

## 2 ALTERNATIVES

### 2.1 INTRODUCTION

Chapter 2 describes the four alternatives evaluated in detail in this Proposed Resource Management Plan Amendment (RMPA)/Final Supplemental Environmental Impact Statement (FSEIS). This chapter also explains how the alternatives were developed and briefly describes additional alternatives and alternative components that were considered but not analyzed in detail. Major management elements of the four analyzed alternatives are presented in the following subsections and depicted on maps provided in Appendix A. A comparison of the No Action Alternative, Alternative II, Alternative III, and Alternative IV is presented in Table 2.1 [Revised].

One of the goals for this Proposed RMPA/FSEIS process is to ensure a consistent, coordinated approach to managing lands within the Roan Plateau Planning Area (Planning Area). The alternatives integrate management of the Colorado River Valley Field Office (CRVFO) and White River Field Office (WRFO) portions of the Planning Area and consider management techniques that have proven successful in other parts of these resource areas. The alternatives also address compliance with Federal Land Policy and Management Act's (FLPMA's) multiple use mandates and the requirements of the Public Law 105.85: Department of Defense Authorization Act of 1998 (Transfer Act).

### 2.2 ALTERNATIVES DEVELOPMENT AND SELECTION PROCESS

The alternatives selection process has been conducted over two periods of time: first for the RMPA/Environmental Impact Statement (EIS), and a second time for the Proposed RMPA/FSEIS. Five alternatives were analyzed during the Roan Final Environmental Impact Statement (Roan FEIS) process, ranging from no action to a most environmentally sensitive alternative. This SEIS's alternatives include No Action, the 2006 Roan FEIS Proposed Plan, a Community Alternative, and a Settlement Alternative. Together, the Roan FEIS and SEIS represent the full range of alternatives considered by the Bureau of Land Management (BLM).

Both processes included public scoping that allowed interested members of the public, as well as resource and land use agencies, to comment on the appropriate scope of issues to consider for the Planning Area. The formal scoping period for the EIS began December 13, 2000, and ended January 31, 2001. BLM staff reviewed the issues identified during scoping and collected pertinent resource information for the Planning Area. This resource information is found in BLM's Analysis of the Management Situation (AMS) (BLM 2002a).

In developing and refining alternatives, BLM sought to accomplish two things: (1) reduce the number of alternatives and the amount of overlap among alternatives to ensure clear and distinct choices, while maintaining a reasonable range of potential actions; and (2) ensure that all of the Action Alternatives would be consistent with the Transfer Act of November 1998.

The Transfer Act states:

“The Secretary of the Interior shall enter into leases with one or more private entities for the purpose of exploration for, and development and production of, petroleum (other than in the form of oil shale) located on public domain lands in the Oil Shale Reserves Numbered 1 and 3 (including the developed tract of Oil Shale Reserve Numbered 3).”

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The Transfer Act further states:

“The Secretary of the Interior, acting through the Bureau of Land Management, shall manage the lands transferred in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA) and other laws applicable to the public lands.”

Resource management activities described for each alternative could have been combined in many different ways to create a large number of alternatives. The four alternatives analyzed in detail in the Draft RMPA/SEIS and Proposed RMPA/FSEIS were selected to represent a reasonable range of implementable alternatives, as well as to respond to the Judicial Order and comply with the Settlement Agreement. These alternatives were derived from the Roan FEIS alternatives, 2013 scoping, and the Settlement Agreement. In addition to the alternatives analyzed in detail, other possible alternatives were dropped from consideration early in the process. In general, alternatives considered but not carried further into the process were eliminated because BLM concluded that they would not comply with the intent of the Transfer Act, fulfill the requirements of FLPMA or other applicable laws, appropriately address the various resource values, or were redundant with alternatives being analyzed in detail.

Considerations in the formulation of the alternatives (Sections 2.3 and 2.4, respectively) include the following:

- All would comply with existing laws and regulations. Nothing presented as a component or outcome should be construed as exempting activities from applicable regulatory requirements;
- The requirements of the Endangered Species Act (ESA) would apply to federally listed threatened and endangered (T&E) species and their critical habitat;
- All are considered by BLM to be implementable from both technical and management perspectives;
- Oil and gas leasing would be consistent with the Transfer Act, FLPMA, and the Mineral Leasing Act;
- Resource management actions would be consistent with FLPMA and BLM guidance and standards;
- Area of Critical Environmental Concern (ACECs) would be designated only where relevant and important values were found to be present;
- No Wilderness Study Area (WSAs) would be designated;
- Multiple stream segments have previously been determined to be eligible for designation under the Wild and Scenic Rivers Act (WSRA). Pursuant to direction in BLM’s Wild and Scenic Rivers Manual (6400), at least one alternative will determine that all eligible stream segments are suitable for designation, and at least one alternative will determine that eligible segments are not suitable for designation; and
- Other energy sources, including fossil fuels (coal, coalbed methane, and oil shale) and alternative sources (wind, solar, geothermal, and biomass) were considered but not addressed in detail. Exploration, research and development, or production of other energy sources would be considered within the context of the management prescriptions resulting from this RMPA/SEIS process. If and when a proposal is made, and details of potential development are provided, additional analysis may be required for compliance with National Environmental Policy Act (NEPA) and BLM guidance.

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Certain actions under the four alternatives would not be implemented or permitted immediately upon adoption of the RMPA. For example, oil and gas development would occur only after an area has been leased and proposed well locations, road and pipeline alignments, and other facilities have gone through a site, or project-specific, NEPA and permitting process. Furthermore, while the assumptions associated with the alternatives represent reasonable projections of what could occur, it is impossible to predict, with certainty, the precise outcome of any of the actions due to the large number of variables involved.

Using oil and gas development as an example, the number of wells could be larger or smaller, drilling of wells could occur at a faster or slower rate, and the pace and success of reclamation and other mitigation measures may prove greater or less than anticipated. Additionally, it should be noted that the number of wells assumed to be developed under each alternative was derived from the Oil and Gas Reasonable Foreseeable Development (RFD) scenario (BLM 2014b) (Appendix G). The number was further broken down based on assumed annual drilling rates, surface-use restrictions, and the total wells needed for full field development in each alternative.

Because of land use and resource management considerations, BLM would apply various stipulations and other use restrictions to protect specific resource values in conjunction with management, development, or other activities, including those undertaken by oil and gas lessees. Terminology for oil and gas leases has specific definitions. The following oil and gas leasing terminology is taken from the *Uniform Format for Oil and Gas Lease Stipulations* (Rocky Mountain Regional Coordinating Committee 1989):

- **No Surface Occupancy (NSO)** – Prohibits occupancy of the land surface for fluid mineral exploration or development to protect identified resource values. This means that an area is protected from permanent structures or ground-disturbing activities. Also, an NSO does not preclude the extraction of underlying fluid minerals if they can be accessed from outside the area by directional drilling. Except for specified situations, individual NSOs may include standards, exceptions, modifications, or waivers that would allow a ground-disturbing activity if it meets specific, stated criteria. In situations where a ground-disturbing activity is permitted, the activity would be subject to additional COAs and the best management practices (BMPs), and reclamation standards in Appendices H and I, respectively;
- **Timing Limitation (TL)** – Prohibits exploration, development, construction, and major maintenance activities during a specified period to protect identified resource values and habitat uses. This means that an area may be subject to long-term impacts, but that the impacts cannot occur during a specified season (e.g., raptor nesting, bald eagle winter roosting, and use of winter range by big game). The TLs do not apply to minor activities associated with ongoing operation and maintenance of production facilities or to emergency responses required to avoid, minimize, or mitigate a risk to human health and safety, private property, or vulnerable resources and permitted uses on public lands;
- **Controlled Surface Use (CSU)** – Allows surface use and occupancy (unless restricted by another stipulation), but identified resource values require special operational constraints and may modify the lease rights. For example, a CSU stipulation for a specific area would allow BLM to require that a proposed well pad or other facility be shifted by more than the standard distance of 200 meters to protect a specific resource, but without precluding the activity;
- **Standard Lease Terms** – Comprise the suite of restrictions and limitations related to environmental protection in areas not subject to an NSO, TL, or CSU stipulation. Chapter 6 of the Sample Oil and Gas Lease (Appendix B) gives BLM the authority to require that oil and gas activities be conducted in a manner that minimizes adverse environmental impacts. Examples of measures that may be required under this authority, normally applied as lease notices or conditions of approval (see below), include

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shifting the location of the proposed facility or activity by up to 200 meters or prohibiting the activity for a period of up to 60 days to minimize impacts;

- **Lease Notice (LN)** – Provides more detailed information concerning limitations that already exist in laws, lease terms, regulations, or operational orders. An LN also addresses special items the lessee should consider when planning operations, but does not impose additional restrictions; and
- **Condition of Approval (COA)** – Conditions or provisions (requirements) under which an Application for a Permit to Drill (APD) is approved.

Existing stipulations for existing oil and gas leases would apply to those leases. New stipulations would apply only to lands leased pursuant to the Record of Decision (ROD) that results from this Proposed RMPA/FSEIS process. COAs equivalent to new stipulations developed through this RMPA would be applied to both new leases and, to development on pre-2008 leases, to the extent that they do not infringe or conflict with existing lease terms rights on existing leases.

The reader should note that:

1. Many of the stipulations (i.e., restrictions on surface facilities and other ground-disturbing activities) that would apply to any new leases under the alternatives are based on existing stipulations, although they may differ somewhat in one or more details;
2. Statements in this document, to the effect that certain existing stipulations would be applied, extended, retained, or dropped under the alternatives, are meant to describe the extent to which these new stipulations would include the same types and levels of resource protection as current management. While correct as a practical matter, these statements are imprecise as a procedural matter because, as noted above, existing 1999 stipulations would be applied in the No Action Alternative as new stipulations to new leases. New stipulations may mirror existing stipulations;
3. Stipulations are referred to by the resources to which they would be applied (e.g., slopes greater than 50 percent, bald eagle nest, or winter roost sites, etc.). Appendix C lists and describes the proposed stipulations that would be applicable to new leases in the Planning Area, by alternative; and
4. Because each stipulation is applied to a specific resource location, and different stipulations may be applied to the same resource, between alternatives, there is often considerable overlap of stipulation categories. This is reflected in the summary of areas under each stipulation type listed for each alternative, below.

New surface use restrictions under the alternatives would be applied not only to new oil and gas leases, but also to other types of land uses and management actions such as livestock grazing, range improvement actions, recreation, travel management, and use of rights-of-way (ROWS). The following terminology is used to refer to these generally applicable restrictions:

- **No Ground Disturbance (NGD)** – Essentially equivalent to NSO. For example, an NGD designation would preclude construction of a new stock pond or communications tower, unless specific exception criteria were met. As with NSO stipulations for oil and gas operations, application of NGDs does not preclude temporary ground disturbances, except for the constraint on excessive or protracted disturbance that could affect a seasonally sensitive wildlife use;

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- **Site-Specific Relocation (SSR)** – Essentially equivalent to CSU. For example, an SSR designation would allow BLM to require that a proposed stock pond or communications tower be shifted by more than 200 meters from its proposed location to protect a specific resource; and
- **Standard Restrictions and Limitations** – Essentially equivalent to Standard Lease Terms, which allow BLM to require that the activity be conducted in a manner that minimizes adverse impacts.

Note that activities related to the underlying minerals (e.g., exploration and development of oil and gas) create a nexus for management by BLM. Because that authority includes managing surface activities such as constructing well pads, access roads, pipelines, or other surface facilities related to the Federal minerals, the types of restrictions listed above, as well as TLs, apply to split estates with Federal minerals and private surface ownership.

Areas closed to oil and gas leasing would remain subject to non-oil and gas surface use restrictions. Surface use restrictions, both stipulations associated with oil and gas leases as well as surface use restrictions for non-oil and gas activities are management decisions described as constituent actions in alternatives. These decisions will also become assumptions integrated into the analyses of environmental consequences in Chapter 4.

Objectives and management strategies consistent with the BLM's overall air quality management strategy/Comprehensive Air Resource Protection Protocol (CARPP) have been included in the air quality assessment for the Action Alternatives. As part of the CARPP/strategy, air quality related management actions/control requirements would be developed and assigned when actual Planning Area oil and gas projects are proposed and predicted air quality impacts for project-level analyses suggest the need for additional mitigation. Alternatives II and III integrate specific actions and the application of stipulations for management of greater sage-grouse habitat from the Northwest Colorado Greater Sage-Grouse Draft Land Use Plan Amendment/EIS (NWCOGSG FEIS), as well as incorporate, by reference, assumptions and analyses from this document (BLM 2015d). Alternative IV integrates actions from Northwest Colorado Greater Sage-Grouse Approved RMPA/ROD and incorporates, by reference, assumptions and analyses from this document (BLM 2015e).

For all alternatives, BLM will require the use of BMPs (Appendix H) to protect resource values. As technologies improve, new BMPs may also be developed and implemented. BMPs may be applied to oil and gas operations as COAs and could include a variety of measures to minimize impacts over both the short term and long term. Examples include measures to:

- Reduce the footprint of roads to the smallest safe standard;
- Implement dust suppression to minimize impacts to air, water, vegetation, and wildlife;
- Use appropriate color, shape, size, and location of surface facilities to reduce visual impacts;
- Install low-emission engines at compressor facilities to reduce air quality impacts;
- Use centralized or automated facilities to reduce the length and frequency of travel;
- Collocate utilities in common corridors and align them along roadways to reduce habitat loss and fragmentation; and
- Incorporate powerline and pole or tower designs, including burial, to minimize the risk of raptor electrocution.

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In addition to these generally applicable measures, BLM may require BMPs intended for specific resources and situations. Examples include requirements to:

- Install appropriately sized culverts at stream crossings to avoid creating barriers to along-stream movement of aquatic species or impeding conveyance through the channel;
- Use gravel or other surface material on roads, or use other dust-suppression techniques for the abatement of particulate emissions;
- Use protective fencing to exclude livestock from sensitive areas or areas being revegetated;
- Use biodegradable erosion blankets to stabilize disturbed soil and enhance revegetation;
- Seed with native species;
- Include native shrubs in reclamation seed mixes; and
- Plant containerized shrubs during reclamation.

Where appropriate, these or other BMPs (Appendix H) would be specified at the time of permitting of oil and gas drilling or related operations (as COAs) or of other activities (e.g., range improvements, road reclamation, etc.). For oil and gas development, the potential for these requirements may be specified in the lease documents as LNs.

### 2.3 ALTERNATIVES

This section summarizes the four alternatives analyzed in detail in the Draft RMPA/SEIS and Proposed RMPA/FSEIS. These alternatives were developed to present a reasonable range of management actions for analysis to assist decision-makers and the public in understanding the potential consequences and benefits of alternative scenarios. In general, the most substantial differences between alternatives are centered on the respective oil and gas leasing and development scenarios and these are emphasized in the alternative summaries below.

Table 2.1 [Revised] provides a detailed comparison of the resource and management components of the No Action and Action Alternatives. Management of proposed ACECs and the Parachute Creek Watershed Management Area (WMA) are summarized in Tables 2.2 and 2.3, respectively. Maps 1 through 12 summarize the land management and surface use restrictions integrated into the four alternatives.

#### 2.3.1 Alternative I - No Action Alternative

This alternative represents the No Action Alternative, illustrated by Maps 1 and 2. Because this document supplements the Roan FEIS, the No Action Alternative presented here represents management of the Planning Area prior to the ROD for the Roan Plateau RMPA/FEIS. Therefore, this is essentially the same No Action Alternative that was analyzed in the Roan FEIS. Summary maps and tables for the No Action Alternative include updates to resource and administrative allocation boundary data.

The alternative is “no action” in the sense of “no change from current management,” but not in the sense of “no change from current conditions.” In general, current uses and trends would continue. The exceptions are resources for which BLM initiated implementation of the 2007 ROD before the Judicial Order was issued. For those resources, the No Action Alternative would require BLM to take certain actions to return to previous conditions. For example, that travel management of NOSRs 1 and 3 (viz., restricting motorized and mechanized travel to designated routes) would be vacated, and the entire

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Planning Area would be open to cross-country off-highway vehicle (OHV) use. Similarly, the BLM likely would cancel oil and gas leases issued in 2008 for lands within the Planning Area to return to previous conditions.

### **Fluid Mineral and Other Mineral Resources**

The overall management objective for Alternative I, to maintain present uses by continuing present management direction and activities, would not allow oil and gas leasing on top of the plateau (Naval Oil Shale Reserve [NOSR] 1) and would be accomplished using existing stipulations for lands made available for oil and gas leasing by the 1999 ROD. Under Alternative I, oil and gas management in the Planning Area is characterized as follows (percentage of BLM lands within Planning Area shown in parentheses):

- Closed to Oil and Gas Leasing: 44,180 acres (59.9 percent);
- No Surface Occupancy (NSO): 14,090 acres (19.1 percent);
- Controlled Surface Use (CSU): 21,580 acres (29.2 percent);
- Timing Limitations (TLs): 21,440 acres (29.1 percent), includes five-month restriction on big game winter range within areas available for oil and gas leasing; and
- Standard Lease Terms: 7,570 acres (10.3 percent).

Note that under Alternative I, use of the terms “NSO” and “CSU,” instead of the broader terms “NGD/NSO” and “SSR/CSU,” indicates these are lease stipulations and COAs specifically applied to oil and gas leasing and development. Under Alternative I, it was intended that the same or similar measures may be applied to other public land uses. However, because there is no legal nexus, the restrictions would not necessarily be applied. This is consistent with current management (No Action), but differs from any of the Action Alternatives.

Oil shale and coal leases, and entry for exploration and development of locatable minerals, would be prohibited under this alternative. Exploration and development of salable minerals would be considered on a case-by-case basis, subject to NSO and CSU stipulations.

### **Special Management Designations**

No ACECs or WMAs would be created under Alternative I. Areas would be managed to preserve WSR eligibility until a suitability determination has been made.

### **Physical Resources**

- **Geological Resources** – The scientific and historic values of the Anvil Points Cave would be protected and preserved by prohibiting long-term, ground-disturbing activities. This would be accomplished with an NSO. Activities that could cause direct or indirect impacts (such as roof collapse or dewatering) would be restricted.
- **Paleontological Resources** – Paleontological clearances/mitigation would be required prior to surface-disturbing activities in Potential Fossil Yield Classification (PFYC) 4 and 5 areas and some PFYC 3 areas. Significant resources would be avoided or recovered through the authorization process. A CSU for Sharrard Park paleontological resources would be applied.
- **Soils** – Soils would be managed to meet or exceed Land Health Standards for soils on a watershed scale. Small portions would be allowed not to meet the standard. Below the rim, BLM would

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continue stipulations of the 1999 FSEIS. An NSO on slopes greater than 50 percent to maintain site stability and site productivity and a CSU on erosive soils with slopes greater than 30 percent would be applied.

- **Surface Water and Groundwater** – Surface Water and groundwater would be managed to meet all State and Federal water quality standards. A NSO for Colorado River corridor would be applied.

### ***Biological Resources***

The goal for ecological resources under current management is to maintain or restore upland vegetation to at least a 40 percent Ecological Condition Rating (ECR) and manage riparian areas to meet Proper Functioning Condition (PFC). See Appendix I for a discussion of ECR and PFC.

Occupied habitat for special status species would be protected from direct disturbances, consistent with existing laws, regulations, and policies, including application of NSO and CSU stipulations. No special management areas would be designated to provide additional protection for potential habitat, ecosystem processes, and significant plant communities.

Wildlife management would continue as at present, including maintaining existing populations and habitat quality for the Colorado River cutthroat trout (CRCT), maintaining security areas and the movement corridor for big game (mule deer, Rocky Mountain elk, mountain lion, and black bear), protecting raptor and waterfowl/shorebird nesting and brood-rearing areas, and protecting bald eagle nesting and winter roosting areas. The existing five-month TL stipulation, which closes more than 20,000 acres of mapped big game winter range to oil and gas construction from December through April, would be retained.

### ***Human Environment***

- **Visual** – Visual quality would be managed to maintain current Visual Resource Management (VRM) objectives for each designated class, where designated. This includes an emphasis on protecting visual quality of heavily viewed (high visual sensitivity) areas such as the East Fork Parachute Creek canyon and waterfall, the heavily traveled Interstate 70 (I-70) corridor, and portions of the northeastern cliffs visible from State Highway 13 (SH 13). A total of 24,040 acres in these areas would be managed as VRM Class II (see Appendix D for a discussion of VRM classes). All Class II areas would be protected with a CSU stipulation, and areas of the I-70 viewshed with slopes steeper than 30 percent would be protected with an NSO stipulation.
- **Cultural Resources** – Under Alternative I, BLM would identify, preserve, and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations (FLPMA Sec. 103(c), 201(a), 202(c); National Historic Preservation Act [NHPA] Sec. 110(a); Archaeological Resources Protection Act [ARPA] Sec. 14(a).) by implementing the site use allocations as listed in Appendix C of the Class I Cultural Resource Overview of the Roan Plateau Management Area, Garfield County, Colorado and apply use allocations for cultural resources identified since 2002 and in the future according to their nature and relative preservation value (BLM Manual Section 8110.42 [Hoefler et al. 2002] and Planning Handbook H-1601-1 [BLM 2001a] Appendix C). Additionally, BLM would reduce imminent threats and resolve potential conflicts from natural or human-caused deterioration or potential conflict with other resource uses by ensuring that all authorizations for land use and resource use will comply with Section 106 of NHPA.
- **Recreation and Travel** – A total area of 66,780 acres (comprising areas of BLM surface) would be open to cross-country travel, and the 195 miles of existing travel routes would remain open. Motorized and mechanized travel in NOSRs 1 and 3 is restricted to designated routes under interim

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management announced in the Federal Register on July 3, 2000. All new oil and gas access roads would be designated for administrative use only. After abandonment, all oil and gas roads would be reclaimed unless BLM deems it more appropriate to retain them for administrative or public use. Cross-country, over-snow travel by snowmobile would be allowed.

- **Lands with Wilderness Characteristics** – No special protections would be provided for wilderness characteristics in those areas that have been found to contain them. Management direction would be consistent with that provided by the overall objective for the alternative, and other resources.

### Additional Management Components

- **Lands and Realty** – Some small, isolated parcels (approximately 2,031 acres) would be eligible for disposal, and BLM would allow continued use of the utility ROWs along I-70 and SH 13.
- **Grazing and Rangeland Management** – Livestock grazing would continue to be permitted on existing allotments, and managed to meet Colorado Public Land Health Standards and Guidelines for Livestock Grazing Management for upland vegetation, riparian areas, and aquatic habitats.
- **Forest Products** – No specific management actions for forest products are identified in the No Action Alternative. Generally, these products would be managed to maintain and promote forest health consistent with other resource objectives.
- **Fire Management** – An appropriate fire management response would be based on the firefighter and public safety and social, economic, and environmental values. Fuel treatments, as part for the fire management program, would be used to reduce the threat of wildfire and to restore the role of fire in the ecosystem.
- **Public Health and Safety/Hazardous Materials** – There are no Public Health and Safety/Hazardous Materials actions under Alternative I.

### 2.3.2 Alternative II – 2006 Roan FEIS Proposed Plan Alternative

This section summarizes Alternative II, the 2006 Roan FEIS Proposed Plan, resulting from BLM's response to public input and the Consultation and Coordination process. New and significant resource information designated during the Analysis of New Information (ANI) process and greater sage-grouse management and stipulations (NWCOGSG FEIS) (BLM 2015d) have been integrated into the Roan FEIS Proposed Plan to create this alternative. Objectives and management strategies consistent with the BLM's overall air quality management strategy/CARPP have been included in the air quality assessment for the Action Alternatives. As part of the CARPP/strategy, air quality related management actions/control requirements would be developed and assigned when actual Planning Area oil and gas projects are proposed and predicted air quality impacts for project-level analyses suggest the need for additional mitigation.

### Fluid Minerals and Other Mineral Resources

#### **Emphasis on Phased and Clustered Development**

An important aspect of Alternative II is the incorporation of a requirement atop the plateau, and management emphasis below the rim, for phased and/or clustered oil and gas development, including extensive use of directional drilling to reduce surface disturbance. These requirements resulted from (1) comments by the public and Cooperating Agencies on the 2004 Draft RMPA/EIS that these measures could reduce surface disturbance, particularly in the more sensitive habitats atop the plateau, while allowing similar or greater recovery of oil and gas; and (2) experience of oil and gas operators in the

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region in both reducing the impacts and increasing the efficiency of drilling operations through greater use of multi-well pads and directional drilling.

During the Cooperating Agency process, the Colorado Department of Natural Resources (CDNR), which includes such agencies as Colorado Parks and Wildlife (CPW), Colorado Geological Survey (CGS), and the Colorado Oil and Gas Conservation Commission (COGCC), proposed a conceptual framework for implementing phased and clustered oil and gas development atop the plateau. The CDNR concept, which was viewed favorably by other participants in the Cooperating Agency process, was adopted and incorporated by BLM as a basic component of this alternative. Use of a Federal Unit was intended to facilitate orderly development of the fluid mineral resource beneath the top of the plateau as a means of optimizing recovery of that resource while minimizing impacts to sensitive ecological and hydrological resources and encouraging rapid and effective reclamation. Major aspects follow:

- **Development Considerations** – The maximum size of a BLM oil and gas lease is 2,560 acres. The upper plateau area, with approximately 35,000 acres potentially available for leasing, could contain at least 14 separate leases with an unknown number of separate operators. With separate leases, there would be an incentive for each operator to maximize its own oil and gas production, simultaneous drilling operations across widely dispersed portions of the plateau, and redundant facilities for each operator. Economies of scale could more easily be realized by distributing both costs and revenues associated with this environmentally sensitive area across the top of the plateau as a whole, while, at the same time, promoting development of all economically recoverable oil and gas resources within the Planning Area, rather than just those portions with the highest economic return.
- **Federal Unit atop the Plateau** – A lease stipulation would require participation in a Federal Unit for all leases issued on top of the plateau. In an undivided unit, all lessees have an interest in oil and gas production atop the plateau and share proportionately in the costs and revenues of oil and gas development. By eliminating competition among lessees, the Federal Unit would allow for more orderly development of the entire area and for consolidation of facilities and infrastructure by a single operator.
- **Existing Leases** – Because the area below the rim already has oil and gas development underway in the production area (an area of 16,010 acres within NOSR 3 already leased and being developed for oil and gas) and adjacent private lands, new leasing within this portion of the Planning Area would not be subject to a stipulation requiring participation in a unit with undivided interest. Instead, this area would continue to be leased as individual tracts and may be unitized on a voluntary basis or through forced pooling orders. Mandatory requirements for developing the top of the plateau in an environmentally sensitive manner may encourage use of many of the same approaches for areas below the cliffs.
- **Phased Development** – Requiring 100 percent participation in a Federal Unit would allow the top of the plateau to be developed in a phased or staged progression. Phased development would be achieved through sequencing the exploration and development operations conducted within six geographic areas, referred to as phased development areas (Figure 2-1). These six areas would be defined by the tops of ridges between the major drainages atop the plateau. Drilling and production would be allowed in only one geographic area at a time, providing an incentive to ensure that drilling is complete prior to moving to the next area. Exploratory wells may be drilled in other areas, as needed, to plan future drilling operations.

The six phased development areas may be refined by BLM in collaboration with CDNR. Development in any new area would be predicated on substantial completion of diligent drilling in the preceding area sufficient to recover the oil and gas resource and satisfactory attainment of mitigation

and interim reclamation requirements. For purposes of this document, it is assumed that exploration and development would first occur in the area immediately north of the Roan Cliffs, since this is the area closest in terms of horizontal distance to existing oil and gas development below the cliffs. [Generally, the closer an area is to a known reserve, the more likely it is to have the same conditions in the hydrocarbon-bearing strata.] Only when the first development area is nearing full development would BLM allow the operator to move to the next development area. Thus, impacts related to direct habitat loss, vehicular traffic, drill rig operation, and other sources would be limited to only one portion of the upper plateau at any given time.

The concept of phased and clustered development was discussed in the Draft RMPA/EIS. This alternative further refines this concept as a way to ensure orderly development across the top of the plateau. Of particular importance in developing a phased approach was the desire to reduce impacts to wildlife and other resources by leaving large portions of the plateau relatively unaffected until reclamation had been completed in previously disturbed areas.

- **Clustered Development and Directional Drilling** – Another component of this alternative is the requirement for using directional drilling and multiple wells per pad on top of the plateau to reduce the surface disturbance footprint and landscape fragmentation. With existing proven technology, directionally drilled wells could “reach” a horizontal distance of more than 2,500 feet to access hydrocarbon resources, and most of the directional drilling within the CRVFO has a lateral reach around 2,500 feet (Appendix G). However, in the north Parachute field area, lateral reaches of the bottomhole location from the surface hole location are able to approach 4,877 feet (Webb 2011). This alternative requires that pads atop the plateau be separated by a minimum distance of 2,640 feet (0.5 mile) within areas where disturbance would be allowed. With 10-acre downhole spacing for Mesaverde formation wells and 160-acre spacing for Wasatch wells, this would result in 16 Mesaverde wells and one or more Wasatch wells per pad. Some minor variation to the minimum separation distance could be authorized.

An additional component of clustered development is to focus development along ridgetops. The top of the plateau is characterized by relatively flat ridges separated by relatively steep stream valleys. Focusing development on ridgetops would reduce impacts to the ecologically and hydrologically sensitive drainages. Through Geographic Information System (GIS) analysis, areas of drainage divides with slopes of 20 percent or less were found to be a reasonable basis for defining “ridgetops.”

GIS was used to systematically project hypothetical locations of pads meeting the criteria of a minimum separation of 0.5 mile, in non-NGD/NSO areas, and with slopes of 20 percent or less. By applying a 2,500-foot horizontal reach for directional drilling to the hypothetical pad locations, GIS analysis indicates that more than 95 percent of the area of hydrocarbon-bearing formations beneath the upper plateau could be accessed at full-field development. This includes more than 90 percent in areas with an NGD/NSO restriction. Because the NGD/NSO areas atop the plateau under Alternative II are relatively narrow features (associated with the stream drainage pattern), pads located near the edges of the NGD/NSOs would allow directional drilling to access the entire underlying area in most cases. If drilling technology develops to allow a greater horizontal reach, recovery beneath the NGD/NSO areas could be higher, potentially allowing surface density to be reduced further.

Clustered development would not only reduce surface impacts due to fewer pads, it would also reduce the need for new roads and vehicular travel associated with operation and maintenance of the wells.

Below the rim, BLM would encourage clustering for future development of currently leased lands and require it for new leases. The goal below the rim would be to reduce surface well pad density to achieve an average of one pad per 160 acres for all lands below the rim, including those covered with

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NGD/NSO and SSR/CSU restrictions. This would achieve an overall density similar to the 0.5 mile separation mandated atop the plateau, but with greater flexibility in pad location.

The existing lease terms and conditions and varied ownership of Federal and private lands below the rim makes it impracticable to specify spatially (geographically) phased development, such as would be done atop the plateau. Voluntary commitment to such practices could reduce cumulative impacts and will continue to be encouraged in addition to the application of COAs.

### **Basis for Establishing a Federal Unit**

Oil and gas leases are limited to 2,560 acres in size by statute and regulation. Leasing at this scale could result in fragmentation of habitats, uneven reclamation, and increased traffic because of the potential number of operators. Because of the public interest and the sensitive nature of the ecological and visual resources present, BLM determined that lease unitization could result in ecological benefits while allowing economic oil and gas development. Under unitization, BLM would be able to regulate the rate of development by tying it to the success of mitigation and reclamation.

Through unitization, production is allocated to all leases committed to the agreement in proportion to their lease size. Subsequently, all leases share in any production from day one. Several issues were key in selection of a unitization structure:

- **Agreement Term** – Once the initial drilling obligation is met, the unitization remains in effect throughout the period of production. This contrasts with a divided unit, which has an initial drilling obligation until paying production or a participating area (PA) is established and then continues for five years under a plan of development. After Year 5, a continuous drilling obligation must be met, as outlined in the approved plan of development, with no more than 90 days between wells. The unit contracts to PAs in Year 10. One two-year extension is possible, with a maximum of 12 years for the unit, prior to contracting to PAs. A non-contracting unit avoids these complicating requirements and is the more favorable regulatory unit option for the management of lands to be lease under this alternative.

In a non-contracting unit, all lessees share in production costs and revenues in a method approved by BLM, and the agreement term continues throughout the period of production. This allows drilling plans to be developed logically without issues involving agreement termination dates for the lease where drilling is occurring. In a divided unit, drilling must continue until a PA is formed. However, given the 12-year maximum term of agreement until contraction, developed drilling plans must conform to the agreement terms.

- **Clustered Drilling** – In a non-contracting unit, all lessees share in production in a manner approved by BLM, regardless of where the production is occurring. This approach accommodates systematic development atop the plateau and avoids creating a leasing disincentive for areas with higher levels of environmental protection. Clustered development can be effectively planned in an orderly and systematic manner to minimize roads, well pads, pipelines, and other facilities. In contrast, a divided unit encourages scattered development as a way to expand the PA and include lessees not included within the initial PA.
- **Mitigation Costs** – In a non-contracting unit, the lessees share in all production costs, as well as revenues (as approved by BLM). For the unit atop the plateau, costs of site-specific mitigation would also be shared by the lessees as a component of production costs. This is anticipated to make different portions of lands atop the plateau equally attractive for development, irrespective of differences in mitigation costs, and thereby facilitate the orderly progression of development sought by CDNR. This is because high costs in some areas would be tempered by lower costs in other areas. In a divided

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unit, in contrast, lessees do not share in production costs unless in the PA. Site-specific mitigation may make an individual well non-paying, which means that it would never be in a PA and would not share in paying production. A divided unit would provide an incentive to develop on the highest producing areas with the lowest costs, contrary to the goals of orderly and efficient recovery of mineral resources for the top of the plateau as a whole.

- **Limits on Unreclaimed Disturbance** – Unreclaimed surface disturbance would be limited to 1 percent of the area of BLM lands atop the plateau (approximately 350 acres) at any one time. Disturbed areas would be removed from the running total as they meet interim and final reclamation standards (see Appendix I). Areas removed from the running total on the basis of attainment of interim standards would be placed back into the unreclaimed total if final success is not achieved in five years and would remain in that total until success is achieved.

Unreclaimed surface disturbance associated with construction of the following would count toward the 1 percent limit:

- Well pads above a threshold of 1 acre per pad (i.e., 1 acre of unreclaimed area per pad would not count toward the unreclaimed total to accommodate unavoidable long-term disturbance associated with operating wells);
- Pipelines, whether for oil, gas, or water;
- Compressors, dehydration units, storage tanks, maintenance buildings, and other surface facilities;
- Borrow ditches, water diversion structures, and cut/fill slopes on any route used for oil and gas access; and
- Construction of new routes and realignment, widening, or other improving of existing routes used for oil and gas access.

Items that would not contribute toward the 1 percent limit would include:

- The existing driving surface (or improvements to the driving surface) on existing routes to be designated as open (195 miles); and
  - The existing driving surface (or improvements to the driving surface) on existing routes to be designated as administrative use only (54 miles).
- **Fluid Minerals** – Leasing for oil and gas development on 100 percent of the Federal mineral estate lands within the Planning Area would be allowed. However, various constraints on long-term, ground-disturbing activities (i.e., NGD/NSO restrictions) would limit the area available for these uses to 24,800 acres, or 34 percent of the Federal lands in the Planning Area, as described above. Management objectives to protect and enhance certain resources, and the natural processes on which they depend, would be achieved within the framework of the following land availability or restrictions on development or use (percentage of total BLM lands within the Planning Area shown in parentheses):
    - No Ground Disturbance/No Surface Occupancy (NGD/NSO) – 45,790 acres (62.0 percent);
    - Site-Specific Relocation/Controlled Surface Use (SSR/CSU) – 68,900 (94.6 percent);

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- Timing Limitations (TLs) – 62,090 acres (84.1 percent), includes 39,190 acres of overlap with NGD/NSO areas and 57,660 acres of overlap with SSR/CSU areas; and
- Standard Restrictions and Limitations – 4,480 acres (6.1 percent), includes 4,080 acres with one or more TL stipulations.
- **Other Minerals** – Research-scale lease tracts for oil shale would be considered within the Planning Area and would be subject to the various NGD/NSO, SSR/CSU, TL, and standard restrictions and limitations in Alternative II. Approval of research tracts would be based on the merits of the technologies proposed. [Note: a number of oil shale research tracts have been sought and approved on BLM lands in the Piceance Basin north and northwest of the Planning Area, but none was sought within the Planning Area.]

Section 369 of the Energy Policy Act of 2005 requires the Secretary of Interior to “complete a programmatic environmental impact statement for a commercial leasing program for oil shale and tar sands resources on public lands, with an emphasis on the most geologically prospective lands within each of the States of Colorado, Utah, and Wyoming.”

All decisions related to oil shale leasing in this RMPA will be in accordance with the Approved Land Use Plan Amendments/ROD for Allocation of Oil and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming and Final Programmatic Environmental Impact Statement (BLM 2013b). Activities associated with oil shale development will comply with applicable stipulations and conditions outlined in this Roan Plateau RMPA.

Coal leases would also be allowed, subject to the various NGD/NSO, SSR/CSU, TL, and standard restrictions and limitations. However, this use is not anticipated during the 20-year planning period.

All lands would be available to entry for locatable minerals and open for salable minerals, but again subject to the NGD/NSO, SSR/CSU, TL, and standard restrictions and limitations. BLM would evaluate and, as appropriate, permit these uses on a case-by-case basis. Transferred lands would be recommended for withdrawal revocation except for repositories.

### **Special Management Designations**

- **Areas of Critical Environmental Concern** – Alternative II would designate four ACECs (24,890 acres total): East Fork Parachute Creek, Trapper/Northwater Creek, Magpie Gulch, and Anvil Points (Map 6). Resource management prescriptions for the ACECs are summarized in Table 2.2.
- **Watershed Management Area** – The entire area atop the plateau, excluding a minor portion draining northward into the Piceance Creek basin, would be designated as the Parachute Creek WMA, with a total area of 33,010 acres. All portions of the Parachute Creek WMA not protected by an NGD/NSO for one or more resource values would have an SSR/CSU to provide BLM with flexibility in project locations and timing. Table 2.3 details the management objectives and actions for the Parachute Creek WMA.
- **Streams Eligible for Designation Under the WSRA** – Stream segments found eligible for designation as WSRs (7,750 acres along approximately 25 miles of stream length) would be determined to be not suitable for designation and released from interim management protections afforded eligible stream segments.

**Physical Environment**

- **Geological Resources** – As in the three other Action Alternatives, the scientific and historic values of the Anvil Points Cave would be protected and preserved by prohibiting long-term, ground-disturbing activities. This would be accomplished with an NGD/NSO. Activities that could cause direct or indirect impacts (such as roof collapse or dewatering) would be restricted.

BLM has some concern about highlighting this geologic resource, because increased visits could have a negative effect on the resource conditions and could create a risk of injury associated with visitation by inexperienced cavers (spelunkers). Therefore, information concerning the specific location of the cave would not be made available to the public, pursuant to 5 United States Code (U.S.C.) 552 and as stated at 43 Code of Federal Regulations (CFR) 37.

- **Paleontological Resources** – Paleontological Resources. Paleontological clearances and mitigation would be required prior to ground-disturbing activities in PFYC 4 and 5 areas, which are areas of outcrops of formations that are known to contain, or have a high potential to contain, vertebrate fossils or other occurrences of fossils of paleontological interest such as scientifically-important invertebrate, plant, and trace fossils, as per Paleontological Resources Preservation Act of 2009 (PRPA). Significant resources would be avoided or recovered through the authorization process. Paleontological resources in the Sharrard Park area would be protected from ground-disturbing activities through an SSR/CSU.
- **Soils** – Soils would be managed on a watershed level to meet Land Health Standards, with an NGD/NSO restriction for slopes steeper than 50 percent and an SSR/CSU restriction for areas with highly erodible (erosive) soils and on slopes steeper than 30 percent.
- **Surface Water and Groundwater** – Surface water and groundwater resources would be managed to meet all State and Federal water quality standards. Based on NGD/NSO and SSR/CSU restrictions and BMPs to protect water quality, aquatic life, riparian/wetland habitats, and the Parachute Creek watershed, this alternative is not anticipated to result in a violation of water quality standards. The potential for impacts from accidental spills or releases of pollutants associated with oil and gas operations exists, but BLM requirements are designed to minimize this potential and ensure an appropriate response. If standards are exceeded or if spills or releases occur, remedial measures and stringent protections and mitigation would be required.
- **Air Quality** – Under all Action Alternatives, air quality would be managed within the scope of BLM’s authority, and would ensure that air quality and air quality-related values are adequately protected by analyzing the effects of activities or resource uses authorized by the BLM and cumulative actions. Air resources would be protected in accordance with the methodology and provisions outlined in the BLM CARPP. Additional management would include compliance with the Colorado Regional Haze State Implementation Plan. Mitigation measures could include methods to further reduce fugitive dust from road construction and vehicular travel, emissions of pollutants from diesel engines, and gaseous emissions from wells and compressors below levels achieved using BMPs.

