Life of Plan Direction: These decisions include the goals, objectives, and management actions established by the Approved RMPA applied during site-specific analyses and activity planning (e.g., review of an APD or a ROW application). All future authorizations must conform to the Approved RMPA (43 CFR 1610.5-3(a)). Further, the Field Manager is required to make operations and activities under existing permits conform to the Approved RMPA within a reasonable period of time, subject to valid existing rights (43 CFR 1610.5-3(b)).

3.2 *Program Specific Implementation*

3.2.1 **Zero to 1 Year from Signing the ROD**

All surface disturbing activities related to oil and gas exploration and development on BLM-administered lands authorized after the signing of the ROD for the Oil and Gas Development RMPA would be subject to reclamation standards included in the WRFO Surface Reclamation Plan. For all such exploration and development authorized prior to the signing of the ROD, the WRFO Surface Reclamation Plan would be used as guidance for Reclamation Plans submitted as per Onshore Order

No. 1. Reclamation is dynamic and the BLM may revise the WRFO Surface Reclamation Plan through time to incorporate updated reclamation practices.

The BLM will conduct a review of the Water Monitoring Plan within one year of signing the ROD, and every third year thereafter. This plan will be updated and refined as needed to achieve an adaptive management approach to monitoring of water resources.

The BLM will meet with the Wolf Creek Work Group within one year of signing the ROD to discuss their concurrence with managing about 6,000 acres along Snake John Reef (between the Utah border and the town of Dinosaur) as a black-footed ferret management area.

Annually, the BLM will prepare a comprehensive summary report (from actual project data and analysis) as described in the CARPP (Appendix 5). This report will be made available to the public. The BLM will use this annual review to evaluate whether current air resources protection strategies are meeting the goals and objectives established within the BLM Colorado RMPs. If the analysis shows that the strategies are not achieving the defined air resource protection goals, the BLM will collaborate with CDPHE and the EPA to develop or modify air resource protection strategies as necessary to effectively protect air resources within any deficient planning area. Should this result in changes to RMP goals and objectives, additional planning level analyses will be required.

A reclamation status report for each site would be submitted electronically to the WRFO annually until it is determined that reclamation of the site has met all required objectives of the particular reclamation phase. Reclamation data will be submitted via the most current BLM approved data management system. The White River Data Management System (WRDMS) is available for industry to begin using to submit reclamation data (see Section 3.3). Industry will be required to use the WRDMS to submit the reclamation status reports beginning in spring 2016.

The BLM will evaluate the Rocky Mountain Wild ACEC nominations, submitted on January 21, 2003, and on March 9, 2007, that are located within the boundaries of the WRFO to determine whether they satisfy the relevance and importance criteria consistent with BLM's planning regulations and provide interim management for those areas found to meet the criteria.

3.2.2 Three to 6 Years from Signing the ROD

Periodically, but not less than every three years, the BLM will evaluate the available or reasonably foreseeable oil and gas development projections for the planning area for the following three to five year period, and compare these projected levels to the level of predicted future development analyzed in the Colorado Air Resources Management Modeling Study (CARMMS) modeling study (or the most recent BLM or interagency air impacts analysis). The BLM will use the projected development/emissions data to determine whether the modeling analysis remains appropriate as a reference for any subsequent project analyses.

The BLM will ensure that disturbance data for all existing locations (including "legacy" sites) are included in the WRDMS within 5 years of signing the ROD. Reclamation data for existing locations would be included in the WRDMS as it becomes available.

A grace period of five years from signing the ROD would be provided to allow compliance in the event leaseholder/operator activity exceeds threshold allowances at the time of ROD approval.

If existing facilities are located within 0.6 mile of sage-grouse leks, alternate access routes would be devised and/or surface facilities removed to the extent practicable within five years of approval of the ROD.

A cultural resource project plan (CRPP) for the Canyon Pintado NHD will be developed within five years of signing the ROD.

A CRPP for the Dragon Trail/Douglas Arch area south of Rangely, Colorado will be developed within six years of signing the ROD.

3.2.3 Twenty years from Signing the ROD

In areas under an existing lease, a program would be developed in cooperation with current leaseholders, to apply (where appropriate) the most current reclamation standards and practices to existing well pads, roads, and pipelines. These standards and practices would be applied in annual increments that would allow for completed interim and/or final reclamation of active and inactive ROW corridors and producing, plugged, and abandoned wells and access routes within 20 years.

