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BUREAU OF LAND MANAGEMENT
Colorado River Valley Field Office
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ENVIRONMENTAL ASSESSMENT

1. Introduction

NUMBER: **DOI-BLM-CO-040-2013-0023 EA**

CASEFILE NUMBER: 0504760

PROJECT NAME: Issue grazing permit on the Old Mountain Allotment

LOCATION: Garfield County, North of Parachute, CO

LEGAL DESCRIPTIONS: T6S R95W Sec. 5-7, See attached map

APPLICANT: Grazing Permittee

BACKGROUND:

The grazing permit on the Old Mountain allotment expired June 15, 2009. The permit is based on a grazing lease with Encana Oil and Gas (USA) Inc. which controls access and serves as base property for the grazing preference. On June 1, 2012, Encana renewed the grazing lease on the North Parachute Ranch and the lessee applied for the grazing permit on August 13, 2012.

PURPOSE AND NEED FOR ACTION:

This permit is subject to renewal or transfer at the discretion of the Secretary of the Interior for a period of up to ten years. The U.S. Bureau of Land Management has the authority to renew the livestock grazing permit/lease consistent with the provisions of the Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act, and Glenwood Springs Field Office's Resource Management Plan/Environmental Impact Statement. This Plan/EIS has been amended by Standards for Public Land Health in Colorado.

The renewal of the grazing permit is needed for the following reasons: (1) to meet the livestock grazing management goal and objective of the Resource Management Plan, (2) to continue to allow livestock grazing on the specified allotment, (3) to meet the forage demands of local livestock operations, (4) to provide stability to these operations and help preserve their rural agricultural lands for open space and wildlife habitat, and (5) to allow use of native rangeland resource for conversion into protein suitable for human consumption.

Decision to be made: Whether or not to reissue a grazing permit and implement a new Allotment Management Plan (AMP).

SCOPING AND PUBLIC INVOLVEMENT AND ISSUES:

This action was scoped internally with the NEPA Interdisciplinary Team on (January 9, 2013). Issues raised during the internal scoping are itemized in table 3-1 and analyzed in Section 3 Affected Environment and Environmental Effects.

The Colorado River Valley Field Office Internet NEPA Register lists grazing NEPA documents that have been initiated. They are generally posted approximately one month prior to the estimated completion date. No public comments specific to this proposed action have been received.

2. Proposed Action and Alternatives

DESCRIPTION OF PROPOSED ACTION

The Proposed Action is to issue a term grazing permit. The season of use would be modified from the previous permit from summer use to a flexible spring, summer or fall use but the number/kind of livestock, percent public land, and Animal Unit Months (AUMS) will remain the same. Grazing use will be managed under the Old Mountain Allotment Management Plan (AMP). The AMP is included as an appendix to this EA. The permit would be issued for a 10-year period unless the base property is leased for less, but for purposes of the EA, we are assuming 10 years of grazing by this or another applicant (in case of transfer). The proposed action is in accordance with 43 CFR 4130.2. Scheduled grazing use, grazing preference, and terms and conditions for the proposed grazing permit are summarized below.

Table 2-1 Proposed Mandatory Terms and Conditions/Scheduled Grazing Use:

Allotment Name & No.	Livestock No. & kind	Period of use	Percent public land	AUMs
Old Mountain #08914	175 Cattle	06/15 – 10/15	100	270

Table 2-2 Grazing Preference AUMS:

Allotment Name & No.	Active	Suspended	Total
Old Mountain #08914	270	384	654

The following other terms and conditions will be included on the permit:

Grazing use will be in accordance with the Old Mountain Allotment Management Plan. An actual use statement shall be submitted no later than 11/1 annually.

The annual use may not exceed 45 days but may be modified within the terms and conditions of the permit. Flexibility is further described in the AMP.

Administrative access on routes identified as “Foot/Horse Trail” will be allowed from June 1 to August 25 and should only be utilized for the maintenance of assigned range improvement projects. Motorized administrative access on “Foot/Horse Trail” routes for grazing operation

after August 25th will require the permit holder to seek and receive prior authorization from an authorized BLM officer.

Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits. Maintenance shall be completed prior to turn out. Maintenance activities shall be restricted to the footprint (previously disturbed area) of the project as it existed when it was initially constructed. The Bureau of Land Management shall be given 48 hours advanced notice of any maintenance work that will involve heavy equipment. Disturbed areas will be reseeded with a certified weed-free seed mixture of native species adapted to the site.

The permittee and all persons associated with grazing operations must be informed that any person who injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public land is subject to arrest and penalty of law. If in connection with allotment operations under this authorization any of the above resources are encountered, the proponent shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM authorized officer of the findings. The discovery must be protected until further notified in writing to proceed by the authorized officer.

REDUCED USE ALTERNATIVE

Under this alternative the previously authorized use would be reduced. The grazing lease made between the base property owner [Encana Oil and Gas (USA) Inc.] and the proposed permittee authorized a maximum number of 150 cattle. Since the Old Mountain allotment will be grazed as a pasture in rotation with the North Parachute Ranch, the permit would be issued for 150 cattle. An Ecological Site Inventory (ESI) done for the allotment indicated that 164 AUMs were available for livestock grazing. Based on this inventory, 150 cattle could graze the allotment for 33 days. This reduced level of use would continue to meet the needs of the permittee, would match the use authorized on the adjacent private, and would meet the AUMs indicated from the ESI. The AMP in the proposed action would be implemented and modified to reflect the reduced level of use. Scheduled grazing use, grazing preference, and terms and conditions for the grazing permit are summarized below.