**Biological Environment**

- **Vegetation** – As in all the Action Alternatives, upland vegetation would be managed to achieve a diverse native species composition and productivity, characterized by specific objectives for the ten most extensive plant communities in the Planning Area, and maintained at, or restored to, at least a 70 percent ECR. Ecological Site Inventories (ESIs) or an equivalent monitoring system would be established to support assessments against these objectives and condition rating based on Natural

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Resources Conservation Service (NRCS) procedures and standards. BLM decisions regarding the permitting and siting of ground-disturbing activities would consider these vegetation standards and objectives.

Riparian/wetland communities would be managed to achieve PFC and late-seral stage community development, with a diverse structural and native species composition. Riparian/wetland vegetation would be protected with an NGD/NSO, while buffers of up to 500 feet would have an SSR/CSU. Within 500 feet of riparian/wetland vegetation, BLM may require special design or mitigation of projects, as well as require that a project be relocated by more than 656 feet (200 meters) to minimize impact to the resource.

All Action Alternatives would emphasize implementation of an integrated weed management program (which includes mechanical, biological, and chemical methods) to deter and control noxious weeds. This would include promoting healthy native plant communities as well as prevention, inventory, detection, monitoring, and specific project and control actions.

Protections for special status plant species and significant plant communities would include an NGD/NSO for Critical Habitat and known occupied habitat of the two listed plant species, the De Beque phacelia and Parachute penstemon. A large area of SSR/CSU restrictions for other special status plants and significant plant communities would apply, including habitat for hanging garden special status species along the East Fork Parachute Creek and Trapper/Northwater Creek watersheds above the rim.

Actions for greater sage-grouse habitat include prioritizing restoration treatments in areas that may be limiting greater sage-grouse distribution or abundance, require use of native plant seeds that are beneficial for greater sage-grouse, and make reestablishment of sagebrush and desirable understory plant cover (relative to ecological site potential) the highest priority for restoration efforts in General Habitat Management Area (GHMA). Alternative II makes meeting habitat parameters in Priority Habitat Management Area (PHMA) a high restoration priority.

- **Fish and Wildlife** – Another component incorporated into Alternative II, in response to the Consultation and Coordination process, is the application of NGD/NSO restrictions for 11,410 acres mapped by CPW as big game security areas. These areas are located above and below the rim.

A seasonal TL on ground-disturbing activities (including oil and gas drilling and road construction) would be applied to all areas mapped by CPW as big game winter range, and not only to severe winter range and winter concentration areas. The TL would cover the five-month period of December through April.

While wildlife would benefit from the phased and clustered development approach atop the plateau, and from NGD/NSO restrictions for a host of other resources, specific protections would be applied to special status wildlife and sensitive wildlife habitats or areas. Special status species include listed, proposed, or candidate Federal threatened or endangered species, BLM sensitive species, and State-listed threatened, endangered, or species of special concern in Colorado.

Protections for genetically pure populations of CRCT atop the plateau would include an NGD/NSO for occupied and other high-value habitat and an SSR/CSU for the entire Parachute Creek WMA, including areas identified as having a high-value for watershed processes (i.e., upslope or upstream from areas of high-value trout habitat). Other, indirect protections would result from NGD/NSO and SSR/CSU restrictions for riparian/wetland areas and buffers, respectively.

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Management goals for greater sage-grouse include conserving, enhancing, and restoring the sagebrush ecosystem to maintain or increase their abundance and distribution, implementing actions originating from laws, regulations, and policies, and collaborating with other stakeholders to monitor and implement decisions. Under this alternative, there would be an NSO applied to areas within 2 miles of an active greater sage-grouse lek and on all PHMA. No new fluid mineral leasing would occur within one mile of an active lek, should one be found, in or near the Planning Area in the future.

A TL would be applied during lekking, nesting, and early brood rearing within 4 miles of an active lek. Restrictions on long-term, ground-disturbing activities for other habitats and areas of wildlife use include NGD/NSO restrictions for big game movement routes (consisting of passages through the Roan Cliffs), the Colorado River corridor, the Anvil Points Cave habitat for bats, bald eagle nesting and winter roosting areas, other raptor and waterbird nesting and brood-rearing areas, and occupied or other habitats needed to sustain threatened or endangered species. Additional protections include TLs for the bald eagle, other raptor nesting, and waterbird nesting areas, and an SSR/CSU (in addition to an NGD/NSO and a TL) for the peregrine falcon cliff-nesting complex. An SSR/CSU would also apply to habitats for any BLM sensitive species.

### **Human Environment**

- **Visual Resources** – Visual resources would be managed to protect and preserve visual values and natural landscape values at a level consistent with Alternative II oil and gas development. The top of the plateau would be managed as VRM Class III, which allows “moderate” changes to the landscape. The exception to this designation is that 1,620 acres (the East Fork Parachute Creek waterfall viewshed) would be managed as VRM Class I to preserve this visually sensitive area. The Class I area would have an NGD/NSO restriction, while an SSR/CSU restriction would be applied to the Class II and Class III areas.

Areas below the rim would be managed as VRM Class II, which allows a lower degree of change than Class III, due to the visibility of much of this area from the I-70 and SH 13 corridors. An SSR/CSU restriction would be placed on the majority of VRM Class II areas below the rim, except for the I-70 viewshed, which would be protected with an NGD/NSO. Exceptions to management for Class II below the rim include some areas of existing leases that would continue to be managed for their existing designations (Class III or IV).

- **Cultural Resources** – Cultural resource management would develop, implement, and maintain a preservation management program that incorporates one or more of the activities identified in Section VI.B.1.(a-e) of the 2014 State Protocol Agreement in compliance with the NHPA, ARPA, National Programmatic Agreement/State Protocol, WO-IB-2002-101, and other applicable laws, regulations, and policies. Specific goals would be to:
  - Identify, preserve, and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations. This would include compliance with FLPMA Sections 103(c), 201(a), and 202(c); NHPA Section 110(a); and ARPA Section 14(a); and
  - Reduce imminent threats and resolve potential conflicts from natural or human-caused deterioration or potential conflict with other resource uses by ensuring that all authorizations for land use and resource use will comply with Section 106 of NHPA. This compliance will be based on the use of a sensitivity model developed from the Class I Cultural Resource Overview of the Roan Plateau Management Area, Garfield County, Colorado (Hoefer et al. 2002).

- **Recreation and Travel** – As with the other Action Alternatives, Alternative II would manage the entire Planning Area as undesignated for recreation management; that is, managed to meet basic recreation and visitor services and resource stewardship needs. The Hubbard Mesa area would be identified as an OHV Riding Area, “open” to cross-country motorized travel. Outside Hubbard Mesa, motorized travel within the Planning Area would be limited to designated routes, except for over-snow travel by snowmobiles when the depth of snow cover is at least 12 inches. A total of 192 miles of routes would be open to motorized and mechanized use. The remainder of the existing routes would include 55 miles open only to administrative use and 25 miles closed to motorized and mechanical use. All new oil and gas access roads would be designated for administrative use only, except in the Hubbard Mesa OHV Riding Area. Upon abandonment, all oil and gas roads would be reclaimed unless BLM deems it more appropriate to retain them for administrative or public use.

The delineation of Travel Management Areas (TMAs) addresses other modes of travel not covered by OHV area designations (43 CFR 8342.1). The Roan Plateau Area TMA delineation allows muscle-powered (i.e., foot, ski, horse, and stock) travel cross-country year-round. Mechanized (wheeled conveyance) travel in the Roan Plateau Area TMA is limited to designated routes year-round as signed or identified on maps available onsite or at the CRVFO. The Hubbard Mesa TMA delineation (same boundary as the Hubbard Mesa OHV Riding Area) allows muscle-powered travel and mechanized (wheeled conveyance) travel cross-country year-round consistent with the “open” OHV designation for motorized travel. All TMA delineations are subject to additional restrictions (i.e., seasonal, area, type, and number) set forth in the ROD or in subsequent travel planning.

In greater sage-grouse PHMA, BLM would limit motorized travel to existing roads, primitive roads, and trails and consider permanent or seasonal road or area closures. Activity-level travel plans would be completed as soon as possible. Route construction would be limited. Roads would be restored and reseeded, where this activity does not disrupt habitat. No new roads would be constructed if the Colorado Management Zone is over the 3 percent disturbance cap, unless there is an immediate health and safety need (BLM 2013a).

- **Lands with Wilderness Characteristics** – No areas identified as having wilderness characteristics would be managed to protect and maintain those values. Protections for various resources could have the effect of maintaining some wilderness characteristics (e.g., roadlessness and naturalness) within NGD/NSO allocations.

### **Additional Management Components**

- **Lands and Realty** – Management actions for this resource are common to all Action Alternatives. Acquisitions of in-holdings and other areas with important resource values would be encouraged or allowed. Lands would be retained on top of the plateau except for the possibility of an exchange to acquire in-holdings. Below the rim, lands would be considered on a case-by-case basis for sale, acquisition, or exchange. No exchanges or disposals would occur within ACECs. Use authorizations would have to meet the conditions or stipulations of the alternative. Approximately 230 acres of isolated parcels would be eligible for disposal.

BLM will continue to allow use of the utility ROWs along I-70 and SH 13, as well as within 50 feet of BLM designated and administrative travel routes, except where such placement would negatively impact other important resource values (e.g., wildlife seclusion areas below the rim, also referred to as wildlife security areas above the rim, occupied habitat for special status plants, or significant plant communities). Where practicable in such areas, BLM will require that utilities be placed within the existing road ROW or realigned to avoid important resource values. On a case-by-case basis, BLM may require that proposed utility projects be relocated by more than 200 meters to avoid sensitive resources.

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BLM would avoid authorizing ROWs in greater sage-grouse PHMA and within 4 miles of a lek and prohibit new roads or above-ground structures within 1 mile of an active lek. All new projects would be subject to a 3 percent disturbance cap.

- **Grazing and Rangeland Management** – Management actions for this resource are common to all Action Alternatives. Management of grazing and rangeland would conform to BLM grazing regulations (43 CFR 4100) and BLM Colorado’s Standards for Public Land Health and Guidelines for Livestock Management (Roan FEIS, Appendix F) by development of allotment management plans, regular monitoring of rangeland health, and evaluation of existing grazing management practices. The most current version of the BLM CRVFO Monitoring Plan (Appendix I) would provide the format for evaluation of grazing management outcomes in terms of Land Health Standards and vegetation community management objectives (Table 2.4), including riparian and wetland areas. In coordination with grazing permittees, Allotment Management Plans (AMPs) would be developed, implemented, monitored, and evaluated on a regular basis, with priority for allotments not meeting Land Health Standards.

A combination of administrative solutions (e.g., mandatory terms and conditions of the permit, season of use revisions, pasture rotation, deferred or rest rotation, livestock exclusion, and stocking level adjustments), rangeland projects (e.g., fences, ponds, etc., to direct livestock use), and guidelines and BMPs for resting and deferring grazing of riparian areas (Appendix H) would be applied to meet resource objectives and Land Health Standards. Determination of drought conditions would be used to adjust livestock management within allotments to provide long-term protection of ecological and forage values.

BLM would incorporate greater sage-grouse habitat objectives and management considerations into grazing allotments, work cooperatively on integrated ranch planning, and prioritize completing land health assessments.

- **Forest Products** – Under all Action Alternatives, forest products would be managed to maintain and promote forest health, consistent with other resource objectives.
- **Fire Management** – Under all Action Alternatives, a full range of wildland fire management options, from full suppression to use of unplanned ignitions managed for resource benefits, would be applied. This would allow the use of naturally caused, unplanned wildfires to be managed for multiple objectives, including resource benefit in specific geographic areas on 53,775 acres. On remaining acreage of BLM lands, fire would be managed under a suppression strategy. As part of the fire management program use fuels treatments to meet Fire Regime Condition Class (FRCC) objectives, to protect and conserve sage grouse habitat, improve Land Health Standards, address wildland-urban interface issues, and achieve natural resource objectives. The fire program would also be managed to avoid greater sage-grouse habitat loss and restore damaged habitat.
- **Public Health and Safety/Hazardous Materials** – All Action Alternatives would ensure that BLM lands provide safe facilities and conditions for visitors, users, and employees, with minimum conflict among users and minimum damage to BLM lands and resources, as defined by the Department of the Interior Performance and Accountability Report measures.

### 2.3.3 Alternative III – Community Alternative

Alternative III, the Community Alternative, was designed, in part, to address specific issues identified in the Judicial Order. This alternative was constructed from public comments on the Draft RMPA/EIS in 2005, as well as public scoping comments for the RMPA/SEIS in 2013. Alternative III management and stipulations are illustrated in Maps 7 and 8. In accordance with public comment, this alternative allows oil

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and gas leasing throughout the Planning Area, but limits surface disturbance on BLM lands above the rim. Wilderness characteristics would be protected in this alternative, and all eligible rivers in the Planning Area would be determined to be suitable for designation as WSRs. New and significant resource information, designated during the ANI process, greater sage-grouse management and stipulations, and BLM's regional air quality strategy have been integrated into this alternative. Where public comments and scoping were silent as to other specific resource management, these management actions are the same as Alternative II.

### ***Fluid Minerals and Other Mineral Resources***

- **Fluid Minerals** – The entire Planning Area is available for oil and gas leasing under Alternative III. Per specific public comments, the total area above the rim would be subject to overlapping NGD/NSO restrictions that would completely prohibit surface occupancy. Surface access to Federal fluid mineral leases in this area would, therefore, be restricted to adjacent fee land surface. Potential locations for hypothetical well pad locations under Alternative III were estimated using a GIS analysis with an assumed lateral directional drilling reach of 2,500 feet in areas with slopes of less than 20 percent. Alternative III includes a number of management actions and restrictions to protect and enhance certain resources and the natural processes on which they depend. These management actions and restrictions reflect the emphasis of Alternative III on conservation of the visual, natural, wilderness characteristics, geological, and ecological qualities of the Planning Area while allowing oil and gas development in some areas. This would be achieved within the framework of the following land availability and restrictions on development or use (percentage of total BLM lands within the Planning Area shown in parentheses):
  - Closed to Oil and Gas Leasing: 0 acres (0 percent);
  - No Ground Disturbance/No Surface Occupancy (NGD/NSO): 63,910 acres (84.8 percent);
  - Site-Specific Relocation/Controlled Surface Use (SSR/CSU): 70,140 acres (95.0 percent);
  - Timing Limitations (TLs): 62,090 acres (84.1 percent); and
  - Standard Lease Terms: 3,080 acres (4.2 percent).
- **Other Minerals** – Restrictions on oil shale and coal leases and entry for exploration and development of locatable minerals would be retained, as in Alternative II, except for the additional restrictions for greater sage-grouse habitat. Operators would be required to submit a Master Development Plan (MDP) for exploration and/or lease development within the Planning Area.

Additional restrictions to protect greater sage-grouse PHMA and GHMA would be required, including closing greater sage-grouse PHMA to leasing and development.

The Planning Area would be open to coal leasing, subject to all the environmental protection requirements for the resources described in this plan and with additional restrictions to protect greater sage-grouse PHMA and GHMA. The Planning Area would be open to mining claims, subject to 43 CFR 3809. Rights granted under the mining law, such as claim exploration and development activities, cannot be modified by NGD/NSO or SSR/CSU surface use restrictions/stipulations. However, additional requirements to protect greater sage-grouse PHMA would apply to these activities. Mineral sales (e.g., construction materials such as rock and sand/gravel) would be permitted on a case-by-case basis, but greater sage-grouse PHMA would be closed to mineral sales. Transferred lands would be recommended for withdrawal revocation except for the Anvil Points Facility repositories. Withdrawal of Anvil Points Oil Shale Repository #3 would be recommended.

***Special Management Designations***

- **Areas of Critical Environmental Concern** – Four ACECs would be designated (24,890 acres total): Anvil Points, Magpie Gulch, East Fork Parachute Creek, and Trapper Creek. Table 2.2 summarizes the resource management objectives for the four ACECs.

Under Alternative III, all eligible rivers in the Planning Area would be determined to be suitable for designation under the WSRA, and interim protective management would be applied, including application of a SSR/CSU to the 7,750 acres.

***Physical Environment***

- **Soils** would have similar management to Alternative II, except that a SSR/CSU for slopes greater than 30 Percent or Fragile/Saline Soils would be applied.
- **Geological and Paleontological Resources** would be managed as in Alternative II.
- **Surface Water and Groundwater Resources** would be managed as in Alternative II, with the addition of NGD/NSO restrictions applied to designated municipal watersheds and for major river corridors.
- **Air Quality** would be managed as in Alternative II.

***Biological Resources***

As noted above, an NGD/NSO for all sensitive resources and natural values atop the Roan Plateau to protect ecological values would be applied under Alternative III.

Upland vegetation, riparian areas, and noxious weeds would be managed, as described in Alternative II.

Under Alternative III, vegetation restoration projects would be prioritized in greater sage-grouse seasonal habitats. Reestablishment of sagebrush and desirable understory plant cover (relative to ecological site potential) would be the highest priority for restoration efforts. Non-native seed could be used as long as it supported greater sage-grouse habitat objectives.

Occupied and potential habitat for special status species and the ecosystem processes that sustain them would be protected from ground-disturbing activities. This alternative would emphasize protection and enhancement of habitat for genetically pure populations of CRCT, as well as protection of watershed areas that contribute to water volume and quality in the trout habitat through an NGD/NSO. Raptor and waterfowl nesting and brood-rearing areas would also be protected with TLs. Additionally, bald eagle and raptors and bald eagle roosts and nest sites would have NGD/NSOs applied. Aquatic special status species would be protected by including a NGD/NSO for Threatened, Endangered, Proposed, and Candidate fish and wildlife species, an NGD/NSO for high-value special status fish species habitat, and TLs. A SSR/CSU would be applied for special status bat species hibernation, maternity, and fall swarming sites.

Wildlife management would continue the protective measures in Alternative II and extend them to other appropriate habitats throughout the Planning Area. These include security areas and a movement corridor for big game (mule deer, Rocky Mountain elk, mountain lion, and black bear) and nearly 38,430 acres subject to the five-month timing limitation to protect big game winter range.

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Greater sage-grouse management would include restrictions on leasing and development, including closing PHMA to all leasing and development. Leaks would be protected with development and ROW TLs in GHMA. Mitigation to protect and enhance greater sage-grouse habitat would be emphasized.

### Human Environment

- **Visual and Cultural Resources** would be managed as in Alternative II.
- **Surface Water and Groundwater Resources** would be managed as in Alternative II, with the addition of NGD/NSO restrictions applied to designated municipal watersheds and for major river corridors.
- **Recreation and Travel** – As with the other Action Alternatives, Alternative III would manage the entire Planning Area as undesignated for recreation management; that is, managed to meet basic recreation and visitor services and resource stewardship needs. Recreational target shooting would be prohibited within ¼ miles of developed recreation sites and the centerline of Fravert Access Road, Township 6 South, Range 93 West to the Hubbard Mesa Trailhead in the Hubbard Mesa OHV Area.
  - Alternative IIIA has specifically applied firearm use restrictions to address one of the more pressing recreation/urban interface issues near the Town of Rifle, Colorado.
  - Alternative IIIB would apply firearm use restrictions to the entire Hubbard Mesa Open OHV Area.

The Hubbard Mesa area would be identified as an OHV Riding Area, “open” to cross-country motorized travel. Outside Hubbard Mesa, motorized travel within the Planning Area would be limited to designated routes, except for over-snow travel by snowmobiles when the depth of snow cover is at least 12 inches. Over snow travel would not be allowed within lands managed for wilderness characteristics, above the rim. A total of 191 miles of routes would be open to motorized and mechanized use. The remainder of the 195 miles of existing travel routes would include 54 miles open only to administrative use and 24 miles closed to motorized and mechanical use. All new oil and gas access roads would be designated for administrative use only. Upon abandonment, all oil and gas roads would be reclaimed unless BLM deems it more appropriate to retain them for administrative or public use. In greater sage-grouse PHMA, BLM would complete activity travel plans within five years of the greater sage-grouse ROD, existing routes would not be upgraded, new roads would be constructed to the absolute minimum standard, and the 3 percent disturbance cap could not be exceeded.

The delineation of TMAs addresses other modes of travel not covered by OHV area designations (43 CFR 8342.1). The Roan Plateau Area TMA delineation allows muscle-powered (i.e., foot, ski, horse, and stock) travel cross-country year-round. Mechanized (wheeled conveyance) travel in the Roan Plateau Area TMA is limited to designated routes year-round as signed or identified on maps available onsite or at the CRVFO. The Hubbard Mesa TMA delineation (same boundary as the Hubbard Mesa OHV Riding Area) allows muscle-powered travel and mechanized (wheeled conveyance) travel cross-country year-round consistent with the “open” OHV designation for motorized travel. All TMA delineations are subject to additional restrictions (i.e., seasonal, area, type, and number) set forth in the ROD or in subsequent travel planning.

- **Lands with Wilderness Characteristics** – Three areas having wilderness characteristics would be managed to protect and maintain those values and preserve the social, cultural, economic, scientific, and ecological benefits they provide to current and future generations. These areas include the East

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Fork Unit, 8,330 acres; Southeast Cliff Unit, 13,700 acres; and the Northeast Cliff Unit, 5,800 acres. These areas would have an NGD/NSO applied for protection of wilderness characteristics.

### **Additional Management Components**

Management of Lands and Realty, Grazing and Rangeland Management, Forest Products, Fire Management, and Public Health and Safety/Hazardous Materials would be common to all Action Alternatives, as described above under Alternative II, with the addition of specific greater sage-grouse management actions.

Habitat objectives for greater sage-grouse PHMA would be considered in BLM grazing allotments. BLM would develop specific objectives to conserve, enhance, or restore greater sage-grouse PHMA. BLM would implement management actions to manage vegetation composition and structure, modify grazing management to meet seasonal greater sage-grouse habitat requirements, and consider and manage allotments to maintain vegetation health, riparian areas, and improve greater sage-grouse habitat.

### **2.3.4 Alternative IV – Proposed RMPA**

The basis of Alternative IV, Settlement Alternative, is to incorporate the terms of the Settlement Agreement for the Planning Area. Approximately 1,830 acres above the rim and 30,170 acres below the rim would be open to oil and gas leasing and development. Approximately 28,660 acres above the rim and 6,120 acres below the rim would be closed to oil and gas leasing and development. Above the rim, lands available to oil and gas leasing and development would be subject to the same stipulations as those prescribed by the 2007 ROD (and contained in leases issued for those lands in 2008), except as modified by the terms and conditions detailed under Exhibit 2 of the Settlement Agreement (Appendix K). These include specific limits as to the number of well pads to be allowed, maximum surface disturbance per well pad, timing/phasing of well pad construction, allowable access roads, collocation of associated infrastructure, and development of a MDP. Below the rim, lands available to oil and gas leasing and development would be subject to the same stipulations as those prescribed by the 2007 ROD (and contained in leases issued for those lands in 2008), except as modified by the terms and conditions detailed under Exhibit 3 of the Settlement Agreement (Appendix K). This specifies that a proposed MDP be submitted prior to exploration and/or lease development so that it includes consultation with CPW. Therefore, where the Settlement Agreement is silent on the management of specific resources and resource uses, actions from the 2006 Roan FEIS Proposed Plan are brought forward into Alternative IV.

### **Fluid Minerals and Other Mineral Resources**

- **Fluid Minerals** – Alternative IV would be accomplished within the framework of the following land availability and restrictions on development or use (percentage of BLM lands shown in parentheses):
  - Closed to Oil and Gas Leasing: 34,780 acres (47.7 percent);
  - No Ground Disturbance/No Surface Occupancy (NGD/NSO): 21,720 acres (29.4 percent);
  - Site-Specific Relocation/Controlled Surface Use (SSR/CSU): 36,990 acres (50.1 percent);
  - Timing Limitations (TLs): 32,150 acres (43.6 percent), includes five-month restriction on big game winter range; and
  - Standard Restrictions and Limitations: 3,050 acres (4.1 percent).

Key provisions of the Settlement Agreement integrated into Alternative IV are described above. The specific terms and conditions for oil and gas leasing under this alternative are applied via two CSU

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stipulations, per the Settlement Agreement, that incorporate implementation for leases above and below the rim.

- **Other Minerals** – Anvil Points Facility Repositories 1 and 2 would be recommended for continued withdrawal without modification. Anvil Points Facility Repository 3 would be recommended for withdrawal. Withdrawal modification would be recommended for the lands in NOSRs 1 and 3 to allow for land tenure actions while keeping land closed to mineral location and entry.

### ***Special Management Designations***

- ACECs and WMAs would be designated and managed the same as in Alternative II, but with a total ACEC acreage of 25,010.
- As in Alternative II, stream segments found eligible for designation as WSRs would be determined to be not suitable for designation and released from interim management protections afforded eligible stream segments.

### ***Physical Environment***

- **Geological, Paleontological, and Soil Resources** would be managed as in Alternative II.
- **Surface Water and Groundwater Resources** would be managed as in Alternative II, with additional NGDs/NSOs applied for designated municipal watersheds and for major river corridors.
- **Air Quality** would be managed as in Alternative II.

### ***Biological Environment***

Upland vegetation would be managed as it would be in Alternative II, to achieve a diverse native species composition and productivity, characterized by specific objectives for the ten most extensive plant communities in the Planning Area, and maintained at, or restored to, at least a 70 percent ECR. Riparian/wetland communities would be managed to achieve PFC and late-seral stage community development, with a diverse structural and native species composition. Riparian/wetland vegetation would be protected with an NGD/NSO, while buffers of up to 500 feet would have an SSR/CSU. Within 500 feet of riparian/wetland vegetation, BLM may require special design or mitigation of projects, as well as require that a project be relocated by more than 656 feet (200 meters) to minimize impact to the resource. Integrated weed management would be implemented to deter and control noxious weeds, including promoting healthy native plant communities as well as prevention, inventory, detection, monitoring, and specific project and control actions.

Protections for special status plant species and significant plant communities would include an NGD/NSO for portions of suitable, critical, and known occupied habitat of the two ESA-listed plant species, the De Beque phacelia and Parachute penstemon. A large area of SSR/CSU for special status plants and significant plant communities would apply in areas below the rim. A commensurate SSR/CSU restriction would apply to all special status plants and significant plant communities above the rim. A separate SSR/CSU would apply to protect the habitat for hanging garden special status species along the East Fork Parachute Creek and Trapper/Northwater Creek watersheds above the rim.

Specific protections would be applied to special status wildlife and sensitive wildlife habitats or areas. Special status species include listed, proposed, or candidate Federal threatened or endangered species, BLM sensitive species, and State-listed threatened, endangered, or special concern species in Colorado. Protections for genetically pure populations of CRCT atop the plateau would include an NGD/NSO for occupied and other high-value habitat and an SSR/CSU for the entire Parachute Creek WMA. NGD/NSO

restrictions would be applied for big game security areas along and below the cliffs. A seasonal TL on ground-disturbing activities (including oil and gas drilling and road construction) would be applied to big game winter range and crucial winter range.

Greater sage-grouse would be managed to emphasize conserving, enhancing, and restoring the sagebrush ecosystem to maintain or increase their abundance and distribution, implement actions originating from laws, regulations, and policies, and collaborate with other stakeholders to monitor and implement decisions. Actions for greater sage-grouse habitat include prioritizing restoration treatments in areas that may be limiting greater sage-grouse distribution or abundance, require use of native plant seeds that are beneficial for greater sage-grouse, and make reestablishment of sagebrush and desirable understory plant cover (relative to ecological site potential) the highest priority for restoration efforts in all designated habitats. In PHMA, meeting habitat parameters will be made a high restoration priority.

Restrictions on long-term, ground-disturbing activities for other habitats and areas of wildlife use include NGD/NSO restrictions for a big game movement route (consisting of a passage through the Roan Cliffs), the Colorado River corridor, the Anvil Points Cave habitat for bats, bald eagle nesting and winter roosting areas, other raptor and waterbird nesting and brood-rearing areas, and occupied or other habitats needed to sustain threatened or endangered species. Additional protections include TLs for the bald eagle, other raptor nesting, and waterbird nesting areas, and an SSR/CSU (in addition to an NGD/NSO and a TL) for the peregrine falcon cliff-nesting complex. An SSR/CSU would also apply to habitats for any BLM sensitive species.

### Human Environment

- **Visual, Cultural, and Recreation and Travel** – These resources would be managed as in Alternative II.
- **Lands with Wilderness Characteristics** – No areas identified as having wilderness characteristics would be managed to protect and maintain those values. Protections for various resources could have the effect of maintaining some wilderness characteristics (e.g., roadlessness and naturalness) within NGD/NSO allocations.

### Additional Management Components

- **Lands and Realty, Grazing and Range Management, Forest Products, Fire Management, and Public Health and Safety** – These resources would be managed as in Alternative II.

## 2.4 ALTERNATIVES NOT ANALYZED IN DETAIL

As described in Section 2.2., a BLM Interdisciplinary Team formulated preliminary alternatives or alternative components during initial stages of the RMPA/EIS and RMPS/SEIS processes. Some of these alternatives were considered but eliminated prior to detailed analysis because they would not comply with the intent of the Transfer Act, fulfill the requirements of FLPMA, adequately reflect existing resource values, or were technically unfeasible. The six preliminary alternatives formulated by BLM staff during the RMPA/EIS process were described in a document dated October 14, 2002, which was mailed to interested parties and presented during public meetings in the City of Rifle, Town of Parachute, and City of Glenwood Springs. The document stated the alternatives were preliminary and that “...many management actions are interchangeable between alternatives, or could be presented in a different mix to alter an alternative to create a different alternative.” These six preliminary alternatives were as follows:

- **Alternative A (No Action)** – Consisted of continuing current management of BLM lands within the Planning Area;

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- **Alternative B** – Included designation of three WSAs (21,383 total acres) and four ACECs (36,145 total acres) and protection of streams eligible as WSRs;
- **Alternative C** – Designated two WSAs (10,993 total acres) and three ACECs (19,160 total acres) in addition to protecting the WSR-eligible streams;
- **Alternative D** – Designated two WSAs (10,993 total acres) and four ACECs (27,446 total acres), as well as protecting the WSR-eligible streams;
- **Alternative E** – Included no WSAs or ACECs, but retained the protection of WSR-eligible streams; and
- **Alternative F** – Designated three WSAs (21,383 total acres) and four ACECs (36,145 total acres), retained the protection of WSR-eligible streams, and precluded leasing for oil and gas development within 32,382 acres of a Special Recreation Management Area (SRMA0 designated for primitive recreation atop the plateau).

In November 2002, following the 30-day comment period on the six preliminary alternatives, a meeting was held among BLM resource experts, land use planners, and legal advisors. BLM staff reviewed the comments on the preliminary alternatives, the resource data and planning criteria on which the alternatives were based, the goals and objectives of the RMPA, and the applicable laws, regulations, and policies. Based on this review, BLM concluded that the alternatives included unnecessary overlap, were not always clearly differentiated, in some cases, might not satisfy the specific intent of the Transfer Act without additional legislation, and in terms of WSAs, consistent with law and BLM policy regarding the designation of WSAs. Accordingly, the major components of Alternatives A through F were modified and recombined into Alternatives I through V of the Draft RMPA/EIS. BLM concluded that Alternative F, in particular, did not comport with the Transfer Act because it would make none of the NOSR 1 area atop the plateau available for oil and gas leasing. However, the no-lease component was retained as part of the No Action alternative, which would continue current (pre-RMPA) management. In addition, most other protective restrictions were incorporated into Alternative II of the Draft RMPA/EIS, and some were included in the Proposed Plan (BLM 2006).

Many alternative components were brought forward during public comment on the Draft EIS and scoping for the SEIS. Some issues raised during the SEIS scoping process were considered, but not carried forward for further analysis. These issues were generally resolved by evaluating whether they met the purpose and need of the plan or contained elements that were sufficiently captured by other alternatives. These are discussed by specific alternative components, below.

### **Canceling all Leases on Top of the Plateau**

Public Law 105-85 (Transfer Act) directed the BLM to lease oil and gas in NOSRs 1 and 3. In the Judicial Order, the court explained that the Transfer Act language is “unambiguous” and “requires the BLM to ‘enter into leases for development or production’ of oil and gas in NOSR 1.” The court therefore found that “BLM properly concluded that [an alternative that provided for no leasing on top of the plateau] did not comport with the requirements of the Transfer Act.” BLM therefore has not analyzed a separate action alternative that would eliminate all leasing and development on top of the plateau. However, the No Action Alternative includes no oil and gas leasing on top of the plateau, and therefore provides a basis for comparison of impacts under the various Action Alternatives.

### **Expanding ACECs**

Several suggestions were received during public scoping to expand the proposed ACECs.

FLPMA defines ACECs as “areas within public lands where special management attention is required ... to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life or safety from natural hazards” (Sec. 103 [a]). Designation as an ACEC recognizes an area as possessing relevant and important values that would be at risk without special management attention. BLM Manual 1613 outlines the procedures for nominating, evaluating, and determining if special management attention is required for potential ACECs.

Ten areas were on the original list of potential Roan Plateau ACECs: Anvil Points, Magpie Gulch, East Fork Parachute Creek, Trapper/Northwater Creek, Rifle Hogback, Ben Good Creek, Anvil Points Expansion, Parachute Creek, Schoolhouse Point, and Thirty-Two Mile Gulch. Only the first four areas met the relevance and importance criteria and were included in this RMPA/EIS process. A complete evaluation of all ten areas is included in the *Roan Plateau RMP Amendment Evaluation of Areas of Critical Environmental Concern* (BLM 2002c).

BLM reconsidered the relevance and importance criteria for the potential ACECs in 2014. Expanding the ACECs was not considered warranted because the relevant and important criteria for which these areas were proposed as ACECs are not present beyond their current boundaries. Recently, however, the Parachute penstemon was listed under the ESA and Critical Habitat for this species was designated. The proposed Anvil Points ACEC was therefore expanded by 2,100 acres in all Action Alternatives to include this Critical Habitat as it is a relevant and important value. Other adjustments, due to updated resource mapping and GIS techniques, added another 2,200 acres to the proposed ACECs integrated into the Action Alternatives.

### **Expand ACECs to 40,945 Acres**

This alternative component was brought up during public comment on the Draft RMPA/EIS and scoping of the RMPA/SEIS. This suggestion did not provide BLM with the information needed to consider this option. The basis for expansion for each potential ACEC was not defined in terms of additional relevant and important values. While BLM received one comment with a suggested ACEC map, ACEC sizes were not specified, and no basis for the proposed expansion, in terms of relevant and important values, was provided. BLM reviewed the relevant and importance criteria in 2014 and because the resources have not changed, this component was eliminated from further consideration.

### **Reevaluate Six Additional Potential ACECs**

Some commenters suggested that Rifle Hogback, Ben Good Creek, Anvil Points Expansion, Parachute Creek, Schoolhouse Point, and Thirty-Two Mile Gulch ACECs should be reevaluated. These potential ACECs were evaluated by BLM in 2002 and did not meet the relevance and importance criteria. Because the resources have not changed, this alternative was eliminated from further consideration.

### **Consider Other ACEC Protections for Sage-Grouse Habitat, Native Trout Streams, and Big Game Winter Range and Migration Corridor**

As discussed above, BLM reconsidered the relevance and importance criteria for the potential ACECs in 2014, and the protections accorded them through specific management (Table 2.2). These were considered sufficient for the special management accorded Relevant and Important Resources in all the Action Alternatives.

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As summarized in Table 2.1 [Revised], specific management actions for greater sage-grouse and its habitat, consistent with the NWCOGSG FEIS (BLM 2015d) and Approved RMPA/ROD (BLM 2015e), are included in all Action Alternatives. CRCT are determined to be a Relevant and Important Resource in East Fork Parachute Creek and the Trapper/Northwater Creek ACECs in all Action Alternatives.

Under all the Action Alternatives, big game winter range and the migration corridor would be protected by a variety of surface use restrictions/stipulations that may overlap. These include NGD/NSO restrictions, SSR/CSU restrictions, and TLs, as summarized in Table 2.1 [Revised].

Native trout streams are afforded protection under surface use restrictions in various combinations under the Action Alternatives for high-value special status fish species habitat, riparian and wetland habitat, and the Parachute Creek high-value watershed and WMA. These are also summarized in Table 2.1 [Revised].

In summary, the specific natural resources identified in this alternative are already protected by a number of overlapping surface use restrictions/stipulations in the Action Alternatives. In addition, specific management actions address values considered Relevant and Important, as well as for their ecological values, are also integrated into all the Action Alternatives. Therefore, this alternative was eliminated from further consideration.

### **A Full Development Alternative with Approximately 3,000 Wells**

BLM's RFD considers that up to 3,520 wells could be accommodated throughout the Planning Area, both above and below the rim. This assumption is conservative, given the management considerations of other resources, including surface use restrictions/stipulations, contained in all of the Alternatives. This alternative would not afford sufficient protection of other resources and balanced multiple-use management consistent with FLPMA. Therefore, this alternative was not carried forward into the analysis.

### **Conservation Alternative**

A Conservation Alternative was put forward during public comment on the Draft RMPA/EIS and scoping of the RMPA/SEIS. This alternative was initially considered by BLM, but was eliminated because many of the components are included in Alternative III and it was substantially the same as Alternative IV, the Settlement Alternative. Elements of the Conservation Alternative, including lease cancellation, were addressed through closure of certain lands to oil and gas leasing and development in Alternative IV and the application of NGD/NSO across the top of the plateau in Alternative III. Other conservation measures were added to Alternative III or IV including an NSO for municipal watersheds, protections for wilderness characteristics, and determinations that all eligible rivers in the Planning Area would be suitable for designation as WSRs (See Sections 2.3.3 and 2.3.4) and are evaluated under Alternative III or Alternative IV.

### **Convert the CSU in the Parachute Creek Watershed Management Area to an NSO**

When considered, this action did not provide any greater protection to watershed resources than those provided in all the Action Alternatives by overlapping surface use restrictions and stipulations, as well as specific management of the Parachute Creek WMA.

### **Separate the Leases Above and Below the Rim**

While the leases above and below the rim would have different management actions, the lands above and below the rim were all transferred to BLM through the Transfer Act. This alternative component does not meet the Purpose and Need. This suggestion could result in two separate RMPAs/EISs for the same action

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and under Alternative IV, lands above and below the rim would be subject to different stipulations. This would result in more delays and expense to the government without any additional benefit.

### **Cancel All Leases**

BLM did not require a separate alternative for cancelling all leases because the no leasing option is evaluated in the No Action Alternative. This issue did not meet the Purpose and Need of the RMPA/SEIS or consider valid existing rights in leases issued in 1999 or earlier. This alternative was not carried forward for further consideration.

### **Change Leasing Regulations**

Changing leasing regulations is outside the scope of an RMPA and was not carried forward as an alternative in the SEIS.

### **Other Suggestions**

A single scoping comment submission included extensive, specific suggestions for a leasing scenario in the Planning Area. This included dividing the Planning Area into a checkerboard with five-year open and closed areas and progressive development requirements. Most of the ideas in this alternative are implementation-level decisions that would be described in an MDP and analyzed in a project-specific NEPA analysis. Therefore, this alternative was not carried forward for further consideration.

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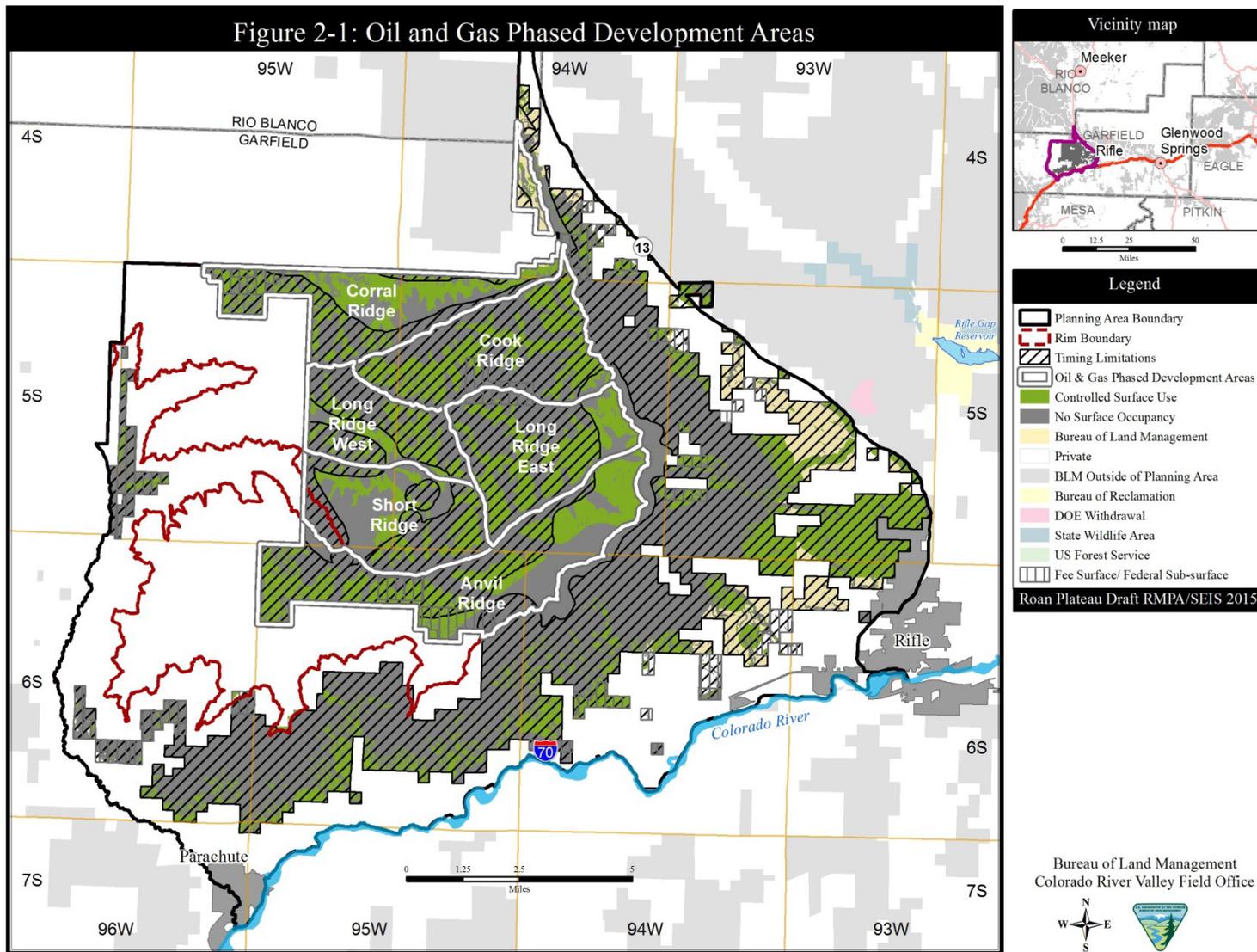


Figure 2-1 Six Phased Development Areas for Oil and Gas Development atop the Plateau

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**2.5 MANAGEMENT COMPONENTS BY ALTERNATIVE, RESOURCE, AND SPECIFIC AREA**

Table 2.1 [Revised] describes the management components of the alternatives analyzed in this FSEIS, including alternative goals, objectives, and constraints. The general management goals, objectives, and techniques are summarized by alternative at the beginning of the table. Specific management actions under each alternative are organized by resource. Selection of a resource from the following list will take a reader to the management actions for that resource in Table 2.1, in the digital versions of this document. Note: substantive changes to Table 2.1 are indicated by underlined text in the table, not in the column headings.

