

EXECUTIVE SUMMARY

INTRODUCTION

The United States Department of the Interior, Bureau of Land Management (BLM) has prepared this Draft Resource Management Plan/Draft Environmental Impact Statement (Draft RMP/EIS) for the Colorado Bureau of Land Management (BLM) Colorado River Valley Field Office (CRVFO). BLM prepared this document in consultation with cooperating agencies, and in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, the Federal Land Policy and Management Act (FLPMA) of 1976, as amended, implementing regulations, the BLM's Land Use Planning Handbook (H-1601-1), and other applicable law and policy.

The planning area consists of about *2.8 million acres* of land which includes about *504,910 acres* of public lands managed by the Colorado River Valley Field Office (Table ES-1). The CRVFO primarily extends across five Colorado counties: Eagle, Garfield, Mesa, Pitkin, and Routt, with a very small portion of the planning area in Rio Blanco County. There are 73,602 acres of the CRVFO planning area managed by the BLM that is covered under the separate Roan Plateau RMP Amendment. The Roan Plateau is not covered under the CRVFO RMP/EIS, except for Wild and Scenic River eligibility, tentative classification, and suitability determinations. When approved, this RMP will replace the 1984 Glenwood Springs Resource Area RMP, as amended, and will guide the management of public lands administered by the CRVFO into the future. The Colorado River Valley RMP and supporting information is available on the project web site at: <http://www.blm.gov/rmp/co/kfo-gsfo>.

Surface and subsurface land ownership in the planning area is mixed and includes other lands administered by the federal government, State of Colorado lands, and private property (Table ES-2; Figure ES-2). The current RMP/EIS also includes a portion of the CRVFO planning area managed by the WRNF and analyzed in the Wild and Scenic River Suitability Report.

Management direction and actions outlined in the RMP apply only to BLM lands in the planning area and to federal mineral estate under BLM jurisdiction that may lie beneath other surface ownership. Federal mineral estate under BLM jurisdiction is composed of mineral estate underlying BLM lands, privately owned lands, and state-owned lands. Leasing and development of federal minerals involving surface lands administered by