Table 2-3 Reduced Use Mandatory Terms and Conditions/Scheduled Grazing Use:

Allotment Name & No.	Livestock No. & kind	Period of use	Percent public land	AUMs
Old Mountain #08914	150 Cattle	06/15 – 10/15	100	164

Table 2-4 Grazing Preference AUMS:

Allotment Name & No.	Active	Suspended	Total
Old Mountain #08914	164	490	654

The following other terms and conditions will be included on the permit:

Grazing management on the Old Mountain allotment will be in accordance with the Old Mountain Allotment Management Plan (AMP).

Adaptive management will be employed on this allotment. The annual use may not be extended beyond a 33 day period but may be used anytime within the dates on the permit. The permittee may use the allotment when the range is ready but not earlier than the beginning dates described in the permit. The range will be considered ready when there is a minimum of 4 inches of new growth on grasses. AUM usage may not exceed active preference.

Supplemental feed such as salting blocks should be placed at least ¼ mile from water developments and riparian areas and, where applicable, up to a ½ mile. This will encourage livestock distribution and give permittees more control over what areas are being used.

The following use levels are considered to be the maximum allowed use to sustain or improve resource conditions in the Old Mountain allotment. Once any of these levels have been reached livestock will be moved to another portion of the allotment, moved to the next scheduled pasture, or removed immediately from the allotment.

Riparian Key Areas:			
Maximum allowable utilization levels on key riparian forage species*	Maximum allowable streambank alteration	Maximum allowable browse of current year's growth on key woody species	Minimum greenline stubble height
40%	25%	40%	4-inches
Upland Key Areas:			
Maximum allowable utilization levels on key upland forage species*	Minimum stubble height on uplands and terraces adjacent to riparian areas		
40%	4-6 inches		

*Key riparian forage species include tufted hair-grass, redtop, all riparian sedge and rush species, and willow. Key upland species are listed above under Resource Objectives.

The period of use within specific areas should be altered annually to provide rest from grazing pressure during different times of the year. This will allow for recovery of root reserves and seed dissemination and seedling establishment. Pasture rotations will be coordinated with the BLM prior to the grazing season.

Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits. Maintenance shall be completed prior to turnout. Maintenance activities shall be restricted to the footprint (previously disturbed area)

of the project as it existed when it was initially constructed. The Bureau of Land Management shall be given 48 hours advance notice of any maintenance work that will involve heavy equipment. Disturbed areas will be reseeded with a certified weed-free seed mixture of native species adapted to the site. (See Map Appendix for Existing Range Improvements)

An actual use report shall be submitted annually to the BLM office no later than 15 days after livestock have been removed (i.e. the grazing end period on the permit).

Administrative access on routes identified as “Foot/Horse Trail” will be allowed from June 1 to August 25 and should only be utilized for the maintenance of assigned range improvement projects. Motorized administrative access on “Foot/Horse Trail” routes for grazing operation after August 25th will require the permit holder to seek and receive prior authorization from an authorized BLM officer.

The permittee and all persons associated with grazing operations must be informed that any person who injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public land is subject to arrest and penalty of law. If in connection with allotment operations under this authorization any of the above resources are encountered, the proponent shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM authorized officer of the findings. The discovery must be protected until further notified in writing to proceed by the authorized officer.

New range improvements, maintenance of existing range improvements, or additional feeding areas may require cultural resource inventories, monitoring, and/or data recovery.

NO ACTION ALTERNATIVE

Under this alternative the previous grazing permit would be reissued with the existing terms and conditions. No AMP would be established at this time. Scheduled grazing use, grazing preference, and terms and conditions for the previous grazing permit are summarized below.

Table 2-5 Previous Mandatory Terms and Conditions/Scheduled Grazing Use:

Allotment Name & No.	Livestock No. & kind	Period of use	Percent public land	AUMs
Old Mountain #08914	175 Cattle	07/15 – 08/30	100	270

Table 2-6 Grazing Preference AUMS:

Allotment Name & No.	Active	Suspended	Total
Old Mountain #08914	270	384	654

Other terms and conditions included on the permit:

This permit or lease is issued under the authority of Section 415, Public Law 112-74 and contains the same terms and conditions as the previous permit or lease. This permit or lease may

be canceled, suspended, or modified, in whole or in part to meet the requirements of applicable laws and regulations.

If an assessment of rangeland health results in a determination that changes are necessary in order to comply with the standards for public land health or the guidelines for livestock grazing management in Colorado, this permit will be reissued subject to revised terms and conditions.

Salt mineral blocks and supplemental feed will be placed a minimum of 0.25 mile and preferably 0.5 mile from riparian areas and other water sources, including springs.

All actions related to this permit will be managed to comply with decisions made in the Roan Plateau Land Use Plan for the East Fork ACEC.

As funds allow, the BLM and permittee should work cooperatively to inventory and control noxious weeds to reduce the risk of expansion and continued degradation of allotment conditions.