Geological Resources	Transportation Routes
Paleontological Resources	Lands and Realty
Soil Resources	Recreation
Water Resources	Grazing and Rangeland Management
Climate and Air Quality	Oil and Gas Leasing and Development
Ecological Values	Oil Shale Leasing and Development
Vegetation Resources	Solid Minerals – Coal Leasing and Development
Riparian/Wetland Resources	Locatable Minerals
Noxious Weeds	Salable Minerals
Terrestrial Wildlife (including Big Game)	Areas of Critical Environmental Concern (ACECs)
Avian Wildlife	Watershed Management Area (WMA)
Aquatic Wildlife	Lands with Wilderness Characteristics
Special Status Plants and Significant Plant Communities	Streams Eligible for Management Under The Wild and Scenic Rivers Act
Special Status Fish and Wildlife Species	Public Health and Safety/Hazardous Materials
Visual Resources	Forest Products
Travel Management Areas (TMAs)	Fire Management
Designation of Off-Highway Vehicle (OHV) Management Areas	Cultural Resources

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**Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource**

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
1	<b>General Management Goals, Objectives, and Techniques</b>			
2	Based on the No Action Alternative from the Roan RMPA/EIS (BLM 2007a).  Maintain present uses by continuing present management direction and activities. Includes no oil and gas leasing on top of plateau.	Based on the Proposed Plan from the Roan RMPA/EIS (BLM 2007a).  Emphasize balance in managing for a variety of multiple resource uses incorporating outcome-based adaptive management to protect key biological and aesthetic resources while developing oil and gas resources in a systematic, clustered, and staged manner.	Based on the Community Alternative, per Rock the Earth (2005). All other management actions from the FEIS Proposed Plan (BLM 2007a).  Emphasize landscape management, visual aesthetics, natural values, wilderness characteristics, geological features, ecological richness, and unique ecosystem values for rare and sensitive species. Encourage non-consumptive resource uses on top of the plateau, including no oil and gas development.	Based on the Settlement Agreement (Conservation Colorado Education Fund et al. v. Sally Jewell, Bill Barrett Corporation, and Oxy USA Inc. et al. 2014). All other management actions from the FEIS Proposed Plan (BLM 2007a).  Emphasize landscape management, visual aesthetics, natural values, geological features, ecological richness, and unique ecosystem values for rare and sensitive species. Encourage non-consumptive resource uses, while allowing for limited consumptive resource uses, including oil and gas development, on top of the plateau.
3	BLM surface open to oil and gas leasing = 24,980 acres.	BLM surface open to oil and gas leasing = 66,780 acres. [Fee surface/Fed sub = 7,020 acres]	BLM surface open to oil and gas leasing = 66,780 acres. [Fee surface/Fed sub = 7,020 acres]	BLM surface open to oil and gas leasing = 32,000 acres. [Fee surface/Fed sub = 5,480 acres]
4	BLM surface closed to oil and gas leasing = 41,800 acres. [Fee surface/ Fed sub = 2,380 acres] Note: areas closed to oil and gas leasing would remain subject to non-oil and gas surface use restrictions.	BLM surface closed to oil and gas leasing = 0 acres. [Fee surface/ Fed sub = 0 acres]	BLM surface closed to oil and gas leasing = 0 acres. [Fee surface/ Fed sub = 0 acres]	BLM surface closed to oil and gas leasing = 34,780 acres. [Fee surface/ Fed sub = 1,540 acres] Note: areas closed to oil and gas leasing would remain subject to non-oil and gas surface use restrictions.
5	Protect natural values using current stipulations. Incorporate no special management based on administrative and legislative designations.  <ul style="list-style-type: none"> <li>• NSO – 14,090 acres</li> <li>• CSU – 21,580 acres</li> <li>• TLs – 21,440 acres</li> <li>• Standard Stipulations – 7,570 acres</li> </ul> TLs include limitation on oil and gas drilling, major reworking, and road construction for five months (December – April) of every year. TL acres shown above include overlaps with other stipulations.  Designate no ACECs.  Designate no Watershed Management Areas.  Areas would be managed to preserve WSR eligibility until a suitability determination has been made.	Emphasize natural resource values through application of protective surface use restrictions and stipulations, directed management actions, and administrative designations.  <ul style="list-style-type: none"> <li>• NGD/NSO – 45,790 acres</li> <li>• SSR/CSU – 68,900 acres</li> <li>• TL – 62,090 acres</li> <li>• Standard Stipulations – 4,480 acres</li> </ul> TLs include limitations on permitted activities, and road construction for five months (December – April) of every year in order to protect big game winter range. TL acres shown above include overlaps with other stipulations.  Designate four ACECs (East Fork Parachute Creek, Trapper/Northwater Creek, Magpie Gulch, and Anvil Points) to highlight important resources. Key fisheries, botanical, and visual resources that lie within the ACECs would be protected with specific NGD/NSO designations independent of ACEC designations.  Protect important ecological values outside ACECs through a variety of NGD/NSO, SSR/CSU, COAs, BMPs, and other site-specific mitigation.  Protect water quality, ecosystem integrity, and hydrologic functions that support the CRCT and its habitat through an array of graduated mitigations, and designate the Parachute Creek WMA.  Determine all eligible rivers in the Planning Area as not suitable for designation and release them from interim	Emphasize natural resource values through application of protective surface use restrictions and stipulations, directed management actions, and administrative designations.  <ul style="list-style-type: none"> <li>• NGD/NSO – 63,910 acres</li> <li>• SSR/CSU – 70,140 acres</li> <li>• TLs – 62,090 acres</li> <li>• Standard Stipulations – 3,080 acres</li> </ul> TLs include limitations on permitted activities, and road construction for five months (December – April) of every year in order to protect big game winter range. TL acres shown above include overlaps with other stipulations.  Designate four ACECs (East Fork Parachute Creek, Trapper/Northwater Creek, Magpie Gulch, and Anvil Points) to highlight important resources. Key fisheries, botanical, and visual resources that lie within the ACECs would be protected with specific NGD/NSO designations independent of ACEC designations.  Protect important ecological values outside ACECs through a variety of NGD/NSO, SSR/CSU, COAs, BMPs, and other site-specific mitigation.  Protect water quality, ecosystem integrity, and hydrologic functions that support the CRCT and its habitat through an array of graduated mitigations.  Determine all rivers in the Planning Area found to be eligible to be suitable for designation and management as Wild and Scenic Rivers. Apply interim protective management,	Emphasize natural resource values through application of protective surface use restrictions and stipulations, directed management actions, and administrative designations.  <ul style="list-style-type: none"> <li>• NGD/NSO – 21,720 acres</li> <li>• SSR/CSU – 36,990 acres</li> <li>• TL – 32,150 acres</li> <li>• Standard Stipulations – 3,050 acres</li> </ul> TLs include limitations on permitted activities, and road construction for five months (December – April) of every year in order to protect big game winter range. TL acres shown above include overlaps with other stipulations.  Designate four ACECs (East Fork Parachute Creek, Trapper/Northwater Creek, Magpie Gulch, and Anvil Points) to highlight important resources. Key fisheries, botanical, and visual resources that lie within the ACECs would be protected with specific NGD/NSO designations independent of ACEC designations.  Protect important ecological values outside ACECs through a variety of NGD/NSO, SSR/CSU, COAs, BMPs, and other site-specific mitigation.  Protect water quality, ecosystem integrity, and hydrologic functions that support the CRCT and its habitat through an array of graduated mitigations, and designate the Parachute Creek WMA.  Determine all eligible rivers in the Planning Area as not suitable for designation and release them from interim

**Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource**

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		management protections afforded eligible segments. This would conclude the suitability study phase for these rivers.	including application of a SSR/CSU, to these rivers.	management protections afforded eligible segments. This would conclude the suitability study phase for these rivers.
6	<b>Colorado Public Land Health Standards</b>			
7	Ensure that all activities are authorized in a manner that would meet, or make progress towards meeting, Colorado Public Land Health Standards.	Implement appropriate management actions on a landscape basis that would result in meeting Colorado Public Land Health Standards and associated guidelines, with emphasis on outcome-based adaptive management.	Same as Alternative II.	Same as Alternative II.
8	<b>Geological Resources</b>			
9		<b>Goal:</b> Protect and preserve Geological Heritage Resources. <b>Objective:</b> Protect and preserve the existing scientific and historic geological values associated with the Anvil Points Claystone Cave and karst system.		
10	Protect and preserve the scientific and historic values of the Anvil Points Claystone Cave and karst system.  Allow no physical disturbance to the cave or karst system surrounding the cave. Restrict activities that could cause direct or indirect impacts, such as collapse or dewatering.	Restrict activities that could cause direct or indirect impacts, such as structural collapse or dewatering, through the application of a NGD/NSO stipulation. Consider public education opportunities to help achieve goals.	Same as Alternative II.	Same as Alternative II.
11	No similar management action.	Manage significant caves in accordance with the Federal Cave Resources Protection Act.	Same as Alternative II.	Same as Alternative II.
12	No similar management action.	Manage Anvil Points Claystone Cave in accordance with the Federal Cave Resources Protection Act.	Same as Alternative II.	Same as Alternative II.
13	No similar management action.	Manage caves to retain their current physical, social, and operational settings, per setting prescriptions described in Appendix H - CRVFO Management and Setting Prescriptions for Caves (BLM 2015c).	Same as Alternative II.	Same as Alternative II.
14	No similar management action.	Manage the Anvil Points Claystone Cave to maintain remoteness and natural appearance by not allowing new facilities, roads, or trails to access the Cave	Same as Alternative II.	Same as Alternative II.
15	No similar management action.	Manage the Anvil Points Claystone Cave for scientific purposes and to allow safe use.	Same as Alternative II.	Same as Alternative II.
16	No similar management action.	Limit Anvil Points Claystone Cave use and monitor use.	Same as Alternative II.	Same as Alternative II.
17	No similar management action.	Initiate the nomination, evaluation, and designation of other potentially significant caves.	Same as Alternative II.	Same as Alternative II.
18	Apply: <ul style="list-style-type: none"> <li>• NSO for Anvil Points Claystone Cave.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for Anvil Points Claystone Cave.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for Anvil Points Claystone Cave.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for Anvil Points Claystone Cave.</li> </ul>

Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
19	<b>Paleontological Resources</b>			
20		<b>Goal:</b> Protect and preserve paleontological resources. <b>Objective:</b> Protect Sharrard Park’s scientifically significant Eocene fossil mammal localities from surface-disturbing activities, and recover such resources and associated data through an authorization process.		
21	Require paleontological clearances/mitigation prior to surface-disturbing activities in PFYC 4 and 5 areas and some PFYC 3 areas. Significant resources would be avoided or recovered through the authorization process.	<b>Management Actions:</b> Apply a SSR/CSU stipulation to protect the paleontological resources in Sharrard Park. <b>Standards:</b> Require survey and mitigation prior to any surface-disturbing activities in PFYC 4 and 5 areas and some PFYC 3 areas.	Same as Alternative II.	Same as Alternative II.
22	Apply: <ul style="list-style-type: none"> <li>CSU for Sharrard Park paleontological resources.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>SSR/CSU for Sharrard Park paleontological resources.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>SSR/CSU for Sharrard Park paleontological resources.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>SSR/CSU for Sharrard Park paleontological resources.</li> </ul>
23	<b>Soil Resources</b>			
24		<b>Goal:</b> Maintain watershed soil stability and productivity. <b>Objective:</b> Manage to meet Land Health Standards for soils on a watershed scale, and support other resource needs.		
25	Manage to meet or exceed Land Health Standards for soils on a watershed scale. Small portions would be allowed not to meet the standard.  Below the rim, continue stipulations of the 1999 FSEIS, described below. NSO on slopes greater than 50% to maintain site stability and site productivity. CSU on erosive soils with slopes greater than 30%.	<b>Management Actions:</b> Maintain site stability and site productivity on steep slopes and erosive soils throughout the Planning Area by applying NGD/NSO and SSR/CSU stipulations, COAs, BMPs, and other site-specific mitigation.  <b>Standards:</b> Apply NGD/NSO on slopes greater than 50% to maintain site stability.  Apply COAs, BMPs, and other site-specific mitigation to minimize erosion, encourage rapid reclamation, retain soils using stormwater mitigation structures, maintain soil stability, and support other resources (including fisheries habitat).	Same as Alternative II.	Same as Alternative II.
26	Apply: <ul style="list-style-type: none"> <li>NSO for slopes greater than 50%.</li> <li>CSU for erosive soils and slopes.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>NGD/NSO for steep slopes (&gt;50%).</li> <li>SSR/CSU for erosive soils and slopes (&gt;30%).</li> </ul>	Apply: <ul style="list-style-type: none"> <li>NGD/NSO for steep slopes (&gt;50%).</li> <li>SSR/CSU for slopes greater than 30% or fragile/saline soils.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>NGD/NSO for steep slopes (&gt;50%).</li> <li>SSR/CSU for erosive soils and slopes (&gt;30%).</li> </ul>
27	<b>Water Resources</b>			
28		<b>Goal:</b> Meet all State and Federal water quality standards, and support water quantity and quality needs of other resources. <b>Objective:</b> Ensure authorized activities comply with all applicable water quality standards.		
29	Meet all State and Federal water quality standards.	<b>Management Actions:</b> Establish baseline water quality data and a monitoring program for drainages prior to allowing surface-disturbing activities. Assess disturbance-related water quality changes. Identify and implement mitigation measures, as needed, to meet water quality standards.  <b>Standards:</b> Implement those actions associated with the Parachute Creek Watershed Area (see Table 2.3).	No similar management action.	Same as Alternative II.
30	No similar management action.	No similar management action.	Apply:	Apply:

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			<ul style="list-style-type: none"> <li>• NGD/NSO on designated municipal watersheds.</li> </ul>	<ul style="list-style-type: none"> <li>• NGD/NSO on designated municipal watersheds.</li> </ul>	
31	Apply: <ul style="list-style-type: none"> <li>• NSO for the Colorado River corridor.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for the Colorado River corridor.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for major river corridors.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for the Colorado River corridor.</li> </ul>	
32	<b>Climate and Air Quality</b>				
33		<p><b>Goal:</b> Within the scope of BLM’s authority, ensure that air quality and air quality-related values are adequately protected by analyzing the effects of activities or resource uses authorized by the BLM and cumulative actions. Protect air resources in accordance with the methodology and provisions outlined in the Comprehensive Air Resource Protection Protocol (CARPP).</p> <p><b>Objective:</b> If warranted by the results of analyses conducted following the CARPP, control or reduce air pollutants associated with construction and industrial activities to help protect human health and ecosystems (meeting State and Federal Standards), and conform with the Colorado Regional Haze State Implementation Plan to improve visibility, reduce atmospheric deposition, and reduce greenhouse gas emissions.</p>			
34	Implement monitoring and mitigation measures required to meet or exceed all applicable Federal and State air quality regulations and standards and any other applicable local standards.	<p><b>Management Actions:</b> Based on project-level analyses, as described in the CARPP (Appendix J), during the construction phase, reduce emissions of fugitive dust by requiring operators to implement watering (a minimum of twice daily during dry conditions) or application of other dust-suppressant agents at construction areas, including access roads used during construction. The Authorized Officer may direct the operator to change the level and type of dust abatement if the measures being used are insufficient to prevent visible plumes of fugitive dust or deposition of excessive dust on nearby surfaces in conjunction with vehicular traffic, equipment operations, or wind events. Require fugitive dust control plans in conjunction with oil and gas MDPs.</p> <p>As described in the CARPP, air quality monitoring may be required for large proposed oil and gas development projects in locations where no representative air quality monitoring data exists, or over the life of large projects to be used as a validation tool in conjunction with projected air quality modeling.</p> <p>Based on project-level analyses, as described in the CARPP, require that industrial operators use gravel (in combination with watering or other dust suppressant), chip-seal, asphalt, or other road-surfacing material to minimize fugitive dust emissions from BLM-authorized access roads (“local” and “resource” roads) during long-term production and maintenance operations.</p> <p>Based on annual review required by the CARPP and on the rate of actual oil and gas development, require phased-in use of improved drilling and completion engines that meet or exceed Tier 4 non-road diesel emission standards (40 CFR 1039).</p> <p>Based on annual review required by the CARPP and on the rate of actual oil and gas development, require “no-bleed” pneumatic devices at well pads and production facilities.</p>		Same as Alternative II.	Same as Alternative II.

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		<p>Require that oil and gas operators use reduced-emission completion technologies (i.e., "green" completions), as defined in COGCC Rule 805 and the New Source Performance Standards for Crude Oil and Natural Gas Production at 40 CFR Part 60 subpart OOOO, for all wells on BLM lands and wells that access Federal minerals. An exemption may be granted on a case-by-case basis if the installation of necessary infrastructure is impracticable.</p> <p>Require flaring of natural gas during well completions that are exempted from green completion technology.</p> <p>Prohibit venting of natural gas except during emergency situations.</p> <p>Require that natural-gas-fired reciprocating internal combustion engines at BLM-authorized field compression facilities comply with Colorado Department of Public Health and Environment Air Quality Control Commission Regulation No. 7, 5 CCR 1001-9, Section XVII.E.2 (Emission Standards for New and Relocated Engines) and Section XVII.E.3 (for existing engines).</p> <p>Require compliance with applicable New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants for all internal combustion engines.</p> <p>Powering centralized compression facilities with electricity may be required in the future based on: implementation of the CARPP (Appendix J), future availability of adequate electricity, and advances in compression technology.</p>		
35	<b>Ecological Values</b>			
36		<p><b>Goal:</b> Protect key ecological values and natural processes.</p> <p><b>Objective:</b> Provide protection for candidate and sensitive species in addition to supporting important ecological processes throughout the Planning Area.</p>		
37	Maintain current ecological values and processes and biological diversity with existing management direction and activities.	<p><b>Management Actions:</b> Apply NGD/NSO, SSR/CSU, COAs, and BMPs to provide protections to minimize impacts to an acceptable level and support sustainable ecosystem processes.</p> <p>Design and implement COAs, BMPs, other mitigation, and monitoring on a site-specific basis to mitigate the effects of surface disturbance.</p> <p>Designate four ACECs. Specific stipulations and mitigation measures are identified independently of ACEC designation for protection of various resources (Table 2.2).</p> <p>Table 2.3 provides more information on the management of resources within the Parachute Creek WMA.</p>	Same as Alternative II.	Same as Alternative II.
38	No similar management action.	No similar management action.	<p>Apply:</p> <ul style="list-style-type: none"> <li>• NGD/NSO for all sensitive resources and natural values atop the Roan Plateau.</li> </ul>	No similar management action.

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	Alternative I No Action	Alternative II FEIS Proposed Plan	Alternative III Community Alternative	Alternative IV Proposed RMPA
39	<b>Vegetation Resources</b>			
40		<p><b>Goal:</b> Manage vegetation resources in a long-term, sustainable manner, protecting the soil, hydrologic, and watershed conditions that support them.</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>Enhance the health, productivity, and ecological condition of native and other desirable plant communities, including the integrity of native stands of aspen, mountain shrubs, grasslands, and conifers.</li> <li>Optimize forage production, given other uses and objectives.</li> </ul> <p><b>GRSG Objective:</b> (1) Use habitat restoration as a tool to create and/or maintain landscapes that benefit GRSG; (2) Use Integrated Vegetation Management to control, suppress, and eradicate, where possible, noxious and invasive species per BLM Handbook H-1740-2; and (3) In all Sagebrush Focal Areas and Priority Habitat Management Areas, the desired condition is to maintain a minimum of 70% of lands capable of producing sagebrush with 10 to 30% sagebrush canopy cover. The attributes necessary to sustain these habitats are described in Interpreting Indicators of Rangeland Health (BLM Tech Ref 1734-6).</p>		
41	Rehabilitate areas affected by wildland fire and other surface-disturbing activities to protect soil, water, vegetation, and other resources and ensure overall watershed protection.	<p><b>Management Actions:</b> Require reclamation practices, BMPs, and performance-based success criteria as COAs in all surface-disturbing project proposals designed to reestablish and maintain native species.</p> <p>Require reclamation plans, reclamation monitoring plans, and weed management plans for all disturbances larger than 1.0 acre in size. Reclamation plans would contain specifics such as elevation, precipitation dependent seed mixes, topsoil management, site preparation, etc.</p> <p>Require annual monitoring/reporting of reclamation status and success for all disturbances larger than 1.0 acre in size until reclamation meets five-year reclamation standards, or until defined revegetation success criteria are achieved (see Appendix I).</p> <p>Develop and implement economically feasible grazing systems and range improvements.</p> <p>Defer grazing use for two growing seasons on disturbed areas larger than 0.5 acre (e.g., a fire event, reclamation of disturbed lands, or vegetation treatment), or until site-specific analysis and monitoring data indicate that vegetation cover, species composition, and litter accumulation are adequate to support and protect watershed values and meet vegetation objectives (Table 2.4). The method of enclosure would depend on land health assessments and site-specific factors, as part of an implementation level decision.</p> <p>Establish vegetative site potential using ESIs, based on NRCS procedures and standards (or a comparable methodology) incorporating soil and vegetation data, for at least the ten most extensive vegetation communities (Table 2.4) in the Planning Area to aid in the development of site-specific reclamation standards.</p> <p>Develop desired future condition objectives that support quantitative assessment of revegetation success and adaptive management decisions for other resources.</p>	Same as Alternative II.	<p><b>Management Actions:</b> In All Designated Habitat (ADH), when planning restoration treatments in GRSG habitat, identify seasonal habitat availability, and prioritize treatments in areas that are thought to be limiting GRSG distribution and/or abundance, in accordance with the Prioritization section of the narrative for Alternative D.</p> <p>The habitat objectives for GRSG (Table 2-5 in NWCOGSG FEIS [BLM 2015d]) are a list of indicators and values that describe GRSG seasonal habitat conditions. The values for the indicators were derived using a synthesis of current local and regional GRSG habitat research and data and reflect variability of ecological sites. The habitat cover indicators are consistent with existing indicators used by the BLM.</p> <p>When determining if a site is meeting habitat objectives, the measurements from that particular site would be assessed based on the range of values for the indicators in Table 2-5. Table 2-5 is one component of GRSG multi-scale habitat assessment (see Appendix F, Greater Sage-Grouse Monitoring Framework) (NWCOGSG FEIS; BLM 2015d). The results of the habitat assessment would be used during the land health evaluation to ascertain if the land health standard applicable to GRSG habitat (e.g., special status species habitat standard) is being met.</p> <p>When authorizing activities in GRSG habitat, the BLM would consider if habitat objectives are being achieved. If the habitat objectives are not being achieved and the site has the potential for achieving these objectives, the BLM would determine the causal factor(s) and make the necessary management adjustments to address the causal factor(s), following current BLM regulations and policy.</p> <p>Treat areas that contain <i>Bromus tectorum</i> and other invasive or noxious species to minimize competition and favor establishment of desired species.</p> <p>Remove conifers encroaching into sagebrush habitats. Prioritize treatments closest to occupied GRSG habitats and near occupied leks, and where juniper encroachment is</p>

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		<p>Incorporate vegetation management objectives (Table 2.4) for the most extensive vegetation communities into activity siting decisions, project proposals, mitigation requirements for permits, and COA decisions.</p> <p>Utilize range, fuels and fire, and vegetation management activities that protect and/or enhance the health and productivity of native and other desirable plant communities and wildlife habitat.</p> <p><b>Standards:</b> Use only native plant species for revegetation (preferably locally adapted), unless in areas with a high risk of becoming dominated by cheatgrass or other undesirable species under conditions where only nonnative species have been proven effective and not within a 0.62-mile (1.0-kilometer) buffer around any TES plant species occurrence (as consistent with BLM Manual 1745 or Handbook 1742-1).</p> <p>Activities should be designed to maintain or improve ecological condition.</p>		<p>phase 1 or phase 2. Use of site-specific analysis and principles like those included in the Fire and Invasives Assessment Team report (Chambers et. al. 2014) and other ongoing modeling efforts to address conifer encroachment will help refine the location for specific priority areas to be treated. See Appendix H, Guidelines for Implementation (NWCOGSG FEIS; BLM 2015d).</p>
42	No similar management action.	In GRSG GHMA, when planning restoration treatments in GRSG habitat, identify seasonal habitat availability and prioritize treatments in areas that are thought to be limiting GRSG distribution and/or abundance, in accordance with the Prioritization section of the narrative for Alternative D, NWCOGSG FEIS.	<p>In GRSG GHMA, prioritize implementation of restoration projects based on environmental variables that improve chances for project success in areas most likely to benefit GRSG.</p> <p>Prioritize restoration in seasonal habitats that are thought to be limiting GRSG distribution and/or abundance.</p>	Same as Alternative II.
43	No similar management action.	In GRSG PHMA, include GRSG habitat parameters or if available, State GRSG Conservation plans and appropriate local information in habitat restoration objectives. Make meeting these objectives within GRSG PHMA areas a high restoration priority.	Same as Alternative II.	Same as Alternative II.
44	No similar management action.	In GRSG GHMA require use of native plant seeds that are beneficial for GRSG, for vegetation treatments based on availability, adaptation (site potential), probability for success, and the vegetation management objectives for the area covered by the treatment. Where probability of success or native seed availability is low, use species that meet soil stability and hydrologic function objectives as well as vegetation and GRSG habitat objectives.	In GRSG PHMA, require the use of native seeds for restoration based on availability, adaption (ecological site potential), and probability of success. Where probability of success or adapted seed availability is low, nonnative seeds may be used as long as they support GRSG habitat objectives.	Same as Alternative II.
45	No similar management action.	In GRSG PHMA, design post-restoration management to ensure long-term persistence of seeded or pre-burn native plants. This may require temporary or long-term changes in livestock grazing, wild horse and burro, and travel management, etc., to achieve and maintain the desired condition of ESR projects to benefit GRSG.	Same as Alternative II.	Same as Alternative II.
46	No similar management action.	No similar management action.	In GRSG PHMA, consider potential changes in climate when proposing restoration seedings when using native plants. Consider collection from the warmer component of the species' current range when selecting native species.	No similar management action.
47	No similar management action.	In GRSG GHMA, manage for a habitat objective that is primarily sagebrush with a mosaic of seral stages and	In GRSG GHMA, restore native (or desirable) plants and create landscape patterns that most benefit GRSG.	Same as Alternative II.

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		<p>sagebrush in all age classes.</p> <p>On a site-by-site basis, do not allow treatments that would adversely affect GRSG populations.</p> <p>Remove conifers encroaching into sagebrush habitats. Prioritize treatments closest to occupied sage-grouse habitats and near occupied leks, and where juniper encroachment is phase 1 or phase 2. Use of site-specific analysis and principles like those included in the FIAT report and other ongoing modeling efforts to address conifer encroachment will help refine the location for specific priority areas to be treated.</p>		
48	No similar management action.	<p>In GRSG GHMA, make reestablishment of sagebrush and desirable understory plant cover (relative to ecological site potential) the highest priority for restoration efforts.</p> <p>Consider GRSG habitat requirements in conjunction with all resource values managed by the BLM, and give preference to GRSG habitat unless site-specific circumstances warrant an exemption.</p>	In GRSG GHMA, make reestablishment of sagebrush and desirable understory plant cover (relative to ecological site potential) the highest priority for restoration efforts.	Same as Alternative II.
49	No similar management action.	In GRSG GHMA, authorize local sagebrush seed collection to support local restoration efforts.	In GRSG GHMA, in fire prone areas where sagebrush seed is required for GRSG habitat restoration, consider establishing seed harvest areas that are managed for seed production and are a priority for protection from outside disturbances.	No similar management action.
50	<b>Riparian/Wetland Resources</b>			
51		<p><b>Goal:</b> Ensure healthy and vigorous riparian plant communities.</p> <p><b>Objective:</b> Achieve a minimum condition rating of PFC and late-seral stage plant community development, and provide high-quality fisheries habitat atop the plateau.</p>		
52	Manage riparian/wetlands to achieve a minimum condition rating of PFC.	<p><b>Management Actions:</b> Establish condition ratings based on Ecological Site Indices (or equivalent assessments of potential natural vegetation based on site and soil characteristics and conditions). Manage to improve riparian-related fisheries habitat atop the plateau based on site potential findings.</p> <p>Apply NGD/NSO protections to riparian vegetation to avoid direct impacts.</p> <p>Apply SSR/CSU stipulations to riparian/wetland areas to avoid indirect impacts.</p> <p>Avoid or mitigate activities that could cause a downward trend in the condition of riparian resources or functioning condition.</p> <p>Initiate activity plans that identify habitat improvement projects to achieve desired conditions.</p> <p>Close, reclaim, or relocate routes that are negatively impacting the stream and/or riparian zones.</p>	Same as Alternative II.	Same as Alternative II.
53	<p>Avoid surface-disturbing activities that would disturb or destroy riparian vegetation. Mitigate or relocate activities within 500 feet of the outer edge of the riparian vegetation.</p> <p>Avoid surface-disturbing activities within a 0.5-mile buffer on either side of the Colorado River.</p> <p>Avoid or mitigate activities that could cause a downward trend in the condition of riparian resources or functioning condition. Initiate activity plans and improvement projects to achieve desired conditions.</p>			
54	The stipulations developed in the 1999 Oil and Gas FSEIS would be carried forward for protection of riparian zones and their associated hydrologic and wildlife values. These stipulations would only apply to streams and associated riparian areas below the rim and not to any lands on top of the plateau.			

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55	Initiate riparian restoration projects within those systems that have been identified as not functioning or functioning at risk with a downward or static trend.	Locate new routes outside riparian zones to reduce or eliminate negative impacts.		
56	Determine grazing systems or exclusions on riparian/wetland areas on a case-by-case basis to promote or maintain PFC.	Initiate riparian restoration projects within those systems that have been identified as not functioning, or functioning at risk with a downward or static trend, and in those reaches of streams where fisheries habitat can be enhanced.		
57	Relocate existing routes, wherever possible, and locate new routes outside riparian zones to reduce or eliminate negative impacts.	<p>Implement grazing management on riparian/wetland areas that would result in achieving PFC and late-seral stage plant community development and improve fisheries habitat.</p> <p><b>Standards:</b> Mitigate or relocate activities that would fall within 500 feet of the outer edge of the riparian vegetation.</p> <p>Avoid surface-disturbing activities within a 0.5-mile buffer on either side of the Colorado River.</p> <p>Management actions in and near riparian areas atop the plateau should not only result in a PFC rating surpassing the minimum standards, but also provide for high-quality fisheries habitat for the CRCT.</p>		
58	<p>Apply:</p> <ul style="list-style-type: none"> <li>• NSO for riparian and wetland zones.</li> <li>• CSU for riparian and wetland habitat below the rim.</li> </ul>	<p>Apply:</p> <ul style="list-style-type: none"> <li>• NGD/NSO for riparian and wetland habitat.</li> <li>• SSR/CSU for riparian and wetland habitat.</li> </ul>	<p>Apply:</p> <ul style="list-style-type: none"> <li>• NGD/NSO for riparian and wetland habitat.</li> <li>• SSR/CSU for Riparian/Wetland Vegetation Zones.</li> </ul>	<p>Apply:</p> <ul style="list-style-type: none"> <li>• NGD/NSO for riparian and wetland habitat.</li> <li>• SSR/CSU for riparian and wetland habitat.</li> </ul>

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59	<b>Noxious Weeds</b>			
60		<p><b>Goal:</b> Maintain healthy native vegetation free of noxious weeds and exotic (introduced) species on Federal lands within the Planning Area.</p> <p><b>Objective:</b> Promote natural processes and healthy native plant communities to deter noxious weeds while minimizing and, to the extent practicable, eradicating noxious weed and undesirable exotic species on Federal lands within the Planning Area.</p>		
61	Apply approved noxious weed control methods in an integrated weed management program, (including preventive management, as well as mechanical, biological, and chemical control techniques).	<p><b>Management Actions:</b> Implement an integrated weed management program (which includes a weed management plan; pre-disturbance weed mapping; and mechanical, biological, and chemical control techniques).</p>	Same as Alternative II.	Same as Alternative II.
62	Continue and expand public education efforts concerning the importance of weed detection, prevention, and management.	<p>For activities creating a surface disturbance larger than 1.0 acre, require a weed management plan that emphasizes and details prevention, inventory, detection, eradication, monitoring efforts, corrective measures, and other weed control actions.</p> <p>Require weed-free seed for reclamation activities.</p> <p>Require the use of weed-free hay and feed for livestock.</p> <p>Require weed control actions for all disturbances, including those less than 1.0 acre in size.</p> <p>Require prompt reclamation of all disturbed areas with native species.</p> <p><b>Standards:</b> To the extent practicable, eradicate all noxious weeds and minimize the occurrence of exotic species within the Planning Area.</p>		
63	<b>Terrestrial Wildlife (including Big Game)</b>			
64		<p><b>Goal:</b> Protect important wildlife habitats atop the plateau and below the rim.</p> <p><b>Objective:</b> Protect wildlife security areas, habitat connectivity, habitat carrying capacity, and winter range.</p>		
65	Maintain or enhance habitats capable of sustaining current populations of wildlife.	<p><b>Management Actions:</b> Within the constraints of other resource management objectives and activities, maintain or enhance habitats capable of sustaining existing or increasing populations of wildlife.</p> <p>Minimize loss of habitat connectivity and displacement of wildlife through design and siting of allowed activities.</p> <p>Maintain or enhance big game habitat through vegetation management to improve habitat quantity and quality.</p> <p>Apply travel restrictions on new and existing routes atop the plateau and within or near wildlife security areas.</p> <p>Cluster disturbances to limit fragmentation, or loss of roadless wildlife habitat, below the rim.</p>	<p><b>Management Actions:</b> Within the constraints of other resource management objectives and activities, maintain or enhance habitats capable of sustaining existing or increasing populations of wildlife.</p> <p>Minimize loss of habitat connectivity and displacement of wildlife through design and siting of allowed activities.</p> <p>Maintain or enhance big game habitat through vegetation management to improve habitat quantity and quality.</p> <p>Apply travel restrictions on new and existing routes atop the plateau and within or near wildlife security areas.</p> <p>Encourage offsite mitigation across the landscape, in consultation with CPW, to offset impacts to wildlife habitat.</p>	Same as Alternative II.
66	Protect wildlife seclusion areas, as identified in the 1999 Oil and Gas FSEIS from human disturbance. An NSO stipulation would apply.			
67	Apply two terrestrial wildlife TLs, including one to protect 20,230 acres of crucial big game winter habitat from December 1 through April 30 below the rim.			
68	No planned management actions to enhance big game habitat, but site-specific actions to enhance wildlife habitat would be allowed.			

Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		Atop the plateau, require clustered and sequenced development of oil and gas resources; location of drilling pads not closer than 2,640 feet, and on slopes of 20% or less along ridgetops; limit direct surface disturbance not yet meeting reclamation standards to less than 1% of the land area (350 acres); require successful reclamation (five-year standard) prior to development of other ridgetop areas. (See Tables 2.3 and C-1).  Encourage offsite mitigation across the landscape, in consultation with CPW, to offset impacts to wildlife habitat.		
69	No similar management action.	No similar management action.	Management activities on lands with wilderness characteristics would emphasize natural processes for wildlife management.	No similar management action.
70	Apply: <ul style="list-style-type: none"> <li>• NSO for wildlife seclusion areas.</li> <li>• TL for big game winter habitat.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for wildlife seclusion areas below rim.</li> <li>• SSR/CSU for wildlife security areas above the rim.</li> <li>• SSR/CSU for big game migration corridor.</li> <li>• SSR/CSU for sensitive bat species habitat.</li> <li>• TL for big game winter range.</li> <li>• TL for elk production areas.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for wildlife seclusion areas below rim.</li> <li>• SSR/CSU for wildlife security areas above the rim.</li> <li>• SSR/CSU for big game migration corridor.</li> <li>• SSR/CSU for special status bat species hibernation, maternity, and fall swarming sites.</li> <li>• TL for big game winter habitat.</li> <li>• TL for elk production areas.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for wildlife seclusion areas below rim.</li> <li>• SSR/CSU for wildlife security areas above the rim.</li> <li>• SSR/CSU for big game migration corridor.</li> <li>• SSR/CSU for sensitive bat species habitat.</li> <li>• TL for big game winter range.</li> <li>• TL for elk production areas.</li> </ul>
71	<b>Avian Wildlife</b>			
72		<p><b>Goal:</b> Protect raptor nests and nesting raptors from human disturbances. Avoid the construction of facilities hazardous to raptors.</p> <p><b>Objective:</b> Comply with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Avoid destruction or abandonment of the nest or reduction in nesting productivity.</p>		
73	In accordance with the Migratory Bird Treaty Act and the Bald and Golden Eagle Act, protect raptor nests and nesting raptors from human disturbances to avoid destruction or abandonment of the nest or reduction in nesting productivity.	<p><b>Management Actions:</b> Apply NSO and TL stipulations to nest sites. The cliff nesting complex for peregrine falcon on the cliffs and wildlife seclusion areas above the rim would be protected with SSR/CSU, rather than NGD/NSO restrictions, because the peregrine falcon is now a sensitive species, rather than threatened or endangered.</p> <p><b>Standards:</b> No surface disturbances would be allowed within a 0.125-mile radius of a nest site for owls, ospreys, golden eagles, buteos, accipiters, and falcons (except kestrels).</p> <p>The buffer for the peregrine falcon cliff nesting complex and bald eagle roost or nest sites would be a 0.25-mile radius.</p> <p>TL stipulations would apply during the roosting and nesting season of each species.</p>	Same as Alternative II.	Same as Alternative II.
74	The NSO and TL stipulations identified in the 1999 Oil and Gas FSEIS would apply below the rim only.  No surface disturbances would be allowed within a 0.125-mile radius of a nest site for owls, ospreys, golden eagles, buteos, accipiters, and falcons (except kestrels). The buffer for the peregrine falcon cliff nesting complex and bald eagle roost or nest sites would be a 0.25-mile radius. TL stipulations would apply during the roosting and nesting season of each species.	<p><b>Standards:</b> No surface disturbances would be allowed within a 0.125-mile radius of a nest site for owls, ospreys, golden eagles, buteos, accipiters, and falcons (except kestrels).</p> <p>The buffer for the peregrine falcon cliff nesting complex and bald eagle roost or nest sites would be a 0.25-mile radius.</p> <p>TL stipulations would apply during the roosting and nesting season of each species.</p>		
75	Apply: <ul style="list-style-type: none"> <li>• NSO for raptor nesting areas.</li> <li>• NSO for bald eagle nest areas.</li> <li>• NSO for peregrine falcon cliff nesting complex.</li> <li>• TL for raptor nesting.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for raptor nest sites.</li> <li>• NGD/NSO for bald eagle nest or winter roost sites.</li> <li>• SSR/CSU for peregrine falcon cliff nesting complex.</li> <li>• TL for raptor nest sites.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for raptors (non-special status raptor species).</li> <li>• NGD/NSO for bald eagle roost or nest sites.</li> <li>• SSR/CSU for peregrine falcon cliff nesting complex.</li> <li>• TL for non-special status raptor species.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for raptor nest sites (below the rim).</li> <li>• NGD/NSO for raptors (non-special status raptor species) (above the rim).</li> <li>• NGD/NSO for bald eagle nest or winter roost sites.</li> <li>• SSR/CSU for peregrine falcon cliff nesting complex.</li> </ul>

Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
	<ul style="list-style-type: none"> <li>• TL for bald eagle nesting.</li> <li>• TL for peregrine falcon cliff nesting complex.</li> <li>• TL for waterfowl and shorebird nesting areas.</li> </ul>	<ul style="list-style-type: none"> <li>• TL for bald eagle nest or winter roost sites.</li> <li>• TL for peregrine falcon cliff nesting complex.</li> <li>• TL for waterfowl and shorebird nesting areas.</li> <li>• TL for migratory bird nesting season.</li> </ul>	<ul style="list-style-type: none"> <li>• TL for bald eagle nest sites or winter roost sites.</li> <li>• TL for peregrine falcon nesting complex.</li> <li>• TL for waterfowl and shorebird nesting and production areas.</li> <li>• TL for migratory bird nesting season.</li> </ul>	<ul style="list-style-type: none"> <li>• TL for active raptor nest sites (below the rim).</li> <li>• TL for non-special status raptor species (above the rim).</li> <li>• TL for bald eagle nest or winter roost sites.</li> <li>• TL for peregrine falcon cliff nesting complex.</li> <li>• TL for waterfowl and shorebird nesting areas.</li> <li>• TL for migratory bird nesting season.</li> </ul>
76	<b>Aquatic Wildlife</b>			
77		<p><b>Goal:</b> Maintain and enhance habitats important to CRCT and other native fish.</p> <p><b>Objective:</b> Maintain or improve water quality, natural stream flow, and stream ecological function by preventing or minimizing direct, indirect, or cumulative adverse impacts to CRCT or their habitat.</p>		
78	Maintain existing populations and habitat quality for CRCT and other native fish species.	<p><b>Management Actions:</b> Prior to conducting surface disturbance in the WMA, collect baseline data to assess current local hydrological and ecological conditions.</p> <p>Continue water quality monitoring throughout development of surface-disturbing activities until reclamation is complete.</p> <p>Require project-specific design and mitigation such that proposed actions and site locations would prevent or minimize reductions in natural stream flow, additional sedimentation or other degradation of water quality, or adverse impacts to stream ecological function for reaches containing cutthroat trout habitat, and reaches upstream from occupied habitat.</p> <p><b>Standards:</b> Required design components may include construction design, implementation of BMPs, mitigation, reclamation, revegetation, monitoring (to guide adaptive management), and erosion control. Project design would incorporate baseline studies, other results as available, and require monitoring of mitigation components sufficient to demonstrate effectiveness.</p> <p>Relocate activities, as necessary, to minimize negative impacts to water quality and stream ecological function.</p> <p>Recognize valid existing water rights.</p> <p>Design culvert and bridge installations such that erosion and sedimentation would be minimized, structures would function properly with anticipated water flows, and fish passage would be facilitated.</p> <p>Consider activities designed to provide long-term habitat improvement or protection, such as culvert or bridge installation or bank stabilization actions.</p> <p>Assess terms of indicator values for Public Land Health Standard #2 – Riparian Systems, #3 – Plant and Animal</p>	No similar management action.	Same as Alternative II.