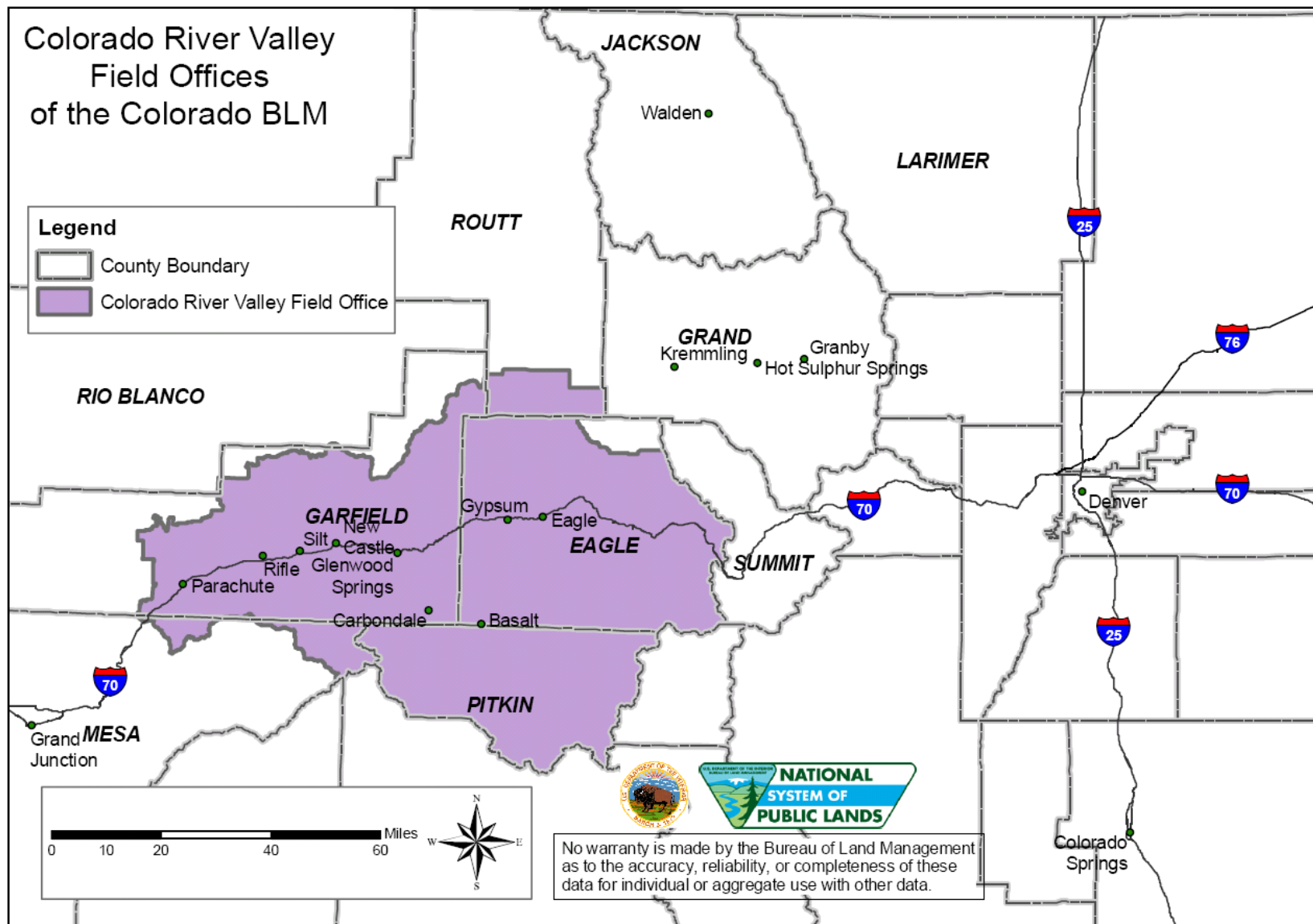


Figure ES-1. Location of CRVFO Planning Area

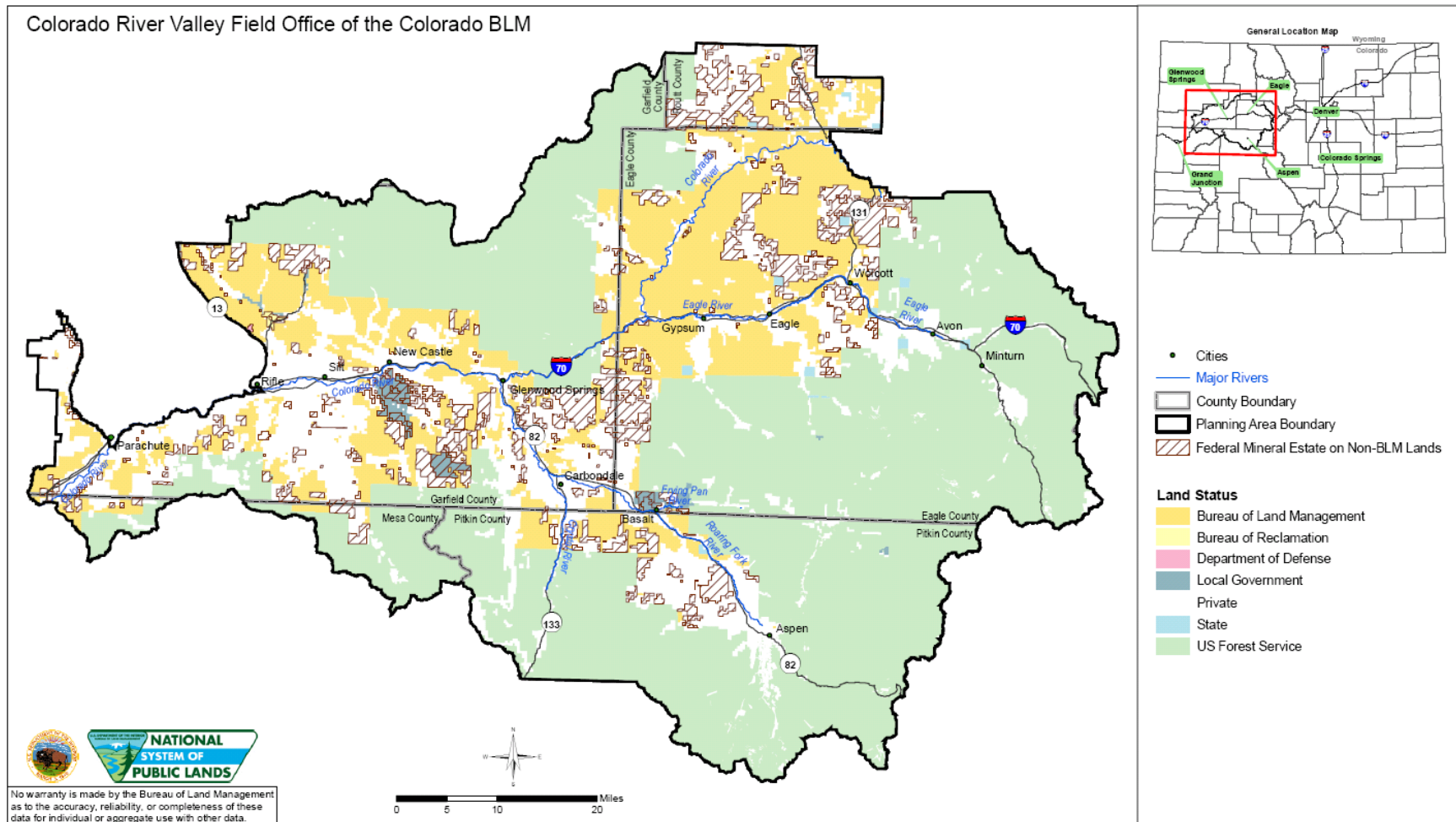


Figure ES-2 Land Status in the CRVO Planning Area

**Table ES-1
Land Status Area in the CRVFO Planning Area**

Land Status	Acres	Percentage of Planning Area
BLM	504,910	18%
USFS	1,501,617	54%
Bureau of Reclamation	1,585	<1%
Department of Energy	205	<1%
Colorado Division of Wildlife (CDOW)	514	<1%
State (other than CDOW)	27,656	<1%
Private	755,347	27%
TOTAL	2,791,834	100%

Source: BLM 2008c

**Table ES-2
Area of Mineral Status by County in the CRVFO**

Land Status (acres)	Eagle	Garfield	Mesa	Pitkin	Rio Blanco	Routt	Total
BLM/federal minerals	233,879	203,017	9,904	27,490	1	30,535	504,826
Private surface/federal minerals	63,556	74,851	5,533	19,537	70	25,482	189,029
State surface/federal minerals	1,414	10,449	0	3	0	0	11,866
Bureau of Reclamation/federal minerals	0	1,037	0	0	0	0	1,037
Department of Energy/federal minerals	0	205	0	0	0	0	205
Total	298,849	289,559	15,437	47,027	71	56,017	706,963

Source: BLM 2008c

the USFS are subject to leasing decisions made in the appropriate USFS land plan. In its plans, the USFS analyzes impacts from oil and gas leasing and development on National Forest System lands and describes where the USFS will or will not consent to leasing. The BLM is responsible for decisions related to drilling, completing, producing, and plugging and abandoning federal wells underlying National Forest lands. It is also responsible for decisions related to leasing and developing federal mineral estate underlying lands administered by other federal agencies. In the CRVFO area, additional federal agencies with underlying federal minerals include the Bureau of Reclamation and Department of Energy. No US Fish and Wildlife Service or National Park Service lands are in the CRVFO. Mineral status by county for each field office is shown in Table ES-2.

PURPOSE OF AND NEED FOR ACTION

Purpose

The purpose of the revision to the current RMP is to ensure that public lands are managed in accordance with the intent of Congress, as stated in FLPMA, under the principles of multiple use and sustained yield. This will be accomplished through the establishment of desired goals and objectives and allowable uses and

management actions needed to achieve the desired conditions for resources and resource uses. The RMP incorporates new data, addresses land use issues and conflicts, specifies where and under what circumstances particular activities would be allowed on BLM lands, and incorporates the mandate of multiple uses in accordance with FLPMA. The RMP does not describe how particular programs or projects would be implemented or prioritized; rather, those decisions are deferred to more detailed implementation-level planning.

Need

FLPMA requires that the BLM “develop, maintain, and when appropriate, revise land use plans” (43 USC, Section 1712 [a]). There is a need to revise the RMP due to new issues that have arisen since the original plan was prepared in 1984 and higher levels of controversy around existing issues. Major issues contributing to the revision of the current RMP are the following:

- Managing recreation to improve facilities, protect natural and cultural resources, provide a variety of opportunities, and maximize socioeconomic benefits.
- Managing special designations to protect the natural and cultural resources and maximize recreational opportunities and socioeconomic benefits.
- Managing energy development, particularly oil and gas leasing, to protect cultural and natural resources and to minimize user conflicts.
- Managing vegetation to reduce fuel loading, to control and prevent noxious weeds, and to maintain a healthy forest ecosystem.
- Managing vegetation to maintain and improve wildlife habitats, while maintaining multiple-uses.
- Managing sagebrush habitat to reduce continued habitat loss and fragmentation.
- Managing surface water and groundwater resources to maintain and improve habitat, improve water quality, protect drinking water sources, and help meet and maintain local and regional water delivery compacts.