The permittee and all persons specifically associated with grazing operations must be informed that any objects or sites of cultural, paleontological, or scientific value such as historic or prehistoric resources, graves or grave markers, human remains, ruins, cabins, rock art, fossils, or artifacts shall not be damaged, destroyed, removed, moved, or disturbed. If in connection with allotment operations under this authorization any of the above resources are encountered, the proponent shall immediately suspend all activities in the immediate vicinity and notify the BLM authorized officer of the findings. The discovery must be protected until notified in writing to proceed by the authorized officer (36CFR800.110 & 112, 43CFR 0.4).

Grazing in riparian areas by livestock should leave an average minimum 4-inch stubble height of herbaceous vegetation and should not exceed an average utilization of 40% of the current year's growth for browse species. Within the uplands, average livestock utilization levels will be limited to 50% by weight on key grass species and 40% for browse species. Livestock will be moved to another portion of the allotment, moved to the next scheduled pasture, or removed immediately from the allotment when the above utilization levels occur.

NO GRAZING ALTERNATIVE

Under this alternative a grazing permit would not be reissued. As a result, no grazing would be authorized on the Old Mountain Allotment. This alternative would initiate the process in accordance with 43 CFR parts 4100 and 1600 to eliminate grazing on this allotment and would amend the resource management plan.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

No other alternatives were considered.

PLAN CONFORMANCE REVIEW

The proposed action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: Roan Plateau Resource Management Plan Amendment.

Date Approved: June 2007 – Record of Decision for the Approval of Portions of the Roan Plateau Resource Management Plan Amendment; amended in March 2008 - Record of Decision for the Designation of Areas of Critical Environmental Concern for the Roan Plateau Resource Management Plan.

Decision Number/Page: The action is in conformance with Livestock Grazing Management identified in the Record of Decision for the Approval of Portions of the Roan Plateau Resource Management Plan Amendment (pg. 38).

Decision Language: General Management Decisions are: Goal: Provide livestock forage while maintaining or enhancing healthy landscapes. Objective: Ensure grazing management conforms to the BLM grazing regulations (43 CFR 4180) and the BLM's Colorado Standards for Public Land Health and Guidelines for Livestock Grazing Management.

Note: Plan guidance was to manage livestock grazing to less than 10 percent streambank alteration within the ACECs. The management guidance for alteration was modified in the proposed action of this NEPA EA. A permanent exemption to this stipulation would be granted, based on the existing Multiple Indicator Monitoring data, demonstrating that a less restrictive measure would adequately protect the resource. This action would fall under the waiver criteria identified in the impact analysis of the FEIS, page 4-6.

RELATIONSHIP TO STATUTES, REGULATIONS, OTHER PLANS

- Taylor Grazing Act of 1934 as amended;
- Federal Land Policy and Management Act of 1976;
- Public Rangelands Improvement Act of 1978;
- Title 43 of the Code of Federal Regulations Subpart 4100 – Grazing Administration;
- Noxious Weed Act of 1974;
- Endangered Species Act of 1973;
- National Environmental Policy Act of 1969;
- Migratory Bird Treaty Act of 1918;
- National Historic Preservation Act (16 USC 470f);
- Archeological Resources Protection Act;
- Native American Graves Protection and Repatriation Act;
- Indian Sacred Sites – EO 13007; and
- Consultation and Coordination with Indian Tribal Governments – EO 13175
- Colorado Public Health Standards and Livestock Grazing Management Guidelines - March 1997

STANDARDS FOR PUBLIC LAND HEALTH

In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. The five standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands.

The proposed action is located within the Roan Cliffs Land Health Assessment Area which was assessed in 1999. The Old Mountain allotment was determined to be meeting or making progress towards meeting the standards at the time of the assessment.

The impact analysis addresses whether the proposed action or any alternatives being analyzed would result in impacts that would maintain, improve, or deteriorate land health conditions for each of the five standards. These analyses are located in the program-specific analysis in this document.

3. Affected Environment & Environmental Effects

DIRECT AND INDIRECT EFFECTS, MITIGATION MEASURES

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and alternatives. In addition, the section presents comparative analyses of the direct and indirect effects on the affected environment stemming from the implementation of the various actions.

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of a proposed action and alternative(s) on certain environmental elements. Not all programs, resources or uses are present in the area, or if they are present, may not be affected by the proposed action and alternatives (Table 3-1). Only those elements that are present and potentially affected are described and brought forth for detailed analysis.

<i>Table 3-1. Programs, Resources, and Uses (Including Supplemental Authorities)</i>	<i>Potentially Affected?</i>	
	Yes	No
Access and Transportation		X
Air Quality		X
Areas of Critical Environmental Concern	X	
Cadastral Survey		X
Cultural Resources	X	
Native American Religious Concerns	X	
Environmental Justice		X
Farmlands, Prime or Unique		X
Fire/Fuels Management		X
Floodplains		X
Forests		X
Geology and Minerals		X
Law Enforcement		X
Livestock Grazing Management	X	
Noise		X
Paleontology		X
Plants: Invasive, Non-native Species (Noxious Weeds)	X	