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		Communities, #4 – Special Status Species, and #5 – Water Quality.  Implement WMA management prescriptions as detailed in Table 2.3.		
79		Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for high-value special status fish species habitat.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for high-value special status fish species habitat.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for high-value special status fish species habitat.</li> </ul>
80	<b>Special Status Plants and Significant Plant Communities</b>			
81		<p><b>Goal:</b> Prevent the need for listing of proposed, candidate, and sensitive species under the ESA and improve the condition of special status species and their habitats to a point where their special status recognition is no longer warranted. Promote recovery of special status plant species that may become listed.</p> <p><b>Objective:</b> Manage listed, proposed, or candidate threatened or endangered species to comply with the provisions of the ESA and promote their recovery. Manage BLM sensitive and significant plant communities consistent with the Colorado Standards for Public Land Health and with BLM policy on Special Status Species Management (BLM Manual 6840).</p>		
82	<p>Manage listed, proposed, or candidate threatened or endangered species to comply with the provisions of the ESA.</p> <p>Manage special status plants and BLM-recognized significant plant communities consistent with the Colorado Standards for Public Land Health and with BLM policy on Special Status Species Management (BLM Manual 6840), which directs BLM to prevent the need for listing of proposed, candidate, and sensitive species under the ESA and improve the condition of special status species and their habitats to a point where their special status recognition is no longer warranted.</p>	<p><b>Management Actions:</b> Any species that is listed in the future or moved to candidate status would be protected through application of a NGD/NSO.</p> <p>Sensitive species and significant plant communities would be protected through the application of a SSR/CSU.</p> <p>Designate four ACECs. ACECs serve to highlight the importance of natural values. Specific stipulations and mitigation measures are identified independently of ACEC designation for protection of various resources, and are synopsized in Table 2.2.</p>	<p><u>Management Actions:</u> Any species that is listed in the future or moved to candidate status would be protected through application of a NGD/NSO.</p> <p><u>Sensitive species and significant plant communities would be protected through the application of a SSR/CSU.</u></p> <p><u>Designate four ACECs. ACECs serve to highlight the importance of natural values. Specific stipulations and mitigation measures are identified independently of ACEC designation for protection of various resources, and are synopsized in Table 2.2.</u></p>	Same as Alternative II.
83	Protect and maintain occupied habitat for special status plants and significant plant communities.	Within the WMA, prevent disruption, alteration, or interruption of surface and subsurface water flows that support rare and/or significant natural plant communities. Implement WMA management prescriptions, as detailed in Table 2.3.		
84	<p>Avoid activities that could have a direct or indirect negative effect on special status plants and plant communities.</p> <p>NGD/NSO and SSR/CSU stipulations in the 1999 Oil and Gas FSEIS (which apply only below the rim) would be carried forward for the protection of special status plants.</p>	<p>Take action to protect against invasion and establishment of noxious weeds or other aggressive exotic plants, including nonnative species used for reclamation or vegetation treatments.</p> <p>Close selected routes to protect special status species and significant plant communities.</p> <p>Prohibit collection of rare plants or plant parts, except for scientific research as approved by USFWS in the case of TE plants, and with a valid collection permit.</p>	<p><u>Take action to protect against invasion and establishment of noxious weeds or other aggressive exotic plants, including nonnative species used for reclamation or vegetation treatments.</u></p> <p><u>Close selected routes to protect special status species and significant plant communities.</u></p> <p><u>Prohibit collection of rare plants or plant parts, except for scientific research as approved by USFWS in the case of TE plants, and with a valid collection permit.</u></p>	

**Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource**

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
85	Apply: <ul style="list-style-type: none"> <li>NSO for Threatened, Endangered, and Federal Proposed or Candidate species.</li> <li>CSU for sensitive species populations and significant plant communities.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>NGD/NSO for Threatened, Endangered, or Candidate species habitat.</li> <li>SSR/CSU for habitat for special status plant species populations and significant plant communities.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>NGD/NSO for Threatened, Endangered, or Candidate species habitat.</li> <li>SSR/CSU for habitat for special status plant species populations and significant plant communities.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>NGD/NSO for Threatened, Endangered, or Candidate species habitat.</li> <li>SSR/CSU for habitat for special status plant species populations and significant plant communities.</li> </ul>
86	<b>Special Status Fish and Wildlife Species</b>			
87	Manage the Colorado River Endangered Fishes (Colorado pikeminnow, razorback sucker, bonytail, and humpback chub) in accordance with existing recovery plans and consultations completed with the USFWS. Manage special status fish and wildlife consistent with the Colorado Standards for Public Land Health and BLM direction for the management of special status species in BLM Manual 6840 (BLM 2001b). Implement the strategies outlined in the Conservation Agreement and Strategy for CRCT ( <i>Oncorhynchus clarkii pleuriticus</i> ) in the States of Colorado, Utah, and Wyoming (CRCT Conservation Team 2006). Implement the strategies outlined in the Range-Wide Conservation Agreement and Strategy for Roundtail Chub ( <i>Gila robusta</i> ), Bluehead Sucker ( <i>Catostomus discobolus</i> ), and Flannelmouth Sucker ( <i>Catostomus latipinnis</i> ) (UT DNR 2006).			
88		<b>Goals:</b> <ul style="list-style-type: none"> <li>Protect, preserve, restore, recover, and enhance special status fish and wildlife species and their habitats.</li> <li>Implement actions originating from laws, regulations, and policies and conform to day-to-day management, monitoring, and administrative functions not specifically addressed in the Regional Mitigation Strategy, Monitoring Framework, and Adaptive Management (NWCOGSG FEIS; BLM 2015d).</li> </ul> <b>Objectives:</b> <ul style="list-style-type: none"> <li>Protect supporting habitat and ecosystem integrity and function; maintain or improve water quality and stream flow; and manage, in accordance with recovery plans and Conservation Agreement and Strategies for the CRCT, the three species (bluehead sucker, flannelmouth sucker, and roundtail chub), and Colorado River endangered fishes (Colorado pike minnow, razorback sucker, bonytail chub, and humpback chub).</li> <li>Protect habitat for the Townsend's big-eared bat that inhabits the Anvil Points Claystone Cave. This includes preventing or minimizing direct, indirect, or cumulative adverse impacts to this species' habitats.</li> <li>Promote maintenance and recovery of greater sage-grouse by protecting occupied and adjacent habitat consistent with the NCGSG RMP/EIS.</li> <li>Maintain and enhance populations and distribution of GRSG by protecting and improving sagebrush habitats and ecosystems that sustain GRSG populations.</li> </ul>		
89		<b>Greater Sage-Grouse Goals:</b> <ul style="list-style-type: none"> <li>Conserve, enhance, and restore the sagebrush ecosystem upon which GRSG populations depend in an effort to maintain or increase their abundance and distribution, in cooperation with other conservation partners.</li> <li>Comply with State and Federal laws, regulations, policies, and standards, including FLPMA multiple-use mandates.</li> <li>Implement actions originating from laws, regulations, and policies and conform to day-to-day management, monitoring, and administrative functions not specifically addressed (see Appendix G, Mitigation Strategy; Appendix F, Monitoring Framework (NWCOGSG FEIS).</li> <li>Preserve valid existing rights, which include any leases, claims, or other use authorizations established before a new or modified authorization, change in land designation, or new or modified regulation is approved. Existing fluid mineral leases are managed through COAs.</li> <li>Collaborate with adjacent landowners, Federal and State agencies, local governments, tribes, communities, other agencies, and other individuals and organizations, as needed, to monitor and implement decisions to achieve desired resource conditions.</li> </ul>		
90	Disturbance to sensitive bat habitat would be mitigated or relocated more than 200 meters. Implement enhancement and restoration efforts where necessary, on a site-specific basis.	No similar management action.	No similar management action.	No similar management action.
91	Manage habitat conditions specific to the requirements of individual species versus ecosystem approaches.	No similar management action.	No similar management action.	No similar management action.
92	Apply: <ul style="list-style-type: none"> <li>NSO for Threatened, Endangered, and Federal Proposed or Candidate species.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>NGD/NSO for Threatened, Endangered, or Candidate species habitat.</li> <li>CSU/SSR for sensitive bat species habitat.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>NGD/NSO for Threatened, Endangered, Proposed, and Candidate fish and wildlife species.</li> <li>CSU/SSR for sensitive bat species habitat.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>NGD/NSO for Threatened, Endangered, or Candidate species habitat.</li> <li>CSU/SSR for sensitive bat species habitat.</li> </ul>

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		<ul style="list-style-type: none"> <li>• NSO within 2 miles of active GRSG leks in GRSG GHMA.</li> <li>• NSO with exceptions, modifications, and waivers on the remainder of PHMA. Authorized Officer could grant an exception or modification in consultation with the State of Colorado.</li> <li>• TL on activities associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• TL on GRSG PHMA ROWs to prohibit surface occupancy and surface-disturbing activities associated with BLM ROW permits within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• LN for any lands leased in GRSG PHMA are subject to the restrictions of one disturbance per 640 acres calculated by CO management zone to allow clustered development.</li> <li>• LN within GRSG PHMA, operators would be encouraged to complete Master Development Plans in consultation with the State of Colorado, instead of single-well Applications for Permit to Drill for all but exploratory wells.</li> </ul>	<ul style="list-style-type: none"> <li>• NSO within 2 miles of active GRSG leks in GRSG GHMA</li> <li>• NSO with exceptions, modifications, and waivers on the remainder of PHMA. Authorized Officer could grant an exception or modification in consultation with the State of Colorado.</li> <li>• TL on activities associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• TL on GRSG PHMA ROWs to prohibit surface occupancy and surface-disturbing activities associated with BLM ROW permits within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• LN for any lands leased in GRSG PHMA are subject to the restrictions of one disturbance per 640 acres calculated by CO management zone to allow clustered development.</li> <li>• LN within GRSG PHMA, operators would be encouraged to complete Master Development Plans in consultation with the State of Colorado, instead of single-well Applications for Permit to Drill for all but exploratory wells.</li> </ul>	<ul style="list-style-type: none"> <li>• NSO within 2 miles of active GRSG leks in GRSG GHMA.</li> <li>• NSO without waiver or modification in PHMA. See Appendix D (Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations) for exceptions. NWCOGSG FEIS.</li> <li>• TL on activities associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• TL on GRSG PHMA ROWs to prohibit surface occupancy and surface-disturbing activities associated with BLM ROW permits within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• LN for any lands leased in GRSG PHMA are subject to the restrictions of one disturbance per 640 acres calculated by CO management zone to allow clustered development.</li> <li>• LN within GRSG PHMA, operators would be encouraged to complete Master Development Plans in consultation with the State of Colorado, instead of single-well Applications for Permit to Drill for all but exploratory wells.</li> </ul>
93				<ul style="list-style-type: none"> <li>• Temporary closures will be considered in accordance with 43 CFR 8364 (Closures and Restrictions); 43 CFR 8351 (Designated National Area); 43 CFR 6302 (Use of Wilderness Areas, Prohibited Acts, and Penalties); 43 CFR 8341 (Conditions of Use).</li> <li>• Temporary closure or restriction orders under these authorities are enacted at the discretion of the authorized officer to resolve management conflicts and protect persons, property, and public lands and resources. Where an authorized officer determines that OHVs are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the affected areas shall be immediately closed to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence (43 CFR 8341.2). A closure or restriction order should be considered only after other management strategies and alternatives have been explored. The duration of temporary closure or restriction orders should be limited to 24 months or less; however, certain situations may require longer closures and/or iterative temporary closures. This may include closure of routes or areas.</li> </ul>

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				<ul style="list-style-type: none"> <li>In undertaking BLM management actions, and consistent with valid and existing rights and applicable law in authorizing third-party actions, the BLM will apply the lek buffer distances identified in the USGS Report Conservation Buffer Distance Estimates for Greater Sage-Grouse – A Review (Open File Report 2014-1239) in accordance with Appendix B.</li> <li>In all sage-grouse habitat, in undertaking BLM management actions, and consistent with valid existing rights and applicable law, in authorizing third-party actions that result in habitat loss and degradation, the BLM will require and ensure mitigation that provides a net conservation gain to the species including accounting for any uncertainty associated with the effectiveness of such mitigation. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions.</li> </ul>
94	<b>Visual Resources</b>			
95	<p><b>Goal:</b> Protect and maintain visual and aesthetic qualities in sensitive areas, while allowing for changes to visual quality in less sensitive areas.</p> <p><b>Objectives:</b> Manage changes in the landscape to maintain and protect visual qualities, as identified by VRM Class designations throughout the Planning Area.</p>			
96	Restrictions based on VRM would not apply to the existing utility corridor (Map 1).	<p><b>Management Actions:</b></p> <p>Apply:</p> <ul style="list-style-type: none"> <li>NGD/NSO for East Fork Falls viewshed (VRM Class I). To preserve the landscape character within the East Fork Falls viewshed and to maintain VRM Class I.</li> <li>NGD/NSO for I-70 viewshed (VRM Class II). On slopes steeper than 30%, visible from and within 5 miles of I-70 to retain the existing character of the landscape and to maintain VRM Class II.</li> <li>SSR/CSU for VRM Class II areas below the rim.</li> <li>SSR/CSU for VRM Class III areas above the rim.</li> </ul> <p>Manage lands below the rim adjacent to Highway 13 and urban areas as VRM Class IV, which allow for major modifications to the existing landscape character.</p> <p>Restrictions based on VRM would not apply to the existing utility corridor (Map 25).</p> <p>VRM Classes (acres):</p> <ul style="list-style-type: none"> <li>Class I: 1,620</li> <li>Class II: 30,400</li> <li>Class III: 33,510</li> <li>Class IV: 8,280</li> </ul>	Same as Alternative II.	Same as Alternative II.
97	Apply: <ul style="list-style-type: none"> <li>NSO for I-70 viewshed.</li> <li>CSU for VRM Class II areas.</li> </ul>			
98	Allow changes in the landscape associated with maintaining current VRM Classes throughout the Planning Area.  The stipulations developed in the 1999 Oil and Gas FSEIS would be carried forward for the protection of visual resources only on some of the lands below the rim and would not apply to any lands atop the plateau.			
99	Disturbed areas would be restored to meet VRM Class objectives for adjacent lands.			
100	VRM Classes (acres): <ul style="list-style-type: none"> <li>Class I: 0</li> <li>Class II: 24,040</li> <li>Class III: 37,120</li> <li>Class IV: 10,340</li> </ul>			

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101	No similar management action.	No similar management action.	Lands Managed for Wilderness Characteristics would be managed under VRM Class II objectives unless otherwise managed as VRM Class I.	No similar management action.
102	<b>Transportation and Travel Management</b>			
103	<b>Travel Management Areas (TMAs)</b>			
104		<p><b>Goal:</b> Travel Management Area (TMA) delineation addresses other modes of travel not covered by OHV area designations (43 CFR 8342.1).</p> <p><b>Objective:</b> Identify appropriate TMA conveyances to supplement and complement goals and objectives for other resources atop the plateau, and to accommodate recreational demand in Hubbard Mesa.</p> <p><b>GRSG Objectives:</b> Manage travel and transportation to: (1) reduce mortality from vehicle collisions; (2) limit change in GRSG behavior; (3) avoid, minimize, and mitigate habitat fragmentation; (4) limit the spread of noxious weeds; and (5) limit disruptive activity associated with human access.</p>		
105	No similar management action.	<p><b>Management Actions:</b> Within the Roan Plateau Planning Area TMA, allow muscle-powered (e.g., foot, ski, horse, stock) travel cross-country year-round. Mechanized (wheeled conveyance) travel in the Roan Plateau Planning Area TMA is limited to designated routes year-round as signed or identified on maps available onsite or at the CRVFO.</p> <p>Future travel plans will minimize disturbance and redundant routes in order to outline criteria for future route development.</p> <p>Within the Hubbard Mesa TMA (same boundary as the Hubbard Mesa OHV Riding Area), allow muscle-powered (e.g., foot, ski, horse, stock) travel and mechanized (wheeled conveyance) travel cross-country year-round consistent with the “open” OHV designation for motorized travel.</p> <p><b>Standards:</b> All TMA delineations are subject to additional restrictions (i.e., seasonal, area, type, and number) set forth in the ROD or in subsequent travel planning.</p>	Same as Alternative II.	Same as Alternative II.
106	No similar management action.	In GRSG PHMA, limit motorized travel to existing roads, primitive roads, and trails, at a minimum.	Same as Alternative II.	Same as Alternative II.
107	No similar management action.	In GRSG PHMA, evaluate and consider permanent or seasonal road or area closures as needed to address a current threat.	In GRSG PHMA, travel management should evaluate the need for permanent or seasonal road or area closures.	Same as Alternative II.
108	No similar management action.	In GRSG PHMA, complete activity-level travel plans as soon as possible, subject to funding. During activity-level planning, where appropriate, designate routes with current administrative/agency purpose or need to administrative access only.	In GRSG PHMA, complete activity-level travel plans within 5 years of the ROD. During activity-level planning, where appropriate, designate routes with current administrative/agency purpose or need to administrative access only.	Same as Alternative II.
109	No similar management action.	In GRSG PHMA, complete activity-level travel plans as soon as possible, subject to funding. Limit route construction to routes that will not adversely affect GRSG populations due to habitat loss or disruptive activities.	In GRSG PHMA, limit route construction to realignments of existing designated routes if that realignment has a minimal impact on GRSG habitat, eliminates the need to construct a new road, or is necessary for motorist safety.	Same as Alternative II.
110	No similar management action.	In GRSG PHMA, use existing roads or realignments whenever possible. If it is necessary to build a new road, and the use of existing roads would cause adverse impacts to GRSG, construct new roads to the appropriate minimum Gold	In GRSG PHMA, use existing roads or realignments, as described above, to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to	Same as Alternative II.

Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		<p>Book standard and add the surface disturbance to the total disturbance in the priority habitat management area if it meets the criteria in Appendix E, Methodology for Calculating Disturbance Caps, NWCOGSG FEIS.</p> <p>Construct no new roads if the CO Management Zone is over the 3% disturbance cap, unless there is an immediate health and safety need, or to support valid existing rights that cannot be avoided. Evaluate and implement additional, effective mitigation necessary to offset the resulting loss of GRSG habitat.</p>	<p>the absolute minimum standard necessary, and add the surface disturbance to the total disturbance in the priority area. If that disturbance exceeds 3% for that area, then evaluate and implement additional, effective mitigation necessary to offset the resulting loss of GRSG habitat.</p>	
111	No similar management action.	In GRSG PHMA, allow upgrades to existing routes after documenting that the upgrade will not adversely affect GRSG populations due to habitat loss or disruptive activities.	In GRSG PHMA, allow no upgrading of existing routes that would change a route category (road, primitive road, or trail) or capacity unless the upgrading would have a minimal impact on GRSG habitat, is necessary for motorist safety, or eliminates the need to construct a new road.	Same as Alternative II.
112	No similar management action.	In GRSG PHMA, conduct restoration of roads, primitive roads, and trails not designated in travel management plans. This also includes primitive routes/roads that were not designated in WSAs and within lands with wilderness characteristics that have been selected for protection in previous LUPs.	Same as Alternative II.	Same as Alternative II.
113	No similar management action.	In GRSG PHMA, when reseeding roads, primitive roads, and trails, use appropriate native seed mixes and require the use of transplanted sagebrush.	Same as Alternative II.	Same as Alternative II.
114	<b>Designation of Off-Highway Vehicle (OHV) Management Areas</b>			
115		<p><b>Goal:</b> Motorized recreation opportunities coexist with fragile resources.</p> <p><b>Objective:</b> Provide for motorized recreational opportunities in the Hubbard Mesa Area, while managing for non-motorized and non-mechanized travel based recreation opportunities in other portions of the Planning Area.</p>		
116	<p>No designated routes on transferred lands. Open to cross-country travel. (Present travel restrictions are temporary, subject to land use planning.)</p> <p>As oil and gas or other development occurs, travel in areas affected by oil and gas development may be limited, restricted, or closed to resolve conflicts, provide for public safety, and provide for orderly oil and gas operations.</p> <p>New routes associated with oil and gas would be designated administrative access only, unless specific objectives for other resources (e.g., recreational travel routes or access to recreational sites) are present that warrant other designations on a case-by-case basis.</p>	<p><b>Management Actions:</b> Hubbard Mesa is designated as <i>Open</i> to OHV travel. Travel on all other public lands is classified as limited to designated routes, except for snowmobiles, which are allowed to travel cross-country on top of the Roan Plateau if there is at least 12 inches of snow (43 CFR 8340-0.5). The designation excludes vehicles in emergency, official, and authorized use (by permit holders, lessee, etc.). OHV travel and access may also be limited at certain times/seasons, in certain areas, and/or to certain vehicular types and numbers of vehicles.</p> <p>Authorization for oil and gas development may modify route designations to reduce conflict and ensure public health and safety.</p> <p>New routes associated with oil and gas would be designated administrative access only (BLM use), unless specific objectives for other resources (e.g., recreational travel routes or access to recreational sites) are present that warrant other designations on a case-by-case basis.</p>	Same as Alternative II.	Same as Alternative II.

Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
117	Open to cross-country travel: 66,780 acres (over-snow conveyances may travel cross-country).	Designate 2,330 acres, the Hubbard Mesa (Map 36), as OHV Open Area.	Same as Alternative II.	Same as Alternative II.
118	Limited to designated routes: 0 acres.	Designate 64,450 acres as OHV Limited Area, where all OHV use is limited to designated routes (Map 36).	Same as Alternative II.	Same as Alternative II.
119		<u>Designate 32,680 acres as OHV Limited Area. Within this area, over snow use would be allowable cross-county with a minimum snow depth of 12 inches. Over snow travel would not be allowed in lands managed for wilderness characteristics above the rim (Map 36). Aside from the over-snow exception, all OHV use is restricted to designated routes.</u>	<u>Designate 32,680 acres as OHV Limited Area. Within this area, over snow use would be allowable cross-county with a minimum snow depth of 12 inches. Over snow travel would not be allowed in lands managed for wilderness characteristics above this rim (Map 36). Aside from the over-snow exception, all OHV use is restricted to designated routes.</u>	Same as Alternative II.
120	No similar management action.	Apply: <ul style="list-style-type: none"> <li>SSR/CSU for Hubbard Mesa Open OHV Riding Area.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>SSR/CSU for Hubbard Mesa Open OHV Riding Area.</li> </ul>	Apply: <ul style="list-style-type: none"> <li>SSR/CSU for Hubbard Mesa Open OHV Riding Area.</li> </ul>
121	<b>Transportation Routes</b>			
122	Route discussion applies only to currently existing routes, unless otherwise noted. Additional routes that may be authorized as part of permitted activities would generally be for administrative access only in order to reduce impacts to wildlife and habitat fragmentation, but such routes may be open to limited use by recreationists, or for other resource management purposes. Such future identification would not require an RMP amendment, but would be addressed in site-specific NEPA analyses.			
123		<b>Goals:</b> <ul style="list-style-type: none"> <li>Provide a network of roads and trails open to administrative, recreational, and permitted uses that accommodates environmental and resource concerns.</li> <li>Maintain the present visual quality and character associated with the JQS Road.</li> </ul> <b>Objectives:</b> <ul style="list-style-type: none"> <li>Manage routes as open if they provide recreational opportunities, needed administrative access (including permitted uses), are not redundant with other routes, and do not pose a potential risk to other resources. Restrict use to administrative purposes to avoid or minimize conflicts. Close routes that are redundant, conflict with management objectives, or pose threats to the various resources present, and are not needed for administrative purposes. The primary purpose in implementing closures and administrative use limitations is to minimize impacts to wildlife and to reduce habitat fragmentation.</li> <li>Maintain the JQS Road in its present condition and allow for present uses.</li> </ul>		
124	Where off-highway vehicles are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness characteristics, other authorized uses, or other resources, the affected areas shall be immediately closed to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence.			
125	<u>Open to motorized (public and administrative) and mechanized use: 195 miles.</u>	<b>Management Actions:</b> <u>Open to motorized and mechanized use: 195 miles (96 miles atop the plateau, 99 miles below the rim).</u>	Same as Alternative II.	Same as Alternative II.
126	Closed to motorized and mechanized use: 78 miles.			
127	The JQS Road is not suitable as a main access for long or heavy equipment due to steep grades and switchbacks.	Open only for administrative motorized use: 54 miles (47 miles atop the plateau, 7 miles below the rim). Administrative roads in the Hubbard Mesa OHV Riding Area would be open to the public.  Closed to motorized and mechanized travel use: 24 miles (23 miles atop the plateau, 1 mile below the rim).  <b>Standards:</b> Routes atop the plateau would be managed to not exceed approximately 138 miles of open and administrative routes, although some exceptions may apply (Appendix C).  Routes are subject to closure or restrictions for public safety or environmental protection.		

**Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource**

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		<p>Closed routes would be rehabilitated and may be designated/managed for foot and horse travel, and/or other non-motorized uses, including mountain bikes.</p> <p>The JQS Road would be managed to allow for only historical and recreational use and would be maintained in approximately its current condition. It is not suitable as a main access route for industrial or other long/heavy equipment due to steep grades and switchbacks. Improvements to accommodate such use would not be permitted.</p>		
128	<p>The JQS Road is not suitable as a main access for oil and gas drilling equipment and other long or heavy equipment due to steep grades and switchbacks.</p> <p>It is assumed that oil and gas lessees would access the top of the plateau across private lands from the west or via public access on Cow Creek Road (Rio Blanco CR 5 and Garfield CR 249) from the north. In Rio Blanco County, CR 5 provides public access across BLM land or via easements on private lands and is not a BLM road.</p>	<p>The JQS Road is not suitable as a main access for oil and gas drilling equipment and other long or heavy equipment due to steep grades and switchbacks.</p> <p>It is assumed that oil and gas lessees would access the top of the plateau across private lands from the west or via public access on Cow Creek Road (Rio Blanco CR 5 and Garfield CR 249) from the north. In Rio Blanco County, CR 5 provides public access across BLM land or via easements on private lands and is not a BLM road.</p>	<p>The JQS Road is not suitable as a main access for oil and gas drilling equipment and other long or heavy equipment due to steep grades and switchbacks.</p>	<p>The JQS Road is not suitable as a main access for oil and gas drilling equipment and other long or heavy equipment due to steep grades and switchbacks.</p> <p>It is assumed that oil and gas lessees would access the top of the plateau across private lands from the west.</p>
129	No similar management action.	No similar management action.	New permanent or temporary routes would not be allowed on lands with wilderness characteristics.	No similar management action.
130	No similar management action.	No similar management action.	All lands with wilderness characteristics would be closed to over-snow travel	No similar management action.
131	No similar management action.	No similar management action.	Access to lands with wilderness characteristics would be restricted to BLM administrative use.	No similar management action.
132	<b>Lands and Realty</b>			
133		<p><b>Goal:</b> Provide for compatible land use authorizations within the framework of laws and regulations. Provide for land tenure adjustments and sales to benefit the public interest and facilitate effective land management.</p> <p><b>Objective:</b> Meet agency and public ROWs, utility, land exchange, land tenure adjustments, and consolidation of ownership needs when in the public interest and within the constraints for other resources.</p> <p><b>GRSG Objectives:</b></p> <ul style="list-style-type: none"> <li>• Manage the Lands and Realty program to avoid, minimize, and mitigate the loss of GRSG habitat and habitat connectivity through the authorizations of ROWs, land tenure adjustments, proposed land withdrawals, agreements with partners, and incentive programs.</li> <li>• Effects of infrastructure projects, including siting, will be minimized using the best available science and updated as monitoring information on current infrastructure projects becomes available.</li> </ul>		
134	Acquisitions of in-holdings and other areas with important resource values would be encouraged or allowed.	<p><b>Management Actions:</b> Acquisition of in-holdings and other lands with important resource values would be encouraged or allowed.</p> <p>Allow development in the existing ROWs corridor along SH 13 and I-70.</p> <p>Retain lands atop the plateau and acquire in-holdings atop the plateau. Below the rim, lands would be considered for sale, acquisition, or exchange on a case-by-case basis.</p>	Same as Alternative II.	Same as Alternative II.
135	BLM would continue to allow development in existing ROWs along SH 13 and I-70.			
136	No direction identified for transferred lands. Acquisition of in-holdings and areas of important resource values allowed.			
137	Disposal of 2,031 acres in previously isolated parcels. (With the transfer of the NOSR parcels, lands identified in the 1988 GSRA RMP may not be suitable for disposal as they are no longer isolated.)			

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
138	All lands are suitable for consideration for the location of utility and communication facilities. Sensitive zones are identified for some lands where existing resource values must be mitigated prior to location of a proposed facility.			
139				
140	Maintain the current Oil Shale Withdrawal affecting the transferred lands.	Propose revocation of the current oil shale withdrawal affecting the transferred lands, but maintain withdrawal on Anvil Points Facility Repositories 1 and 2 to limit mineral development and for consistency with perpetual ROW on repositories.  Retain BLM ROWs on Anvil Points Facility Repositories 1, 2, and 3.	Retain suitable Wild and Scenic River segments and inventoried lands with wilderness characteristics.  Propose revocation of the current oil shale withdrawal affecting the transferred lands, but maintain withdrawal on Anvil Points Facility Repositories 1 and 2 to limit mineral development and for consistency with perpetual ROW on repositories.  Recommend withdrawal of Anvil Points Oil Shale Facility Repository 3.  Retain BLM ROWs on Anvil Points Facility Repositories 1, 2, and 3.	Recommend modification of the current oil shale withdrawal affecting the transferred lands to allow for land tenure actions while keeping land closed to mineral location and entry, but retain oil shale withdrawal (without modification) for Anvil Points Facility Repositories 1 and 2 for consistency with perpetual ROW on repositories.  Recommend withdrawal of Anvil Points Oil Shale Facility Repository 3.  Retain BLM ROW on Anvil Points Facility Repositories 1, 2, and 3.
141	No similar management action.	Apply: CRVFO-NSO-Roan-32: Anvil Points Spent Shale Repositories.	Apply: CRVFO-NSO-Roan-32: Anvil Points Spent Shale Repositories.	Apply: CRVFO-NSO-Roan-32: Anvil Points Spent Shale Repositories.
142	No similar management action.	For lands in GHMA that are identified for disposal, the BLM would only dispose of such lands consistent with the goals and objectives of this LUPA, including, but not limited to, the LUPA objective to maintain or increase GRSG abundance and distribution.	Same as Alternative II.	Same as Alternative II.
143	No similar management action.	No similar management action.	Recommend for withdrawal to the Secretary of the Interior to close suitable WSR segments to mining laws for locatable exploration or development.	No similar management action.
144	No similar management action.	No similar management action.	Designate suitable WSR stream segments as ROW exclusion areas.	No similar management action.
145	No similar management action.	No similar management action.	Recommend for withdrawal to the Secretary of the Interior to close lands with wilderness characteristics to mining laws for locatable exploration or development.	No similar management action.
146	No similar management action.	No similar management action.	New discretionary uses that create valid existing rights would not be allowed in lands with wilderness characteristics if they would detract from the wilderness values. Specific exemptions/allowances could be made for prior existing rights.	No similar management action.
147	No similar management action.	No similar management action.	Lands with wilderness characteristics would be retained in public ownership. They would not be disposed through any means, including public sales, exchanges, patents under the Recreation and Public Purposes Act, State selections, or other actions (except were a vested right was established prior to October 21, 1976).	No similar management action.

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148	No similar management action.	No similar management action.	Retain suitable WSR stream segments for long-term management.	No similar management action.
149	No similar management action.	No similar management action.	Prior existing rights such as leases under the Recreation and Public Purposes Act, leases and permits under 43 CFR 2920, and ROWs on lands with wilderness characteristics may be renewed.	No similar management action.
150	No similar management action.	No similar management action.	Lands with wilderness characteristics would be designated as ROW exclusion areas. New authorizations, leases, or ROWs that are not compatible with the defined values would not be authorized.	No similar management action.
151	No similar management action.	<p>Make areas within GRSG PHMA avoidance areas for BLM ROW permits.</p> <p>No new roads or above-ground structures would be authorized within 1 mile of an active lek.</p> <p>Above-ground structures are defined as structures that are located on or above the surface of the ground, including, but not limited to: roads, fences, communication towers, and/or any structure that would provide perches.</p> <p>An above-ground structure would be authorized only if:</p> <ol style="list-style-type: none"> <li>1. It is consistent with the overall objective of the GRSG RMP Amendment;</li> <li>2. The effect on GRSG populations or habitat is nominal or incidental;</li> <li>3. Allowing the exception prevents implementation of an alternative more detrimental to GRSG or similar environmental concern; and</li> <li>4. Rigid adherence to the restriction would be the only reason for denying the action.</li> </ol> <p>Manage PHMA and GHMA as avoidance areas for high-voltage (greater than 230 kilovolts) transmission lines, except for the transmission projects specifically identified below. All authorizations in these areas must comply with the conservation measures outlined in the NWCOGSG FEIS, including RDFs/PDFs (Appendix I) and avoidance criteria, as outlined above.</p> <p>GRSG PHMA ROW Avoidance. ROWs may be issued after documenting that the ROWs would not adversely affect GRSG populations based on the following criteria:</p> <ul style="list-style-type: none"> <li>• Location of proposed activities in relation to critical GRSG habitat areas as identified by factors including, but not limited to, average male lek attendance and/or important seasonal habitat.</li> <li>• An evaluation of the potential threats from proposed activities that may affect the local population as compared to benefits that could be accomplished</li> </ul>	<p>Make GRSG PHMA areas exclusion areas for new BLM ROW permits.</p>	<p>Manage areas within PHMA as avoidance areas for BLM ROW permits. (See Special Stipulations applicable to GRSG PHMA ROW Avoidance, Proposed LUPA*.)</p> <p>Manage areas within GHMA as avoidance areas for major (transmission lines greater than 100 kilovolts and pipelines greater than 24 inches) and minor BLM ROW permits. (See Special Stipulations applicable to GRSG PHMA ROW Avoidance, Proposed LUPA*.)</p> <p>No new roads or above-ground structures would be authorized within 1 mile of an active lek.</p> <p>Above-ground structures are defined as structures that are located on or above the surface of the ground, including but not limited to: roads, fences, communication towers, and/or any structure that would provide perches.</p> <p>Above ground structures would only be authorized if:</p> <ol style="list-style-type: none"> <li>1. It is consistent with the overall objective of the RMP Amendment;</li> <li>2. The effect on GRSG populations or habitat is nominal or incidental;</li> <li>3. Allowing the exception prevents implementation of an alternative more detrimental to GRSG or similar environmental concern; and</li> <li>4. Rigid adherence to the restriction would be the only reason for denying the action.</li> </ol> <p>PHMA and GHMA are designated as avoidance areas for high-voltage transmission line ROWs. All authorizations in these areas must comply with the conservation measures outlined here, including the RDFs and avoidance criteria presented in this document.</p> <p>GRSG PHMA ROW Avoidance, Proposed LUPA*. ROWs may be issued after documenting that the ROWs would not adversely affect GRSG populations based on the following criteria:</p> <ul style="list-style-type: none"> <li>• Location of proposed activities in relation to critical GRSG habitat areas as identified by factors,</li> </ul>

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		<p>through compensatory or offsite mitigation.</p> <ul style="list-style-type: none"> <li>An evaluation of the proposed activities in relation to the site-specific terrain and habitat features. For example, within 4 miles from a lek, local terrain features such as ridges and ravines may reduce the habitat importance, and shield nearby habitat from disruptive factors.</li> </ul> <p>Any new projects within PHMA would be subject to the 3% disturbance cap, as described in Appendix E, Methodology for Calculating Disturbance Caps, NWCOGSG FEIS. If the 3% disturbance cap is exceeded in PHMA in any CO Management Zone, no new ROW would be authorized in PHMA within that CO Management Zone, unless site-specific analysis documents no impact to GRSG.</p> <p>Apply: GRSG PHMA ROW TL to prohibit surface occupancy and surface-disturbing activities associated with BLM ROW permits within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</p>		<p>including, but not limited to, average male lek attendance and/or important seasonal habitat.</p> <ul style="list-style-type: none"> <li>An evaluation of the potential threats from proposed activities that may affect the local population as compared to benefits that could be accomplished through compensatory or off-site mitigation (see Section 2.7.3, Regional Mitigation).</li> <li>An evaluation of the proposed activities in relation to the site-specific terrain and habitat features. For example, within 4 miles from a lek, local terrain features such as ridges and ravines may reduce the habitat importance and shield nearby habitat from disruptive factors.</li> </ul> <p>Any new projects within PHMA would be subject to the 3% disturbance cap as described in Appendix H, Guidelines for Implementation of the Proposed Plan (NWCOGSG FEIS; BLM 2015d). If the 3% disturbance cap is exceeded in PHMA in any Colorado MZ, no new ROW would be authorized in PHMA within that biologically significant unit (Colorado populations) and proposed project analysis area (Colorado MZ), unless site-specific analysis documents no impact to GRSG.</p> <p>GRSG PHMA ROW TL, Proposed LUPA*: Prohibit surface occupancy and surface-disturbing activities associated with BLM ROW within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15). (See Special Stipulations applicable to GRSG PHMA ROW TL, Proposed LUPA*).</p> <p>(PHMA) Only issue ROWs after documenting that the ROWs will not adversely affect GRSG populations due to habitat loss or disruptive activities (independent of disturbance cap), except where such limitation would make accessing valid existing rights impracticable.</p> <p>Construct new roads to the appropriate Gold Book standard and add the surface disturbance to the total disturbance in the PHMA.</p> <p>Any new ROW authorizations would be subject to the 3% disturbance cap, and would be evaluated based on an analysis of the following:</p> <ul style="list-style-type: none"> <li>Location of proposed activities in relation to critical GRSG habitat areas as identified by factors, including, but not limited to, average male lek attendance and/or important seasonal habitat.</li> <li>An evaluation of the potential threats from proposed activities that may affect the local population as compared to benefits that could be accomplished through compensatory or off-site mitigation (see Section 2.7.3, Regional Mitigation).</li> </ul>

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
				<ul style="list-style-type: none"> <li>An evaluation of the proposed activities in relation to the site-specific terrain and habitat features. For example, within 4 miles from a lek, local terrain features such as ridges and ravines may reduce the habitat importance and shield nearby habitat from disruptive factors.</li> </ul> <p>GRSG PHMA ROW TL, Proposed LUPA*: Prohibit surface occupancy and surface-disturbing activities associated with BLM ROW within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).</p> <p>* NCGSG Proposed LUPA/FEIS</p>
152	No similar management action.	In GRSG PHMA, new ROWs may be collocated within approved ROW corridors that are encumbered by existing ROW authorizations. Apply special stipulations in Appendix D, Stipulations Applicable to Fluid Mineral Leasing and Land Use (NWCOGSG FEIS).	In GRSG PHMA within designated ROW corridors encumbered by existing ROW authorizations: new ROWs may be collocated only if the entire footprint of the proposed project (including construction and staging) can be completed within the existing disturbance associated with the authorized ROWs.	Same as Alternative II.
153	No similar management action.	<p>In GRSG PHMA, issue ROWs only after documenting that the ROWs will not adversely affect GRSG populations due to habitat loss or disruptive activities (independent of disturbance cap) except where such limitation would make accessing valid existing rights impracticable.</p> <p>Construct new roads to the appropriate Gold Book standard and add the surface disturbance to the total disturbance in the priority habitat management area.</p> <p>Any new ROW authorizations would be subject to the 3% disturbance cap, and would be evaluated based on an analysis of the following:</p> <ul style="list-style-type: none"> <li>Location of proposed activities in relation to critical GRSG habitat areas as identified by factors including, but not limited to, average male lek attendance and/or important seasonal habitat.</li> <li>An evaluation of the potential threats from proposed activities that may affect the local population as compared to benefits that could be accomplished through compensatory or offsite mitigation. (See Mitigation Strategy, NGS RMP/EIS.)</li> <li>An evaluation of the proposed activities in relation to the site-specific terrain and habitat features. For example, within 4 miles from a lek, local terrain features such as ridges and ravines may reduce the habitat importance and shield nearby habitat from disruptive factors.</li> </ul> <p>Apply: GRSG PHMA ROW TL: Prohibit surface occupancy and surface-disturbing activities associated with BLM ROW permits within 4 miles from active leks during lekking, nesting,</p>	In GRSG PHMA, subject to valid existing rights: where new ROWs associated with valid existing rights are required, collocate new ROWs where it best minimizes GRSG impacts. Use existing roads, or realignments as described above, to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary, and add the surface disturbance to the total disturbance in the priority habitat management area. If that disturbance exceeds 3% for that area, then evaluate and implement additional effective mitigation to offset the resulting loss of GRSG habitat.	Same as Alternative II.