There is also the need to revise the RMP to allow for updated BLM management direction, guidance, and policy. In addition, new resource assessments and scientific information is available to help the CRVFO revise previous decisions. Specifically, there may be a need to evaluate management prescriptions and resource allocations to address the increase in uses and demands on BLM lands (such as natural gas development and recreation) and concerns over scenic quality and open spaces, as well as the increased interest in protecting natural and cultural resources. Land use plan decisions may be changed only through the amendment or revision process.

SCOPING

The formal scoping period began with publication of the Notice of Intent in the *Federal Register* on March 2, 2007. To assist in the process, the BLM implemented a public scoping and collaboration process and mailed a postcard to members of the public, agencies, and organizations. The BLM compiled the mailing list from over 850 individuals, agencies, and organizations that have participated in past BLM projects, requested to be on the mailing list, or who otherwise may have an interest. The postcard informed the recipients of the scoping process and the seven scheduled open house scoping meetings and gave them various alternative methods to

submit written comments. The Notice of Intent was also posted on the project website for public consideration.

CRVFO conducted a joint public scoping process with the neighboring Kremmling Field Office due to similarity of some issues, such as Colorado River management. Seven joint RMP public scoping meetings were held in the joint planning area in 2007: Rifle and Granby on April 10, Carbondale and Kremmling on April 11, Gypsum and Walden on April 12, and Glenwood Springs on April 25. The BLM provided the local media with press releases announcing the time, location, and purpose of these meetings. The format for the scoping meetings featured informal one-on-one discussions between BLM representatives and members of the public.

Additionally, on May 18, 2007, the BLM prepared a newsletter and distributed it via e-mail and US mail to over 1,050 members of the public and representatives from agencies and organizations. The newsletter summarized the scoping meetings, provided information on data collection workshops for future trails and routes (held in June 2007), and gave overall information about the planning process.

The scoping report (BLM 2007b) documents the results of scoping by summarizing the individual comments received and describing the issues that were raised; it is incorporated here by reference.

Issue Identification

Issue identification is the first step of the BLM planning process. A planning issue is a major controversy or dispute regarding management of resources or uses on BLM lands that can be addressed in a variety of ways, which is within BLM's authority to resolve.

In September 2005, the BLM prepared a plan analysis for the RMP/EIS. This plan, used by the BLM interdisciplinary team to initiate the planning process, highlighted anticipated planning issues developed by the team internally. Based on the lands and resources managed in the planning area, preliminary issues fell into eight categories in the plan analysis. The comments received during the scoping process were analyzed, and a scoping summary report was finalized in August 2007 (BLM 2007b). Four new issues were identified from public input during the scoping process, resulting in a total of 12 planning issues.

A planning issue statement was developed for each of the planning issue categories. Each statement summarizes the issues and concerns heard for each category during scoping. The 12 planning issue category statements are as follows:

1. **Travel management and transportation**—How will transportation be managed to protect natural and cultural resources, provide motorized and nonmotorized recreation opportunities, reduce user conflicts, enforce route designations and closures, and improve public access?
2. **Recreation demand and uses**—How will recreation be managed to maintain and improve recreation sites and trails, especially near communities, to reduce user conflicts, to protect natural and cultural resources, to provide a variety of recreation opportunities, and to maximize socioeconomic benefits?
3. **Lands and realty**—What opportunities exist to make adjustments to public land ownership that would result in greater management efficiency, in appropriate and agreeable levels of public access, and in increased public and natural resource benefits?

4. **Special designations**—Where are special designations appropriate to protect unique resources, and how should existing special designations be managed to protect the natural and cultural resources and maximize recreation opportunities and socioeconomic benefits?
5. **Urban interface**—How will BLM lands in urban interface areas be managed to provide benefits desired by the public and to be consistent with future land use plans in neighboring communities?
6. **Energy development**—Which areas should be open to energy development, particularly oil and gas leasing, and what restrictions should be used to protect cultural and natural resources and minimize user conflicts?
7. **Rangeland health/upland management**—How will the BLM manage livestock grazing on its lands while protecting, managing, restoring, and using natural and cultural resources?
8. **Vegetation**—What actions or restrictions will be needed to reduce dangerous fuel loading, to control and prevent the spread of noxious weeds and other undesirable plant species, and to maintain healthy forest ecosystems?
9. **Wildlife**—How will uses and land management activities be managed to maintain and improve terrestrial and aquatic habitats in a scattered land ownership pattern, while maintaining multiple-use land management?
10. **Water/riparian**—What measures will be implemented to protect water resources, especially riparian areas, from the effects of other uses?
11. **Sagebrush habitat and species**—How will sagebrush habitat be managed to reduce continued habitat loss and fragmentation?
12. **Cultural resources**—How can the BLM protect and conserve cultural resources, and where do interpretation opportunities exist?

MANAGEMENT ALTERNATIVES

The basic goal of developing alternatives is to prepare different combinations of resource uses to address issues and to resolve conflicts among uses. Alternatives must meet the purpose and need, must be reasonable, must provide a mix of resource protection, management use, and development, must be responsive to the issues (each issue must be addressed in at least one alternative), must meet the established planning criteria, and must meet federal laws, regulations, policies, and standards, including the multiple use mandates of FLPMA.

Following the close of the public scoping period in June 2007, the BLM began developing alternatives by assembling an interdisciplinary team of BLM resource specialists. The BLM also coordinated with cooperating agencies and coordinated with American Indian tribes, beginning in April 2007 and continuing throughout the planning process. Between September 2007 and June 2008, the BLM interdisciplinary team developed management goals, objectives, and management actions to meet those goals and objectives.