Plants: Sensitive, Threatened, or Endangered	X	
Plants: Vegetation	X	
Realty Authorizations		X
Recreation	X	
Social and/or Economics	X	
Soils	X	
Visual Resources		X
Wastes, Hazardous or Solid		X
Water Quality, Surface and Ground	X	
Water Rights		X
Wetlands and Riparian Zones	X	
Wild and Scenic Rivers	X	
Wilderness/WSAs/Wilderness Characteristics	X	
Wildlife: Aquatic / Fisheries	X	
Wildlife: Migratory Birds	X	
Wildlife: Sensitive, Threatened, and Endangered Species	X	
Wildlife: Terrestrial	X	

Areas of Critical Environmental Concern

Affected Environment

The northeastern portion of the Old Mountain Allotment falls within the East Fork Parachute Creek ACEC that was designated in the March 2008 Record of Decision for ACECs for the Roan Plateau Resource Management Plan Amendment. The relevant and important values associated with this ACEC are fisheries, ecological, botanical and scenic values. The fish values are related to the occupied habitat for a core conservation population (99% genetic purity or better) of Colorado River cutthroat trout in East Fork Parachute Creek above the falls. However, the occupied habitat for the fish does not occur within the boundaries of the Old Mountain Allotment or downstream of the allotment, so the proposed action would have no direct effect on this species.

Botanical/ecological values that are found within the Old Mountain Allotment or downstream of the allotment include the BLM sensitive plant species, Roan Cliffs blazing star; the Hanging garden sullivania; and a Boxelder-Narrowleaf cottonwood/Red-osier dogwood significant riparian plant community that are considered rare or imperiled within Colorado and rare to relatively common nationally. The Roan Plateau is regionally important habitat for the hanging garden sullivania, supporting approximately 62% of the known global populations. The rare riparian plant species and communities are of excellent condition and abundance and are vulnerable to adverse change.

In addition, East Fork Parachute Creek contains scenic values associated with the 200-foot high East Fork Parachute Creek Falls, one of the longest waterfalls in the state, and the scenic box canyon downstream of the falls.

Environmental Effects

Proposed Action

Livestock grazing in the Old Mountain allotment is unlikely to affect the fisheries or scenic values within the ACEC. The ROD for the Designation of ACECs for the Roan Plateau RMP Amendment and EIS establishes objectives for management of the relevant and important botanical and ecological values within the East Fork Parachute Creek ACEC. The ROD includes objectives and management actions to protect populations of rare plants and significant plant communities from direct and indirect impacts and managing significant plant communities to retain mid-to-late seral stage conditions. The overall objectives are to preclude any surface-disturbing actions or high levels of activity that might impair the identified values and to promote plant health, maintain sufficient residual vegetation, and sustain overall watershed functions.

Management Actions affecting livestock grazing in the ACEC include:

1. Apply NGD/NSO within occupied habitat for rare plants.
2. Manage livestock grazing within 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.
3. Manage significant riparian communities to retain mid-to late-seral stage condition.

Livestock grazing would have no direct effects on the botanical/ecological ACEC values. Livestock would not graze within the Boxelder-Narrowleaf cottonwood/Red-osier dogwood community since the plant community is found in the bottom of East Fork Parachute Creek canyon outside of the allotment boundary. Direct grazing impacts to the Roan Cliffs blazing star and the hanging garden sullivania are also not anticipated as the blazing star occurs on steep, nearly barren talus slopes which are generally inaccessible and receive little livestock use and the sullivania is located within seeps along the cliffs which are inaccessible to livestock. Indirect impacts may include the expansion of noxious weeds from grazing activities into the occupied habitat for these species and communities. Proper livestock grazing management should maintain native plant health and diversity which would minimize the risk of noxious weed invasion and expansion that could impact botanical/ecological resources. The proposed action would permit livestock grazing use for no more than 45 days in the growing season. This is unlikely to result in a reduction in vegetative cover or substantial areas of surface disturbance that would provide a niche for noxious weeds. Most infestations would be isolated to watering facilities, salting areas, and other areas where livestock concentrate which would not substantially impact the relevant and important botanical values within the ACEC.

Reduced Use Alternative

The reduced use alternative would reduce the grazing use from 45 days to 33 days and would reduce the number of AUMs from 270 to 164. The reduced use alternative would best maintain the vigor and health of native plant species which is the primary deterrent of noxious weed spread. The ACEC values would be maintained.

No Action Alternative

Grazing use would occur for 45 days under the no action alternative. Impacts on ACEC values would be the same as under the Proposed Action.

No Grazing Alternative

Under this alternative, no livestock grazing would occur on the allotment and there would be no direct or indirect impacts to noxious weeds from livestock use. Grazing by wildlife may continue to create localized disturbances that would enable weed expansion.

Cultural Resources

Affected Environment

Grazing authorization renewals are undertakings under Section 106 of the National Historic Preservation Act. During Section 106 review, a cultural resource assessment (CRVFO#1013-20) was completed for the Old Mountain allotment on February 28, 2013 by Erin Leifeld, Colorado River Valley Field Office Archaeologist. The assessment followed the procedures and guidance outlined in the 1980 National Programmatic Agreement Regarding the Livestock Grazing and Range Improvement Program, IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, and IM-CO-01-026. The results of the assessment are summarized in the table below. Copies of the cultural resource assessments are available at the Colorado River Valley Field Office archaeology files.

Data developed here was taken from the cultural program project report files, site report files, and base maps filed at the Colorado River Valley Field Office as well as information from General Land Office (GLO) maps, BLM land patent records, and the State Historic Preservation Office (SHPO) site records, report records, and GIS data.