Site-specific management of ACECs would be developed in individual activity plans. Existing ACEC activity plans (i.e., Dudley Bluffs, South Cathedral Bluffs, and Raven Ridge) will be revised to be consistent with the decisions contained in the Approved RMPA. As integrated activity plans are initiated, ACECs occurring within those areas will be incorporated into that activity plan process. The integrated activity plan will then replace the need for an individual ACEC activity plan.

3.3 Plan Amendment Monitoring

Land-use plan decision monitoring is a continuous process occurring over the life of an RMP. The goal is to maintain a dynamic RMP. Monitoring data are collected, examined, and used to draw conclusions on (1) whether planned actions have been implemented in the manner prescribed by the RMP (implementation monitoring), (2) whether RMP allowable use and management action decisions and the resultant implementation actions are effective in achieving program specific objectives or desired outcomes (effectiveness monitoring), and (3) calculating the cost of delivering a service or product (efficiency monitoring by program elements). Conclusions are then used to make recommendations on whether to continue current management or determine what changes need to be made to implementation practices to better achieve RMP decisions. Indicators, methods, locations, units of measures, frequency, and action triggers can be established by national policy guidance, in RMPs, or by technical specialists in order to address specific issues.

Based on staffing and funding levels, monitoring is annually prioritized consistent with the goals and objectives of the RMP. The BLM may work in cooperation with local, State, and other Federal agencies or use data collected by other agencies and sources when appropriate and available.

White River Data Management System

The BLM will use the WRDMS to track and document disturbance and reclamation activities associated with oil and gas operations in the WRFO Planning Area. The WRDMS is an online tool that is available for the public to view at <https://my.usgs.gov/wrfo/>.

Industry will be able to submit reclamation status reports and enter data directly into the WRDMS but the BLM will retain the authority to verify data prior to determining if reclamation success criteria have been met and when calculating big game timing limitation thresholds.

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Chapter 4.0 Evaluation And Maintenance

4.1 Plan Amendment Evaluation

In accordance with the BLM’s Land Use Planning Handbook (H-1601-1), an RMP will be evaluated periodically (at a minimum every 5 years) to determine whether the land use plan decisions and the NEPA analysis are still valid and whether the plan is being implemented effectively. More specifically, the Approved RMPA will be evaluated with the 1997 White River RMP to determine if (1) the decisions remain relevant to current issues, (2) the decisions are effective in achieving or making progress toward achieving the desired outcomes specified in the plan, (3) any decisions are in need of revision, (4) any decisions need to be dropped from further consideration, and (5) any areas require new decisions.

In making these determinations, the evaluation will consider whether mitigation measures are satisfactory, whether there are significant changes in the related plans of other entities, and whether there is significant new information.

4.2 Plan Amendment Maintenance

The BLM’s land use planning regulations require that RMPs and supporting components “be maintained as necessary to reflect minor changes in data” (43 CFR 1610.5-4). The BLM’s Land Use Planning Handbook (H-1601-1) states that maintenance “must occur continuously so that the RMP and its supporting records reflect the current status of decision implementation and knowledge of resource conditions” (page 44).

Maintenance is limited to further refining, documenting, or clarifying the decisions in the Approved RMPA and will not expand the scope of resource uses or restrictions, or change the terms, conditions, and decisions of the Approved RMPA. Maintenance does not require formal public involvement or interagency coordination.

Examples of maintenance actions include:

- Correcting minor data, typographical, mapping, or data errors in the Approved RMPA;
- Applying a lease stipulation to a new area prior to the lease sale based on new inventory data (e.g., apply an NSO stipulation for raptor nests to a newly discovered nest location);
- Refining the known habitat of a special status species addressed in the plan based on new information; or
- Modifying or waiving a lease stipulation consistent with the criteria outlined in the Approved RMPA.

Maintenance may be especially necessary to update acreage figures presented throughout the Approved RMPA. Acreages were estimated using geographical information system (GIS) data, which is subject to constant refinement. Any potential discrepancies within the acreage figures or future refinements in the data may be corrected or updated in the Approved RMPA through plan maintenance.