Four management alternatives were developed to fulfill the purpose and need, to meet the multiple use mandates of FLPMA, and to address the 12 planning issues. Chapter 2 describes the four alternative resource management plans: the No Action Alternative (Alternative A) and three action alternatives; Alternative B (preferred alternative), Alternative C (conservation emphasis), and Alternative D (emphasis on development of the resources). The following sections provide some key components of the alternatives. The descriptions

are organized by alternative, starting with Alternative A (the No Action Alternative), followed by Alternatives B, C, and D. The alternatives offer a range of management options that resolve the issues identified in supporting documents (e.g., the Community Assessment Report), the scoping process, coordination with American Indian Tribes, and other outreach activities. These outreach activities included input from cooperating agencies, the Northwest Resource Advisory Council subgroups, visitor studies, focus groups, informal interviews, and reports, such as the NWSRS eligibility study and NWSRS suitability study for all rivers in the decision area, ACECs evaluation, and visual resource management study.

Each alternative stands alone as a potential RMP and provides direction for resource programs based on the development of specific goals, objectives, and management actions. Described in each alternative is specific direction influencing land management, with an emphasis on different combinations of resource uses, allowable uses, and restoration measures to address issues and to resolve user conflicts. Resource program goals are met in varying degrees across alternatives. Resources or resource uses not tied to key planning issues or mandated by laws and regulations often contain few or no differences in management between alternatives. Alternatives may also result in different long-term conditions.

How the alternatives differ from one another is in the relative emphasis given to particular resources or resource uses. Each alternative has been designed to respond to the key issues differently, providing a range of possible management approaches that the BLM could implement. That distinction is expressed in the RMP by varying specific objectives, allowable uses, management actions, and implementation actions, such as travel route designations. Although each alternative stands alone as a potential RMP, the final Proposed Plan/Final EIS may include elements from multiple alternatives analyzed in this draft.

Summaries of the alternatives are presented below.

Alternative A (No Action Alternative)

Alternative A is the continuation of the present management situation. Goals and objectives for BLM land resources and resource uses would be based on the existing CRVFO RMP, RMP amendments, and activity- or implementation-level plans. The emphasis would be on maintaining the existing land management direction for physical, biological, cultural, and historic resource values, along with recreation, social, and economic land uses. The BLM would implement the direction contained in laws, regulations, and BLM policies superseding provisions of the existing RMP and amendments.

Alternative A
Theme: Current Management.
Maintain existing land
management based on existing
RMPs and policies.

The appropriate development scenarios would stay the same for such allowable uses as mineral leasing, locatable mineral development, recreation, timber harvest, utility corridors, and livestock grazing. There would be no change in goals, objectives, allowable uses, or management actions that are allowed, restricted, or prohibited on BLM lands and mineral estate. The BLM would not establish additional criteria or change present criteria to guide the identification of site-specific use levels for implementation activities.

Key components of Alternative A are the following:

- **Air Quality.** The air quality management objective under Alternative A is to limit air quality degradation in the resource area by ensuring that BLM land-use activities comply with federal, state, and local laws and regulations. Air quality management actions under Alternative A are the least

restrictive with regard to emission controls mandated under the other alternatives. Consequently, fugitive dust controls associated with Alternatives B, C, and D may be needed to replace Alternative A fugitive dust controls if Alternative A is the selected alternative. Modeling results for Alternative A resulted in a predicted maximum, 24-hour average PM₁₀ concentration above the NAAQS. Analysis assuming fugitive dust controls identical to those under Alternatives B, C, and D, showed maximum criteria pollutant concentrations near oil and gas well fields would be less than the relevant NAAQS. Modeling of hazardous air pollutants (benzene, ethylbenzene, formaldehyde, n-hexane, toluene, and xylene) showed that maximum concentrations would be less than relevant 1-hour and annual average toxicity criteria. The associated cancer risk is well below the impact significance level of 1 to 100 per million. Ozone impacts attributable to the CRVFO Project and cumulative emissions are not expected to cause or contribute to violations of the ozone NAAQS under any alternative.

- **Recreational Demand and Uses.** Recreation administration would be directed by decisions in the existing RMP, amendments, and recreation area management plans. Recreation management would generally emphasize the continued availability of outdoor recreation opportunities, interpretation, and visitor safety. The existing eight Recreation Management Areas (Bocco Mountain, Bull Gulch, Deep Creek, Gypsum Hills, Hack Lake, Red Hill, Thompson Creek, and the Upper Colorado River) would be continued. The remaining BLM lands would be managed custodially as the Glenwood Springs Extensive Recreation Management Area (ERMA). Application of No Surface Occupancy (NSO) stipulations would offer some protection for nonmotorized recreation opportunities at King Mountain, Siloam Springs, Castle Peak, Bull Gulch (the portion of the WSA not within the Special Recreation Management Area (SRMA)), Sunlight Peak, Fisher Creek, and Pisgah Mountain.
- **Travel Management.** Under Alternative A, 294,300 acres are designated as open to cross country OHV use, 165,300 are designated as limited to existing routes, and 44,000 acres are designated as closed to OHV use. Over-snow travel is limited to designated routes on King Mountain under all alternatives, and, under all alternatives, over-snow travel is prohibited in the following areas: all winter wildlife closures, Deep Creek ACEC, Thompson Creek ACEC, WSAs, the Hack Lake area, the Haff Portion of Fisher Creek, and the Siloam Springs area.
- **Energy Development.** Under Alternative A, 679,200 acres in the CRVFO would be open to oil and gas leasing and development. These areas would be subject to a variety of NSO, controlled surface use (CSU), and timing limitation (TL) stipulations, as well as conditions of approval (COAs) to ensure that oil and gas activities are conducted in an environmentally acceptable manner. The majority of the high potential has already been leased.
- **Fish and Wildlife (including special-status species).** The condition and trends of all aquatic habitats in perennial streams or lakes would continue to be maintained and, where needed, would be improved at levels conducive to a healthy aquatic community. BLM land habitat would be managed to support optimum terrestrial wildlife population levels, as determined cooperatively with the CDOW Strategic Plan and the US Fish and Wildlife Service, commensurate with public land health standards. Special status species and their habitats would be managed to provide for their continued presence, in accordance with applicable laws and regulations. Current stipulations (e.g., seasonal protections) would be maintained to protect sensitive species habitat, such as greater sage-grouse.
- **Sagebrush Habitat and Sagebrush-Dependent Species.** Implementing measures to protect occupied and suitable habitat for sagebrush-dependent species would continue. Habitat treatments to enhance sagebrush habitat for sagebrush-dependent species would be implemented.

- **Special Designations.** Four existing WSAs (27,700 acres) and six ACECs (27,030 acres) would continue to be managed, and protective management would be implemented on 26 stream segments (143 miles total, 88.1 miles on BLM) eligible for inclusion in the NWSRS.