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		and early brood rearing (March 1-July 15).		
154	No similar management action.	In GRSG PHMA, or within 4 miles of an active lek, for ROW renewals, where existing facilities cannot be removed, buried, or modified, require perch deterrents.	In GRSG PHMA, evaluate and take advantage of opportunities to remove, bury, or modify existing power lines within GRSG PHMA areas.	Same as Alternative II.
155	No similar management action.	In GRSG PHMA, reclaim and restore ROWs per regulatory requirements (43 CFR 2805.12(i)(1); 43 CFR 2885.11(b)(9)(i)).  Designate new ROW corridors in GRSG PHMAs only where there is a compelling reason to do so and location of the corridor within PHMAs will not adversely affect GRSG populations due to habitat loss or disruptive activities.	In GRSG PHMA, where existing leases, ROWs have had some level of development (road, fence, well, etc.) and are no longer in use, reclaim the site by removing these features and restoring the habitat.  <i>Planning Direction Note:</i> Relocate existing designated ROW corridors crossing GRSG PHMAs void of any authorized ROWs, outside of the PHMAs. If relocation is not possible, undesignate that entire corridor during the planning process (corridor would no longer exist).	Same as Alternative II.
156	No similar management action.	No similar management action.	Make GRSG PHMA areas "avoidance areas" for new ROWs.	Manage areas within GHMA as avoidance areas for major (transmission lines greater than 100 kilovolts and pipelines greater than 24 inches) and minor BLM ROW permits. (See Special Stipulations applicable to GRSG PHMA ROW Avoidance, Proposed LUPA*.)  * NCGSG Proposed LUPA/FEIS
157	No similar management action.	No similar management action.	Where new ROWs are necessary in GRSG PHMA, collocate new ROWs within existing ROWs where possible.	No similar management action.
158	No similar management action.	Retain public ownership of GRSG PHMA. Consider exceptions where there is mixed ownership and land exchanges would allow for additional or more contiguous Federal ownership patterns within the GRSG PHMA area.	Same as Alternative II.	Same as Alternative II.
159	No similar management action.	In GRSG PHMA, in isolated Federal parcels, only allow tract disposals that are beneficial or neutral to long-term management of GRSG populations.  For GRSG GHMA:  1. For parcels in GHMA for which land retention was analyzed in one alternative (i.e., not analyzed for disposal in every alternative), the allocation for that piece of GHMA should be "retention" in the Proposed Plan.  2. For pieces of land in GHMA for which land retention was never analyzed (i.e., analyzed for disposal in every alternative), the lands will remain identified for "disposal" subject to the following drop in: For lands in General Habitat that are identified for disposal, the BLM will only dispose of such lands consistent with the goals and objectives of this plan, including, but not limited to, the land use plan objective to maintain or increase GRSG abundance and distribution.	Under GRSG PHMA areas with minority Federal ownership, include an additional, effective mitigation agreement for any disposal of Federal land. As a final preservation measure, consideration should be given to pursuing a permanent conservation easement.	Same as Alternative II.

Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
160	No similar management action.	In GRSG GHMA, no similar action, but consider GRSG habitat values in acquisitions. For example, identify key GRSG habitats on private or State land adjacent to existing BLM land where acquisition and protection by BLM could substantially benefit the local GRSG population. This could be accomplished via purchase, exchange, or donation to satisfy mitigation requirements.	In GRSG PHMA, where suitable conservation actions cannot be achieved, seek to acquire State and private lands with intact subsurface mineral estate by donation, purchase, or exchange in order to best conserve, enhance, or restore GRSG habitat.	No similar management action.
161	No similar management action.	In GRSG PHMA, consider petitioning for withdrawal on a case-by-case basis from mineral entry based on risk to GRSG and its habitat.	Propose lands within GRSG PHMA areas for mineral withdrawal.	Same as Alternative II.
162	No similar management action.	No similar management action.	In GRSG PHMA, do not recommend withdrawal proposals not associated with mineral activity unless the land management is consistent with GRSG conservation measures. For example, in a proposed withdrawal for a military training range buffer area, manage the buffer area with GRSG conservation measures.	No similar management action.
163	<b>Recreation</b>			
164		<p><b>Goal:</b> Manage the entire Planning Area as undesignated for recreation management.</p> <p><b>Objectives:</b> Manage to meet basic recreation and visitor services and resource stewardship needs:</p> <ol style="list-style-type: none"> <li>1. Visitor Health and Safety – Ensure that participants in dispersed recreational activities have a low potential for serious accidents (&lt; two accidents/year that require hospitalization) due to human-created conditions and no (zero) exposure to hazardous health conditions.</li> <li>2. Use and User Conflicts – Limit incidents of conflict that impede gas production (as determined by BLM Natural Resource Specialists) to three or less per year by increasing the understanding of participants in traditional dispersed recreational activities about gas production and the phasing of development.</li> <li>3. Resource Protection – Create an increased awareness, understanding, and sense of stewardship in recreational activity participants so their conduct safeguards natural resource values within ACECs and overall land health (as defined by ACEC objectives or Land Health Standards).</li> </ol> <p><b>GRSG Objectives:</b> Manage Recreation to avoid activities that: (1) disrupt GRSG; (2) fragment GRSG habitat; or (3) spread noxious weeds.</p>		
165	Manage entire area as part of Glenwood Springs ERMA.	<b>Management Actions:</b> Management activities would include custodial recreation management actions only.	Same as Alternative II.	Same as Alternative II.
166	Ensure the continued availability of outdoor recreation opportunities that the public seeks and that are not readily available from other sources to reduce the impacts of recreational use on fragile and unique resource values, and to provide for visitor safety.	Marketing/Interpretation: Mitigate conflicts through visitor outreach efforts.	Undesignated lands are public lands not designated as Recreation Management Areas and are managed to meet basic recreation and visitor services and resource stewardship needs.	
167	Implementation Actions: Existing type and degree of management, marketing, monitoring, and administration would occur.	Monitoring: BLM staff would monitor conflicts with other uses (i.e., oil and gas production, grazing, ACEC management and land health), and private lands.  Administration: Mitigate conflicts directly by way of recreation use restrictions, realignments, signage, and closures.  Permitted special events and Special Recreation Permits (SRPs) for commercial use, organized group use, competitive events, and vending use would be allowed consistent with other management objectives for other resources and uses.		
168	No similar management action.	In GRSG PHMA, do not allow SRPs with the potential to adversely affect GRSG or GRSG habitat.	Only allow BLM SRPs in GRSG PHMA that have neutral or beneficial effects to PHMA areas.	Same as Alternative II.
169	No similar management action.	No similar management action.	Permanent recreation structures would not be permitted on lands with wilderness characteristics	No similar management action.

**Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource**

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
170	No similar management action.	No similar management action.	No SRPs would be authorized on lands with wilderness characteristics unless they are necessary for helping people realize the primitive and unconfined recreational values (e.g., upland outfitting service).	No similar management action.
171	No similar management action.	No similar management action.	When commercial SRPs on lands with wilderness characteristics are renewed, the terms and conditions of the SRP would be modified as necessary to comply with the Management and Setting Prescriptions for Lands Managed for Wilderness.	No similar management action.
172	No similar management action.	No similar management action.	Competitive events would not be authorized on lands with wilderness characteristics.	No similar management action.
173	<p><u>Allow the discharge of firearms for recreational target shooting on BLM lands outside areas with firearm use restrictions, provided that the firearm is discharged toward a proper backstop sufficient to stop the projectile's forward progress beyond the intended target. Targets shall be constructed of wood, cardboard, and paper or similar non-breakable materials. All targets, clays, and shells are considered litter after use and must be removed and properly discarded.</u></p> <p><u>Prohibit the discharge of firearms for recreational target shooting in developed recreation sites (existing and future). The purpose of the restriction is to protect visitor safety by minimizing potential for accidental shootings (43 CFR 8365.2-5).</u></p>	<u>Same as Alternative I</u>	<u>Same as Alternative I</u>	<u>Same as Alternative I</u>
174	No similar management action.	No similar management action.	<p><u>Alternative III A</u></p> <p>Prohibit the discharge of firearms for recreational target shooting on the following BLM lands to protect visitor safety by minimizing potential for accidental shootings (43 CFR 8364.1) (610 acres):</p> <ul style="list-style-type: none"> <li>• Within ¼ mile of developed recreation sites (existing and future).</li> <li>• Within the Hubbard Mesa OHV Area, within ¼ mile from the centerline of Fravert Access Road located in Township 6 South, Range 93 West to the Hubbard Mesa Trailhead.</li> </ul> <p>Note: Hunting is authorized in accordance with CPW regulations.</p>	No similar management action.

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
175	<u>No similar management action.</u>	<u>No similar management action.</u>	<p><u>Alternative III B</u></p> <p><u>Prohibit the discharge of firearms for recreational target shooting on the following BLM lands to protect visitor safety by minimizing potential for accidental shootings (43 CFR 8364.1) (2, 330 acres):</u></p> <ul style="list-style-type: none"> <li><u>Within ¼ mile of developed recreation sites (existing and future).</u></li> <li><u>Within the entire Hubbard Mesa Open OHV Area.</u></li> </ul> <p><u>Note: Hunting is authorized in accordance with CPW regulations.</u></p>	<u>No similar management action.</u>
176	<b>Grazing and Rangeland Management</b>			
177		<p><b>Goal:</b> Provide livestock forage while maintaining or enhancing healthy landscapes.</p> <p><b>Objective:</b> Grazing management would conform to BLM grazing regulations (43 CFR 4180) and BLM Colorado's Standards for Public Land Health and Guidelines for Livestock Management.</p> <p><b>GRSG Objectives:</b> GRSG objectives and well-managed livestock operations are compatible because forage availability for livestock and hiding cover for GRSG are both dependent on healthy plant communities. Agreements with partners that promote sustainable GRSG populations concurrent with sustainable ranch operations offer long-term stability. In the context of sustainable range operations, manage the range program to: (1) maintain or enhance vigorous and productive plant communities; (2) maintain residual herbaceous cover to reduce predation during GRSG nesting and early brood rearing; (3) avoid direct adverse impacts to GRSG-associated range project infrastructure; and (4) employ grazing management strategies that avoid concentrating animals on key GRSG habitats during key seasons.</p>		
178	<p>Continue the authorization of livestock grazing in a manner consistent with Public Land Health Standards and Guidelines for Livestock Grazing Management in Colorado.</p> <p>Conduct high-intensity monitoring on allotments with identified issues to ensure compliance with permit terms and conditions and progress toward Land Health Standards.</p> <p>Conduct low-intensity monitoring on other allotments to ensure compliance with authorization and maintenance of current conditions.</p> <p>Develop AMPs within administrative units that do not meet, or have identified concerns in meeting, Land Health Standards.</p> <p>Implement rangeland projects to direct livestock use (fences, ponds, etc.) and administrative solutions to meet resource management objectives (season-of-use revisions, stocking level adjustments, pasture exclusions, and utilization stipulations) based on monitoring studies and Land Health Assessment findings.</p> <p>Abandon and rehabilitate rangeland projects that do not function to maintain resource values and meet management objectives.</p>	<p><b>Management Actions:</b> Regularly monitor rangeland health and evaluate existing grazing management practices.</p> <p>Continue to implement the BLM CRVFO Monitoring Plan (Appendix I) and current AMPs in conjunction with Standards for Public Land Health and Guidelines for Livestock Management to assess overall rangeland health.</p> <p>Develop, implement, and review AMPs on a regularly scheduled basis with grazing permittees with priority for allotments determined not to be meeting Land Health Standards. Apply guidelines and BMPs (Roan FEIS Appendix L) to rest, and defer grazing of riparian areas.</p> <p>Ensure that Land Health Standards are being met through Land Health surveys and application of the most current version of the CRVFO Monitoring Plan (Appendix I). Use a combination of administrative solutions (season-of-use revisions, livestock exclusion, and stocking level adjustments) and rangeland projects (fences, ponds, etc.) to direct livestock use to meet resource objectives and Land Health Standards, following the latest version of BLM Technical Reference 1734-6 or equivalent documents.</p> <p>Modify or abandon and rehabilitate rangeland projects that do not function to maintain resource values and meet management objectives.</p>	Same as Alternative II.	Same as Alternative II

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		<p>Identify criteria for determining the beginning and end of droughts (or droughty periods whether officially declared or not) on the basis of scientifically credible methods, data, and BLM policy (e.g., Palmer Drought Severity Index, Crop Moisture Index, and soil moisture).</p> <p>The authorized officer has the authority to modify grazing based on resource conditions and objectives and the need to protect resources from imminent likelihood of resource damage (43 CFR 4110.3-3(b)).</p>		
179	No similar management action.	In GRSG GHMA, incorporate GRSG habitat objectives and management considerations into all BLM grazing allotments through Allotment Management Plans or permit renewals.	In GRSG PHMA, incorporate GRSG habitat objectives and management considerations into all BLM grazing allotments through Allotment Management Plans or permit renewals.	Same as Alternative II.
180	No similar management action.	In GRSG GHMA, work cooperatively on integrated ranch planning within GRSG habitat. Develop management strategies that are seamless with respect to actions on public and private lands within BLM grazing allotments.	In GRSG PHMA, work cooperatively on integrated ranch planning within GRSG habitat so operations with deeded BLM allotments can be planned as single units.	Same as Alternative II.
181	No similar management action.	<p>In GRSG PHMA, the BLM will prioritize:</p> <ul style="list-style-type: none"> <li>the review of grazing permits/leases, in particular to determine whether modification is necessary prior to renewal, and</li> <li>the processing of grazing permits/leases in PHMAs.</li> </ul> <p>In setting workload priorities, precedence will be given to existing permits/leases in these areas not meeting Land Health Standards, with focus on those containing riparian areas, including wet meadows.</p> <p>The BLM may use other criteria for prioritization to respond to urgent natural resource concerns (e.g., fire) and legal obligations.</p>	Prioritize completion of land health assessments and processing grazing permits within GRSG PHMA areas. Focus this process on allotments that have the best opportunities for conserving, enhancing, or restoring habitat for GRSG. Utilize BLM Ecological Site Descriptions to conduct land health assessments to determine if standards of rangeland health are being met.	Same as Alternative II.
182	No similar management action.	In GRSG GHMA, conduct land health assessments that include (at a minimum) indicators and measurements of structure/condition/composition of vegetation specific to achieving GRSG habitat objectives. If local/State seasonal habitat objectives are not available, use GRSG habitat recommendations from Connelly et al. 2000 and Hagen et al. 2007.	Same as Alternative II.	Same as Alternative II.

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183	No similar management action.	In GRSG GHMA, develop specific objectives—through NEPA analysis conducted in accordance with the permit/lease renewal process—to conserve, enhance, or restore GRSG habitat. Base benchmarks on Ecological Site/Range Site Descriptions. When existing Ecological Site/Range Site Descriptions have not been developed, or are too general to serve adequately as benchmarks, identify and document local reference sites for areas of similar potential that exemplify achievement of GRSG habitat objectives and use these sites as the benchmark reference. Establish measurable objectives related to GRSG habitat from baseline monitoring data, ecological site descriptions, or land health assessments/evaluations, or other habitat and successional stage objectives.	In GRSG PHMA, develop specific objectives to conserve, enhance, or restore PHMAs based on BLM Ecological Site Descriptions and assessments (including within wetlands and riparian areas). If an effective grazing system that meets GRSG habitat requirements is not already in place, analyze at least one alternative that conserves, restores, or enhances GRSG habitat in the NEPA document prepared for the permit renewal.	Same as Alternative II.
184	No similar management action.	In GRSG GHMA, manage for vegetation composition and structure consistent with ecological site potential and within the reference state subject to habitat objectives, including successional stages.	In GRSG GHMA, manage for vegetation composition and structure consistent with ecological site potential and within the reference state to achieve GRSG seasonal habitat objectives.	Same as Alternative II.
185	No similar management action.	In GRSG GHMA, include terms and conditions on grazing permits and leases that address disruptive activities that affect GRSG and that ensure plant growth requirements are met and residual forage remains available for GRSG hiding cover.  Specify as necessary:  1. Season or timing of use; 2. Numbers of livestock (include temporary non-use or livestock removal); 3. Distributions of livestock use; 4. Intensity of use (utilization or stubble height objectives); 5. Kind of livestock (e.g., cattle, sheep, horse, llama, alpaca, and goat); 6. Class of livestock (e.g., yearlings versus cow/calf pairs); and 7. Locations of bed grounds, sheep camps, trail routes, etc.	In GRSG GHMA, implement management actions (grazing decisions, Allotment Management Plan/Conservation Plan development, or other agreements) to modify grazing management to meet seasonal GRSG habitat requirements. Consider singly, or in combination, changes in:  1. Season or timing of use; 2. Numbers of livestock (includes temporary non-use or livestock removal); 3. Distribution of livestock use; 4. Intensity of use; and 5. Type of livestock (e.g., cattle, sheep, horses, llamas, alpacas, and goats) (Briske et al. 2011).	Same as Alternative II.
186	No similar management action.	In GRSG GHMA, develop drought contingency plans at the appropriate landscape unit that provide for a consistent/appropriate BLM response. Plans should establish policy for addressing ongoing drought and post-drought recovery for GRSG habitat objectives.	In GRSG PHMA, during drought periods, prioritize evaluating effects of the drought in GRSG PHMAs relative to their needs for food and cover. Since there is a lag in vegetation recovery following drought, ensure that post-drought management allows for vegetation recovery that meets GRSG needs in GRSG PHMAs.	Same as Alternative II.
187	No similar management action.	In GRSG PHMA, the NEPA analysis for renewals and modifications of livestock grazing permits/leases that include lands within PHMAs would include specific management thresholds based on GRSG Habitat Objectives Table and Land Health Standards (43 CFR 4180.2) and defined responses that would allow the authorizing officer to make adjustments to livestock grazing without conducting additional NEPA.	No similar management action.	Same as Alternative II.

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188	No similar management action.	Allotments within PHMAs, focusing on those containing riparian areas, including wet meadows, would be prioritized for field checks to help ensure compliance with the terms and conditions of the grazing permits. Field checks could include monitoring for actual use, utilization, and use supervision.	No similar management action.	Same as Alternative II.
189	No similar management action.	In GRSG GHMA, manage riparian areas and wet meadows for proper functioning condition.	In GRSG PHMA, manage riparian areas and wet meadows for proper functioning condition.	Same as Alternative II.
190	No similar management action.	In GRSG GHMA, manage wet meadows to maintain diverse species richness, including a component of perennial forbs, relative to site potential (i.e., reference state).	In GRSG GHMA, manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (i.e., reference state) to facilitate brood rearing. Also conserve or enhance these wet meadow complexes to maintain or increase the amount of edge and cover within that edge to minimize elevated mortality during the late brood rearing period.	Same as Alternative II.
191	No similar management action.	In GRSG GHMA, establish permit/lease terms and conditions (see above) in conjunction with grazing strategies to ensure that the timing and level of utilization results in wet meadows with diverse species richness, including a component of perennial forbs, relative to site potential (i.e., reference state).	In GRSG GHMA, where riparian areas and wet meadows meet proper functioning, strive to attain reference state vegetation relative to the ecological site description. For example, within GRSG PHMA, reduce hot season grazing on riparian and meadow complexes to promote recovery or maintenance of appropriate vegetation and water quality. Utilize fencing/herding techniques or seasonal use or livestock distribution changes to reduce pressure on riparian or wet meadow vegetation used by GRSG in the hot season (summer).	Same as Alternative II.
192	No similar management action.	In GRSG GHMA, authorize new water development only after determining that the project will not adversely impact GRSG due to habitat loss. Ensure that adequate long-term grazing management is in effect before authorizing water developments that may increase levels of use or change season of use. Give specific consideration to adjacent or downstream wetland habitat when a project entails a diversion from a spring or seep.	In GRSG PHMA, authorize new water development for diversion from spring or seep sources only when GRSG PHMA would benefit from the development. This includes developing new water sources for livestock as part of an Allotment Management Plan/Conservation Plan to improve GRSG habitat.	Same as Alternative II.
193	No similar management action.	In GRSG GHMA, analyze springs, seeps, and associated pipelines to determine whether modifications are necessary to maintain the continuity of the predevelopment riparian area. If necessary to maintain GRSG populations or reverse a downward population trend caused by habitat loss, modify the project as necessary to restore the applicable wetland habitat.	In GRSG PHMA, analyze springs, seeps, and associated pipelines to determine whether modifications are necessary to maintain the continuity of the predevelopment riparian area within GRSG PHMA. Make modifications, where necessary, considering impacts to other water uses when such considerations are neutral or beneficial to GRSG.	Same as Alternative II.
194	No similar management action.	In GRSG GHMA, manage for a habitat objective that is primarily sagebrush with a mosaic of seral stages and sagebrush in all age classes. On a site-by-site basis, do not allow treatments that would adversely affect GRSG populations.	In GRSG PHMA, only allow treatments that conserve, enhance, or restore GRSG habitat (this includes treatments that benefit livestock as part of an Allotment Management Plan/Conservation Plan to improve GRSG habitat).	Same as Alternative II.
195	No similar management action.	In GRSG PHMA, evaluate the role of existing seedings that are currently composed of primarily introduced perennial grasses in and adjacent to GRSG PHMA to determine whether they should be restored to sagebrush or habitat of higher quality for GRSG. If these seedings are part of an Allotment Management Plan or if they provide value in conserving or enhancing the rest of the PHMA, then no restoration would be necessary. Assess the compatibility of these seedings for GRSG habitat or as a component of a	Same as Alternative II.	Same as Alternative II.

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		grazing system during the land health assessments (or other analyses only). For example, some introduced grass seedings are an integral part of a livestock management plan and reduce grazing pressure in important sagebrush habitats or serve as a strategic fuels management area.		
196	No similar management action.	In GRSG GHMA, design new range improvement projects to enhance livestock distribution and control the timing and intensity of utilization. Examples of structural range improvement projects are cattle guards, fences, corrals, pipelines, troughs, storage tanks, windmills, ponds/reservoirs, solar panels, and spring developments.  Include a plan to monitor and control invasive plant species following any related ground disturbance.  Place mineral or salt supplements away from water sources and leks in locations that enhance livestock distribution.	In GRSG PHMA, design any new structural range improvements and location of supplements (salt or protein blocks) to conserve, enhance, or restore GRSG habitat through an improved grazing management system relative to GRSG objectives. Structural range improvements, in this context include, but are not limited to, cattle guards, fences, exclosures, corrals or other livestock handling structures; pipelines, troughs, storage tanks (including moveable tanks used in livestock water hauling), ponds/reservoirs, windmills, solar panels, and spring developments. Potential for invasive species establishment or increase following construction must be considered in the project planning process and monitored and treated post-construction.	Same as Alternative II.
197	No similar management action.	In GRSG PHMA, where conditions create the potential for impacts from West Nile virus from developments or modification of water developments, use PDFs/RDFs to mitigate the potential impacts. See Appendix I, NWCOGSG FEIS.	In GRSG PHMA, when developing or modifying water developments, use applicable PDFs or RDFs (NWCOGSG FEIS) to mitigate potential impacts from West Nile virus.	Same as Alternative II.
198	No similar management action.	In GRSG PHMA, evaluate existing structural range improvements to determine whether modifications are necessary to maintain GRSG populations or reverse a downward population trend caused by habitat loss. Modify, relocate, or remove projects, as necessary.  Place mineral and salt supplements away from water sources and leks in locations that enhance livestock distribution.	In GRSG PHMA, evaluate existing structural range improvements and locations of supplements (salt or protein blocks) to make sure they conserve, enhance, or restore GRSG habitat.	(ADH) At the time a permittee or lessee voluntarily relinquishes a permit or lease, the BLM will consider whether the public lands where that permitted use was authorized should remain available for livestock grazing or be used for other resource management objectives, such as reserve common allotments or fire breaks. When a permittee or lessee voluntarily relinquishes grazing preference, consider conversion of the allotment to a reserve common allotment that will remain available for use on a temporary, nonrenewable basis for the benefit of GRSG habitat. Authorize temporary nonrenewal permits in Reserve Common Allotments to meet resource objectives elsewhere such as rest or deferment due to fire or vegetation treatments. Temporary use of reserve common allotments would not be allowed due to drought or overuse of customary allotments.
199	No similar management action.	In GRSG GHMA, mark fences in high-risk areas.  In GRSG PHMA, where marking fences does not reduce fence-related GRSG mortality, modify fences. Where modification does not reduce GRSG mortality and the fence-related mortality is sufficient to adversely affect GRSG populations, remove fences.	In GRSG PHMA, to reduce outright GRSG strikes and mortality, remove, modify, or mark fences in high-risk areas based on proximity to lek, lek size, and topography.	Same as Alternative II.
200	No similar management action.	In GRSG GHMA, monitor for and treat invasive species associated with existing range improvements.	In GRSG PHMA, monitor for and treat invasive species associated with existing range improvements.	Same as Alternative II.

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201	No similar management action.	In GRSG GHMA, at the time a permittee or lessee voluntarily relinquishes a permit or lease, the BLM will consider whether the public lands where that permitted use was authorized should remain available for livestock grazing or be used for other resource management objectives. When a permittee or lessee voluntarily relinquishes grazing preference, consider conversion of the allotment to a Reserve Conservation Allotment (RCA) that will remain available for use on a temporary, nonrenewable basis for the benefit of GRSG habitat. Authorize temporary nonrenewal permits in RCAs to meet resource objectives elsewhere such as rest or deferment due to fire or vegetation treatments. Temporary use of RCAs would not be allowed due to drought or overuse of customary allotments.	In GRSG GHMA, maintain retirement of grazing preference as an option in priority GRSG areas when the current permittee is willing to relinquish grazing on all or part of an allotment.  Analyze the impacts of no livestock use on wildfire and invasive species threats in evaluating retirement proposals.  <i>Planning direction note:</i> Each planning effort will identify the specific allotment where retirement of grazing preference is potentially beneficial.	In ADH, at the time a permittee or lessee voluntarily relinquishes a permit or lease, the BLM will consider whether the public lands where that permitted use was authorized shall remain available for livestock grazing or be used for other resource management objectives, such as reserve common allotments or fire breaks. This does not apply to or impact grazing preference transfers, which are addressed in 43 CFR 4110.2-3.  When a permittee or lessee voluntarily relinquishes grazing preference, consider conversion of the allotment to a reserve common allotment that will remain available for use on a temporary, nonrenewable basis for the benefit of GRSG habitat. Authorize temporary nonrenewal permits in Reserve Common Allotments to meet resource objectives elsewhere, such as rest or deferment due to fire or vegetation treatments. Temporary use of reserve common allotments would not be allowed due to drought or overuse of customary allotments.
202	<b><i>Oil and Gas Leasing and Development</i></b>			
203	<b><i>Protection of Threatened, Endangered, or Special Status Species</i></b>			
204	In addition to standard stipulations, all lands made available for lease under any alternative would have the following special stipulation:  The lease area may now or subsequently contain threatened, endangered, or other special status species of plants or animals or their habitats. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such species or their habitat under the ESA, as amended (16 U.S.C. 1531 et seq.). BLM will require modifications to, or disapprove, a proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the ESA, including any required procedure for conference or consultation.			
205	<b><i>Greater Sage-Grouse</i></b>			
206	<b><i>Fluid Minerals Management</i></b>			
207		<b>GRSG Objectives:</b> <ul style="list-style-type: none"> <li>Manage fluid minerals to avoid, minimize, and compensate for: 1) direct disturbance, displacement, or mortality of GRSG; 2) direct loss of habitat or loss of effective habitat through fragmentation; and 3) cumulative landscape-level impacts. Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside PHMA and GHMA. When analyzing leasing and authorizing development of fluid mineral resources, including geothermal, in PHMA and GHMA, and subject to applicable stipulations for the conservation of GRSG, priority will be given to development in non-habitat areas first and then in the least suitable habitat for GRSG. The implementation of these priorities will be subject to valid existing rights and any applicable law or regulation, including, but not limited to, 30 U.S.C. 226(p) and 43 CFR 3162.3-1(h).</li> <li>Utilize Federal authority to protect GRSG habitat on split estate lands to the extent provided by law.</li> </ul>		
208	<b><i>Unleased Fluid Minerals</i></b>			
209	No similar management action.	No new leasing within 1 mile from active leks in GHMA.  No surface occupancy in PHMA or within 2 miles of active leks in GHMA.  3% disturbance cap in PHMA with disturbances limited to one per 640-acre density calculated by CO Management Zone would apply to new lease activities.	Close GRSG PHMA areas to fluid mineral leasing. Upon expiration or termination of existing leases, do not accept nominations/expressions of interest for parcels within priority areas.	No new leasing 1 mile from active leks in ADH.  NSO without waiver or modification in PHMA. See Appendix D (Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations NWCOGSG FEIS) for exceptions.  In GHMA, any new leases would include appropriate TL stipulations to protect GRSG and its habitat. In addition, in GHMA, NSO with waivers, exceptions, and modification within 2 miles of active leks (Appendix D, Stipulations

**Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource**

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		<p>No new leasing in PHMA if disturbance cap exceeds 3% for the CO Management Zone, or one per 640 acres, is exceeded.</p> <p>The following stipulations would apply (See Appendix D, Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations, NWCOGSG FEIS):</p> <ul style="list-style-type: none"> <li>• GRSG NSO-46e. See Appendix D (NWCOGSG FEIS) for waiver, modification, and exception criteria.</li> <li>• GRSG TL-46e. No activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15). Authorized Officer could grant an exception, modification, or waiver in consultation with the State of Colorado.</li> <li>• GRSG LN-46e. Any lands leased in PHMAs are subject to the restrictions of one disturbance per 640 acres calculated by CO management zone to allow clustered development.</li> </ul>		<p>Applicable to Fluid Mineral Leasing and Land Use Authorizations NWCOGSG FEIS).</p> <p>3% disturbance cap in PHMA (by biologically significant unit) with disturbances limited to one disturbance per 640 acres density calculated by Colorado MZ and proposed project analysis area would apply to new lease activities.</p> <p>No new leasing in PHMA if disturbance cap exceeds 3% calculated by biologically significant unit (Colorado populations) and proposed project analysis area (Colorado MZ) or one disturbance per 640 acres density is exceeded.</p> <p>The following stipulations would apply (Appendix D, Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations NWCOGSG FEIS):</p> <p>GRSG NSO-46e: See Appendix D, Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations (NWCOGSG FEIS), for waiver, modification, and exception criteria.</p> <p>GRSG TL-46e: No activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood-rearing (March 1 to July 15).</p> <p>GRSG LN-46e: Any lands leased in PHMA are subject to the restrictions of one disturbance per 640 acres calculated by biologically significant unit (Colorado populations) and proposed project analysis area (Colorado MZ) to allow clustered development.</p>
210	No similar management action.	In GRSG PHMA, allow geophysical exploration within GRSG PHMAs to obtain information for existing Federal fluid mineral leases or areas adjacent to State or fee lands within GRSG PHMAs. Allow geophysical operations only using helicopter-portable drilling, wheeled, or tracked vehicles on existing roads, or other approved methods conducted in accordance with seasonal timing limitations and other restrictions that may apply. Geophysical exploration shall be subject to seasonal restrictions that preclude activities in breeding, nesting, brood-rearing, and winter habitats during their season of use by GRSG.	Same as Alternative II.	Same as Alternative II.
211	<b>Leased Fluid Minerals</b>			
212		<b>GRSG Objectives:</b> Where a proposed fluid mineral development project on an existing lease could adversely affect GRSG populations or habitat, the BLM will work with the lessees, operators, or other project proponents to avoid, reduce, and mitigate adverse impacts to the extent compatible with lessees' rights to drill and produce fluid mineral resources. The BLM will work with the lessee, operator, or project proponent in developing an Application for Permit to Drill for the lease to avoid, minimize, and compensate for impacts to GRSG or its habitat and will ensure that the best information about GRSG and its habitat informs and helps guide development of such Federal leases.		

Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
213	No similar management action	<p>Within 1 mile of active leks, disturbance, disruptive activities, and occupancy are precluded. If it is determined that this restriction would render the recovery of fluid minerals infeasible or uneconomic, considering the lease as a whole, or where development of existing leases requires that disturbance density exceeds one per 640 acres and/or 3% disturbance cap, use the criteria below to site proposed lease activities to meet GRSG habitat objectives and require mitigation as described in Appendix G, Mitigation, NWCOGSG FEIS.</p> <p>In PHMA and within 4 miles of an active lek, the criteria below would be applied to guide development of the lease or unit that would result in the fewest impacts possible to sage-grouse.</p> <p>Based on site-specific conditions, prohibit construction, drilling, and completion within PHMA within 4 miles of a lek during lekking, nesting, and early brood rearing (March 1 through July 15). In consultation with the State of Colorado, this timing limitation may be adjusted based on application of the criteria below.</p> <p>Criteria:</p> <ul style="list-style-type: none"> <li>• Location of proposed lease activities in relation to critical GRSG habitat areas, as identified by factors including, but not limited to, average male lek attendance and/or important seasonal habitat.</li> <li>• An evaluation of the potential threats from proposed lease activities that may affect the local population as compared to benefits that could be accomplished through compensatory or offsite mitigation.</li> <li>• An evaluation of the proposed lease activities, including design features, in relation to the site-specific terrain and habitat features. For example, within 4 miles from a lek, local terrain features such as ridges and ravines may reduce the habitat importance and shield nearby habitat from disruptive factors. This is particularly likely in CO Management Zone 17, which has an atypical GRSG habitat, featuring benches with GRSG habitat interspersed with steep ravines.</li> </ul> <p>To authorize an activity based on the criteria above, the environmental record of review must show no significant direct disturbance, displacement, or mortality of GRSG.</p>	<p>In GRSG PHMA, apply the following conservation measures through LUP implementation decisions (e.g., approval of an Application for Permit to Drill, Sundry Notice, etc.) and upon completion of the environmental record of review (43 CFR 3162.5), include appropriate documentation of compliance with NEPA. In this process, evaluate, among other things:</p> <ol style="list-style-type: none"> <li>1. Whether the conservation measure is "reasonable" (43 CFR 3101.1-2) with the valid existing rights; and</li> <li>2. Whether the action is in conformance with the approved LUP.</li> </ol>	<p>Within 1 mile of active leks, disturbance, disruptive activities, and occupancy are precluded.</p> <p>If it is determined that this restriction would render the recovery of fluid minerals infeasible or uneconomic, considering the lease as a whole, or where development of existing leases requires that disturbance density exceeds one disturbance per 640 acres and/or the 3% disturbance cap, use the criteria below to site proposed lease activities to meet GRSG habitat objectives and require mitigation as described in Appendix G (Greater Sage-Grouse Mitigation Strategy; NWCOGSG FEIS).</p> <p>In PHMA and within 4 miles of an active lek, the criteria below would be applied to guide development of the lease or unit that would result in the fewest impacts possible to GRSG.</p> <p>Based on site-specific conditions, prohibit construction, drilling, and completion within PHMA within 4 miles of a lek during lekking, nesting, and early brood-rearing (March 1 to July 15). In consultation with the State of Colorado, this TL may be adjusted based on application of the criteria below.</p> <p>Criteria:</p> <ul style="list-style-type: none"> <li>• Location of proposed lease activities in relation to critical GRSG habitat areas as identified by factors, including, but not limited to, average male lek attendance and/or important seasonal habitat.</li> <li>• An evaluation of the potential threats from proposed lease activities that may affect the local population as compared to benefits that could be accomplished through compensatory or off-site mitigation (see Section 2.7.3*, Regional Mitigation).</li> <li>• An evaluation of the proposed lease activities, including design features, in relation to the site-specific terrain and habitat features. For example, within 4 miles from a lek, local terrain features such as ridges and ravines may reduce the habitat importance and shield nearby habitat from disruptive factors. This is particularly likely in Colorado MZ 17, which has an atypical GRSG habitat featuring benches with GRSG habitat interspersed with steep ravines.</li> </ul> <p>To authorize an activity based on the criteria above, the environmental record of review must show no significant direct disturbance, displacement, or mortality of GRSG.</p> <p>* NCGSG Proposed LUPA/FEIS</p>

**Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource**

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
214	No similar management action.	In GRSG PHMA COA, BLM should closely examine the applicability of categorical exclusions in PHMA. If extraordinary circumstances review is applicable, the BLM should determine whether those circumstances exist.	Same as Alternative II.	Same as Alternative II.
215	No similar management action.	GRSG PHMA Notice to Lessees-54e: Within PHMA, operators would be encouraged to complete Master Development Plans in consultation with the State of Colorado, instead of single-well Applications for Permit to Drill for all but exploratory wells.  (Refer to Appendix E, Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations, NWCOGSG FEIS).	GRSG PHMA Notice to Lessees-54b/c: For leases within PHMA, complete Master Development Plans in lieu of single-well Applications for Permit to Drill processing for all but wildcat wells.  (Refer to Appendix D, Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations, NWCOGSG FEIS).	GRSG PHMA Notice to Lessees-54e*: Within PHMA, operators would be encouraged to complete Master Development Plans in consultation with the State of Colorado, instead of single-well Applications for Permit to Drill for all but exploratory wells.  (Refer to Appendix D*, Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations.)  *NWCOGSG FEIS
216	No similar management action.	In GRSG PHMA, conduct effective mitigation, first within the same Colorado Management Zone where the impact is realized and, if not possible, then conduct mitigation within the same population as the impact, or in other Colorado GRSG populations, in consultation with the State of Colorado.	In GRSG PHMA, conduct additional, effective mitigation, first within the same population area where the impact is realized and, if not possible, then conduct mitigation within the same Colorado Management Zone as the impact, per 2006 WAFWA Strategy (p. 2-17).	Same as Alternative II.
217	No similar management action.	In GRSG PHMA, when necessary, conduct effective mitigation in (1) GRSG PHMA areas; or, less preferably, (2) GHMA (dependent upon the area-specific ability to increase GRSG populations and in consultation with the State of Colorado).	In GRSG PHMA, when necessary, conduct additional, effective mitigation in (1) GRSG PHMA areas; or, less preferably, (2) GHMA (dependent upon the area-specific ability to increase GRSG populations).	Same as Alternative II.
218	No similar management action.	No similar management action.	GRSG PHMA Notice to Lessees-58b/c: Require unitization when deemed necessary for proper development and operation of an area to minimize adverse impacts to GRSG.  (Refer to Appendix D, Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations, NWCOGSG FEIS).	No similar management action.
219	No similar management action.	In GRSG PHMA, allow applicants and partners to offset impacts from development and disruption with conservation easements.	In GRSG PHMA, identify areas where acquisitions (including subsurface mineral rights) or conservation easements would benefit GRSG.	Same as Alternative II.
220	No similar management action.	In GRSG GHMA, for future actions, require a full reclamation bond specific to the site in accordance with 43 CFR 3104.2, 3104.3, and 3104.5. Ensure bonds are sufficient for costs relative to reclamation that would result in full restoration of the lands to the condition they were found prior to disturbance. Base the reclamation costs on the assumption that contractors for the BLM will perform the work.	Same as Alternative II.	Same as Alternative II.
221	No similar management action.	The range of alternatives is articulated in the specific Preferred Design Features/Required Design Features (PDFs/RDFs) sections.	Where applicable and technically feasible, apply PDFs/RDFs (see this table's Fluid Minerals and Multiple Program sections) as mandatory COAs within GRSG PHMA.	Same as Alternative II.