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Chapter 5.0 Acronyms, Glossary and References

5.1 *List of Acronyms and Abbreviations*

| | |
|--------|---|
| ACEC | Areas of Critical Environmental Concern |
| AIM | Assessment, Inventory and Monitoring Protocol |
| APD | Application for Permit to Drill (an oil or gas drill) |
| APLIC | Avian Power Line Interaction Committee |
| AQCC | Air Quality Control Commission |
| BA | Biological Assessment |
| BLM | Bureau of Land Management |
| BMP | Best Management Practice |
| CARMMS | Colorado Air Resources Management Modeling Study |
| CDPHE | Colorado Department of Public Health and Environment |
| CEQ | Council on Environmental Quality |
| CFR | Code of Federal Regulations |
| COA | Conditions of Approval |
| CPW | Colorado Parks and Wildlife |
| CRPP | Cultural Resource Protection Plan |
| CSU | Controlled Surface Use |
| CWA | Clean Water Act |
| DOI | U.S. Department of the Interior |
| DPC | Desired Plant Community |
| e.g. | For example |
| EIS | Environmental Impact Statement |
| EPCA | Energy Policy and Conservation Act |
| ESA | Endangered Species Act |
| FLAG | Federal Land Managers' Air Quality Related Values Workgroup |
| FLPMA | Federal Land Policy and Management Act (of 1976) |
| FWS | U. S. Fish and Wildlife Service |
| GMU | Game Management Unit |
| HMA | Herd Management Area |
| i.e. | That is |
| IBLA | Interior Board of Land Appeals |

| | |
|-------|--|
| IPM | Integrated Pest Management |
| LN | Lease Notice |
| MLP | Master Leasing Plan |
| MPA | Mesaverde Play Area |
| NAIP | National Agriculture Imagery Program |
| NEPA | National Environmental Policy Act (of 1969) |
| NHD | National Historic District |
| NHPA | National Historic Preservation Act (of 1966) |
| NOA | Notice of Availability |
| NPDES | National Pollutant Discharge Elimination System |
| NPS | U.S. National Park Service |
| NRHP | National Register of Historic Places |
| NSO | No Surface Occupancy (a stipulation on an oil and gas lease) |
| NSPS | New Source Performance Standard |
| OHV | Off-highway Vehicle |
| PFYC | Potential Fossil Yield Classification |
| PNC | Potential Natural Community |
| RMP | Resource Management Plan |
| RMPA | Resource Management Plan Amendment |
| ROD | Record of Decision |
| ROW | Right-of-way |
| RVA | Remnant Vegetation Association |
| SHPO | State Historic Preservation Office |
| USC | United States Code |
| USFS | U.S. Forest Service |
| USGS | U.S. Geological Service |
| VOC | Volatile Organic Compound |
| VRM | Visual Resource Management |
| WO | Washington Office (BLM) |
| WRDMS | White River Data Management System |
| WRFO | White River Field Office |
| WSA | Wilderness Study Area |

5.2 Glossary

A

Acute impacts. As used in the context of the threshold management strategy, acute impacts or effects are those concentrated, intensive fluid mineral development activities attributable to vegetation clearing, pad and facility construction, pipeline installation and drilling and completion operations.

Avoid. When used in the Approved RMPA, the intention of the term “avoid” is that the preferred strategy for managing surface disturbing and disruptive activities is to keep away from or bypass sensitive resources. Activities would be relocated. Where avoidance is determined not to be feasible, intensive mitigation to prevent adverse effects to the sensitive resources would be required.

B

Best Management Practices (BMPs). Are practices that provide for state-of-the-art mitigation measures applied to oil and natural gas drilling and production to help ensure that energy development is conducted in an environmentally responsible manner. Best management practices protect wildlife, air quality, and landscapes as we work to develop vitally needed domestic energy sources. Best Management Practices are voluntary unless they have been analyzed as a mitigation measure in the environmental review for a MLP, APD, ROW or other related facility and included as a COA.

BLM Sensitive Species. Species that require special management consideration to avoid potential future listing under the Endangered Species Act (ESA) and that have been identified in accordance with procedures set forth in BLM manual 6840. (From M6840, Special Status Species Manual.)

C

Candidate Species. Plants and animals that have been studied and the U.S. Fish and Wildlife Service (FWS) has concluded that they should be proposed for addition to the Federal endangered and threatened species list. These species have formerly been referred to as category 1 candidate species. From the February 28, 1996 Federal Register, page 7597: “those species for which the Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list but issuance of the proposed rule is precluded.” Separate lists for plants, vertebrate animals, and invertebrate animals are published periodically in the Federal Register. (From M6840, Special Status Species Manual.)