Alternative B (Preferred Alternative)

Alternative B seeks to allocate limited resources among competing human interests, land uses, and the conservation of natural and cultural resource values. Goals and objectives would focus on environmental, economic, and social outcomes achieved by strategically addressing demands across the landscape. Management direction would generally be broad to accommodate a variety of values and uses.

Alternative B
Theme: Mixed Use
Allowable uses would
emphasize balance among
competing human interests,
land uses, and conservation

Key components of Alternative B are the following:

- **Air Quality.** The air quality management goal under Alternative B is to ensure that air quality and air quality-related values are adequately protected in conjunction with activities or resource uses authorized by the BLM. The objective is to control or reduce emissions of air pollutants associated with oil and gas activities to help protect human health, reduce visibility-impairing pollutants in accordance with the reasonable progress goals established within the Colorado Regional Haze State Implementation Plan to improve visibility, reduce atmospheric deposition, and reduce greenhouse gas emissions. Air quality management objectives and actions under Alternative B include more stringent emission controls on oil and gas equipment and activities than under Alternative A.
- **Recreational Demand and Uses.** Alternative B would emphasize a variety of recreation opportunities and the protection of natural resource recreation settings. Current recreational uses would be recognized and accommodated where possible when considering land uses. Alternative B would include the designation of six SRMAs (Bocco Mountain, Hack Lake, King Mountain, Red Hill, The Crown, and the Upper Colorado River) where recreation opportunities are recognized as a primary management consideration due to their unique value, importance, or distinctiveness. Alternative B would also include the designation of six ERMAs (Eagle River, Fisher Creek, Hardscrabble/East Eagle, New Castle, Silt Mesa, and Thompson Creek) where the principal recreation activities, current recreation demand, and existing recreation facilities would receive specific management consideration commensurate with the management of other resources.
- **Travel Management.** Under Alternative B, no acres are designated as open to cross country OHV use, 467,600 are designated as limited to existing routes, and 37,300 are designated as closed to OHV use. Compared to Alternative A, Alternative B has 6,700 fewer acres closed to OHVs and 344,600 more acres limited to designated routes. Over-snow travel would be limited to designated routes in the Glenwood Springs Debris Flow Hazard Zone ACEC and Sheep Creek Uplands ACEC.
- **Energy Development.** Alternative B would include designation of 651,400 acres as open to oil and gas exploration and development. Oil and gas activities on BLM lands or associated with federal mineral estate would be managed using a variety of NSO, CSU, and TL stipulations (Appendix B) and COAs to ensure that exploration and development are conducted in an environmentally responsible manner. This alternative would have the greatest restrictions on oil and gas leasing and development.

- **Fish and Wildlife (including special-status species).** Fish and wildlife species (including special status species) would be strategically managed with an emphasis on protecting crucial habitat, streamflows, and riparian areas. Management would protect and improve priority habitat, winter range (quantity and quality), and core wildlife areas. Development would be moderately limited in, and seasonal restrictions would be applied to, winter range.
- **Sagebrush Habitat and Sagebrush-Dependent Species.** Alternative B would emphasize identifying and protecting sagebrush habitat for sagebrush-dependent species. Alternative B would also implement habitat treatments to enhance sagebrush habitat for sagebrush-dependent species.
- **Special Designations.** Alternative B would maintain the four existing WSAs (27,700 acres) and designate nine ACECs (34,500 acres). For WSRs, Alternative B is divided into Alternative B1 and Alternative B2. Under Alternative B1, the BLM would find four segments suitable for inclusion in the NWSRS, including two segments of Deep Creek (4.5 miles, all on BLM land) and two segments of the Colorado River between the CRVFO boundary near State Bridge and Glenwood Springs (61.1 miles total, 30.7 miles on BLM land). Under Alternative B2, the BLM would recommend adopting and implementing the Stakeholder Management Plan to protect the free-flowing nature, outstanding remarkable values, and tentative classifications on the Colorado River segments. Additionally, this RMP will also include a suitability analysis for the USFS segments in Glenwood Canyon and Deep Creek (totaling 18 miles). If the USFS and the BLM decide to adopt the proposed Stakeholder Plan, the stakeholder group has requested that they delay the suitability decision on eligible Colorado River segments between Kremmling and Glenwood Springs.

Alternative C

Alternative C emphasizes protecting resource values and sustaining or restoring the ecological integrity of habitats for all priority plant, wildlife, and fish species, particularly the habitats needed for conserving and recovering listed, proposed, or candidate threatened or endangered plant and animal species. Goals and objectives focus on environmental and social outcomes achieved by sustaining relatively unmodified physical landscapes and natural and cultural resource values for current and future generations.

Alternative C
Theme: Conservation
Emphasizes protecting resource values and sustaining or restoring the ecological integrity of habitats for all priority plant, wildlife, and fish species.

The appropriate mix of uses on BLM lands and mineral estate would be based on minimizing site-specific types and levels of human disturbances to natural and cultural resources. Management direction would generally be ecologically based; existing uses would be recognized but would likely be limited to ensure the protection of natural and cultural values, including intangible Native American landscape values encompassing plant communities, wildlife, viewsheds, air, and water. The appropriate development scenarios for allowable uses (such as mineral leasing, locatable mineral development, recreation, and livestock grazing) are contingent on meeting the essential conditions of natural and heritage resources.

Key components of Alternative C are the following:

- **Lands with wilderness characteristics.** All lands with wilderness characteristics (LWCs) outside WSAs would be managed to protect those characteristics, using the management settings and prescriptions presented in Appendix F. The total area of LWCs to be managed in this way is 47,000

acres. No other alternative includes management specifically to preserve wilderness character outside the WSAs.

- **Air Quality.** The air quality management goal and objective under Alternative C would be identical to the Alternative B goal and objective. In addition, Alternative C oil and gas activity and air quality management actions are identical to Alternative B, so pollutant emissions and air quality impacts due to oil and gas activity on lands under BLM jurisdiction are identical to those for Alternative B.
- **Recreational Demand and Uses.** Recreation opportunities would be emphasized under Alternative C, in concert with sustaining the biological integrity of habitats for plants, wildlife, and fish species. Recreation may be limited in ecologically sensitive areas. Recreation and visitor services management would be recognized as the primary land use in the Red Hill SRMA and the Upper Colorado River SRMA. In turn, Alternative C would include the designation of nine ERMAs (Eagle River, Fisher Creek, Hardscrabble/East Eagle, New Castle, Silt Mesa, Thompson Creek, Hack Lake, King Mountain, and The Crown), which is the most designations among the four alternatives analyzed. At these ERMAs, the principal recreation activities, current recreation demand, and existing recreation facilities would be given specific management consideration commensurate with the management of other resources.
- **Travel Management.** Travel management actions would be similar to Alternative B, except that 200 fewer acres would be designated as limited to designated routes and 200 more acres would be designated as closed to OHV use.
- **Energy Development.** Alternative C would include designation of 531,500 acres as open to oil and gas exploration and development. Oil and gas activities on BLM lands or associated with federal mineral estate would be managed using a variety of NSO, CSU, and TL stipulations (Appendix B) and COAs to ensure that exploration and development are conducted in an environmentally responsible manner. Restrictions on oil and gas leasing and development under this alternative would be intermediate between Alternatives B and D.