The table below is based on the allotment specific analysis for the allotment in this EA. The table shows known cultural resources, the potential of Historic Properties, and Management recommendations.

Allotment Name and Number	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level	Percent Allotment Inventoried at a Class III Level (%)	Number of Cultural Resources known in Allotment	High Potential of Historic Properties (yes/no)	Management Recommendations (Additional inventory required and historic properties to be visited)
Old Mountain #08914	1281.2	26.2	98%	5	No	No new cultural resource inventory recommended and no site need monitoring.

Within the Old Mountain Allotment #08914 a total of three cultural resource inventories (CRVFO#8396-1, 786, and SHPO#GF.LM.R194) have been previously conducted totaling 1281.2 acres at the Class III level. A total of five cultural resources have been located and documented within the allotment. One prehistoric isolated find (5GF.2397) and four prehistoric sites (5GF.83, 5GF.85, 5GF.871 and 5GF.1116) are not eligible for the National Register of Historic Places (NRHP). Looking at the General Land Office (GLO) Patents from 1923, indicates there is a historic trail along the East Fork Parachute Creek but does not fall within this allotment, so encountering segments of this trail may not occur within the allotment boundary.

Environmental Effects

Proposed Action Alternative

The direct impacts that occur where livestock concentrate, during normal livestock grazing activity, can include trampling, chiseling, artifact breakage, and churning of site soils, cultural features, and cultural artifacts. Indirect impacts could include soil erosion and gullyng, which can lead to increased ground visibility which has the potential to increase unlawful collection and vandalism.

Changes in livestock season by expanding the season of use will not likely have any impacts to cultural resources.

No additional cultural resource inventory or monitoring is recommended within this allotment.

Reduced Use Alternative

Direct and indirect effects on cultural resources from livestock grazing would be similar in type to the proposed action.

Changes in livestock grazing by expanding the season of use will not likely have any impacts to cultural resources. Decreasing the number of AUM has the potential to reduce adverse impacts to cultural resources because ground disturbance will potentially be lessened.

No additional cultural resource inventory or monitoring is recommended within this allotment.

No Action Alternative

Direct and indirect effects on cultural resources from livestock grazing would be similar in type to the proposed action.

Continuing the current season of use will likely not have any additional impacts to cultural resources. Not introducing AMPs can lead to higher relative levels of ground disturbance through erosion, reduced ground cover, or areas of high use which may have the potential to adversely impact cultural resources.

No Grazing Alternative

Under this alternative, direct and indirect impacts to cultural resources from grazing would be reduced based on the absence of livestock and no related surface disturbing activities.

Mitigation

Grazing permit terms and conditions cover modification or mitigation needed if new information has determined cultural resources may be adversely impacted.

Native American Religious Concerns

Affected Environment

American Indian religious concerns are legislatively considered under the American Indian Religious Freedom Act of 1978 (PL 95-341), the Native American Graves Environmental Assessment Protection and Repatriation Act of 1990 (PL 101-601), and Executive Order 13007 (1996; Indian Sacred Sites). These require, in concert with other provisions such as those found in the NHPA and Archaeological Resources Protection Act (ARPA), that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life. This ensures, to the degree possible, that access to sacred sites, the treatment of human remains, the possession of sacred items, the conduct of traditional religious practices, and the preservation of important cultural properties are considered and not unduly infringed upon. In some cases, these concerns are directly related to “historic properties” and “archaeological resources”. In other cases, elements of the landscape without archaeological or other human material remains may be involved. Identification of these concerns is normally completed during the land use planning efforts, reference to existing studies, or via direct consultation.

The Ute have a generalized concept of spiritual significance that is not easily transferred to Euro-American models or definitions. The BLM recognizes that the Ute have identified sites that are of concern because of their association with Ute occupation of the area as part of their traditional lands. The cultural resource evaluation of several allotments that described known cultural resources and their condition was sent to the Southern Ute Indian Tribe, Ute Mountain Ute Tribe, and the Uinta and Ouray Agency Ute Indian Tribe. The letter, sent on March 7, 2013, requested the tribes to identify issues and areas of concern within the allotments. Responses supported additional survey, specifically in areas identified for livestock concentration within allotments which have not been previously inventoried for cultural resources. Additionally, they are interested in the significant cultural resources and agree with monitoring them and if mitigation is required, consultation would occur to best determine appropriate action.

Environmental Effects

Proposed Action Alternative

Tribal Representatives have consulted with the CRVFO on several grazing permit renewals and indicated their support of additional inventory in allotments not previously inventoried. They were also interested in continued monitoring of the significant sites located within the allotments. No specific concerns were raised during tribal consultations for this specific allotment and no adverse effect is anticipated. This allotment did not require additional inventory or monitoring. In addition to the stipulations for the protection of Cultural Resources, any site-specific Native American mitigation measures suggested during subsequent consultation would be considered during the implementation of the Proposed Action.

Reduced Use Alternative

Changes in livestock grazing by expanding the season of use will not likely have any impacts to Native American religious concerns. Additionally, reductions in the number of AUM have the

potential to reduce adverse cultural resource impacts because ground disturbance will potentially be lessened.