Collective impacts. As used in the context of the threshold management strategy, collective impacts or effects are all development-related activities (including acute effects) that take place up until the time successful interim reclamation is achieved on the well pad, access road, and pipeline and vehicle visits to the pad average less than 8 per week. Collective impacts include those effects generated by all residual and incomplete well and lease development activity, including, but not limited to: access corridors, multiple-well pads awaiting further drilling or not meeting interim reclamation success criteria, linear utility corridors that support vehicle traffic after final reclamation and facilities receiving frequent visitation (i.e., greater than 7 vehicle trips per week).

Collector Roads. These Bureau roads normally provide primary access to large blocks of land, and connect with or are extensions of a public road system. Collector roads accommodate mixed traffic and serve many uses. They generally receive the highest volume of traffic of all the roads in the Bureau road system. User cost, safety, comfort, and travel time are primary road management considerations. Collector roads usually require application of the highest standards used by the Bureau. As a result, they have the potential for creating substantial environmental impacts and often require complex mitigation procedures. (From 9113-BLM Roads Manual.)

Conditions of Approval (COA). A site-specific and enforceable requirement included in an approved APD or Sundry Notice that may limit or amend the specific actions proposed by the operator. Conditions of Approval minimize, mitigate, or prevent impacts to resource values or other uses of public lands.

Controlled Surface Use (CSU). Use and occupancy is allowed (unless restricted by another stipulation), but identified resource values require special operational constraints that may modify lease rights.

Critical Habitat. An area occupied by a threatened or endangered species “on which are found those physical and biological features (1) essential to the conservation of the species, and (2) which may require special management considerations or protection.”

D

Desired Plant Community (DPC). A DPC is a plant community type composed of desirable species that occupy an ecological site to meet management objectives and provide at least the minimum qualitative and quantitative criteria for the soil, water, air, plant, and animal resources.

E

Environmental Analysis. An analysis of alternative actions and their predictable short-term and long-term environmental effects, incorporating physical, biological, economic, and social considerations.

Exception. Is a one-time exemption for a particular site within the leasehold; exceptions are determined on a case-by-case basis; the stipulation continues to apply to all other sites with the leasehold. An exception is limited type of waiver.

Exclusion Areas. Land areas determined to be unavailable for corridor allocation or facility siting. Exceptions would only be considered for short-term land use permits involving no development and projects that are consistent with management objectives for the area.

I

Impacts (or Effects). Consequences (the scientific and analytical basis for comparison of alternatives) as a result of a proposed action. Effects may be either direct, which are caused by the action and occur at the same time and place, or indirect, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable, or cumulative.

Inner Gorge. As used in this document, “inner gorge” refers to an ephemeral or intermittent channel system bounded by inherently unstable, near-vertical incise walls that terminate into more gentle upslope or valley topography. The outer extent of an inner gorge is determined by a significant slope break that transitions into gentler upslope topography.

L

Lands with Wilderness Characteristics. Are those lands that have been inventoried and determined by the BLM to contain wilderness characteristics as defined in section 2(c) of the Wilderness Act. These attributes include the area’s size, its apparent naturalness, and outstanding opportunities for solitude or a primitive and unconfined type of recreation.

Lease Notice (LN). Areas identified as LN are open to oil and gas leasing; they provide information about a resource that is present which may limit activity or cause special operational planning to occur.

Local Roads. These Bureau roads normally serve a smaller area than collectors, and connect to collectors or public road systems. Local roads receive lower volumes, carry fewer traffic types, and generally serve fewer uses. User cost, comfort, and travel time are secondary to construction and maintenance cost considerations. Low volume local roads in mountainous terrain, where operating speed is reduced by effort of terrain, may be single lane roads with turnouts. Environmental impacts are reduced as steeper grades, sharper curves, and lower design speeds than would be permissible on collector roads are allowable. (From 9113-BLM Roads Manual.) (Note: for oil and gas development, a local road provides access to more than one well pad and provides the connection between collector roads and resource roads.)

M

Managed Development. In the context of this Resource Management Plan Amendment (RMPA), “managed development” refers to managing the spatial extent of surface disturbance by limiting the extent of impacts to sensitive wildlife habitats (e.g., the extent of sensitive big game seasonal range subjected to cumulative adverse behavioral effects, such as harassment or avoidance) at any one time. The managed development approach considered in this RMPA includes establishing thresholds for cumulative adverse behavior effects to be applied per Game Management Unit (GMU), by each mule deer seasonal range as defined by Colorado Parks and Wildlife (CPW) and the BLM (see Map 2-4), and by leaseholder. The managed development concept differs from the traditional “phased development” approach (defined in this Glossary) in that limitation of the spatial extent of surface disturbance is achieved by managing the extent of impacts to sensitive wildlife habitats rather than limiting total surface disturbance to a specific geographic area, or specific acreage regardless of habitat, condition, or terrain. Further, reclamation of a particular wildlife habitat, rather than a geographic area, is used as the criterion for removing acres of habitat from the disturbance threshold computation. The overall vision for a managed development approach would be to cluster, collocate, and consolidate surface facilities and other ground-disturbing activities.