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222	No similar management action.	In GRSG PHMA, where the Federal government owns the mineral estate in PHMAs and GHMAs, and the surface is in non-Federal ownership, apply the same stipulations, COAs, and/or conservation measures and RDFs applied if the mineral estate is developed on BLM-administered lands in that management area, to the maximum extent permissible under existing authorities, and in coordination with the landowner.	In GRSG PHMA, where the Federal government owns the mineral estate and the surface is in non-Federal ownership, apply the conservation measures applied to public lands.	Same as Alternative II.
223	No similar management action.	Allow geophysical exploration within GRSG PHMA areas to obtain information for existing Federal fluid mineral leases or areas adjacent to State or fee lands within GRSG PHMA areas. Allow geophysical operations only using helicopter-portable drilling, wheeled, or tracked vehicles on existing roads, or other approved methods conducted in accordance with seasonal timing limitations and other restrictions that may apply. Geophysical exploration shall be subject to seasonal restrictions that preclude activities in breeding, nesting, brood-rearing, and winter habitats during their season of use by GRSG.	Same as Alternative II.	Same as Alternative II.
224	No similar management action.	In GRSG PHMA and GHMA, where the Federal government owns the surface and the mineral estate is in non-Federal ownership in PHMA and GHMA, apply appropriate surface use COAs, stipulations, and mineral RDFs/PDFs through ROW grants or other surface management instruments, to the maximum extent permissible under existing authorities, in coordination with the mineral estate owner/lessee.	In GRSG PHMA, where the Federal government owns the surface, and the mineral estate is in non-Federal ownership, apply appropriate Fluid Mineral PDFs to surface development.	Same as Alternative II.
225	<b>Leasing and Permitting</b>			
226		<b>Goal:</b> Make lands available, as appropriate for oil and gas leasing in an environmentally sound manner, under multiple use mandates. Conduct oil and gas leasing on leasable lands in accordance with the Mineral Leasing Act and the Federal Onshore Oil and Gas Reform Act of 1987 (Reform Act) and applicable regulations under 43 CFR 3100 and in accordance with the decisions made through application of FLPMA and other laws applicable to public lands. Regulations governing onshore oil and gas operations can be found at 43 CFR 3160.		
227	Oil and gas leasing would be conducted on leasable lands in accordance with the Mineral Leasing Act and the Federal Onshore Oil and Gas Reform Act of 1987 (Reform Act) and applicable regulations under 43 CFR 3100 and in accordance with the decisions made through application of FLPMA and other laws applicable to public lands. Regulations governing onshore oil and gas operations can be found at 43 CFR 3160.	<b>Objective:</b> Conduct oil and gas leasing in a systematic, clustered, and staged manner, incorporating outcome-based adaptive management, while protecting key biological and aesthetic resources.  <b>Management Actions:</b> Lands would be available for oil and gas leasing and development, including associated actions and facilities, such as upgrading existing roads and constructing well sites, new roads, pipelines, and compressor stations.	<b>Objective:</b> Maintain the public lands atop the plateau for uses besides oil and gas development. Limit surface access to Planning Area oil and gas reserves to areas at the perimeters of NOSRs 1 and 3 using ERD technology.  <b>Management Actions:</b> Lands at the perimeters of NOSRs 1 and 3 would be available for oil and gas leasing and development, including associated actions and facilities, such as upgrading existing roads and constructing well sites, new roads, pipelines, and compressor stations.	<b>Objective:</b> Limit lands open to oil and gas leasing and development atop the plateau. Open lands below the rim of the plateau to oil and gas leasing and development. All leases would be subject to lease notices, stipulations, and standard lease terms and conditions, except as modified by CRVFO-CSU-Roan-1: Settlement Terms and Conditions (Appendix C).  <b>Management Actions:</b> Limited areas above the rim would be available for oil and gas leasing and development. Well drilling, well pad construction, and associated actions and facilities, such as upgrading existing roads and constructing well sites, new roads, pipelines, and compressor stations, would be sited and constructed in compliance with CRVFO-CSU-Roan-1: Settlement Terms and Conditions (Appendix C).
228	BLM would issue oil and gas leases and provide for environmentally sound development, such as upgrading existing roads and constructing well sites, new roads, and associated facilities, for development of new or existing oil and gas leases.	The standard lease form, along with standard terms and conditions, is shown in Appendix B. Lease stipulations are described in Appendix C.	The standard lease form, along with standard terms and conditions, is shown in Appendix B. Lease stipulations are described in Appendix C.	
229	Although well pad densities may vary across the Planning Area, the objective would be to manage lease development to limit surface density consistent with lease rights granted. This would be achieved through clustering of wells and collocation of facilities based on site-specific considerations in response to ecological, visual, recreational, and other resource sensitivities.	Prior to exploration and/or lease development within the Planning Area, the operator must submit a MDP identifying projected activity (including well locations, pipelines, and facilities) during the next two to five years, as well as appropriate mitigation.  All oil and gas operations and activities atop the plateau	Prior to exploration and/or lease development within the Planning Area, the operator must submit a MDP identifying projected activity (including well locations, pipelines, and facilities) during the next two to five years and appropriate mitigation.	For leases below the rim, prior to exploration and/or lease development, the operator shall submit a proposed MDP identifying its projected activities. Prior to submitting the MDP, the operator shall consult with the Colorado Division of Parks and Wildlife and BLM to develop terms that minimize

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	<p>Prior to exploration and/or lease development, the operator must submit a Geographic Area Proposal identifying projected activity (including well locations, pipelines, and facilities) during the next two to five years and appropriate mitigation.</p> <p>The standard lease form, along with standard terms and conditions, is shown in Appendix B. Lease stipulations are described in Appendix C.</p>	<p>would be under the control of a single operator; BLM would directly control and manage the timing, location, and type of all operations by that single operator. Activities atop the plateau would be conducted in accordance with the following decisions:</p> <ul style="list-style-type: none"> <li>• Oil and gas development activities would be restricted to six specific development areas (Figure 2.1) along the ridgetops on slopes less than 20%;</li> <li>• Operations would be staged and sequenced over time;</li> <li>• Development activities would be allowed on only one of six development areas at a time. Exploratory wells may be drilled in other areas sufficient to plan future drilling operations;</li> <li>• Total unreclaimed surface disturbance would be limited to 350 acres atop the plateau at any given time;</li> <li>• Five-year interim reclamation standards must be met throughout 90% of any development area, as determined by BLM, prior to development operations moving to another development area;</li> <li>• Drilling pads would be a minimum of 2,640 feet apart; and development and production facilities would be clustered and designed to minimize surface impacts;</li> <li>• Limit open and administrative motorized routes to approximately 245 miles. Allow exceptions only where necessary to reduce impacts, such as using a longer route to avoid a sensitive resource or reduce visual impacts and direct habitat loss;</li> <li>• Implement innovative reclamation and performance-based monitoring standards;</li> <li>• Consolidate natural gas production facilities, roads, pipelines, and staging areas along roadways to minimize disturbance;</li> <li>• Apply the resources protections detailed in this table, and in Tables 2.2, 2.3, and Appendix C-2. This includes NSO, CSU, and TL lease stipulations, and COAs current at the time of permitting;</li> <li>• Before any on-the-ground lease operations are considered for approval by BLM atop the plateau, the lessees would be required to reach a formal agreement on one operator to conduct all operations on behalf of all the lessees. All lessees/leases would be required, by lease stipulation, to join a Federal Unitization Agreement, approved by BLM. This agreement would be non-contracting. The Unitization Agreement would allow BLM to directly control and manage the timing, location, and type of all operations occurring on all Federal lands atop the plateau. In effect, all of the leases would act administratively as a single lease, and BLM would</li> </ul>		<p>impacts to wildlife and other resources. Agreed-upon terms shall be included in the operator's MDP (CRVFO-CSU-Roan-1: Settlement Terms and Conditions [Appendix C]).</p> <p>The standard lease form, along with standard terms and conditions, is shown in Appendix B. Lease stipulations are described in Appendix C.</p>

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		work with just one operator for the life of all oil and gas operations occurring atop the plateau. This legal agreement would (among other things) identify the agreed-upon single operator and provide for allocation of costs and revenues of gas and/or oil production to all of the leases.		
230	<b>Mineral Split Estate</b>			
231	<b>GRSG Objectives:</b> Utilize Federal authority to protect GRSG habitat on split-estate lands to the extent provided by law.			
232	No similar management action.	Where the Federal Government owns the mineral estate in PHMA and GHMA, and the surface is in non-Federal ownership, apply the same stipulations, COAs, and/or conservation measures and RDFs/PDFs applied if the mineral estate is developed on BLM-administered lands in that management area, to the maximum extent permissible under existing authorities, and in coordination with the landowner.	Same as Alternative II.	Same as Alternative II.
233	No similar management action.	In PHMA/GHMA, where the Federal Government owns the surface and the mineral estate is in non-Federal ownership in PHMA and GHMA, apply appropriate surface use COAs, stipulations, and mineral RDFs/PDFs through ROW grants or other surface management instruments, to the maximum extent permissible under existing authorities, in coordination with the mineral estate owner/lessee.	Same as Alternative II.	Same as Alternative II.
234	<b>Stipulations and Restrictions:</b> The following terms and conditions would be applied to oil and gas development in the Planning Area to accommodate needs of other resources and to ensure that development is performed in an environmentally responsible manner.			
235	Closed to Oil and Gas Leasing: 44,180 acres (60.6%) (not leased within former NOSR 1 and three parcels)	Closed to Oil and Gas Leasing: 0 acres*  * Includes 0 acres of GRSG GHMA within 1.0 mile of an active lek.	Closed to Oil and Gas Leasing: 0 acres	Closed to Oil and Gas Leasing: 34,780 acres*  * Includes 0 acres of GRSG GHMA within 1.0 mile of an active lek.
236	No similar management action.	No similar management action.	No similar management action.	Well spacing: <ul style="list-style-type: none"> <li>Limit to two well sites per section (320-acre spacing) in sensitive wildlife habitat (including severe winter range and winter concentration areas).</li> <li>Limit to one well per section (640-acre spacing) in greater sage-grouse habitat.</li> </ul>
237	No Surface Occupancy (NSO): 14,090 acres (19%)  NSO stipulations for the following resources: <ul style="list-style-type: none"> <li>NSO 15 - Slopes greater than 50%</li> <li>NSO 12 - Threatened or endangered species</li> <li>NSO 11 - Wildlife seclusion areas</li> <li>NSO 7 - Raptor nesting areas</li> <li>NSO 8 - Bald eagle nest areas</li> <li>NSO 9 - Peregrine falcon cliff nesting complex</li> <li>NSO 18 - I-70 viewshed</li> <li>NSO 19 - Anvil Points Claystone Cave</li> </ul>	No Surface Occupancy (NSO): 45,790 acres (62%) May overlap with less restrictive stipulations.  NSO stipulations for the following resources: <ul style="list-style-type: none"> <li>CRVFO-NSO-Roan-22: Steep slopes (&gt; 50%)</li> <li>CRVFO-NSO-Roan-24: Threatened, endangered, or candidate species habitat</li> <li>CRVFO-NSO-Roan-25: Raptor nest sites</li> <li>CRVFO-NSO-Roan-26:</li> </ul>	No Surface Occupancy (NSO): 63,910 acres (96%) May overlap with less restrictive stipulations.  NSO stipulations for the following resources: <ul style="list-style-type: none"> <li>CRVFO-NSO-2: Steep slopes (&gt; 50%)</li> <li>CRVFO-NSO-9: Threatened, endangered, proposed, and candidate plant species</li> <li>CRVFO-NSO-19: Threatened, endangered, proposed, and candidate fish and wildlife species</li> <li>CRVFO-NSO-8:</li> </ul>	No Surface Occupancy (NSO): 21,720 acres (29%) May overlap with less restrictive stipulations.  NSO stipulations for the following resources: <ul style="list-style-type: none"> <li>GS-NSO-Roan-22: Steep slopes (&gt; 50%)</li> <li>GS-NSO-Roan-24: Threatened, endangered, or candidate species habitat</li> <li>GS-NSO-Roan-25: Raptor nest sites</li> <li>GS-NSO-Roan-26:</li> </ul>

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	<ul style="list-style-type: none"> <li>• NSO 2 - Riparian and wetland zones</li> <li>• NSO 3 - Colorado river corridors</li> </ul>	<p>Bald eagle nest or winter roost sites</p> <ul style="list-style-type: none"> <li>• CRVFO-NSO-Roan-27: Wildlife seclusion areas below rim</li> <li>• CRVFO-NSO-Roan-28: High-value special status fish species habitat</li> <li>• CRVFO-NSO-Roan-23: Riparian and wetland habitat</li> <li>• CRVFO-NSO-Roan-30: I-70 viewshed (VRM Class II)</li> <li>• CRVFO-NSO-Roan-31: East Fork Falls viewshed (VRM Class I)</li> <li>• CRVFO-NSO-Roan-21: Anvil Points Claystone Cave</li> <li>• CRVFO-NSO-Roan-29: Colorado River corridor</li> <li>• CRVFO-NSO-Roan-32: Anvil Points Spent Shale Repositories</li> <li>• GRSG NSO-46e1: NSO within 2 miles of active GRSG leks, in GRSG GHMA, no exceptions anticipated.</li> <li>• GRSG NSO-46e2: Exceptions, modifications, and waivers on the remainder of PHMA. Authorized Officer could grant an exception or modification in consultation with the State of Colorado.</li> </ul>	<p>Raptors (non-special status raptor species)</p> <ul style="list-style-type: none"> <li>• CRVFO-NSO-12: Bald eagle roost or nest site</li> <li>• CRVFO-NSO-18: Special status bat species hibernation, maternity roosts, and fall swarming sites</li> <li>• GS-NSO-Roan-27: Wildlife security areas below rim</li> <li>• GS-NSO-Roan-28: High-value special status fish species habitat</li> <li>• CRVFO-NSO-5: Riparian and wetland habitat</li> <li>• GS-NSO-Roan-30: I-70 viewshed (VRM Class II)</li> <li>• GS-NSO-Roan-31: East Fork Falls viewshed (VRM Class I)</li> <li>• GS-NSO-Roan-21: Anvil Points Claystone Cave</li> <li>• CRVFO-NSO-4: Major river corridors</li> <li>• CRVFO-NSO-Roan-32: Anvil Points Spent Shale Repositories</li> <li>• CRVFO-NSO-39: Historic Properties</li> <li>• GRSG NSO-46e1: NSO within 2 miles of active GRSG leks, in GRSG GHMA, no exceptions anticipated.</li> <li>• GRSG NSO-46e2: Exceptions, modifications, and waivers on the remainder of PHMA. Authorized Officer could grant an exception or modification in consultation with the State of Colorado.</li> <li>• CRVFO-NSO-Roan 1: All sensitive resources and natural values atop the Roan Plateau</li> <li>• CRVFO-NSO-Roan 2: Lands with wilderness characteristics (no exceptions, modifications, or waivers)</li> <li>• CRVFO-NSO-Roan 4: Designated municipal watersheds</li> <li>•</li> </ul>	<p>Bald eagle nest or winter roost sites</p> <ul style="list-style-type: none"> <li>• GS-NSO-Roan-27: Wildlife seclusion areas below rim</li> <li>• GS-NSO-Roan-28: High value special status fish species habitat</li> <li>• GS-NSO-Roan-23: Riparian and wetland habitat</li> <li>• GS-NSO-Roan-30: I-70 viewshed (VRM Class II)</li> <li>• GS-NSO-Roan-31: East Fork Falls viewshed (VRM Class I)</li> <li>• GS-NSO-Roan-21: Anvil Points Claystone Cave</li> <li>• GS-NSO-Roan-29: Colorado River corridor</li> <li>• CRVFO-NSO-Roan-32: Anvil Points Spent Shale Repositories</li> <li>• GRSG NSO-46e1/GRSG NSO-46e2: NSO within 2 miles of active GRSG leks; NSO without waiver or modification in PHMA. In GHMA, NSO with waivers, exceptions, and modification within 2 miles of active leks.</li> <li>• CRVFO-NSO-Roan 4: Designated municipal watersheds</li> </ul>

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
238	<p>Controlled Surface Use (CSU): 21,580 acres (29%)</p> <p>CSU is the most restrictive stipulation, where no NSO stipulations apply.</p> <p>CSU stipulations for the following resources:</p> <ul style="list-style-type: none"> <li>• CSU 3 - BLM sensitive species populations and significant plant communities</li> <li>• CSU 4 - Erosive soils and slopes steeper than 30%</li> <li>• CSU 5 - VRM Class II areas</li> <li>• CSU 6 - Sharrard Park paleontological area</li> <li>• CSU 2 - Riparian and wetland habitat below the rim</li> </ul>	<p>Controlled Surface Use (CSU): 68,900 acres (95%)</p> <p>CSU is the most restrictive stipulation, where no NSO stipulations apply.</p> <p>CSU stipulations for the following resources:</p> <ul style="list-style-type: none"> <li>• CRVFO-CSU-Roan-12: Habitat for special status plant species populations and significant plant communities</li> <li>• CRVFO-CSU-Roan-07: Riparian and wetland habitat</li> <li>• CRVFO-CSU-Roan-08: Peregrine falcon cliff nesting complex</li> <li>• CRVFO-CSU-Roan-09: Wildlife security areas above the rim</li> <li>• CRVFO-CSU-Roan-10: Big game migration corridors</li> <li>• CRVFO-CSU-Roan-11: Sensitive bat species habitat</li> <li>• CRVFO-CSU-Roan-04: Erosive soils and slopes (&gt;30%)</li> <li>• CRVFO-CSU-Roan-14: VRM Class II areas below the rim</li> <li>• CRVFO-CSU-Roan-15: VRM Class III areas above the rim</li> <li>• CRVFO-CSU-Roan-18: Sharrard Park paleontological resources</li> <li>• CRVFO-CSU-Roan-13: Parachute Creek high-value watershed and Watershed Management Area</li> <li>• CRVFO-CSU-Roan-16: Hubbard Mesa open OHV riding area</li> </ul>	<p>Controlled Surface Use (CSU): 70,140 acres (95%)</p> <p>CSU is the most restrictive stipulation, where no NSO stipulations apply.</p> <p>CSU stipulations for the following resources:</p> <ul style="list-style-type: none"> <li>• GS-CSU-Roan-12: Habitat for special status plant species populations and significant plant communities</li> <li>• CRVFO-CSU-4: Riparian/wetland vegetation zones</li> <li>• GS-CSU-Roan-08: Peregrine falcon cliff nesting complex</li> <li>• GS-CSU-Roan-09: Wildlife security areas above the rim</li> <li>• GS-CSU-Roan-10: Big game migration corridors</li> <li>• GS-CSU-Roan 11: Sensitive bat species habitat</li> <li>• GS-CSU-Roan-17: Wild and Scenic River Suitability</li> <li>• CRVFO-CSU-1: Slopes greater than 30 Percent or fragile/saline soils</li> <li>• GS-CSU-Roan-14: VRM Class II areas below the rim</li> <li>• GS-CSU-Roan-15: VRM Class III areas above the rim</li> <li>• GS-CSU-Roan-18: Sharrard Park paleontological resources</li> <li>• GS-CSU-Roan-16: Hubbard Mesa open OHV riding area</li> </ul>	<p>Controlled Surface Use (CSU): 36,990 acres (50%)</p> <p>CSU is the most restrictive stipulation, where no NSO stipulations apply.</p> <p>CSU stipulations for the following resources:</p> <ul style="list-style-type: none"> <li>• GS-CSU-Roan-12: Habitat for sensitive plant species populations and significant plant communities</li> <li>• GS-CSU-Roan-07: Riparian and wetland habitat</li> <li>• GS-CSU-Roan-08: Peregrine falcon cliff nesting complex</li> <li>• GS-CSU-Roan-09: Wildlife security areas above the rim</li> <li>• GS-CSU-Roan-10: Big game migration corridors</li> <li>• GS-CSU-Roan-11: Sensitive bat species habitat</li> <li>• GS-CSU-Roan-04: Erosive soils and slopes (&gt;30%)</li> <li>• GS-CSU-Roan-14: VRM Class II areas below the rim</li> <li>• GS-CSU-Roan-15: VRM Class III areas above the rim</li> <li>• GS-CSU-Roan-18: Sharrard Park paleontological resources</li> <li>• GS-CSU-Roan-13: Parachute Creek high-value watershed and Watershed Management Area</li> <li>• GS-CSU-Roan-16: Hubbard Mesa open OHV riding area</li> <li>• CRVFO-CSU-Roan-17: Lease area above the rim</li> <li>• CRVFO- CSU-Roan-18: Lease area below the rim</li> </ul>
239	<p>Timing Limitation (TL): 21,440 acres (29%)</p> <p>Lands available for lease with TLs on periods when construction and drilling activities are prohibited to protect important wildlife habitats. These limitations do not apply to the operation and maintenance of producing wells.</p> <p>TL stipulations for the following resources:</p> <ul style="list-style-type: none"> <li>• Big game winter habitat</li> <li>• Raptor nesting</li> <li>• Bald eagle nesting</li> </ul>	<p>Timing Limitation (TL): 62,090 acres (84%)</p> <p>Lands available for lease with TLs on periods when construction and drilling activities are prohibited to protect important wildlife habitats. These limitations do not apply to the operation and maintenance of producing wells.</p> <p>TL stipulations for the following resources:</p> <ul style="list-style-type: none"> <li>• CRVFO -TL-Roan-13: Big game winter range</li> <li>• CRVFO -TL-Roan-14: Raptor nest sites</li> </ul>	<p>Timing Limitation (TL): 62,090 acres (84%)</p> <p>Lands available for lease with TLs on periods when construction and drilling activities are prohibited to protect important wildlife habitats. These limitations do not apply to the operation and maintenance of producing wells.</p> <p>TL stipulations for the following resources:</p> <ul style="list-style-type: none"> <li>• CRVFO-TL-2: Big game winter habitat</li> <li>• CRVFO-TL-5: Raptors (non-special status raptor species)</li> </ul>	<p>Timing Limitation (TL): 32,150 acres (44%)</p> <p>Lands available for lease with TLs on periods when construction and drilling activities are prohibited to protect important wildlife habitats. These limitations do not apply to the operation and maintenance of producing wells.</p> <p>TL stipulations for the following resources:</p> <ul style="list-style-type: none"> <li>• GS-TL-Roan-13: Big game winter range</li> <li>• GS-TL-Roan-14: Active raptor nest sites</li> </ul>

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	<ul style="list-style-type: none"> <li>• Peregrine falcon cliff nesting complex</li> <li>• Waterfowl and shorebird nesting areas</li> </ul>	<ul style="list-style-type: none"> <li>• CRVFO -TL-Roan-15: Bald eagle nest or winter roost sites</li> <li>• CRVFO -TL-Roan-16: Peregrine falcon cliff nesting complex</li> <li>• CRVFO -TL-Roan-17: Waterfowl and shorebird nesting areas</li> <li>• GRSG TL-46e: No activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• GRSG PHMA ROW TL: Prohibit surface occupancy and surface-disturbing activities associated with BLM ROW permits within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• CRVFO-TL-Roan 1: Migratory Bird Nesting Season</li> <li>• CRVFO-TL-Roan 2: Elk Production Areas</li> </ul>	<ul style="list-style-type: none"> <li>• CRVFO-TL-8: Bald eagle nest sites and winter roost sites</li> <li>• CRVFO-TL-10: Peregrine falcon nesting complex</li> <li>• CRVFO-TL-6: Waterfowl and shorebird nesting and production areas</li> <li>• GRSG TL-46e: No activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• GRSG PHMA ROW TL: Prohibit surface occupancy and surface-disturbing activities associated with BLM ROW permits within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• CRVFO-TL-Roan 1: Migratory bird nesting season</li> <li>• CRVFO-TL-Roan 2: Elk production areas</li> <li>• CRVFP-TL-1: Salmonid and native non-salmonid fishes</li> </ul>	<ul style="list-style-type: none"> <li>• GS-TL-Roan-15: Bald eagle nest or winter roost sites</li> <li>• GS-TL-Roan-16: Peregrine falcon cliff nesting complex</li> <li>• GS-TL-Roan-17: Waterfowl and shorebird nesting areas</li> <li>• GRSG TL-46e: No activity associated with construction, drilling, or completions within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• GRSG PHMA ROW TL: Prohibit surface occupancy and surface-disturbing activities associated with BLM ROW permits within 4 miles from active leks during lekking, nesting, and early brood rearing (March 1-July 15).</li> <li>• CRVFO-TL-Roan 1: Migratory bird nesting season</li> <li>• CRVFO-TL-Roan 3: Elk production areas</li> <li>• CRVFP-TL-1: Salmonid and native non-salmonid fishes</li> </ul>
240	No Lease Notices (LN) stipulations	Lease Notices (LN): <ul style="list-style-type: none"> <li>• CRVFO-LN-Roan-14: Master Development Plan (MDP)</li> <li>• CRVFO-LN-Roan-34: ESA consultation</li> <li>• GRSG PHMA LN-46e: Any lands leased in PHMA are subject to the restrictions of one disturbance per 640 acres calculated by CO management zone to allow clustered development</li> <li>• GRSG PHMA LN-54e: Within PHMA, operators would be encouraged to complete Master Development Plans in consultation with the State of Colorado, instead of single-well Applications for Permit to Drill for all but exploratory wells.</li> <li>• CRVFO-LN-Roan-35: Emergency response plan. The operator is required to prepare and maintain a current emergency communications plan.</li> </ul>	Lease Notices (LN): <ul style="list-style-type: none"> <li>• GS-LN-Roan-14: Master Development Plan (MDP)</li> <li>• GS-LN-Roan-34: ESA consultation</li> <li>• GRSG PHMA LN-46e: Any lands leased in PHMA are subject to the restrictions of one disturbance per 640 acres calculated by CO management zone to allow clustered development</li> <li>• GRSG PHMA LN-54e: Within PHMA, operators would be encouraged to complete Master Development Plans in consultation with the State of Colorado, instead of single-well Applications for Permit to Drill for all but exploratory wells.</li> <li>• CRVFO-LN-Roan-35: Emergency response plan. The operator is required to prepare and maintain a current emergency communications plan.</li> </ul>	Lease Notices (LN): <ul style="list-style-type: none"> <li>• GS-LN-Roan-14: Master Development Plan (MDP)</li> <li>• GS-LN-Roan-34: ESA consultation</li> <li>• GRSG PHMA LN-46e: Any lands leased in PHMA are subject to the restrictions of one disturbance per 640 acres calculated by CO management zone to allow clustered development</li> <li>• GRSG PHMA LN-54e: Within PHMA, operators would be encouraged to complete Master Development Plans in consultation with the State of Colorado, instead of single-well Applications for Permit to Drill for all but exploratory wells.</li> <li>• CRVFO-LN-Roan-35: Emergency response plan. The operator is required to prepare and maintain a current emergency communications plan.</li> </ul>

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
241	No similar management action.	No similar management action.	<p>Conditions of Approval (COAs):</p> <ul style="list-style-type: none"> <li>• GRSG PHMA COA-47-51b/c. The operator/lessee is required to conduct site-specific review of proposed projects prior to approval of Applications for Permit to drill. For leases within GRSG PHMA, the following COAs would apply:                             <ul style="list-style-type: none"> <li>○ Preclude new surface occupancy on existing leases within PHMA.</li> <li>○ If the lease is entirely within PHMA, do not allow surface occupancy of any portion within 4 miles around the lek and limit permitted disturbances to one per section with no more than 3% surface disturbance in that section.</li> <li>○ If the entire lease is within the 4-mile lek perimeter, limit permitted disturbances to one per section with no more than 3% surface disturbance in that section. Require any development to be placed at the most distal part of the lease from the lek or, depending on topography and other habitat aspects, in an area that is demonstrably less harmful to GRSG, such as based on topography or vegetation.</li> </ul> </li> <li>• GRSG PHMA COA-52b/d: Apply a seasonal restriction on exploratory drilling in GRSG PHMA to prohibit surface-disturbing activities during the lekking, nesting, and early brood-rearing season.</li> <li>• GRSG PHMA COA-55b: For leases that are not yet developed in PHMA, the proposed surface disturbance cannot exceed 3% within that Colorado MZ.</li> <li>• GRSG ADH COA-52c: Apply seasonal restriction on exploratory drilling to prohibit surface-disturbing activities during the lekking, nesting, and early brood rearing season in ADH. This restriction shall also apply to related activities that are disruptive to GRSG, including vehicle traffic and other human presence.</li> </ul>	No similar management action.
242	Areas with Protective Designations or Management Actions: 0 acres	<p>Areas with Protective Designations or Management Actions: 0 acres</p> <p>Lands where exploration and development activities are subject to surface use restrictions, BMPs, and mitigation measures. These would be in the form of COAs and would be developed through the permitting process.</p> <p>BMPs and mitigation measures to protect wildlife, greater sage-grouse, vegetation, geological, watershed, fisheries, and visual resources.</p>	<p>Areas with Protective Designations or Management Actions: 0 acres</p> <p>Same as Alternative II.</p>	<p>Areas with Protective Designations or Management Actions: 0 acres</p> <p>Same as Alternative II.</p>

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
243	Standard Terms and Conditions with or without TLs: 7,570 acres (10.3%)  Lands where exploration and development activities are subject to standard lease terms and conditions plus a stipulation for the protection of species under the ESA. Mitigation measures, which may be in the form of COAs, would be developed through the impact analysis process.	Standard Terms and Conditions with or without TLs: 4,480 acres (6.1%)  Lands where exploration and development activities are subject to standard lease terms and conditions plus a stipulation for the protection of species under the ESA. Mitigation measures, which may be in the form of COAs, would be developed through the impact analysis process.	Standard Terms and Conditions with or without TLs: 3,080 acres (4.2%)  Lands where exploration and development activities are subject to standard lease terms and conditions plus a stipulation for the protection of species under the ESA. Mitigation measures, which may be in the form of COAs, would be developed through the impact analysis process.	Standard Terms and Conditions with or without TLs: 3,050 acres (4.1%)  Lands where exploration and development activities are subject to standard lease terms and conditions plus a stipulation for the protection of species under the ESA. Mitigation measures, which may be in the form of COAs, would be developed through the impact analysis process.
244	<b>Oil Shale Leasing and Development</b>			
245	No leasing.	<p><b>Goal:</b> Conduct oil shale leasing in conformance with the Approved Resource Management Plan Amendment/Record of Decision for Oil Shale and Tar Sands Resources to Address Land Use Allocations in Colorado, Utah, and Wyoming and Final Programmatic Environmental Impact Statement.</p> <p><b>Objective:</b> Conduct potential oil shale leasing in conformance with surface disturbance stipulations identified in Appendix C. Resource condition objectives identified in this RMPA will guide reclamation activities of areas to be developed before their abandonment.</p> <p><b>GRSG Objective:</b> Utilize Federal authority to protect GRSG habitat on split estate lands to the extent provided by law.</p>		
246	<b>Solid Minerals - Coal Leasing and Development</b>			
247		<p><b>Goal:</b> Provide opportunities for leasing, exploration, and development of coal to meet local and national energy and mineral needs, consistent with 43 CFR 4320.1-4.</p> <p><b>Objective:</b> Facilitate environmentally sound exploration and development of coal resources using the best available technology.</p>		
248	No leasing.	No lands are currently identified as containing potentially developable coal resources based on geologic and economic constraints and lack of expressions of interest. Only areas of potentially developable coal resources may be identified at the land use planning level as acceptable for further consideration for leasing (43 CFR 3420.1-4). Therefore, no lands are currently identified as acceptable for further consideration for coal leasing.	Same as Alternative II.	Same as Alternative II.
249	No similar management action.	No similar management action.	All Federal mineral estate within lands with wilderness characteristics would be closed to non-energy solid mineral leasing.	No similar management action.
250	No similar management action.	No similar management action.	Close WSR stream segments found suitable for inclusion in the NWSRS to solid minerals leasing.	No similar management action.
251	No similar management action.	<p><b>GRSG Objectives:</b></p> <ul style="list-style-type: none"> <li>• Manage solid mineral programs to avoid, minimize, and mitigate adverse impacts to GRSG habitat to the extent practical under the law and BLM jurisdiction.</li> <li>• Utilize Federal authority to protect GRSG habitat on split estate lands to the extent provided by law.</li> </ul>		
252	No similar management action.	<p>In GRSG GHMA, Existing Coal Leases: During the term of the lease, encourage the lessee to voluntarily follow PDFs (Appendix I, Required Design Features, Preferred Design Features, and Suggested Design Features, NWCOGSG FEIS) to reduce and mitigate any adverse impacts to GRSG.</p> <p>At the time an application for a new coal lease or lease modification is submitted to the BLM, the BLM will determine whether the lease application area is "unsuitable" for all or certain coal mining methods pursuant to 43 CFR 3461.5. PHMA is essential habitat for maintaining GRSG for purposes of the suitability criteria set forth at 43 CFR 3461.5(o)(1).</p>	In GRSG GHMA, apply minimization of surface disturbing or disruptive activities (including operations and maintenance), where needed, to reduce the impacts of human activities on important seasonal GRSG habitats. Apply these measures during activity-level planning. Use additional, effective mitigation to offset impacts, as appropriate (determined by local options/needs).	Same as Alternative II.

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		<p>To authorize expansion of existing leases, the environmental record of review must show no significant direct disturbance, displacement, or mortality of GRSG based on the criteria below:</p> <ul style="list-style-type: none"> <li>• Critical GRSG habitat areas as identified by factors including, but not limited to, average male lek attendance and/or important seasonal habitat.</li> <li>• An evaluation of the threats affecting the local population as compared to benefits that could be accomplished through compensatory or offsite mitigation (See Chapter 2, Mitigation Strategy, NWCOGSG FEIS).</li> <li>• An evaluation of terrain and habitat features. For example, within 4 miles from a lek, local terrain features such as ridges and ravines may reduce the habitat importance and shield nearby habitat from disruptive factors.</li> </ul>		
253	No similar management action.	<p>In GRSG PHMA, no new surface coal mine leases would be allowed in PHMA.</p> <p>At the time an application for a new coal lease or lease modification is submitted to the BLM, the BLM would determine whether the lease application area is “unsuitable” for all or certain coal mining methods pursuant to 43 CFR 3461.5. PHMA is essential habitat for maintaining GRSG for purposes of the suitability criteria set forth at 43 CFR 3461.5(o)(1).</p>	In GRSG PHMA, Surface Mines: Find unsuitable all surface mining of coal under the criteria set forth in 43 CFR 3461.5.	Same as Alternative II.
254	No similar management action.	<p>New Underground Coal Mine Leases would be subject to special stipulations:</p> <ul style="list-style-type: none"> <li>• All surface disturbances will be placed more than 2 miles from active leks.</li> <li>• No surface disturbance on remainder of PHMA, subject to the following conditions:</li> </ul> <p>If, after consultation with the State of Colorado, and in consideration of the following criteria, there is no significant direct disturbance, displacement, or mortality of GRSG or impact to GRSG habitat;</p> <ul style="list-style-type: none"> <li>• 3% disturbance cap in PHMA with disturbances limited to one per 640-acre density calculated by CO Management Zone would apply to new lease activities.</li> <li>• No new leasing in PHMA if disturbance cap exceeds 3% for the CO Management Zone or one disturbance per 640 acres is exceeded.</li> </ul>	In GRSG PHMA, Sub-surface Mining: Grant no new mining leases unless all surface disturbances (appurtenant facilities) are placed outside of the GRSG PHMA area. In GRSG PHMA areas, place any new appurtenant facilities outside of PHMA. Where new appurtenant facilities associated with the existing lease cannot be located outside the GRSG PHMA area, collocate new facilities within existing disturbed areas. If this is not possible, then build any new appurtenant facilities to the absolute minimum standard necessary.	Same as Alternative II.

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255	No similar management action.	In GRSG GHMA, underground mining exemption criteria for new leases:  1. Federal lands with coal deposits that would be mined by underground mining methods shall not be assessed as unsuitable where there would be no surface coal mining operations, as defined in 43 CFR 3400.0-5 (mm) of this title, on any lease, if issued.  2. Where underground mining will include surface operations and surface impacts on Federal lands to which a criterion applies, the lands shall be assessed as unsuitable unless the surface management agency find that a relevant exception or exemption applies. See 43 CFR 3461.1(b). Where practicable, limit permitted disturbances as defined in Appendix E, Methodology for Calculating Disturbance Caps, NWCOGSG FEIS, to 5% in any Colorado MZ. Where disturbance exceeds 5% in any Colorado MZ, make additional, effective mitigation necessary to offset the resulting loss of GRSG habitat.	No similar management action.	Same as Alternative II.
256	No similar management action.	In GRSG PHMA, see 43 CFR 3461.4 (a) and (b) Exploration. Authorized exploration activities may be conducted only if the Authorized Officer reviews any application for an exploration license on such lands to ensure that any exploration does not harm any value for which the area has been assessed as unsuitable and determines that the exploration will not adversely affect GRSG populations due to habitat loss or disruptive activities or that the impact can be fully mitigated. Where practicable, limit permitted disturbances as defined in Appendix E, Methodology for Calculating Disturbance Caps, NWCOGSG FEIS, to 5% in any Colorado MZ. Where disturbance exceeds 5% in any Colorado MZ make additional, effective mitigation necessary to offset the resulting loss of GRSG habitat.  Disturbance Cap Exception Criteria: Where data-based documentation is available to warrant a conclusion that GRSG populations in the applicable Colorado GRSG MZ are healthy and stable at objective levels or increasing, and that the development will not adversely affect GRSG populations due to habitat loss or disruptive activities, the Authorized Officer may authorize disturbance in excess of the 5% disturbance cap without requiring additional mitigation. In many cases, this exception will require project proponents to fund studies necessary to secure the “data-based documentation” requirement.	No similar management action.	Same as Alternative II.
257	No similar management action.	In GRSG PHMA - Underground Mining – Lease Renewals:  <ul style="list-style-type: none"> <li>• Require that all surface mining appurtenant facilities for underground mining be located outside of PHMA (unless the lessee establishes that that such location is not technically feasible).</li> <li>• If surface mining facilities must be located in PHMA, require the facilities be located in areas of existing disturbance and to have the smallest footprint</li> </ul>	No similar management action.	Same as Alternative II.

**Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource**

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		<p>possible utilizing design strategies to minimize disturbance such as those identified in the PDF section of this table.</p> <ul style="list-style-type: none"> <li>Apply as conditions of lease renewal all appropriate conservation measures, PDFs, and mitigation designed to avoid and minimize impacts to GRSG.</li> </ul> <p>In GRSG GHMA - Surface Mining – Lease Renewals/Readjustments:</p> <p>Apply as conditions of lease renewal all appropriate conservation measures, PDFs, and mitigation designed to avoid and minimize impacts to GRSG.</p>		
258	No similar management action.	<p>In GRSG GHMA, recommend or require as appropriate during all relevant points of the coal leasing and authorization process, minimization of surface-disturbing or disrupting activities (including operations and maintenance) where needed to reduce the impacts of human activities on important seasonal GRSG habitats. Apply these measures during activity-level planning (jurisdiction is managed by the State). The Office of Surface Mining or a delegated State regulatory authority under the Surface Mining Control and Reclamation Act of 1977 authorizes surface disturbance activities of active coal mining operations on Federal mineral estate. The BLM coordinates with the Surface Mining Control and Reclamation Act of 1977 regulatory authority in overseeing coal leasing and permitting on Federal lands. The resource recovery and protection plan for which BLM recommends approval to the Secretary integrates the reclamation plan recommended by the Surface Mining Control and Reclamation Act of 1977 regulatory authority for active coal mines on Federal mineral estate. Approval of coal mining plans on lands containing leased Federal coal is reserved to the Secretary of the Interior (30 CFR 740.4). BLM issues coal leases and exploration licenses for right of entry to promote development of minerals on Federal lands. See the following in regards to BLM exploration: 43 CFR 3461.4. Exploration. States with delegated authority on Federal lands from the Office of Surface Mining may have their own GRSG guidance in association with State wildlife agencies, and such guidance may differ from state to state.</p>	No similar management action.	Same as Alternative II.
259	No similar management action.	<p>In GRSG GHMA:</p> <p>(a) Assessment of any area as unsuitable for all or certain stipulated methods of coal mining operations pursuant to Section 522 of the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1272) and the regulations of this subpart does not prohibit exploration of such area under 43 CFR 3410 and 43 CFR 3480. 43 CFR 3461.4(a).</p> <p>(b) An application for an exploration license on any lands assessed as unsuitable for all or certain stipulated methods of coal mining shall be reviewed by the BLM to ensure that exploration does not harm any value</p>	No similar management action.	Same as Alternative II.

**Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource**

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		for which the area has been assessed as unsuitable. 43 CFR 3461.4(b).		
260	<b>Locatable Minerals</b>			
261	<b>Goal:</b> Make lands available for mining claim location. <b>Objective:</b> Allow mineral exploration and development activities			
262	Under current management, the Naval Oil Shale Withdrawal has closed the transferred lands to mineral entry under the mining law.	<b>Management Action:</b> The Naval Oil Shale Withdrawal affecting the transferred lands would be proposed for revocation. All lands would be available for mining claim location.  Exploration/development activities would be subject to 43 CFR 3809, but not the NGD/NSO or SSR/CSU stipulations identified in the Proposed Plan. Rights granted under the mining law cannot be modified by NGD/NSO or SSR/CSU stipulations.	Same as Alternative II.	Same as Alternative II.
263	No similar management action.	No similar management action.	Propose for closure under the Mining Law for locatable exploration or development WSR segments suitable for inclusion in the NWSRS.	No similar management action.
264	<b>GRSG Objective:</b> Manage solid mineral programs to avoid, minimize, and mitigate adverse impacts to GRSG habitat to the extent practical under the law and BLM jurisdiction.			
265	No similar management action.	In GRSG PHMA, consider petitioning for withdrawal on a case-by-case basis from mineral entry based on risk to GRSG and its habitat from conflicting locatable mineral potential and development.	In GRSG PHMA, recommend withdrawal from mineral entry based on risk to the GRSG and its habitat from conflicting locatable mineral potential and development.	No similar management action.
266	No similar management action.	No similar management action.	In GRSG PHMA, make any existing claims within the withdrawal area subject to validity exams or buy-out. Include claims that have been subsequently determined to be null and void in the proposed withdrawal.	No similar management action.
267	No similar management action.	In GRSG PHMA, in plans of operations required prior to any proposed surface-disturbing activities, include, as appropriate, effective mitigation for conservation in accordance with existing policy (BLM Washington Office Instruction Memorandum 2008-204).  In GRSG PHMA, apply seasonal restrictions if deemed necessary to prevent unnecessary or undue degradation.	In GRSG PHMA, in plans of operations required prior to any proposed surface-disturbing activities, include the following: <ul style="list-style-type: none"> <li>• Additional, effective mitigation in perpetuity for conservation (in accordance with existing policy, BLM Washington Office Instruction Memorandum 2008-204). For example, purchase private land and mineral rights or severed subsurface mineral rights within the priority area and deed to the U.S. Government.</li> <li>• Consider seasonal restrictions if deemed effective.</li> </ul>	Same as Alternative II.
268	No similar management action.	In GRSG GHMA, an application for an exploration license on any lands assessed as unsuitable for all or certain stipulated methods of coal mining shall be reviewed by the BLM to ensure that exploration does not harm any value for which the area has been assessed as unsuitable. 43 CFR 3461.4(b)	No similar management action.	Same as Alternative II.

Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
269	No similar management action.	The range of alternatives is articulated in Appendix I, Required Design Features, Preferred Design Features, and Suggested Design Features, NWCOGSG FEIS.	In GRSG PHMA, where applicable to prevent unnecessary or undue degradation, apply PDFs/RDFs/SDFs (see Appendix I, Required Design Features, Preferred Design Features, and Suggested Design Features, NWCOGSG FEIS) as mandatory COAs.	Same as Alternative II.
270	<b>Salable Minerals</b>			
271	<b>Goal:</b> Allow for limited sales of mineral materials. <b>Objective:</b> Permit mineral material sales on a case-by-case basis in an environmentally responsible manner.	<b>GRSG Objective:</b> Manage solid mineral programs to avoid, minimize, and mitigate adverse impacts to GRSG habitat to the extent practical under the law and BLM jurisdiction.		
272	No similar management action.	No similar management action.	Lands with wilderness characteristics would be closed to mineral material disposal.	No similar management action.
273	No similar management action.	No similar management action.	Close WSR stream segments found suitable for inclusion in the NWSRS for salable/mineral materials disposal.	No similar management action.
274	Allow for mineral material sales on a case-by-case basis subject to the closures associated with areas managed to protect and maintain wilderness characteristics and NGD/NSO and SSR/CSU constraints identified by alternative.	Close GRSG PHMAs to new mineral material sales. However, these areas would remain open to free use permits and the expansion of existing active pits, only if the following criteria are met: <ul style="list-style-type: none"> <li>• The activity is within the Biologically Significant Unit (BSU) and the project area disturbance cap;</li> <li>• The activity is subject to the provisions set forth in the mitigation strategy (Appendix F, NWCOGSG FEIS);</li> <li>• All applicable required/preferred design features are applied; and, if applicable, the activity is permissible under the regional screening criteria (NWCOGSG FEIS).</li> </ul>	Close GRSG PHMA to mineral material sales.	(PHMA) Close PHMA to new mineral material sales. However, these areas would remain open to free use permits and the expansion of existing active pits, only if the following criteria are met: <ul style="list-style-type: none"> <li>• The activity is within the biologically significant unit and the project area disturbance cap</li> <li>• The activity is subject to the provisions set forth in the mitigation strategy (Appendix G *)</li> <li>• All applicable required/preferred design features are applied; and [if applicable] the activity is permissible under the regional screening criteria (Appendix H *, Guidelines for Implementation).</li> </ul> * NWCOGSG FEIS.
275	No similar management action.	In GRSG GHMA, restore salable mineral pits no longer in use to meet GRSG habitat conservation objectives. Require reclamation/restoration of GRSG habitat as a viable long-term goal to improve the GRSG habitat.	In GRSG PHMA, restore salable mineral pits no longer in use to meet GRSG habitat conservation objectives.	Same as Alternative II.
276	<b>Areas of Critical Environmental Concern (ACECs)</b>			
277		<b>Goal:</b> Highlight management of relevant and important resource values. <b>Objective:</b> Designate four ACECs where special management is applied through special designations, recognize the unique values on BLM lands that require special management in order to protect resource values. Protect important geologic, botanic, historic, cultural, and scenic values, fish and wildlife resources, and other natural systems (rare or exemplary) that are vulnerable to adverse change and protect human life and property from natural hazards.		
278	No ACECs would be designated. Management direction would be consistent with that provided by the overall objective for the alternative and for specific resources.	<b>Management Action:</b> Designate four ACECs in which risk of impacts to significant values would be minimized through management prescriptions on 24,890 acres: <ul style="list-style-type: none"> <li>• East Fork Parachute Creek: 6,990 acres (visual, fish/wildlife, botanical/ecological).</li> <li>• Trapper/Northwater Creek: 6,290 acres (fish/wildlife, botanical/ecological).</li> <li>• Magpie Gulch: 4,710 acres (visual, wildlife,</li> </ul>	Same as Alternative II.	<b>Management Action:</b> Designate four ACECs in which risk of impacts to significant values would be minimized through management prescriptions on 25,010 acres: <ul style="list-style-type: none"> <li>• East Fork Parachute Creek: 7,110 acres (visual, fish/wildlife, botanical/ecological).</li> <li>• Trapper/Northwater Creek: 6,290 acres (fish/wildlife, botanical/ecological).</li> <li>• Magpie Gulch: 4,710 acres (visual, wildlife,</li> </ul>

Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		botanical/ecological). <ul style="list-style-type: none"> <li>Anvil Points: 6,900 acres (visual, wildlife, botanical/ecological).</li> </ul> Management prescriptions for resources within the ACECs are detailed in Table 2.2.		botanical/ecological). <ul style="list-style-type: none"> <li>Anvil Points: 6,900 acres (visual, wildlife, botanical/ecological).</li> </ul> Management prescriptions for resources within the ACECs are detailed in Table 2.2.
279	<b>Watershed Management Area (WMA)</b>			
280	No management goals and objectives.	<b>Goals:</b> The goals of the WMA are threefold: <ol style="list-style-type: none"> <li>Maintain or improve CRCT habitat. This may be accomplished by habitat improvement and by preventing or minimizing impacts to ecological function throughout the WMA.</li> <li>Maintain or improve special status plant populations, significant plant communities, and their habitat.</li> <li>Maintain the hydrologic regime and ecological integrity/function that provide existing habitat for special status plant populations and significant plant communities in the WMA (defined in Section 3.3.3).</li> </ol> <b>Objectives:</b> The objectives are also threefold: <ol style="list-style-type: none"> <li>Maintain or improve water quality, natural stream flow, and stream ecological function throughout the WMA by preventing or minimizing direct, indirect, or cumulative adverse impacts to CRCT or their habitat.</li> <li>Maintain or improve surface and subsurface water flows, and the ecological integrity and function that supports rare and/or significant natural plant communities.</li> <li>Prevent disruption, alteration, or interruption of surface and subsurface water flows that support rare and/or significant natural plant communities, and protect against invasion of noxious weeds or other aggressive exotic plants.</li> </ol>	No management goals and objectives.	Same management goals and objectives as Alternative II.
281	No similar management action.	Apply: <ul style="list-style-type: none"> <li>SSR/CSU for Parachute Creek high-value watershed and WMA</li> </ul>	No similar management action.	Apply: <ul style="list-style-type: none"> <li>SSR/CSU for Parachute Creek high-value watershed and WMA</li> </ul>
282	No WMAs would be identified. Management direction would be consistent with that provided by the overall objective for the alternative and for specific resources.	<b>Management Actions:</b> Protections would be applied to the watershed in the form of a SSR/CSU. For more information on these management actions, see Table 2.3.	Same as Alternative II.	Same as Alternative II.
283	<b>Lands With Wilderness Characteristics</b>			
284	<b>Goal:</b> No similar goal.	<b>Goal:</b> Reduce impacts to wilderness characteristics to preserve the social, cultural, economic, scientific, and ecological benefits they provide to current and future generations.	<b>Goal:</b> Protect wilderness characteristics and preserve the social, cultural, economic, scientific, and ecological benefits they provide to current and future generations.	<b>Goal:</b> Reduce impacts to wilderness characteristics to preserve the social, cultural, economic, scientific, and ecological benefits they provide to current and future generations.

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
285	<b>Objective:</b> No similar objective.	<b>Objective:</b> Achieve indirect protection of some wilderness characteristics through application of protections for other natural resources.	<b>Objective:</b> Maintain or improve the wilderness characteristics, including naturalness, outstanding opportunities for solitude, outstanding opportunities for primitive recreation, and supplemental values.	<b>Objective:</b> Achieve indirect protection of some wilderness characteristics through application of protections for other natural resources.
286	Management direction would be consistent with that provided by the overall objective for the alternative, and other resources. No special protections would be provided for wilderness characteristics in those areas that have been found to contain them.	No areas would be managed specifically to maintain wilderness characteristics. However, protections for various resources may have the effect of maintaining some wilderness characteristics (e.g., roadlessness and naturalness) within NGD/NSO allocations.	<b>Management Action:</b> Manage the following LWC inventory units, totaling 27,830 acres, to protect their wilderness characteristics: <ul style="list-style-type: none"> <li>• East Fork Unit: 8,330 acres.</li> <li>• Southeast Cliff Unit: 13,700 acres.</li> <li>• Northeast Cliff Unit: 5,800 acres.</li> </ul>	Same as Alternative II.
287	No similar management action.	No similar management action.	<b>Management Action:</b> Restrictions on Use: Protect wilderness characteristics and associated supplemental values per the Management and Setting Prescriptions for BLM Lands Outside WSAs Being Managed to Protect Wilderness Characteristics (Appendix F).	No similar management action.
288	No similar management action.	No similar management action.	Apply: <ul style="list-style-type: none"> <li>• NGD/NSO for lands with wilderness characteristics.</li> </ul>	No similar management action.
289	<b>Streams Eligible for Management under the Wild and Scenic Rivers Act</b>			
290		<b>Goal:</b> Manage suitable river segments and identify suitable segments for inclusion in the National Wild and Scenic River System, protecting outstandingly remarkable resource values (ORV) in accordance with the Wild and Scenic Rivers Act and BLM guidance. <b>Objective:</b> Apply interim protection for all suitable segments to protect the free-flowing nature, ORVs, water quality, and tentative classification, pending congressional action or for the duration of the RMPA in accordance with 43 CFR 1610.4-9.		
291	Apply interim protective management to stream segments determined to be eligible for WSR designation. Utilize BLM management authorities to implement interim protective management.	Determine all eligible rivers in the Planning Area as not suitable for designation and release them from interim management protections afforded eligible segments. This would conclude the suitability study phase for these rivers.	Determine all eligible rivers in the Planning Area as suitable for designation, and apply interim protective management, including application of a SSR/CSU for the resource.	Same as Alternative II.
292	No similar management action.	No similar management action.	Apply: <ul style="list-style-type: none"> <li>• SSR/CSU for Wild and Scenic River Suitability.</li> </ul>	No similar management action.
293	<b>Public Health and Safety/Hazardous materials</b>			
294	No similar management action.	<b>Goal:</b> Protect lives, resources, and property to improve the quality of life in local communities. <b>Objective:</b> Ensure that BLM lands provide safe facilities and conditions for visitors, users, and employees, with minimum conflict among users and minimum damage to BLM lands and resources, as defined by the Department of the Interior Performance and Accountability Report measures.		
295	No similar management action.	Inspect incidents and injuries as a result of reported events in accordance with Notice to Lessees and Operators of Onshore Federal and Indian Oil and Gas Leases (NTL-3A) in order to ensure that all contributing factors in which the BLM has jurisdictions are identified and, where appropriate, plans are formulated to take corrective actions.	Same as Alternative II.	Same as Alternative II.
296	No similar management action.	Apply: Lease Notice, Emergency Response Plan: The operator is required to prepare and maintain a current emergency response plan. The plan shall be provided to the BLM, Colorado State Patrol, the affected county and communities, and the general public. The plan shall contain information	Same as Alternative II.	Same as Alternative II.

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	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
		sufficient to describe the potential for emergency incidents related to fluid minerals development that pose an immediate danger to human health and safety and would normally require immediate actions by the operator to remove the threat, such as for hazardous materials spills, actions to be taken by the operator in the event of such an incident, and a communications plan to inform appropriate authorities and potentially affected citizens.		
297	<b>Forest Products</b>			
298	No special management actions identified. Manage to maintain and promote forest health consistent with other resource objectives.	<b>Goal:</b> Maintain and promote forest health consistent with other resource objectives.		
299	No similar management action.	No similar management action.	Close lands with wilderness characteristics to commercial timber harvest, firewood cutting, and special forest product harvest.	Same as Alternative II.
300	Close Wild and Scenic Rivers to commercial timber harvest, firewood cutting, and special forest product harvest.	No similar management action.	Close Wild and Scenic Rivers to commercial timber harvest, firewood cutting, and special forest product harvest.	No similar management action.
301	No similar management action.	No similar management action.	Introduction of threatened, endangered, or other special status species native to North America would be allowed in lands with wilderness characteristics.	No similar management action.
302	No similar management action.	No similar management action.	Management activities on lands with wilderness characteristics would emphasize natural processes for wildlife management.	No similar management action.
303	<b>Fire Management</b>			
304		<b>Goals:</b> <ul style="list-style-type: none"> <li>Recognizing that management of wildfires is inherently dangerous; give first priority to public and firefighter safety when determining what actions would be necessary to protect property and natural and cultural resources from fire.</li> <li>Consistent with risk management principles, manage fires to meet natural and cultural resource objectives.</li> <li>Suppress wildfires at the minimum cost, considering firefighter and public safety and potential resource benefits and values to be protected.</li> </ul>		
305		<b>Objectives:</b> <ul style="list-style-type: none"> <li>Integrate fire and fuels management across all BLM programs to restore and maintain resilient landscapes.</li> <li>Pursue opportunities to work with neighbors and partners across jurisdictional boundaries to improve land health and address wildland-urban interface concerns.</li> </ul>		
306	Provide appropriate fire management response considering firefighter and public safety and social, economic, and environmental values.  Considering firefighter and public safety and social, economic, and environmental values, FMZs for the Planning Area are as follows: <ul style="list-style-type: none"> <li>B-140-02 (south side of plateau).</li> <li>C-140-02 (NE and SE cliffs).</li> <li>D-140-01 (top of plateau).</li> </ul>	Use a full range of wildfire management options, from full suppression to management of unplanned ignitions to meet resource and protection objectives. Allow the use of naturally caused wildfires to be managed for multiple objectives, including protection and resource benefit in specific geographic areas on 53,775 acres. On remaining acreage of BLM lands, fire will be managed to meet the single objective of protection (Map 33).		
307	No similar management action.	Use fuels treatments to meet FRCC objectives (see Appendix H for types of treatments and relevant Best Management Practices). In FRCC 2 areas, apply moderate levels of restoration treatments; in FRCC 3 areas, apply higher levels of restoration treatments to restore to the fire regime condition class.		

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308	No similar management action.	Prioritize vegetation treatments to strategically reduce wildfire threat in areas of high fire risk and low potential for natural recovery.		
309	No similar management action.	<b>GRSG Objective:</b> Manage the fuels program to avoid GRSG habitat loss and restore damaged habitat.		
310	No similar management action.	In GRSG PHMA, do not reduce sagebrush canopy cover to less than 15% in a project area unless a vegetation management objective requires additional reduction in sagebrush cover to meet strategic protection of GRSG PHMA and conserve habitat quality for the species, in consultation with the State of Colorado.	In GRSG PHMA, do not reduce sagebrush canopy cover to less than 15% unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of GRSG PHMA and conserve habitat quality for the species. Closely evaluate the benefits of the fuel breaks against the additional loss of sagebrush cover in the future NEPA process.	Same as Alternative II.
311	No similar management action.	In GRSG PHMA, apply appropriate seasonal restrictions for implementing vegetation management treatments according to the type of seasonal habitats present in a Colorado MZ. See Table 2.5, Existing Habitat Timing Limitations by Field Office, NCGSG RMP/EIS.	In GRSG PHMA, apply appropriate seasonal restrictions for implementing fuels management treatments according to the type of seasonal habitats present in a priority area.	Same as Alternative II.
312	No similar management action.	In GRSG PHMA, allow no treatments in known winter range unless the treatments are designed to strategically reduce wildfire risk around or in the winter range and will maintain winter range habitat quality, unless in consultation with the State of Colorado it is deemed necessary to reduce risk to life.	In GRSG PHMA, allow no fuels treatments in known winter range unless the treatments are designed to strategically reduce wildfire risk around or in the winter range and will maintain winter range habitat quality.	Same as Alternative II.
313	No similar management action.	<p>In GRSG GHMA, do not use fire to treat sagebrush in less than 12-inch precipitation zones (e.g., Wyoming big sagebrush or other xeric sagebrush species). However, if, as a last resort and after all other treatment opportunities have been explored and site-specific variables allow, the use of prescribed fire or natural ignition fire for fuel breaks that would disrupt fuel continuity or enhance land health could be considered where cheatgrass is deemed a minor threat.</p> <p>If prescribed fire is used in GRSG habitat with less than 12 inches of annual precipitation, the NEPA analysis for the Burn Plan will address:</p> <ul style="list-style-type: none"> <li>• why alternative techniques were not selected as viable options;</li> <li>• how GRSG goals and objectives would be met by its use;</li> <li>• how the COT Report objectives would be addressed and met;</li> <li>• a risk assessment to address how potential threats to GRSG habitat would be minimized.</li> </ul> <p>A. Allow prescribed fire as a vegetation or fuels treatment in Wyoming big sagebrush sites or other xeric sagebrush species sites, or in areas with a potential for post-fire exotic annual dominance only after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Prescribed fire could be used to meet specific fuels objectives that would protect greater sage-grouse habitat in PHMAs (e.g., creation of fuel breaks that</p>	<p>In GRSG PHMA, do not use fire to treat sagebrush in less than 12-inch precipitation zones (e.g., Wyoming big sagebrush or other xeric sagebrush species). However, if, as a last resort and after all other treatment opportunities have been explored and site-specific variables allow, the use of prescribed fire for fuel breaks that would disrupt the fuel continuity or enhance land health could be considered where cheatgrass is a very minor component in the understory.</p>	<p>In ADH, do not use fire to treat sagebrush in less than 12-inch precipitation zones (e.g., Wyoming big sagebrush or other xeric sagebrush species) (Connelly et al. 2000; Hagen et al. 2007; Beck et al. 2009). However, if as a last resort and after all other treatment opportunities have been explored, and site-specific variables allow, the use of prescribed fire or natural ignition fire for fuels breaks that would disrupt fuel continuity or enhance land health could be considered where cheatgrass is deemed a minor threat.</p> <p>If prescribed fire is used in GRSG habitat, the NEPA analysis for the burn plan will address:</p> <ul style="list-style-type: none"> <li>• why alternative techniques were not selected as viable options;</li> <li>• how GRSG goals and objectives would be met by its use;</li> <li>• how the COT report objectives would be addressed and met;</li> <li>• a risk assessment to address how potential threats to GRSG habitat would be minimized.</li> </ul> <p>Prescribed fire as a vegetation or fuels treatment shall only be considered after the NEPA analysis for the burn plan has addressed the four bullets outlined above. Prescribed fire could be used to meet specific fuels objectives that would protect GRSG habitat in PHMA (e.g., creating fuel designed to strategically reduce wildfire risk around and/or in the winter range and designed to protect winter range habitat quality, breaks that would disrupt the fuel continuity across the landscape in stands where annual invasive grasses are a minor component in the understory, burning slash piles</p>

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		would disrupt the fuel continuity across the landscape in stands where annual invasive grasses are a minor component in the understory; burning slash piles from conifer reduction treatments, used as a component with other treatment methods to combat annual grasses and restore native plant communities).  B. Allow prescribed fire in known winter range only after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Any prescribed fire in winter habitat would need to be designed to strategically reduce wildfire risk around and/or in the winter range and protect winter range habitat quality.		from conifer-reduction treatments, or being used as a component with other treatment methods to combat annual grasses and restore native plant communities).  Prescribed fire in known winter range shall only be considered after the NEPA analysis for the burn plan has addressed the four bullets outlined above. Any prescribed fire in winter habitat would need to be designed to strategically reduce wildfire risk around and/or in the winter range and designed to protect winter range habitat quality.
314	No similar management action.	In GRSG GHMA, monitor and control invasive vegetation post-treatment.	In GRSG PHMA, monitor and control invasive vegetation post-treatment.	Same as Alternative II.
315	No similar management action.	In GRSG GHMA, rest treated areas from grazing for two full growing seasons unless vegetation recovery dictates otherwise.	In GRSG PHMA, rest treated areas from grazing for two full growing seasons unless vegetation recovery dictates otherwise.	Same as Alternative II.
316	No similar management action.	In GRSG GHMA, require use of native plant seeds for vegetation treatments based on availability, adaptation (site potential), probability for success, and the vegetation management objectives for the area covered by the treatment. Where probability of success or native seed availability is low, use species that meet soil stability and hydrologic function objectives, as well as vegetation and GRSG habitat objectives.	In GRSG PHMA, require use of native plant seeds for fuels management treatment based on availability, adaptation (site potential), and probability for success. Where probability of success or native seed availability is low, nonnative seeds may be used as long as they meet GRSG habitat objectives.	Same as Alternative II.
317	No similar management action.	In GRSG PHMA, design post fuels management to ensure long-term persistence of seeded or pre-burn native plants. This may require temporary or long-term changes in livestock grazing, wild horse and burro, and travel management, etc., to achieve and maintain the desired condition of ESR projects to benefit GRSG.	Same as Alternative II.	Same as Alternative II.
318	No similar management action.	In GRSG GHMA, design vegetation treatments in GRSG habitats to strategically facilitate firefighter safety and reduce wildfire threats and extreme fire behavior. This may involve spatially arranging new vegetation treatments with past treatments, vegetation with fire-resistant serial stages, natural barriers, and roads in order to constrain fire spread and growth. This may require vegetation treatments to be implemented in a more linear versus block design.	Design fuels management projects in GRSG PHMA to strategically and effectively reduce wildfire threats in the greatest area. This may require fuels treatments implemented in a more linear versus block design.	Same as Alternative II.
319	No similar management action.	In GRSG GHMA, during fuels management project design, consider the utility of using livestock to strategically reduce fine fuels, and implement grazing management that will accomplish this objective. Consult with ecologists to minimize impacts to native perennial grasses consistent with the objectives and conservation measures of the grazing section.	In GRSG PHMA, during fuels management project design, consider the utility of using livestock to strategically reduce fine fuels, and implement grazing management that will accomplish this objective. Consult with ecologists to minimize impacts to native perennial grasses consistent with the objectives and conservation measures of the grazing section.	Same as Alternative II.
320		<b>GRSG Objective:</b> Manage fire to maintain and enhance large blocks of contiguous sagebrush.		

Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
321	No similar management action.	In GRSG PHMA, prioritize suppression immediately after firefighter and public safety. Consider GRSG habitat requirements commensurate with all resource values at risk managed by the BLM. See Appendix O GRSG Wildland Fire & Invasive Species Assessment, NWCOGSG FEIS.	In GRSG PHMA areas, prioritize suppression immediately after life and property, to conserve the habitat. See Appendix O, Wildland Fire & Invasive Species Assessment, NWCOGSG FEIS.	Same as Alternative II.
322	No similar management action.	In GRSG GHMA: The protection of human life is the single, overriding priority. Setting priorities among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources will be conducted based on the values to be protected, human health and safety, and the costs of protection. Consider GRSG habitat requirements commensurate with all resource values at risk managed by the BLM.	Same as Alternative II.	Same as Alternative II.
323	No similar management action.	In GRSG GHMA, prioritize suppression immediately after firefighter and public safety. Consider GRSG habitat requirements commensurate with all resource values at risk managed by the BLM. See Appendix O GRSG Wildland Fire & Invasive Species Assessment, NWCOGSG FEIS.	In GRSG GHMA, prioritize suppression where wildfires threaten PHMA. See Appendix O GRSG Wildland Fire & Invasive Species Assessment, NWCOGSG FEIS.	Same as Alternative II.
324	No similar management action.	In GRSG PHMAs and GHMAs, temporary closures would be considered in accordance with 43 CFR subpart 8364, 43 CFR subpart 8351, 43 CFR subpart 6302, and 43 CFR subpart 8341.	No similar management action.	Same as Alternate II.
325		<b>Objective:</b> In partnership with local, State, and Federal partners, conduct fire mitigation and fire-prevention activities to reduce human-caused wildfire ignition and improve public safety.		
326	No similar management action.	Use signage, mass media, personal contacts, assistance with Community Wildfire Protection Plans, and other associated activities to reduce human ignition and other threats from wildfire.		
327	No similar management action.	Coordinate fire restrictions closely with State, county, and local partners, while considering economic and social effects on local communities.		
328		<b>Objective:</b> For the emergency stabilization program, determine the need to prescribe and implement emergency treatments to minimize threats to life or property or to stabilize and prevent unacceptable degradation to natural and cultural resources from the effects of a wildfire.		
329	No similar management action.	Design ESR treatment actions based on the severity of the wildfire impacts. ESR priorities include, but are not limited to, areas where: <ul style="list-style-type: none"> <li>• Life, safety, or property requires protection.</li> <li>• Unique or sensitive cultural resources are at risk.</li> <li>• Soils are highly susceptible to accelerated erosion or water quality protection is required.</li> <li>• Perennial grasses and forbs are not expected to provide soil and watershed protection within two years.</li> <li>• Unacceptable vegetation, such as noxious weeds, may invade and become established.</li> <li>• It is necessary to quickly restore threatened, endangered, or special status species habitat populations to prevent adverse impacts.</li> <li>• Stabilization and rehabilitation are necessary to meet RMP resource objectives.</li> </ul>		
330		<b>GRSG Objective:</b> Use ESR to address post-wildfire threats to GRSG habitat.		
331	No similar management action.	In GRSG GHMA, require use of native plant seeds that are beneficial to GRSG for vegetation treatments based on availability, adaptation (site potential), probability for success, and the vegetation management objectives for the area covered by the treatment. Where attempts to use native seeds have failed, or native seed availability is low, use species that meet soil stability and hydrologic function objectives, as well as vegetation and GRSG objectives.	In GRSG GHMA, prioritize native seed allocation for use in GRSG habitat in years when preferred native seed is in short supply. This may require reallocation of native seed from ESR projects outside of GRSG PHMA to those inside it. Use of native plant seeds for ESR seedings is required based on availability, adaptation (site potential), and probability of success. Where probability of success or native seed availability is low, nonnative seeds may be used	Same as Alternative II.

Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>	<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>
			as long as they meet GRSG habitat conservation objectives. Reestablishment of appropriate sagebrush species/subspecies and important understory plants, relative to site potential, shall be the highest priority for rehabilitation efforts.	
332	No similar management action.	In GRSG GHMA, design post-fire ESR and Burn Area Emergency Rehabilitation management to ensure long-term persistence of seeded or pre-burn native plants. This may require temporary or long-term changes in livestock grazing, wild horse and burro, and travel management, etc., to achieve and maintain the desired condition of ESR and Burn Area Emergency Rehabilitation projects to benefit GRSG.	Same as Alternative II.	Same as Alternative II.
333	No similar management action.	No similar management action.	In GRSG GHMA, consider potential changes in climate when proposing restoration seedings when using native plants. Consider collection from the warmer component of the species' current range when selecting native species.	No similar management action.
334	No similar management action.	In GRSG GHMA, rest burned areas from grazing for two full growing seasons unless vegetation recovery dictates otherwise.	No similar management action.	Same as Alternative II.
335		<p><b>Objective:</b> The purpose of the Burned Area Rehabilitation (BAR) program is:</p> <ol style="list-style-type: none"> <li>1. To evaluate actual and potential long-term, post-fire impacts to critical cultural and natural resources and identify those areas unlikely to recover naturally from severe wildfire damage.</li> <li>2. To develop and implement cost-effective plans to emulate historical or pre-fire ecosystem structure, function, diversity, and dynamics consistent with RMP objectives or, if that is infeasible, then restore or establish a healthy, stable ecosystem in which native species are well represented.</li> <li>3. To repair or replace minor facilities damaged by wildfire.</li> </ol>		
336		<p>Design BAR treatment actions based on the severity of the wildfire impacts. BAR priorities include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Repair or improve lands unlikely to recover naturally.</li> <li>• Weed treatment to remove invasive species and planting native or nonnative species to restore or establish healthy ecosystems.</li> <li>• Plant trees to reestablish native trees.</li> <li>• Repair or replace minor facilities (e.g., fences, campgrounds, interpretive signs, shelters, wildlife guzzlers, etc.).</li> </ul>		
337	<b>Cultural Resources</b>			
338	<b>Goal 1. Preservation Management Program</b>			
339	Least amount of proactive field work.	Most amount of proactive field work.	Same as Alternative II.	Same as Alternative II.
340	<p><b>Goal:</b> Identify, preserve and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations (FLPMA Sec. 103(c), 201(a), 202(c); NHPA Sec. 110(a); ARPA Sec. 14(a).).</p> <p><b>Objectives:</b> Implement the site use allocations as listed in Appendix C of the Class I Cultural Resource Overview of the Roan Plateau Management Area, Garfield County, Colorado (Hoefler et al. 2002) and apply use allocations for cultural resources identified since 2002 and in the future according to their nature and relative preservation value (BLM Manual Section 8110.42 and Planning Handbook H-1601-1 Appendix C).</p>			
341	<b>Goal 2. Section 106 of National Historic Preservation Act (NHPA) Compliance</b>			
342	<b>Goal:</b> Reduce imminent threats and resolve potential conflicts from natural or human-caused deterioration or potential conflict with other resource uses by ensuring that all authorizations for land use and resource use will comply with Section 106 of NHPA.			

**Table 2.1 [Revised] Summary of Management Components for the No Action Alternative and Action Alternatives Goals, Objectives, and Constraints by Alternative and Resource**

	<i>Alternative I No Action</i>	<i>Alternative II FEIS Proposed Plan</i>			<i>Alternative III Community Alternative</i>	<i>Alternative IV Proposed RMPA</i>	
	<p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>• Comply with the NHPA, National Programmatic Agreement/2014 State Protocol Agreement, WO-IB-2002-101, and other applicable laws, regulations, and policies.</li> <li>• Use the sensitivity model developed from the Class I Cultural Resource Overview of the Roan Plateau Management Area, Garfield County, Colorado (Hoefler et al. 2002) in the Section 106 compliance process.</li> <li>• Fulfill the requirements of “Section 106” of the National Historic Preservation Act (NHPA), now codified at 54 U.S.C. § 306108 (formerly 16 U.S.C. § 470f), for the travel and transportation management decisions, as set forth in Attachment F of the 2014 Colorado State Agreement (Protocol) between the Colorado State Historic Preservation Officer (SHPO) and BLM. For existing routes (for which continued use is proposed under all alternatives), Attachment F establishes a phased process for the identification and evaluation of adverse effects to historic properties eligible for or listed on the National Register of Historic Places, and for resolution of those potential adverse effects in consultation with the SHPO. In accordance with Attachment F, BLM will comply with the steps in the Section 106 regulations for proposed designations of new routes or areas as open to cross country travel prior to issuing a decision designating such new routes or areas, including consultation with the SHPO, Native American tribes, and other consulting parties, completion of a Class III inventory, and as appropriate, resolution of adverse effects prior to designation.</li> </ul>						
343	<b>Cultural Resources Fieldwork Actions by Sensitivity Area and Location</b>						
344	<i>Sensitivity Zone</i>	<i>Survey Management</i>			<i>Management of Cultural Resource Locations</i>		
		<i>Project Location</i>	<i>Areas Not Inventoried</i>	<i>Inventoried Areas (No Resources)</i>	<i>Sites Needing Data</i>	<i>NRHP Eligible Sites</i>	<i>NRHP Not Eligible Sites</i>
345	High	Atop the plateau	Class III – 100% Inventory	Monitor <sup>1</sup>	Avoid or test <sup>2</sup>	Avoid or implement data recovery plan <sup>3</sup>	Monitor
		Below the rim	Class III – 100% Inventory	Monitor	Avoid or test <sup>2</sup>	Avoid or implement data recovery plan <sup>3</sup>	No further work
346	Moderate	Atop the plateau	Class III – 100% Inventory	Monitor	Avoid or test <sup>2</sup>	Avoid or implement data recovery plan <sup>3</sup>	Monitor
		Below the rim	Class II – Reconnaissance	No further work	Avoid or test <sup>2</sup>	Avoid or implement data recovery plan <sup>3</sup>	No further work
347	Low	Atop the plateau	Class I – Records Search	No further work	Avoid or test <sup>2</sup>	Avoid or implement data recovery plan <sup>3</sup>	No further work
		Below the rim	Class I – Records Search	No further work	Avoid or test <sup>2</sup>	Avoid or implement data recovery plan <sup>3</sup>	No further work
348	<p><sup>1</sup> Monitor refers to having a qualified archaeologist onsite during construction/maintenance activities as determined by the Cultural Resource Specialist.  <sup>2</sup> Test refers to evaluative testing and excavation of a site to determine NRHP eligibility.  <sup>3</sup> Data recovery refers to large-scale excavation of the site for mitigation purposes.</p> <p>All authorizations for land and resource use would comply with Section 106 of the NHPA, consistent with and subject to the objectives established in the RMPA for the proactive use of cultural properties in the public interest (NHPA Sec. 106, 101(d)(6), 110(a)(2)(E); BLM-ACHP-NCSHPO Programmatic Agreement of March 1997).  Proposed activities would not be authorized until compliance with Section 106 of NHPA has been completed and documented, including, where applicable, consultation with the State Historic Preservation Officer and Native American tribes.  Native American consultation for identification and protection of culturally sensitive properties and use areas would occur under all alternatives.  Level of proactive work and/or need for National Register District or ACEC based on Class I overview data and potential impacts of a proposed action.</p> <p>Closed to oil and gas leasing (Fee surface/Federal subsurface)</p>						

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ACECs have been identified for designation based on the presence of various relevant and important values discussed in the following table. Various protective measures and management actions are identified in the Proposed RMPA to guide management of these values. These measures and actions are specific to identified resources; they are being applied independently of ACEC designation. ACEC designation highlights the resource values present. Designation does not carry or require any particular measures or actions. Wilderness characteristics are separate and distinct from the relevant and important resource values for ACECs. ACEC designation is separate and distinct from any management action to maintain and protect wilderness characteristics.