The BLM would manage (with adequate rules, regulations, agreements, and stipulations) the exploration of oil and gas and mineral resources in high-potential areas through the extensive application of stipulations, such as NSOs and TLs (Appendix B) applied to energy development. Such stipulations would be aimed at maximum conservation of the relatively unmodified physical landscapes, the essential conditions of natural and cultural resources, and compatibility with adjacent land uses. Under Alternative C, additional areas would be administratively closed to energy development to emphasize resource conservation and protection, particularly for wildlife, special status species, vegetation, soils, air quality, and riparian areas, while providing opportunities for energy development.

- **Fish and Wildlife (including special status species).** Fish and wildlife species, including special status species, would be managed with an emphasis on proactively identifying, protecting, and improving habitats, such as sensitive and crucial wildlife habitat. Management would also protect and improve priority habitat, winter range (quantity and quality), and core wildlife areas. Parts of core wildlife areas either would be closed or major (NSO) constraints would be applied to fluid minerals leasing. Protection of tributary watersheds, fish-bearing streams, streamflows, riparian areas, and habitat connections and migration corridors would be maximized. Development would be limited in, and seasonal restrictions would be applied to, winter range.

- **Sagebrush Habitat and Sagebrush-Dependent Species.** The BLM would proactively identify, protect, and improve wildlife habitat, including treatments for the benefit of sagebrush-dependent species, particularly in areas identified as historical habitats. Alternative C would include establishing reference areas to use as control groups for evaluating management activities in sagebrush habitat. Additionally, the 24,600 acre Greater Sage-Grouse ACEC would be designated to protect priority habitat in the Wolcott-Burns area for the Southern Routt-Northern Eagle sage-grouse population.
- **Special Designations.** Alternative C would maintain the four existing WSAs (27,700 acres) and designate 16 ACECs (79,700 acres). All 26 eligible stream segments (143 miles total, 88.1 miles on BLM land) would be found suitable for inclusion in the NWSRS. This total includes 13 eligible segments in the Roan Plateau planning area.

Alternative D

The appropriate mix of uses on BLM lands and mineral estate would be based on making the most of resources that target social and economic outcomes, while protecting land health. Management direction would recognize and expand existing uses and would accommodate new uses to the greatest extent possible. The appropriate development scenarios for allowable uses (such as mineral leasing, locatable mineral development, recreation, communication sites, and livestock grazing) would emphasize maximizing resource production in an environmentally responsible manner, while maintaining the basic protection needed to sustain resources.

Alternative D
Theme: Resource Use
Allowable uses would
emphasize maximizing
resource production in an
environmentally responsible
manner.

Key components of Alternative D are the following:

- **Air Quality.** Alternative D emissions would generally be less than Alternative A emissions, with the exception of three hazardous air pollutants. However, Alternative D emissions would be greater than emissions of Alternative B and Alternative C criteria and hazardous air pollutants.
- **Recreational Demand and Uses.** Alternative D would emphasize managing BLM lands to accommodate recreation uses in combination with other BLM land uses. Alternative D would include the designation of seven SRMAs (Bocco Mountain, Fisher Creek, Hardscrabble/East Eagle, Red Hill, The Crown, Thompson Creek, and the Upper Colorado River), where recreation opportunities are recognized as a primary management consideration due to their unique value, importance, or distinctiveness. Alternative D would also designate five ERMAs (Eagle River, Hack Lake, King Mountain, New Castle, and Silt Mesa) where the principal recreation activities, current recreation demand, and existing recreation facilities would receive specific management consideration commensurate with the management of other resources.
- **Travel Management.** Under Alternative D, no acres are designated as open to cross country OHV use, 473,500 acres are designated as limited to existing routes, and 31,400 acres are designated as closed to OHV use. Compared to Alternative A, Alternative D has 12,600 fewer acres closed to OHVs and 350,500 more acres limited to designated routes.
- **Energy Development.** Alternative D would include designation of 658,200 acres as open to oil and gas exploration and development. Oil and gas activities on BLM lands or associated with federal mineral estate would be managed using a variety NSO, CSU, and TL stipulations (Appendix B) and

COAs to ensure that exploration and development are conducted in an environmentally responsible manner. In general, fewer restrictions would be placed on oil and gas leasing and development than under the other action alternatives.

- **Fish and Wildlife (including special status species).** Alternative D would continue to manage fish and wildlife (including special status species) with an emphasis on protecting crucial habitat, including protecting streamflows and riparian areas.
- **Sagebrush Habitat and Sagebrush-Dependent Species.** Fewer restrictions would be placed on uses in sagebrush habitat than under Alternatives B and C.
- **Special Designations.** Alternative D would maintain the four existing WSAs (27,700 acres) and designate three ACECs (20,200 acres). No segments eligible for inclusion in the NWSRS would be found suitable for congressional designation. Alternative D would not include special management for LWCs.

ENVIRONMENTAL CONSEQUENCES

The purpose of the environmental consequences analysis in this RMP/EIS is to determine the potential for significant impacts of the federal action on the human environment. Council on Environmental Quality regulations for implementing NEPA states that the “human environment” is interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment (40 CFR, Part 1508.14). The “federal action” is the BLM’s selection of a RMP on which future land use actions will be based for each field office.

The purpose of the environmental consequences analysis in this RMP/EIS is to determine the potential for significant impacts of the federal action on the human environment.

Chapter 4 objectively evaluates the likely direct, indirect, and cumulative impacts on the human and natural environment in terms of environmental, social, and economic consequences that are projected to occur from implementing the alternatives. Some types of impacts for resources or resource uses could be confined to the BLM lands (such as soil disturbance from recreation and OHV use), whereas some actions may have off-site/indirect impacts on resources on federal mineral estate (such as energy and minerals and requirements to protect such resources as special-status species and cultural resources from such activity), or other land jurisdictions (e.g., private, state, or USFS). Federal mineral estate includes subsurface mineral estate administered by the BLM. Some BLM management actions might affect only certain resources and alternatives. This impact analysis identifies both enhancing and improving effects on a resource from a management action, as well as those that have the potential to diminish resource values.