Mesaverde Play Area. The area within the WRFO characterized by the Upper Cretaceous tight gas sand reservoirs occurring in a concentrated area involving 712,190 acres in the central portion of WRFO and geographically bound on the south by the southern border of the WRFO.

Modification. Is a change to the provisions of a lease stipulation, either temporarily or for the term of the lease. Depending on the specific modification, the stipulation may or may not apply to all sites within the leasehold to which the restrictive criteria are applied.

N

No Surface Occupancy (NSO). Use or occupancy of the land surface for fluid mineral exploration or development is prohibited in order to protect identified resource values. The minerals under NSO lands may potentially be developed by directionally or horizontally drilling from nearby lands that do not have the NSO limitation.

O

Occupied habitat. Intact habitat currently supporting special status plant species. Occupied habitat also includes areas that were previously mapped or confirmed as occupied habitat, but do not contain special status plant species presently.

Old-growth Forest and Woodlands. Distinguished by the age/seral stage, structure, and function of the community. Old-growth forest typically contain large-diameter trees of specific species, a wide variation in age including old trees, accumulations of large dead standing and fallen trees, decadence in the form of broken or deformed tops and boles, multi-layered canopies, canopy interspaces, and understory patchiness.

P

Phased Development. Traditionally, “phased development” refers to prescribing the sequence of drilling operations by geographic area to allow for the development of certain areas while restricting or temporarily restricting development of other areas. Subsequent development occurs as areas developed earlier are completed and reclaimed. Examples of a phased development approach include restricting drilling operations to prescribed geographical “development areas” at any one time and prohibiting shifting operations to the next development area until reclamation is complete; or limiting total surface disturbance at any one time to a specific acreage.

Plan Maintenance. The BLM regulation in 43 CFR 1610.5-4 provides that land use plans decisions and supporting components can be maintained through plan maintenance actions to reflect minor changes in data. Plan maintenance must not expand the scope of resource uses or restrictions or change the terms, conditions, and decisions of the approved plan.

Plant Consideration Area. An area or zone of influence around occupied habitat for federally listed, proposed, or candidate species. The area of influence around a disturbance includes the species’ niche (e.g. potential impacts to pollinator species, seed dispersal, etc.) related to the welfare and survival of the species.

Potential habitat. Unsurveyed habitat determined by the known geologic substrate or soils on which the special status plant species are known to occupy.

R

Remnant Vegetation Association. A plant community that has become established through successional sequences without interference by man and is an expression of the relative degree in which the kinds, proportions, and amounts of the plant community may have resembled that of the original natural community. Examples include but are not limited to ponderosa pine stands and unique or ecologically intact sagebrush communities.

Resource Roads. These BLM roads are spur roads that provide point access and connect to local or collector roads. They carry very low volume and accommodate only one or two types of use. Use

restrictions are applied to prevent conflicts between users needing the road and users attracted to the road. The location and design of these roads are governed by environmental compatibility and minimizing BLM costs, with minimal consideration for user cost, comfort, or travel time. (From 9113-BLM Roads Manual.)

Right-of-way avoidance area. An area designated in a land use plan for which use for a ROW should be avoided if at all possible but may be available for ROW location with special stipulations.

S

Special Status Plant Species. Collectively, federally listed or proposed and BLM sensitive species, which include both Federal candidate species and delisted species within 5 years of delisting. (From M6840, Special Status Species Manual.)

Suitable habitat. Surveyed and mapped habitat occurring on the geologic substrate on which the special status plant species are known to occur. This includes associated vegetation and other subtle characteristics (such as vegetation cover, light availability, aspect, surface cobble size, soil type). Most habitat mapped as suitable has been surveyed and found to contain the correct geology or soil type but is not occupied by the special status plant species.

T

Timing Limitation (TL). Prohibits surface use during a specified time period to protect identified resource values. (Seasonal Restriction).

W

Waiver. Is a permanent exemption from a lease stipulation. The stipulation no longer applies anywhere within the leasehold.

5.3 References

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