**Table 2.2 Proposed Management Prescriptions for Areas of Critical Environmental Concern (ACECs)**

<i>Anvil Points ACEC</i>	
<i>Relevant and Important Resources</i>	
<b>Visual</b>	<p><b>Objective:</b> Protect visual resources on lands that are most visible from I-70 and where changes to the visual character would be the most noticeable.</p> <p><b>Management Action:</b> Apply NGD/NSO restrictions to lands over 30 percent slopes which are within 5 miles of, and visible from, I-70 to retain the existing natural character of the landscape. The level of allowed change to the characteristic landscape would be low. Management activities may be visible but not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.</p> <p><b>Objective:</b> Preserve the existing natural character of the landscape on lands below the cliffs to the casual observer.</p> <p><b>Management Action:</b> Apply SSR/CSU to VRM Class II lands to retain the existing natural character of the landscape. The level of allowed change to the characteristic landscape would be low. Management activities may be visible but not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.</p>
<b>Wildlife</b>	<p><b>Objective:</b> Protect identified raptor nest sites.</p> <p><b>Management Actions:</b> Apply NGD/NSO within wildlife security areas below the rim. For the protection of raptors, apply NGD/NSO restrictions within a 0.125-mile radius of nest sites. Raptors include owls, osprey, golden eagles, buteos, accipiters, and falcons except American kestrel. (For the protection of peregrine falcon, apply NGD/NSO restrictions within 0.25-mile radius of cliff-nesting complexes).</p> <p><b>Objective:</b> Prevent raptor nest abandonment and reductions in nesting productivity.</p> <p><b>Management Actions:</b> Apply NGD/NSO within wildlife security areas below the rim. Avoid drilling or other high-disturbance activities within a 0.25-mile buffer around nest sites from February 1 through August 15. For protection of peregrine falcons, apply a 0.5-mile buffer around the cliff-nesting complex from March 16 through July 31 to prevent abandonment and desertion of established territories.</p> <p><b>Objective:</b> Maintain habitat connectivity and avoid displacement of wildlife.</p> <p><b>Management Action:</b> Apply NGD/NSO within wildlife security areas below the rim. Allow no new long-term (longer than two growing seasons) human use related ground disturbing activities within the unroaded wildlife habitat located below the cliffs.</p> <p><b>Objective:</b> Protect and minimize disturbance to wintering big game, and allow for their use of limited winter range habitats during the critical winter months.</p> <p><b>Management Action:</b> Apply a TL to protect wintering big game. Avoid high-disturbance activities (such as oil and gas drilling) from December 1 through April 30 within winter habitat as mapped by the Colorado Division of Wildlife (CDOW), unless impacts have been mitigated.</p>

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Table 2.2 Proposed Management Prescriptions for Areas of Critical Environmental Concern (ACECs)

<i>Anvil Points ACEC</i>	
<b>Botanical/ Ecological</b>	<p><b>Objective:</b> Protect occupied and critical habitat, and identified suitable or marginally suitable habitat, and the immediately adjacent ecosystem processes that support Federally listed and candidate plants.</p> <p><b>Management Action:</b> Apply NGD/NSO restrictions within occupied habitat, critical habitat, identified suitable habitat, or within the immediately adjacent ecosystem processes that support Federally listed plants.</p> <p><b>Objective:</b> Allow for the long-term viability and recovery of Federally listed plant species, and protect and maintain critical habitat, potential habitat, and the ecosystem processes that support them.</p> <p><b>Management Actions:</b> Apply SSR/CSU restrictions within potential habitat/ecosystem processes outside of designated critical habitat for Federally listed plants.</p> <p><b>Objective:</b> Maintain the current ecological integrity and function of the rare plants and significant plant communities.</p> <p><b>Management Action:</b> Revegetate using only native species (preferably locally adapted), unless in areas with a high risk of becoming dominated by cheatgrass or other undesirable species under conditions where only non-native species have been proven effective and not within a 0.62 mile (1.0 kilometer) buffer around any TES plant species occurrence (as consistent with BLM Manual 1745 or Handbook 1742-1).</p> <p><b>Objective:</b> Allow natural ecosystem processes such as rockslides to continue.</p> <p><b>Management Action:</b> Manage significant grassland and shrubland communities to retain mid- to late-seral stage condition.</p> <p><b>Objective:</b> Minimize fragmentation of habitat and the risk of invasion by noxious weeds and other aggressive non-native species, which may compromise ecosystem function and the long-term viability of the rare plants and significant plant communities.</p> <p><b>Management Action:</b> Minimize disturbance to habitat and ecosystem processes that support habitat for listed and rare plants, and significant plant communities. Where practicable, restore to a naturally functioning state any existing human-caused disturbance that is impairing natural ecosystem processes affecting habitat for rare plant species or significant plant communities. Actions may include burying pipelines and utilities in roads or relocation of facilities to minimize impacts.</p> <p><b>Objective:</b> Ensure the long-term survival and reproductive capability of rare plants and significant plant communities.</p> <p><b>Management Actions:</b> Prohibit collection of plants, plant materials, and seeds, except for scientific or research purposes. Such collection must have no detrimental impact on long-term survival and reproduction of rare species or significant communities.</p> <p><b>Objective:</b> Maintain healthy native plant communities, minimizing competition from non-native invasive species.</p> <p><b>Management Action:</b> Control noxious weeds using integrated control techniques. Utilize focused control techniques in areas with rare species or significant plant communities to avoid damage to non-target species.</p> <p><b>Objective:</b> Maintain populations of rare plants and significant plant communities that are healthy, productive, and able to reproduce and sustain natural fluctuations and ecological processes. Provide adequate opportunities for recovery, regrowth, and seed dissemination and establishment.</p> <p><b>Management Action:</b> Manage livestock grazing within occupied or potential habitat for rare plants or significant plant communities to promote plant health, maintain sufficient residual vegetation, and sustain overall watershed functions, as defined in the Colorado Livestock Grazing Management Guidelines (BLM 1997a).</p>

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**Table 2.2 Proposed Management Prescriptions for Areas of Critical Environmental Concern (ACECs)**

<i>Anvil Points ACEC</i>	
<i>Other Important Resources</i>	
<b>Steep Slopes</b>	<p><b>Objective:</b> Maintain site stability and productivity.</p> <p><b>Management Action:</b> Apply NGD/NSO on slopes greater than 50 percent to minimize impacts on site productivity, to adequately control surface runoff, to reduce accelerated erosion and increase likelihood of successful reclamation.</p>
<b>Soils</b>	<p><b>Objective:</b> Maintain site stability and minimize potential for erosion.</p> <p><b>Management Action:</b> On slopes greater than 30 percent, require special design, construction, operation, and reclamation measures.</p>

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Table 2.2 Proposed Management Prescriptions for Areas of Critical Environmental Concern (ACECs)

<i>Magpie Gulch</i>	
<i>Relevant and Important Resources</i>	
<b>Visual</b>	<p><b>Objective:</b> Protect visual resources on lands that are most visible from I-70, and where changes to the visual character would be most noticeable.</p> <p><b>Management Action:</b> Apply NGD/NSO restrictions to lands over 30 percent slopes which are within 5 miles of, and visible from I-70 to retain the existing natural character of the landscape. The level of allowed change to the characteristic landscape would be low. Management activities may be visible but not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.</p> <p><b>Objective:</b> Preserve the existing natural character of the landscape on lands below the cliffs to the casual observer.</p> <p><b>Management Action:</b> Apply SSR/CSU to VRM Class II lands to retain the existing natural character of the landscape. The level of allowed change to the characteristic landscape would be low. Management activities may be visible but not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.</p>
<b>Wildlife</b>	<p><b>Objective:</b> Protect identified raptor nest sites.</p> <p><b>Management Actions:</b> Apply NGD/NSO within wildlife security areas below the rim. For the protection of raptors, apply NGD/NSO restrictions within a 0.125-mile radius of nest sites. Raptors include owls, osprey, golden eagles, buteos, accipiters, and falcons except American kestrel. For the protection of peregrine falcon, apply NGD/NSO restrictions within 0.25-mile radius of cliff nesting complexes.</p> <p><b>Objective:</b> Prevent raptor nest abandonment and reductions in nesting productivity.</p> <p><b>Management Actions:</b> Apply NGD/NSO within wildlife security areas below the rim. Avoid drilling or other high-disturbance activities within a 0.25-mile buffer around nest sites from February 1 through August 15. For protection of peregrine falcons, apply a 0.5-mile buffer around the cliff-nesting complex from March 16 through July 31 to prevent abandonment and desertion of established territories.</p> <p><b>Objective:</b> Maintain habitat connectivity and avoid displacement of wildlife.</p> <p><b>Management Action:</b> Apply NGD/NSO within wildlife security areas below the rim. Allow no new long-term (longer than two growing seasons) human use related ground disturbing activities within the unroaded wildlife habitat located below the cliffs.</p> <p><b>Objective:</b> Protect and minimize disturbance to wintering big game, and allow for their use of limited winter range habitats during the critical winter months.</p> <p><b>Management Action:</b> Apply a TL to protect wintering big game. Avoid high-disturbance activities (such as oil and gas drilling) from December 1 through April 30 within winter habitat as mapped by CDOW, unless impacts have been mitigated.</p>
<b>Botanical/ Ecological</b>	<p><b>Objective:</b> Protect the current extent, ecological integrity, and function of the old-growth Douglas-fir community.</p> <p><b>Management Action:</b> Apply a SSR/CSU within old-growth Douglas-fir remnant communities, including removal of any size-class trees.</p> <p><b>Objective:</b> Protect occupied and critical habitat, and identified suitable or marginally suitable habitat, and the immediately adjacent ecosystem processes that support Federally listed and candidate plants.</p> <p><b>Management Action:</b> Apply NGD/NSO restrictions within occupied habitat, critical habitat, identified suitable habitat, or within the immediately adjacent ecosystem processes that support Federally listed plants.</p> <p><b>Objective:</b> Allow for the long-term viability and recovery of Federally listed plant species, and protect and maintain critical habitat, potential</p>

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**Table 2.2 Proposed Management Prescriptions for Areas of Critical Environmental Concern (ACECs)**

<i>Magpie Gulch</i>	
	<p>habitat, and the ecosystem processes that support them.</p> <p><b>Management Actions:</b> Apply SSR/CSU restrictions within potential habitat/ecosystem processes outside of designated critical habitat for Federally listed plants.</p> <p><b>Objective:</b> Maintain the current ecological integrity and function of the rare plants and significant plant communities.</p> <p><b>Management Action:</b> Revegetate using only native species (preferably locally adapted), unless in areas with a high risk of becoming dominated by cheatgrass or other undesirable species under conditions where only non-native species have been proven effective and not within a 0.62 mile (1.0 kilometer) buffer around any TES plant species occurrence (as consistent with BLM Manual 1745 or Handbook 1742-1).</p> <p><b>Objective:</b> Allow natural ecosystem processes such as rockslides to continue. Manage fire primarily to meet resource objectives, consistent with fire management objectives.</p> <p><b>Management Action:</b> Manage significant grassland and shrubland communities to retain mid- to late-seral stage condition.</p> <p><b>Objective:</b> Minimize fragmentation of habitat and the risk of invasion by noxious weeds and other aggressive non-native species, which may compromise ecosystem function and the long-term viability of the rare plants and significant plant communities.</p> <p><b>Management Action:</b> Minimize disturbance to habitat and ecosystem processes that support habitat for Federally listed, rare plants, and significant plant communities. Where practicable, restore to a naturally functioning state any existing human-caused disturbance that is impairing natural ecosystem processes affecting habitat for rare plant species or significant plant communities. Actions may include burying pipelines and utilities in roads or relocation of facilities to minimize impacts.</p> <p><b>Objective:</b> Ensure the long-term survival and reproductive capability of rare plants and significant plant communities.</p> <p><b>Management Actions:</b> Prohibit collection of plants, plant materials, and seeds, except for scientific or research purposes. Such collection must have no detrimental impact on long-term survival and reproduction of rare species or significant communities. Prohibit collection of rare plants or plant parts, except for scientific research as approved by the U.S. Fish and Wildlife Service (USFWS) in the case of T&amp;E plants, and with a valid collection permit.</p> <p><b>Objective:</b> Maintain healthy native plant communities, minimizing competition from non-native invasive species.</p> <p><b>Management Action:</b> Control noxious weeds using integrated control techniques. Utilize focused control techniques in areas with rare species or significant plant communities to avoid damage to non-target species.</p> <p><b>Objective:</b> Maintain populations of rare plants and significant plant communities that are healthy, productive, and able to reproduce and sustain natural fluctuations and ecological processes. Provide adequate opportunities for recovery, regrowth, and seed dissemination and establishment.</p> <p><b>Management Action:</b> Manage livestock grazing within occupied or potential habitat for rare plants or significant plant communities to promote plant health, maintain sufficient residual vegetation, and sustain overall watershed functions, as defined in the Colorado Livestock Grazing Management Guidelines (BLM 1997a).</p>

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**Table 2.2 Proposed Management Prescriptions for Areas of Critical Environmental Concern (ACECs)**

<i>Magpie Gulch</i>	
<i>Other Important Resources</i>	
<b>Steep Slopes</b>	<p><b>Objective:</b> Maintain site stability and productivity.</p> <p><b>Management Action:</b> Apply NGD/NSO on slopes greater than 50 percent to minimize impacts on site productivity, to adequately control surface runoff, to reduce accelerated erosion and increase likelihood of successful reclamation.</p>
<b>Soils</b>	<p><b>Objective:</b> Maintain site stability and minimize potential for erosion.</p> <p><b>Management Action:</b> On slopes greater than 30 percent, require special design, construction, operation, and reclamation measures.</p>

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Table 2.2 Proposed Management Prescriptions for Areas of Critical Environmental Concern (ACECs)

<i>East Fork Parachute Creek</i>	
<i>Relevant and Important Resources</i>	
<b>Visual</b>	<p><b>Objective:</b> Preserve the existing character of landscape for East Fork Falls viewshed to meet VRM Class I objectives.</p> <p><b>Management Action:</b> Apply NGD/NSO to maintain the natural character and scenic quality of the landscape to provide for ecological changes and restrict landscape modifications. Limited activities may be allowed if the basic landscape elements (line, form, color, and texture) are repeated and changes are not evident, and appear natural.</p> <p><b>Objective:</b> Partially retain the character of the remainder of the landscape within the ACEC.</p> <p><b>Management Action:</b> Apply SSR/CSU to partially retain the existing character of the landscape on all lands designated as Class III. Activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the elements found in the natural features of the characteristic landscape.</p>
<b>Fish and Wildlife</b>	<p><b>Objective:</b> Protect CRCT from direct impacts.</p> <p><b>Management Action:</b> Apply NGD/NSO to high and moderate risk habitat areas. Allow no loss or degradation of fish habitat that supports CRCT high risk habitat.</p> <p><b>Objective:</b> Protect CRCT from indirect impacts.</p> <p><b>Management Action:</b> Apply NGD/NSO to high and moderate risk habitat areas. Allow no loss or degradation of fish habitat that supports CRCT moderate risk habitat.</p> <p><b>Objective:</b> Monitor livestock grazing impacts at key areas within the ACEC. Make management changes if bank alteration exceeds the allowable amount as defined in AMPs.</p> <p><b>Management Action:</b> Manage livestock grazing within the ACEC so that streambank damage does not exceed 10 percent of the stream length.</p>
<b>Botanical/ Ecological</b>	<p><b>Objective:</b> Maintain the current ecological integrity and function of the rare plants and significant plant communities.</p> <p><b>Management Action:</b> Revegetate using only native species (preferably locally adapted), unless in areas with a high risk of becoming dominated by cheatgrass or other undesirable species under conditions where only non-native species have been proven effective and not within a 0.62 mile (1.0 kilometer) buffer around any TES plant species occurrence (as consistent with BLM Manual 1745 or Handbook 1742-1).</p> <p><b>Objective:</b> Allow natural ecosystem processes such as rockslides to continue. Manage fire primarily to meet resource objectives, consistent with fire management objectives.</p> <p><b>Management Action:</b> Manage significant grassland and shrubland communities to retain mid- to late-seral stage condition.</p> <p><b>Objective:</b> Minimize fragmentation of habitat and the risk of invasion by noxious weeds and other aggressive non-native species, which may compromise ecosystem function and the long-term viability of the rare plants and significant plant communities.</p> <p><b>Management Action:</b> Minimize disturbance to habitat and ecosystem processes that support habitat for Federally listed, rare plants, and significant plant communities. Where practicable, restore to a naturally functioning state any existing human-caused disturbance that is impairing natural ecosystem processes affecting habitat for rare plant species or significant plant communities. Actions may include burying pipelines and utilities in roads or relocation of facilities to minimize impacts.</p>

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Table 2.2 Proposed Management Prescriptions for Areas of Critical Environmental Concern (ACECs)

<i>East Fork Parachute Creek</i>	
	<p><b>Objective:</b> Ensure the long-term survival and reproductive capability of rare plants and significant plant communities.</p> <p><b>Management Actions:</b> Prohibit collection of plants, plant materials, and seeds, except for scientific or research purposes. Such collection must have no detrimental impact on long-term survival and reproduction of rare species or significant communities. Prohibit collection of rare plants or plant parts, except for scientific research as approved by USFWS in the case of T&amp;E plants, and with a valid collection permit.</p> <p><b>Objective:</b> Maintain healthy native plant communities, minimizing competition from non-native invasive species.</p> <p><b>Management Action:</b> Control noxious weeds using integrated control techniques. Utilize focused control techniques in areas with rare species or significant plant communities to avoid damage to non-target species.</p> <p><b>Objective:</b> Maintain populations of rare plants and significant plant communities that are healthy, productive, and able to reproduce and sustain natural fluctuations and ecological processes. Provide adequate opportunities for recovery, regrowth, and seed dissemination and establishment.</p> <p><b>Management Action:</b> Manage livestock grazing within occupied or potential habitat for rare plants or significant plant communities to promote plant health, maintain sufficient residual vegetation, and sustain overall watershed functions, as defined in the Colorado Livestock Grazing Management Guidelines (BLM 1997a).</p>
<b>Other Important Resources</b>	
<b>Steep Slopes</b>	<p><b>Objective:</b> Maintain site stability and productivity.</p> <p><b>Management Action:</b> Apply NGD/NSO on slopes greater than 50 percent to minimize impacts on site productivity, to adequately control surface runoff, to reduce accelerated erosion and increase likelihood of successful reclamation.</p>
<b>Soils</b>	<p><b>Objective:</b> Maintain site stability and minimize potential for erosion.</p> <p><b>Management Action:</b> On slopes greater than 30 percent, require special design, construction, operation, and reclamation measures.</p>
<b>Riparian Areas</b>	<p><b>Objective:</b> Maintain proper hydrologic function and protect adjacent areas that provide habitat for special status fish and wildlife species, important riparian values, water quality, waterfowl shorebird production, amphibian habitat, and high scenic and recreation values. Allow continued access to and use of these habitats by fish and wildlife species.</p> <p><b>Management Actions:</b> Roads, transmission lines, storage facilities and similar human-induced surface disturbances will be restricted to an area beyond the outer edge of the riparian vegetation. A SSR/CSU would apply within 500 feet of the outer edge of the wetland or riparian area.</p>

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Table 2.2 Proposed Management Prescriptions for Areas of Critical Environmental Concern (ACECs)

<i>Trapper/Northwater Creek</i>	
<i>Relevant and Important Resources</i>	
<b>Fish and Wildlife</b>	<p><b>Objective:</b> Protect identified raptor nest sites.</p> <p><b>Management Actions:</b> Apply NGD/NSO within wildlife security areas below the rim. For the protection of raptors, apply NGD/NSO restrictions within a 0.125-mile radius of nest sites. Raptors include owls, osprey, golden eagles, hawks, accipiters, and falcons except American kestrel. (For the protection of peregrine falcon, apply NGD/NSO restrictions within a 0.25-mile radius of cliff nesting complexes.)</p> <p><b>Objective:</b> Prevent raptor nest abandonment and reductions in nesting productivity.</p> <p><b>Management Actions:</b> Apply NGD/NSO within wildlife security areas below the rim. Avoid drilling or other high-disturbance activities within a 0.25-mile buffer around nest sites from February 1 through August 15. For protection of peregrine falcons, apply a 0.5-mile buffer around the cliff-nesting complex from March 16 through July 31 to prevent abandonment and desertion of established territories.</p> <p><b>Objective:</b> Protect CRCT from direct impacts.</p> <p><b>Management Action:</b> Apply NGD/NSO to high and moderate risk habitat areas. Allow no loss or degradation of fish habitat that supports CRCT high risk habitat.</p> <p><b>Objective:</b> Protect CRCT from indirect impacts.</p> <p><b>Management Action:</b> Apply NGD/NSO to high and moderate risk habitat areas. Allow no loss or degradation of fish habitat that supports CRCT moderate risk habitat.</p> <p><b>Objective:</b> Minimize direct impacts to streambanks resulting from livestock grazing.</p> <p><b>Management Action:</b> Monitor livestock grazing impacts at key areas within the ACEC. Make management changes if bank alteration exceeds the allowable amount as defined in AMPs.</p>
<b>Botanical/ Ecological</b>	<p><b>Objective:</b> Maintain the current ecological integrity and function of the rare plants and significant plant communities.</p> <p><b>Management Action:</b> Revegetate using only native species (preferably locally adapted), unless in areas with a high risk of becoming dominated by cheatgrass or other undesirable species under conditions where only non-native species have been proven effective and not within a 0.62 mile (1.0 kilometer) buffer around any TES plant species occurrence (as consistent with BLM Manual 1745 or Handbook 1742-1).</p> <p><b>Objective:</b> Allow natural ecosystem processes such as rockslides to continue. Manage fire primarily to meet resource objectives, consistent with fire management objectives.</p> <p><b>Management Action:</b> Manage significant grassland and shrubland communities to retain mid- to late-seral stage condition.</p> <p><b>Objective:</b> Minimize fragmentation of habitat and the risk of invasion by noxious weeds and other aggressive non-native species, which may compromise ecosystem function and the long-term viability of the rare plants and significant plant communities.</p> <p><b>Management Action:</b> Minimize disturbance to habitat and ecosystem processes that support habitat for listed and rare plants, and significant plant communities. Where practicable, restore to a naturally functioning state any existing human-caused disturbance that is impairing natural ecosystem processes affecting habitat for rare plant species or significant plant communities. Actions may include burying pipelines and utilities in roads or relocation of facilities to minimize impacts.</p> <p><b>Objective:</b> Ensure the long-term survival and reproductive capability of rare plants and significant plant communities.</p> <p><b>Management Actions:</b> Prohibit collection of plants, plant materials, and seeds, except for scientific or research purposes. Such collection</p>

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**Table 2.2 Proposed Management Prescriptions for Areas of Critical Environmental Concern (ACECs)**

<i>Trapper/Northwater Creek</i>	
	<p>must have no detrimental impact on long-term survival and reproduction of rare species or significant communities. Prohibit collection of rare plants or plant parts, except for scientific research as approved by USFWS in the case of T&amp;E plants, and with a valid collection permit.</p> <p><b>Objective:</b> Maintain healthy native plant communities, minimizing competition from non-native invasive species.</p> <p><b>Management Action:</b> Control noxious weeds using integrated control techniques. Utilize focused control techniques in areas with rare species or significant plant communities to avoid damage to non-target species.</p> <p><b>Objective:</b> Maintain populations of rare plants and significant plant communities that are healthy, productive, and able to reproduce and sustain natural fluctuations and ecological processes. Provide adequate opportunities for recovery, regrowth, and seed dissemination and establishment.</p> <p><b>Management Action:</b> Manage livestock grazing within occupied or potential habitat for rare plants or significant plant communities to promote plant health, maintain sufficient residual vegetation, and sustain overall watershed functions, as defined in the Colorado Livestock Grazing Management Guidelines (BLM 1997a).</p>
<b>Other Important Resources</b>	
<b>Steep Slopes</b>	<p><b>Objective:</b> Maintain site stability and productivity.</p> <p><b>Management Action:</b> Apply NGD/NSO on slopes greater than 50 percent to minimize impacts on site productivity, to adequately control surface runoff, to reduce accelerated erosion and increase likelihood of successful reclamation.</p>
<b>Soils</b>	<p><b>Objective:</b> Maintain site stability and minimize potential for erosion.</p> <p><b>Management Action:</b> On slopes greater than 30 percent, require special design, construction, operation, and reclamation measures.</p>
<b>Riparian Areas</b>	<p><b>Objective:</b> Maintain proper hydrologic function and protect adjacent areas that provide habitat for special status fish and wildlife species, important riparian values, water quality, waterfowl and shorebird production, amphibian habitat, and high scenic and recreation values. Allow continued access to and use of these habitats by fish and wildlife species.</p> <p><b>Management Actions:</b> Roads, transmission lines, storage facilities and similar human-induced surface disturbances will be restricted to an area beyond the outer edge of the riparian vegetation. A SSR/CSU would apply within 500 feet of the outer edge of the wetland or riparian area.</p>

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Table 2.3 Management Goals, Objectives, and Actions for the Parachute Creek Watershed Management Area

<i>Resource</i>	<i>Proposed Management Goal, Objective, and Action</i>	
	<i>Alternative II</i>	<i>Alternative IV</i>
<b>Fisheries</b>	<p><b>Goal:</b> Maintain or improve CRCT habitat. This may be accomplished by habitat improvement and by preventing or minimizing impacts to ecological function throughout the WMA.</p> <p><b>Objective:</b> Maintain or improve water quality, natural stream flow, and stream ecological function throughout the WMA by preventing or minimizing direct, indirect, or cumulative adverse impacts to CRCT or their habitat.</p> <p><b>Management Actions:</b></p> <ul style="list-style-type: none"> <li>• Prior to conducting surface disturbance in the WMA, collect baseline data to assess current local hydrological and ecological conditions.</li> <li>• Require project-specific design and mitigation such that proposed actions and site locations will prevent or minimize: reductions in natural stream flow; additional sedimentation or other degradation of water quality; or adverse impacts to stream ecological function, for reaches containing cutthroat trout habitat, and reaches upstream from occupied habitat. Required design components may include construction design, implementation of BMPs, mitigation, reclamation, revegetation, monitoring (to guide adaptive management), and erosion control. Project design will establish baseline environmental conditions and monitor post development conditions, other results as available, and require monitoring of mitigation components sufficient to demonstrate effectiveness.</li> <li>• Relocate activities as necessary to minimize negative impacts to water quality and stream ecological function.</li> <li>• Recognize valid existing water rights.</li> </ul> <p>Standards:</p> <ul style="list-style-type: none"> <li>• Consider activities designed to provide long-term habitat improvement or protection, such as culvert or bridge installation or bank stabilization actions.</li> </ul>	Same as Alternative II

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Table 2.3 Management Goals, Objectives, and Actions for the Parachute Creek Watershed Management Area

<i>Resource</i>	<i>Proposed Management Goal, Objective, and Action</i>	
	<i>Alternative II</i>	<i>Alternative IV</i>
	<ul style="list-style-type: none"> <li>Assess terms of indicator values for Public Land Health Standard #2 – Riparian Systems, #3 – Plant and Animal Communities, #4 – Special Status Species, and #5 – Water Quality. (See Appendix F)</li> </ul>	
<b>Botanical/ Resources</b>	<p><b>Goal:</b> Maintain or improve special status plant populations, significant plant communities, and their habitat.</p> <p><b>Objective:</b> Maintain or improve surface and subsurface water flows, and the ecological integrity and function that supports rare and/or significant natural plant communities.</p> <p><b>Management Actions:</b></p> <ul style="list-style-type: none"> <li>Prior to conducting surface disturbance, collect baseline data of current local hydrological conditions as well as current ecological condition in terms of indicator values for Public Land Health Standard #3 – Plant and Animal Communities and #4 – Special Status Species.</li> <li>Require project-specific design and mitigation such that proposed actions and site locations will prevent or minimize: reduction of natural stream flows, degradation of water quality, or loss stream ecological function. Required design components may include construction design, implementation of BMPs, mitigation, reclamation, revegetation, monitoring (to guide adaptive management), and erosion control.</li> <li>Consider exceptions for short duration, one-time events designed to enhance ecological function to provide long-term habitat protection, such as culvert or bridge installation or bank stabilization actions.</li> <li>Relocate activities as necessary to minimize negative impacts to the hydrologic regime and ecological integrity/function that provide existing habitat for special status plant populations and significant plant communities, and the habitat which supports them.</li> </ul>	Same as Alternative II

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Table 2.3 Management Goals, Objectives, and Actions for the Parachute Creek Watershed Management Area

<i>Resource</i>	<i>Proposed Management Goal, Objective, and Action</i>	
	<i>Alternative II</i>	<i>Alternative IV</i>
	<p>Standards:</p> <ul style="list-style-type: none"> <li>• Project design will incorporate baseline and other relevant study results, as available, and require monitoring of mitigation components sufficient to demonstrate effectiveness.</li> <li>• Review project-specific design plans submitted by the proponent before approving an exception.</li> </ul>	
	<p><b>Goal:</b> Maintain the hydrologic regime and ecological integrity/function that provide existing habitat for special status plant populations and significant plant communities in the WMA.</p> <p><b>Objective:</b> Prevent disruption, alteration, or interruption of surface and subsurface water flows that support rare and/or significant natural plant communities, and protect against invasion of noxious weeds or other aggressive exotic plants.</p> <p><b>Management Actions:</b></p> <ul style="list-style-type: none"> <li>• Prior to approval of proposed surface disturbance, conduct baseline studies of current local hydrological conditions as well as current ecological condition in terms of indicator values for Public Land Health Standard #3 – Plant and Animal Communities and #4 – Special Status Species.</li> <li>• Assess all activities for potential impacts that may change or reduce local surface or subsurface flow volumes directly, indirectly, or cumulative to existing conditions and other human impacts or otherwise cause degradation of indicators for Public Land Health Standards #3 – Plant and Animal Communities and #4 – Special Status Species.</li> <li>• Require project-specific design and mitigation plans prior to approval of proposed actions that may affect habitat for existing rare plant populations and significant plant communities.</li> <li>• Consider exceptions for short duration, one-time events designed to provide long-term habitat protection, such as culvert or bridge installation or bank stabilization actions. Move proposed locations of ground-disturbing activities, as required,</li> </ul>	

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Table 2.3 Management Goals, Objectives, and Actions for the Parachute Creek Watershed Management Area

<i>Resource</i>	<i>Proposed Management Goal, Objective, and Action</i>	
	<i>Alternative II</i>	<i>Alternative IV</i>
	<p>to minimize negative impacts to the hydrologic regime and ecological integrity/function that provide existing habitat for special status plant populations and significant plant communities.</p> <p>Standards:</p> <ul style="list-style-type: none"> <li>• Design projects such that proposed actions and site locations will not contribute to reduction of natural stream flows or other degradation of water quality or stream ecological function.</li> <li>• Required design components may include construction design, implementation of BMPs, mitigation, reclamation, revegetation, monitoring (to guide adaptive management), and erosion control. Incorporate baseline study results into project design. Require that designs and mitigation components be demonstrated effective under similar ecological conditions.</li> <li>• Review project-specific design plans submitted by the proponent before approving an exception.</li> </ul>	
<p><b>Municipal Water Quality</b></p>	<p><b>Goal:</b> Protect and maintain or enhance resource values, especially water quantity and quality, in the Parachute Creek WMA.</p> <p><b>Objective:</b> Ensure sufficient water supply and water quality is available for use by the Town of Parachute and natural hydrologic systems now and in the future. To minimize cumulative impact to the Parachute Creek WMA resource values.</p> <p><b>Management Actions:</b></p> <ul style="list-style-type: none"> <li>• Prior to conducting surface disturbance, or new surface disturbing activities, collect baseline data of local hydrological conditions. Data parameters will include physical, chemical, and biological characteristics.</li> <li>• Require project-specific design and mitigation such that actions do not measurably decrease water quality (including physical, chemical, or biological characteristics) at any collection or diversion point utilized by the Town of Parachute for municipal purposes.</li> </ul>	<p><b>Goal:</b> Protect and maintain or enhance resource values, especially water quantity and quality, in the Parachute Creek WMA.</p> <p><b>Objective:</b> Ensure sufficient water supply and water quality is available for use by the Town of Parachute and natural hydrologic systems now and in the future. To minimize cumulative impact to the Parachute Creek WMA resource values.</p> <p><b>Management Actions:</b></p> <ul style="list-style-type: none"> <li>• Prior to conducting surface disturbance, or new surface disturbing activities, collect baseline data of local hydrological conditions. Data parameters will include physical, chemical, and biological characteristics.</li> <li>• Require project-specific design and mitigation such that actions do not measurably decrease water quality (including physical, chemical, or biological characteristics) at any collection or diversion point utilized by the Town of</li> </ul>

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Table 2.3 Management Goals, Objectives, and Actions for the Parachute Creek Watershed Management Area

<i>Resource</i>	<i>Proposed Management Goal, Objective, and Action</i>	
	<i>Alternative II</i>	<i>Alternative IV</i>
	<ul style="list-style-type: none"> <li>• Monitor and evaluate mitigation efforts on a regular basis for ground-disturbing activities that disturb, either separately or in combination with other activities, within a disturbance area greater than 5 acres.</li> <li>• Operations must be designed, constructed and located to minimize the footprint of surface disturbance, erosion, and other negative impacts on the water supply.</li> <li>• Minimize the footprint from oil and gas activities and preclude location of activities on slopes greater than 20 percent. Apply a CSU stipulation with standards that would require a minimum distance of 2,640 feet between well pads unless: topographic constraints require a closer location, which would result in fewer cumulative impacts to important wildlife, aquatic, visual, and soil resources.</li> <li>• A transportation plan will be required after forming the unit, during formulation of development plans.</li> </ul> <p>Standards:</p> <ul style="list-style-type: none"> <li>• Design any activities, facilities (including wells, pads, and roads), or site locations to prevent or minimize adverse impacts to natural stream flow volume or other degradation of water quality or stream ecological function.</li> <li>• Required design components may include construction design, implementation of BMPs, mitigation, reclamation, revegetation, monitoring (to guide adaptive management), and erosion control.</li> <li>• Project design will incorporate baseline and other relevant study results and require monitoring mitigation components sufficient to demonstrate effectiveness. Apply stringent requirements where recommended by State of Colorado practices.</li> <li>• Relocate activities as necessary to minimize negative impacts to quality and quantity of the current and future water supply of the Town of Parachute.</li> </ul>	<p>Parachute for municipal purposes.</p> <ul style="list-style-type: none"> <li>• Monitor and evaluate mitigation efforts on a regular basis for ground-disturbing activities that disturb, either separately or in combination with other activities, within a disturbance area greater than 5 acres.</li> <li>• Limited areas above the rim would be available for oil and gas leasing and development. Well drilling, well pad construction, and associated actions and facilities such as upgrading existing roads and constructing well sites, new roads, pipelines, and compressor stations would be sited and constructed in compliance with CRVFO-CSU-Roan-1: Settlement Terms and Conditions (Appendix C).</li> <li>• For leases below the rim, prior to exploration and/or lease development, the operator shall submit a proposed Master Development Plan (MDP) identifying its projected activities. Prior to submitting the MDP, the operator shall consult with the Colorado Division of Parks and Wildlife and Bureau of Land Management to develop terms that minimize impacts to wildlife and other resources. Agreed-upon terms shall be included in the operator's MDP (CRVFO-CSU-Roan-1: Settlement Terms and Conditions [Appendix C]).</li> </ul> <p>Standards:</p> <ul style="list-style-type: none"> <li>• Design any activities, facilities (including wells, pads, and roads), or site locations to prevent or minimize adverse impacts to natural stream flow volume or other degradation of water quality or stream ecological function.</li> <li>• Required design components may include construction design, implementation of BMPs, mitigation, reclamation, revegetation, monitoring (to guide adaptive management), and erosion control.</li> <li>• Project design will incorporate baseline and other relevant study results and require monitoring mitigation components sufficient to demonstrate effectiveness. Apply stringent requirements where recommended by State of Colorado</li> </ul>

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Table 2.3 Management Goals, Objectives, and Actions for the Parachute Creek Watershed Management Area

<i>Resource</i>	<i>Proposed Management Goal, Objective, and Action</i>	
	<i>Alternative II</i>	<i>Alternative IV</i>
		<p>practices.</p> <ul style="list-style-type: none"> <li>Relocate activities as necessary to minimize negative impacts to quality and quantity of the current and future water supply of the Town of Parachute.</li> </ul>
<p><b>Hydrologic Function and Ecosystem Stability</b></p>	<p><b>Goal:</b> Ensure protection of overall hydrologic function, ecosystem stability, functionality of wildlife habitat and botanical habitats, and enhancement of fisheries habitat; while making lands available for oil and gas leasing in an environmentally sound manner, under multiple use management.</p> <p><b>Objective:</b> Provide resource protections through actions that minimize disturbance, habitat fragmentation, and protect key habitats from disturbance; while providing for oil and gas leasing accordance with the Mineral Leasing Act and the Federal Onshore Oil and Gas Leasing Reform Act of 1987 (Reform Act) and applicable regulations under 43 CFR 3100 and in accordance with the decisions made through application of FLPMA and other laws applicable to public lands.</p> <p><b>Management Actions:</b> Condition the development of oil and gas through sequencing and clustering of development; consolidation of disturbance and facilities; limiting the amount of un-reclaimed disturbance; and limiting development and associated disturbance to the less environmentally sensitive ridge tops.</p> <ul style="list-style-type: none"> <li>Prior to exploration and/or lease development within the planning area, the operator must submit a GAP identifying projected activity (including well locations, pipelines, and facilities) during the next 2 to 5 years and appropriate mitigation.</li> <li>All oil and gas operations and activities on top of the plateau will be under the control of a single operator; BLM will directly control and manage the timing, location, and type of all operations by that single operator. Activities atop the plateau will be conducted in accordance with the following decisions:</li> <li>Oil and gas development activities will be restricted to six specific development areas (Figure 2-1) which are primarily</li> </ul>	<p><b>Goal:</b> Ensure protection of overall hydrologic function, ecosystem stability, functionality of wildlife habitat and botanical habitats, and enhancement of fisheries habitat; while making lands available for oil and gas leasing in an environmentally sound manner, under multiple use management.</p> <p><b>Objective:</b> Provide resource protections through actions that minimize disturbance, habitat fragmentation, and protect key habitats from disturbance; while providing for oil and gas leasing accordance with the Mineral Leasing Act and the Federal Onshore Oil and Gas Leasing Reform Act of 1987 (Reform Act) and applicable regulations under 43 CFR 3100 and in accordance with the decisions made through application of FLPMA and other laws applicable to public lands.</p> <p><b>Management Actions:</b> Limited areas above the rim would be available for oil and gas leasing and development. Well drilling, well pad construction, and associated actions and facilities such as upgrading existing roads and constructing well sites, new roads, pipelines, and compressor stations would be sited and constructed in compliance with CRVFO-CSU-Roan-1: Settlement Terms and Conditions (Appendix K).</p> <ul style="list-style-type: none"> <li>For leases below the rim, prior to exploration and/or lease development, the operator shall submit a proposed MDP identifying its projected activities. Prior to submitting the MDP, the operator shall consult with the Colorado Division of Parks and Wildlife and Bureau of Land Management to develop terms that minimize impacts to wildlife and other resources. Agreed-upon terms shall be included in the operator's MDP (CRVFO-CSU-Roan-1: Settlement Terms and Conditions [Appendix K]).</li> <li>Limit open and administrative motorized routes to approximately 138 miles. Allow exceptions only where</li> </ul>

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**Table 2.3 Management Goals, Objectives, and Actions for the Parachute Creek Watershed Management Area**

<i>Resource</i>	<i>Proposed Management Goal, Objective, and Action</i>	
	<i>Alternative II</i>	<i>Alternative IV</i>
	<p>the ridge tops on slopes less than 20 percent.</p> <ul style="list-style-type: none"> <li>• Operations will be staged and sequenced over time.</li> <li>• Allowing development on only one of six development areas at a time.</li> <li>• Total unreclaimed surface disturbance will be limited to 350 acres at any given time.</li> <li>• Five year interim reclamation standards must be met throughout 90 percent of any development area prior to moving to the next development area.</li> <li>• Drilling pads will be a minimum of 2,640 feet apart; and development and production facilities will be clustered and designed to minimize surface impacts.</li> <li>• Limit open and administrative motorized routes to approximately 138 miles. Allow exceptions only where necessary to reduce impacts, such as using a longer route to avoid a sensitive resource or reduce visual impacts and direct habitat loss.</li> <li>• Implement innovative reclamation and performance-based monitoring standards.</li> <li>• Consolidate natural gas production facilities, roads, pipelines, and staging areas along roadways to minimize disturbance.</li> <li>• Apply the resources protections detailed in this table, and in Tables 2-1, 2-2, and C-1. This includes NSO, CSU, and TL lease stipulations, and COAs current at the time of permitting.</li> <li>• Before any on-the-ground lease operations are considered for approval by BLM on top of the plateau, the lessees will be required to reach formal agreement on one operator to conduct all operations on behalf of all the lessees. All lessees/leases will be required, by lease stipulation, to join a Federal Unitization Agreement, approved by BLM. The Unitization Agreement will be non-contracting. The agreement will allow BLM to directly control and manage the timing, location, and type of all operations occurring on the entire top</li> </ul>	<p>necessary to reduce impacts, such as using a longer route to avoid a sensitive resource or reduce visual impacts and direct habitat loss.</p> <ul style="list-style-type: none"> <li>• Implement innovative reclamation and performance-based monitoring standards.</li> <li>• Consolidate natural gas production facilities, roads, pipelines, and staging areas along roadways to minimize disturbance.</li> </ul> <p>Apply the resources protections detailed in this table, and in Tables 2-1, 2-2, and C-1. This includes NSO, CSU, and TL lease stipulations, and COAs current at the time of permitting.</p>

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**Table 2.3 Management Goals, Objectives, and Actions for the Parachute Creek Watershed Management Area**

<i>Resource</i>	<i>Proposed Management Goal, Objective, and Action</i>	
	<i>Alternative II</i>	<i>Alternative IV</i>
	<p>of the plateau. In effect, all of the leases will act administratively as a single lease and BLM will work with just one operator for the life of all oil and gas operations occurring on the top of the plateau. The Federal Unitization Agreement will (among other things) identify the agreed upon single operator, and provisions on how to allocate the benefits of gas and/or production to all of the leases.</p>	

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**Table 2.4 Management Objectives for Major Plant Communities<sup>1</sup>**

<i>Community Type</i>	<i>Management Objectives</i>
Aspen Woodland	<ul style="list-style-type: none"> <li>• Prevent new noxious weed infestations and manage existing populations according to prioritized management plan.</li> <li>• Maintain existing spatial extent.</li> <li>• Maintain a full range of size/age classes, with a minimum of 10 percent of any one class.</li> <li>• Encourage or maintain a diverse herbaceous and woody understory component.</li> </ul>
Old-growth Douglas-fir Forest	<ul style="list-style-type: none"> <li>• Prevent new noxious weed infestations and manage existing populations according to prioritized management plan.</li> <li>• Maintain existing spatial extent.</li> <li>• Protect and maintain the ecological integrity and function of the old-growth Douglas-fir community.</li> </ul>
Spruce/Fir Coniferous Forest	<ul style="list-style-type: none"> <li>• Prevent new noxious weed infestations and manage existing populations according to prioritized management plan.</li> <li>• Maintain existing spatial extent, allowing for natural succession processes (e.g., wildland fire, native insect infestation).</li> <li>• Manage for wildlife habitat values (i.e., hiding cover, raptor nest sites, and general community cohesiveness).</li> </ul>
Semi-desert Shrublands	<ul style="list-style-type: none"> <li>• Prevent new noxious weed infestations and manage existing populations according to prioritized management plan.</li> <li>• Maintain existing spatial extent.</li> <li>• Minimize surface disturbance impacts to limit expansion of annual weed populations.</li> <li>• Manage to improve the diversity and cover of native perennial shrubs and herbaceous species.</li> <li>• Maintain or enhance diversity and extent of biological soil crust communities.</li> </ul>
Mountain Grassland	<ul style="list-style-type: none"> <li>• Prevent new noxious weed infestations and manage existing populations according to prioritized management plan.</li> <li>• Maintain existing spatial extent.</li> <li>• Reduce community fragmentation.</li> </ul>
Mixed Mountain Shrubland	<ul style="list-style-type: none"> <li>• Prevent new noxious weed infestations and manage existing populations according to prioritized management plan.</li> <li>• Maintain existing spatial extent.</li> <li>• Maintain a diversity of seral stages, age classes, and species composition.</li> </ul>
Pinyon/Juniper Woodland	<ul style="list-style-type: none"> <li>• Prevent new noxious weed infestations and manage existing populations according to prioritized management plan.</li> <li>• Maintain current extent of oldest age classes.</li> <li>• Maintain or enhance current diversity and extent of biological soil crust communities.</li> </ul>

CHAPTER 2 • ALTERNATIVES

**Table 2.4 Management Objectives for Major Plant Communities<sup>1</sup>**

<i>Community Type</i>	<i>Management Objectives</i>
Riparian/Wetland	<ul style="list-style-type: none"> <li>• Prevent new noxious weed infestations and manage existing populations according to prioritized management plan.</li> <li>• Maintain, or increase, existing spatial extent.</li> <li>• Manage riparian communities to achieve PFC while attaining potential natural condition or a late-seral plant community stage. Concentrate on achieving diverse native species composition and productivity.</li> <li>• Atop the plateau manage to provide or contribute to high quality habitat for the CRCT.</li> </ul>
Sagebrush Shrubland	<ul style="list-style-type: none"> <li>• Prevent new noxious weed infestations and manage existing populations according to prioritized management plan.</li> <li>• Limit encroachment by other woody species.</li> <li>• Maintain a full range of age/size class shrubs.</li> <li>• Encourage diversity and cover of native perennial herbaceous understory.</li> </ul>
Shale Barrens/Naturally Unvegetated	<ul style="list-style-type: none"> <li>• Prevent new noxious weed infestations and manage existing populations according to prioritized management plan.</li> <li>• Allow natural succession processes while limiting human-caused surface disturbance.</li> </ul>

<sup>1</sup>Objectives are defined in terms of potential natural vegetation parameters, based on conditions in the corresponding ESI site.