Table ES-3
Comparative Summary of Resource Uses and Special Designations by Alternative

Resource or Resource Use	Unit of Measure	Notes	Alt A	Alt B	Alt C	Alt D
Special Recreation Management Areas (SRMAs)	Acres	Targeted Activities	Alt A	Alt B	Alt C	Alt D
Bocco Mountain (northeast of Eagle)	1,400	Motorcycle Riding	•	•		•
Bull Gulch (north of Gypsum)	8,300	Hiking, Hunting	•			
Deep Creek (west of Gypsum)	2,400	Hiking	•			
Fisher (north of Carbondale)	2,800	Day-Use Hiking, Mountain Biking				•
Gypsum Hills (north of Gypsum)	16,900	Off-Highway Vehicles (OHVs)	•			
Hack Lake (northwest of Gypsum)	3,300 (A) 3,700 (B)	Hiking, Horseback Riding, Hunting, Camping	•	•		
Hardscrabble/East Eagle (east and west of Eagle; south of I-70)	17,000	Zones for Day-use, Mountain Biking, OHVs				•
King Mountain (far northeastern part of CRVFO)	13,000	Hunting, Horseback Riding, Wildlife Viewing, Camping		•		
Red Hill	3,100	Day-use Hiking, Mountain Biking	•	•	•	•
The Crown (west of Basalt)	9,100	Alternative B – Zones for Day-use Mountain Biking, OHVs Alternative D – Mountain Biking, Camping		•		•
Thompson Creek (southwest of Carbondale)	4,300 (A) 9,500 (D)	Alternative A – Dispersed Recreation Alternative D – Zones for Day-use Hiking, Rock Climbing, Mountain Biking	•			•
Upper Colorado River	20,700	Zones for Fishing/Floatboating and Floatboating/Tubing	•	•	•	•
		Total CRVFO Acres	60,400	51,000	23,800	63,600

Table ES-3
Comparative Summary of Resource Uses and Special Designations by Alternative

Resource or Resource Use	Unit of Measure	Notes	Alt A	Alt B	Alt C	Alt D
Extensive Recreation Management Areas (ERMAs)	Acres	Targeted Activities	Alt A	Alt B	Alt C	Alt D
Glenwood Springs (not a destination)	444,500	Various Dispersed Activities	•			
Eagle River (Edwards to Dotsero)	3,300	River-related Day-use including Float-boating, Fishing		•	•	•
Fisher Creek (southeast of Glenwood Springs)	2,800	Non-motorized Day-use including Mountain Biking, Hiking, Hunting		•	•	
Hack Lake (northwest of Gypsum)	3,700	Non-motorized Activities including Backcountry Hiking, Camping, Horseback Riding, Hunting			•	•
Hardscrabble/East Eagle (east and west of Eagle; south of I-70)	17,000	Motorsports, Mountain Biking, Hiking, Hunting, Scenic Driving		•	•	
King Mountain (near Toponas)	13,000	Alternative C – Backcountry Camping, Horseback Riding, Hunting Alternative D – Backcountry Camping, Mountain Biking, Horseback Riding, Hunting			•	•
New Castle (near New Castle)	9,900	Non-motorized Day-use including Mountain Biking and River-related Activities		•	•	•
Silt Mesa (northwest of Silt)	3,100	Alternative B and D – Day-use Motorsports, Mountain Biking, Hiking, Horseback Riding Alternative C – Non-motorized Day-use including Hiking, Mountain Biking, Horseback Riding		•	•	•
Thompson Creek (southwest of Carbondale)	9,500	Alternative B – Non-motorized Day-use including Mountain Biking, Hiking, Sport Climbing, Horseback Riding, Hunting Alternative C – Primitive Recreation including Mountain Biking, Hiking, Traditional Climbing, Horseback Riding		•	•	
The Crown (west of Basalt)	9,100	Motorsports, Mountain Biking, Hiking, Hunting, Scenic Driving			•	
		Total CRVFO Acres	NA	45,600	71,400	33,000

Table ES-3
Comparative Summary of Resource Uses and Special Designations by Alternative

Resource or Resource Use	Unit of Measure	Notes	Alt A	Alt B	Alt C	Alt D
Trails and Travel Management	Acres or Miles		Alt A	Alt B	Alt C	Alt D
Acres open to cross-country travel			294,300	0	0	0
Acres limited to existing routes			38,000	0	0	0
Acres limited to existing routes May 1 to November 30			4,300	0	0	0
Acres limited to designated routes			123,000	467,600	467,400	473,500
<i>Miles of routes designated for full-sized vehicles</i>			760	470	440	530
<i>Miles of routes designated for all-terrain vehicles</i>			86	62	55	68
<i>Miles of routes designated for motorcycle</i>			85	66	27	82
<i>Miles of routes designated for mechanized</i>			180	220	140	280
<i>Miles of routes designated for foot/horse</i>			160	420	440	300
<i>Miles of routes designated for foot</i>			2	2	2	2
		<i>Total CRVFO miles of motorized designated routes</i>	1,273	1,240	1,104	1,262
		<i>Total CRVFO miles of non-motorized designated routes</i>	310	310	310	310
		<i>Total CRVFO miles of all designated routes</i>	1,583	1,550	1,414	1,572
<i>Miles of routes designated for obliteration</i>			0	70	220	50
<i>Miles of routes designated for seasonal closure, August 20 to April 30 (Alternatives B and C) or October 1 to April 30 (Alternative D)</i>			0	8	8	8
Acres closed to off-highway vehicle use December 1 to April 30 (Alt. A) or December 1 to April 15 (Alts. B, C, and D)			74,800	118,000	148,200	87,400
Acres closed to off-highway vehicle use year-round			44,000	37,300	37,500	31,400
Fluid Minerals	Acres (Federal mineral estate¹)		Alt A	Alt B	Alt C	Alt D
Closed to fluid minerals leasing (Refer to Appendix P)			27,800	55,600	175,500	48,800
Open to fluid minerals leasing (Refer to Appendix P)			679,200	651,400	531,500	658,200