No Action Alternative

Continuing the current season of use will likely not have any additional impacts to Native American religious concerns. Not introducing AMPs can potentially lead to increased ground disturbance through erosion, reduced ground cover, or areas of high use which may have the potential to adversely impact cultural resources.

No Grazing Alternative

Under this alternative, direct and indirect impacts to cultural resources from grazing would be reduced based on the absence of livestock and no related surface disturbing activities. Therefore, areas of concern to Native American tribes would not be affected.

Mitigation

Grazing permit terms and conditions cover modification or mitigation needed if new information has determined cultural resources or areas of Native American religious concern may be adversely impacted.

Livestock Grazing Management

Affected Environment

The Old Mountain allotment, consisting of 1,309 acres, is located on the Roan Plateau south of the East Fork of Parachute Creek; Township 6 South Range 95 West, section 5-7 and Township 5 South Range 95 West, section 35. The allotment lies within Garfield county 10 miles northeast of Parachute, CO. The allotment ranges in elevation from 8,000 to 8,500 feet and averages 20 inches of precipitation a year. Common vegetation types include aspen, conifer, mountain shrub and sagebrush.

There are 4 ponds, 1 spring development, and approximately 3 miles of fence on the allotment. There is no motorized public access to the allotment although foot and horse traffic occasionally occurs during hunting seasons. Currently the private property adjacent to the allotment is being developed for oil-gas resources.

Environmental Effects

Proposed Action

Under this action grazing would continue to be authorized at the same levels as the previous permit but during a flexible season of use. This flexibility will allow the permittee to use the allotment during the spring, summer, or fall. Most of the use would be anticipated during the fall based upon private property rotations. Grazing utilization would be monitored and livestock would be moved when utilization limits are reached. Impacts from grazing would be minimal and would be focused around water sources.

Reduced Use Alternative

Although this alternative would implement a reduction in use it would not have a substantial impact to the permittee or the base property owner. Grazing use has only occurred 5 times since the 1999 Land Health Assessment. Both the permittee and base property owner recognize that

that level of use permitted in the past is higher than what they would expect the allotment to support. The reduced level of use matches what the permittee and base property owner had previously agreed to. Flexibility in use dates would be authorized and the AMP would be implemented to protect resource values.

No Action Alternative

This would result in the renewal of the most recent permit, authorizing 175 cattle for 45 days in the summer. No AMP would be implemented no objectives established for the allotment outside of the RMP. The alternative would have the most potential for negative impacts to the riparian areas.

No Grazing Alternative

Under this alternative these grazing permits would be cancelled. Cancelling grazing use on these allotments may result in economic harm to the permittee. This alternative would initiate the process in accordance with 43 CFR parts 4100 and 1600 to eliminate grazing on these allotments and devote the land to some other purpose and would result in amendments to the resource management plan.

Plants: Invasive Non-Native Species (Noxious Weeds)

Affected Environment

A landscape-wide noxious weed inventory has not been completed on the Old Mountain allotment. Infestations of a variety of species of thistles and houndstongue are documented on neighboring allotments, given the nature of noxious weed infestations it can be assumed these and other noxious weeds may be found in the Old Mountain allotment.

Environmental Effects

Proposed Action

Weeds generally germinate and become established in areas of surface disturbing activities. Livestock grazing can contribute to the establishment and expansion of noxious weeds through various mechanisms. Noxious weed seed can be transported and introduced to new areas by fecal deposition or by seed that clings to animal's coats. This effect is minimal compared to other weed seed dispersal vectors such as recreation and ground disturbing activities. Livestock grazing as proposed maintains the vigor and health of native plant species which inhibits the spread of noxious weeds. Since the proposed action was designed to sustain and/or improve land health, no significant impacts to non-native, invasive species are expected. Noxious and invasive plant species are not expected to radically increase as a result of the continuation of livestock grazing practices. Most infestations will be isolated to watering facilities, salting areas, and other areas where livestock concentrate.

Reduced Use Alternative

The reduced use alternative grazing plan consists of a reduction of 25 cattle and 106 AUMs. The reduced use alternative impacts to weeds would be similar to those of the proposed action. A reduced use alternative would maintain the vigor and health of native plant species which is the primary deterrent of noxious weed spread. Most infestations would be isolated to watering facilities, salting areas, and other areas where livestock concentrate. Noxious weeds are not

expected to radically increase as a result of the continuation of grazing. Recreation and wildlife would continue to contribute to the spread of noxious weeds.

No Action Alternative

The no action alternative would be to re-issue the grazing permit with the same terms and conditions as those associated with the expiring permit. Noxious and invasive plants species would not be expected to radically increase as a result of the continuation of livestock grazing practices associated with the No Action Alternative. Recreation and wildlife would contribute to the spread of noxious weeds.

No Grazing Alternative

Under this alternative, no livestock grazing would occur on the allotment and there would be no direct or indirect impacts to noxious weeds from livestock use. Grazing by wildlife may continue to create localized disturbances that would enable weed expansion. Wildlife and recreation would continue to be vectors for the transportation and spread of noxious weed seeds.

Plants: Sensitive, Threatened, and Endangered

Affected Environment

Table 3-3 lists the threatened, endangered, proposed, and candidate plant species with potential to occur in the Old Mountain allotment or be affected by the proposed action based on the U.S. Fish and Wildlife Service’s IPaC website:

<http://ecos.fws.gov/ipac/wizard/trustResourceList!prepare.action>. Table 3-4 lists all BLM Sensitive plants that may occur in the allotment or be impacted by the proposed action.