**Table ES-3
Comparative Summary of Resource Uses and Special Designations by Alternative**

Resource or Resource Use	Unit of Measure	Notes	Alt A	Alt B	Alt C	Alt D
<i>Open with NSOs</i>			109,400	134,300	78,400	81,800
<i>Open with CSUs</i>			203,500	152,500	242,600	132,000
<i>Open with TLs</i>			170,200	201,600	201,600	199,600
<i>Open with Standard Stipulations</i>			196,100	163,000	8,900	244,800
Locatable Minerals	Acres		Alt A	Alt B	Alt C	Alt D
Recommended for withdrawal from locatable mineral exploration or development			34,600	97,000	172,100	72,300
Open to locatable mineral exploration or development			470,300	407,900	332,800	432,600
		Total CRVFO Acres	504,900	504,900	504,900	504,900
Salable Minerals/Mineral Materials and Non-Energy Solid Leasable Minerals	Acres		Alt A	Alt B	Alt C	Alt D
Closed to salables/mineral materials disposal and non-energy solid mineral leasing			28,000	142,200	196,000	27,800
Open to salables/mineral materials disposal and non-energy solid mineral leasing			476,900	362,700	317,000	477,200
		Total CRVFO Acres	504,900	504,900	513,000	505,000
Areas of Critical Environmental Concern (ACECs)	Acres	ACEC Values	Alt A	Alt B	Alt C	Alt D
Abrams Creek	190	Genetically pure population of naturally reproducing Colorado River cutthroat trout			•	
Blue Hill	3,700	Heritage values and natural hazards	•	•	•	•
Bull Gulch	10,400	Scenic (unique geologic forms and sharp contrasting colors), botanical	•	•	•	•
Colorado River Seeps	470	Significant plant communities: <i>Betula occidentalis</i> /Mesic grass; <i>Artemisia tridentata</i> / <i>Leymus cinereus</i>			•	
Deep Creek	2,400	Scenic, geologic (caves)	•	•	•	
Dotsero Crater	100	Geologic (volcanic crater)		•	•	
Glenwood Springs Debris Flow Hazard Zone	6,100	Natural hazard, steep slopes, mud and debris flow protection	•	•	•	•
Grand Hogback	14,000	Scenic, geologic, heritage			•	
Greater Sage-Grouse Habitat	24,600	Sage-grouse (BLM sensitive species)			•	

Table ES-3
Comparative Summary of Resource Uses and Special Designations by Alternative

Resource or Resource Use	Unit of Measure	Notes	Alt A	Alt B	Alt C	Alt D
Hardscrabble-Mayer Gulch	3,400	Highest known concentrations of Harrington's penstemon (<i>Penstemon harringtonii</i>)		•		
Hardscrabble-Mayer Gulch/ East Eagle	4,200	Highest known concentrations of Harrington's penstemon (<i>Penstemon harringtonii</i>)			•	
Lower Colorado River	130	Riparian, wildlife	•			
Lyons Gulch	480	Sensitive plant: Harrington's penstemon (<i>Penstemon harringtonii</i>)		•	•	
McCoy Fan Delta	220	Geologic (marine deposits)			•	
Mount Logan Foothills	3,900	Colorado hookless cactus (<i>Sclerocactus glaucus</i>), DeBeque phacelia (<i>Phacelia submutica</i>), Naturita milkvetch (<i>Astragalus naturitensis</i>)			•	
Sheep Creek Uplands	4,500	Harrington's penstemon (<i>Penstemon harringtonii</i>) core population		•	•	
The Crown Ridge	1,000	Sensitive plant: Harrington's penstemon (<i>Penstemon harringtonii</i>)			•	
Thompson Creek	4,300 (A) 3,400 (B, C)	Scenic, geologic, historic, ecological	•	•	•	
		Total CRVFO Acres	27,030	34,500	79,700	20,200
Wilderness Study Areas (WSAs)	Acres		Alt A	Alt B	Alt C	Alt D
Bull Gulch	15,200	Manage under Interim Policy for Lands under Wilderness Review until a determination by Congress	•	•	•	•
Castle Peak	12,200		•	•	•	•
Eagle Mountain	320		•	•	•	•
Hack Lake	4		•	•	•	•
		Total CRVFO Acres	27,700	27,700	27,700	27,700
Wild and Scenic Rivers (WSRs) Suitable for Inclusion in the NWSRS	Miles Total / on BLM	Classification	Alt A	Alt B	Alt C	Alt D
Segments Outside Roan Plateau						
Abrams Creek	3.4 / 3.4	recreational			•	
Battlement Creek	2.9 / 1.7	recreational			•	
Colorado River – segment 6	45.4 / 27.3	recreational		• ²	•	
Colorado River – segment 7	15.7 / 3.4	recreational		• ²	•	

Table ES-3
Comparative Summary of Resource Uses and Special Designations by Alternative

Resource or Resource Use	Unit of Measure	Notes	Alt A	Alt B	Alt C	Alt D
Deep Creek – segment 2	3.6 / 3.6	wild		● ²	●	
Deep Creek – segment 3	0.9 / 0.9	recreational		● ²	●	
Eagle River	25.7 / 5.5	recreational			●	
Egeria Creek	8.3 / 7.8	recreational			●	
Hack Creek	2.4 / 1.6	scenic			●	
Mitchell Creek	0.9 / 0.9	recreational			●	
No Name Creek	0.1 / 0.1	recreational			●	
Rock Creek	4.8 / 3.2	recreational			●	
Thompson Creek	4.8 / 4.8	wild			●	
Segments within the Roan Plateau						
East Middle Fork Parachute Creek complex	10.3 / 10.3				●	
East Fork Parachute Creek complex	13.8 / 13.8				●	
		Total CRVFO Miles			143.0/88.3	

n/a = not available

¹ Federal mineral estate includes mineral estate underlying BLM lands, privately owned lands, State-owned lands, and BOR and DOE lands. As such, Federal mineral estate acres are greater than BLM surface acres. Federal mineral estate totals 707,000 acres in the CRVFO.

² Alternative B comprises two variants. Under Alternative B1, the BLM would find two Colorado River segments (61.1 miles, 30.7 miles on BLM) and two Deep Creek segments (4.5 miles, all on BLM) suitable for congressional designation for inclusion in the NWSRS. Under Alternative B2, the BLM would defer a determination of suitability for the two Colorado River segments and recommend adopting and implementing the Stakeholder Management Plan to protect their free-flowing nature, outstanding remarkable values, and tentative classifications. Also under Alternative B2, the BLM would find the two Deep Creek segments suitable for congressional designation for inclusion in the NWSRS.

Source: BLM 2008c (GIS)