Table 3-3. Federally Listed, Proposed or Candidate Plant Species		
Species	Habitat/Range	Occupied/Potential Habitat Present /Absent
Ute ladies’-tresses (<i>Spiranthes diluvialis</i>)	Listed as threatened. Habitat for this threatened species is found below 7,200 feet along streams, lakes or in wetland areas with seasonally saturated or subirrigated soils.	Absent: The streams and wetlands on the Old Mountain allotment are well above the elevation for potential habitat for Ute ladies’-tresses.
Parachute penstemon (<i>Penstemon debilis</i>)	Listed as threatened. Endemic to steep, talus slopes on the southern escarpment of the Roan Plateau in Garfield County, Colorado. The plants are found only on the oil-shale rich Parachute Creek Member of the Green River Formation between 8,000 to 9,000 feet in elevation.	Absent: Parachute penstemon is found along the southern rim of the Roan Plateau ~3.0 miles east of the allotment. No exposures of Parachute Creek Member of Green River Formation shale within this allotment.

Table 3-4. Colorado BLM Sensitive Plant Species		
Species	Habitat	Occupied/Potential Habitat Present/Absent

Cathedral Bluffs meadowrue (<i>Thalictrum heliophilum</i>)	Known from 18 occurrences in Garfield, Mesa and Rio Blanco Counties. The meadowrue is a narrowly endemic plant found in dry, shale barren communities between 6,200 and 8,800 feet in elevation.	Potential: Only about 5 acres of exposed shale on northwest end of allotment, however, no documented occurrences here.
Piceance bladderpod (<i>Lesquerella parviflora</i>)	A Colorado endemic known only in Garfield, Mesa, and Rio Blanco Counties. It occurs on shale outcrops of the Green River Formation, on ledges and slopes of canyons in open areas at elevations ranging from 6,200 to 8,600 feet.	Potential: Only about 5 acres of exposed shale on northwest end of allotment, however, no documented occurrences here.
Roan Cliffs blazing star (<i>Mentzelia rhizomata</i>)	Found only on steep talus slopes of the Green River Formation in Garfield County. The species occurs on eroding oil shale at elevations from 5,800 to 9,000 feet. In the GSFO, the Roan Cliffs blazing star is known to occur on the cliffs of the Roan Plateau, along Parachute Creek drainage and in Main Elk Creek, near New Castle, Colorado.	Potential: Only about 5 acres of exposed shale on northwest end of allotment, however, no documented occurrences here.

Cathedral Bluffs meadowrue, Piceance bladderpod and Roan Cliffs blazing star all occur on open talus slopes of the Green River Formation shale. Parachute penstemon and Roan Cliffs blazing star are known to occur along the southern rim of the Roan Plateau. Very limited potential habitat for Cathedral Bluffs meadowrue, Piceance bladderpod, and Roan Cliffs blazing star is found along West Forked Gulch, but no plants of these species have yet been documented within the Old Mountain allotment.

Environmental Effects

Proposed Action

Due to the absence of documented occurrences and very small area of potential habitat, no impacts to the Cathedral Bluffs meadowrue, Piceance bladderpod or Roan Cliffs blazing star are anticipated from the proposed action.

Reduced Use Alternative

Environmental effects would be the same as the Proposed Action.

No Grazing Alternative

Environmental effects would be the same as the Proposed Action.

No Action Alternative

Environmental effects would be the same as the Proposed Action.

Mitigation

A survey of potential habitat will be conducted in 2013. If special status plants are documented in the allotment and if any livestock grazing impacts are noted, changes to the terms and conditions of the permit may be made to protect the special status plants.

Land Health Standards

The 1999 Roan Cliffs Land Health Assessment found no populations of special status plants within the Old Mountain allotment and thus, Standard 4 for special status plants did not apply at

that time. The proposed action should not result in a failure to meet or maintain Standard 4 for special status plants.

Plants: Vegetation

Affected Environment

The Old Mountain allotment lies near the west end of the Roan Plateau at elevations ranging from approximately 8,000 feet to 8,600 feet. The allotment consists of two long ridges dissected by two perennial streams and several intermittent drainages. The ridgetops support primarily mountain big sagebrush and snowberry. The sides of the ridges are moderately steep, with mesic mountain shrubs such as mountain big sagebrush, Gambel oak, serviceberry and snowberry on the southern aspects, and aspen and Douglas-fir on the northern aspects.

The shrublands are generally dense with a productive understory. The grass species are productive, but not as diverse as expected, with herbaceous vegetation dominated by Columbian and Letterman's needlegrasses, with lesser amounts of lupine, peavine, and sulfur buckwheat. The narrow riparian area of Forked Gulch and West Forked Gulch supports primarily redtop, tufted hairgrass and some sedges, with only a few willows noted. Canada thistle and houndstongue are common on the upland terraces immediately adjacent to the riparian zone but were limited elsewhere in the allotment. Kentucky bluegrass, an invasive, introduced perennial grass, is present at many upland sites.

Much of this allotment has slopes greater than 30%, which cattle tend not to utilize. As a result, livestock concentrate in the valley bottoms, utilizing riparian vegetation and the adjacent upland terraces.

Limited monitoring data is available for the Old Mountain allotment to assess vegetative response to grazing. An upland trend study site established on a ridgetop in 2006 showed a lack of species diversity at the monitoring location with Columbia needlegrass as the dominant herbaceous species. Heavy grazing of riparian vegetation (1-2 inch stubble height) was mentioned nearly every year the allotment was visited. Canada thistle and houndstongue were present in the riparian area and adjacent upland terraces. Ecological Site Inventory data collected in 2012 indicates that the Old Mountain allotment may be over-stocked.

When available forage is not sufficient to sustain livestock use, the most palatable species may be over-used and not able to recover their carbohydrate reserves following grazing. These species may begin to decline in abundance, resulting in a long-term change in species composition to less palatable and more invasive species. This trend in species composition would need to be verified with monitoring data. An updated land health assessment will be conducted in 2013 to qualitatively assess vegetation condition relative to the ecological site potential.

Environmental Effects:

In general, direct impacts to vegetation from livestock grazing include removal of vegetation and trampling damage. Indirect impacts may include increased plant mortality (increased bare ground), changes in species composition and increases in noxious weeds and other undesirable species. Grazing can also remove old or dead growth that allows for an increase in photosynthesis and green matter (re-growth). Well-managed grazing also allows adequate time

for plant regrowth and seed set following grazing or prior to grazing to ensure reproduction of plant species to replace plants lost to senescence.

Proposed Action

The proposed action would allow for a flexible spring, summer, or fall use rather than the previous mid-summer use only. Livestock preferences for various species of grasses and forbs varies slightly throughout the growing season, so varying the season of use may provide periodic rest for those species of plants that are most palatable at different times of the year. This would provide greater opportunity for plant regrowth and recovery prior to or following grazing to help sustain plant health. However, the number of AUM's and proposed length of use (45 days) for this allotment may increase the potential for heavy use of vegetation in the valley bottoms including riparian areas and adjacent upland terraces. Vegetation condition may not improve or may be very slow to improve with this grazing management strategy.

Reduced Use Alternative

Direct and indirect livestock impacts are similar to the proposed action. However, this alternative accounts for the steepness of the terrain, and more accurately reflects the amount of useable forage according to the Ecological Site Inventory data. By reducing the total AUMs and the number of days of grazing use (33 days), this alternative provides the best opportunity for proper grazing utilization levels and for plant regrowth and recovery to sustain plant health. Under the reduced use alternative, the cover and diversity of desirable upland herbaceous plants would be expected to improve.

No Action Alternative

Direct and indirect livestock impacts would be similar to the proposed action. However, under this alternative, livestock would graze the allotment during the middle of the growing season (7/15-8/30) each year. Grazing for this length of time at the height of the growing season may not allow adequate opportunity for plants to regrow and set seed prior to the end of the growing season. No AMP would be established for the allotment to provide guidance on management objectives and acceptable grazing use levels. Therefore, this alternative would have the greatest impacts to the health of plant communities, especially in the valley bottoms where livestock congregate. The most palatable plant species may decline in abundance and vigor, resulting in a long-term decline in total vegetative cover and a change in species composition toward more weedy and less desirable species.

No Grazing Alternative

Under this alternative, no livestock grazing would occur and there would be no direct or indirect impacts to vegetation from livestock use. Trampling or removal of plant material may still occur from wildlife grazing; however, the impacts would be less than impacts from grazing by both livestock and wildlife. This alternative would result in the fastest improvement in the cover and diversity of vegetation communities.

Land Health Standards

In 1999, a formal Land Health Assessment was completed in the Roan Cliffs watershed which included the Old Mountain allotment. The plant communities along the ridges were generally in good condition at that time. Riparian areas were considered to be functioning-at-risk with an upward trend. Forked Gulch and West Forked Gulch appeared to have the potential to support willows but few willows were noted. The adjacent upland terraces had fewer forbs and more weedy and invasive species than desired.

If the season of grazing use varies in consecutive years, as allowed under the proposed action, this would benefit plant health by providing periodic rest or deferment during critical growth stages. However, as indicated by the Ecological Site Inventory data, the number of AUMs may exceed the carrying capacity of the allotment. Grazing of 175 cows for a 45-day grazing period may not provide adequate opportunity for rest and regrowth prior to or following grazing, especially in drought years and in areas where livestock congregate. Vegetative conditions are less likely to achieve Land Health Standard 3 under this alternative than under the reduced use alternative.

The reduced use alternative which provides for a shortened grazing period and a reduced number of livestock would be the grazing strategy most likely to achieve Standard 3 throughout the Old Mountain allotment. The no action alternative permits grazing for a 45-day period during the height of the growing season. As discussed in the analysis above, this alternative would have the greatest impacts on plant communities, especially in the valley bottoms where livestock congregate. Localized vegetative conditions may decline relative to Standard 3.

If future monitoring data indicate that conditions are failing to meet Standard 3 or are trending away from meeting the standard and livestock is a substantial contributing factor, management actions would be taken in accordance with 43 CFR 4180.2 to ensure progress toward meeting Standard 3 for healthy plant communities.

Recreation

Affected Environment

The Old Mountain allotment is within the Roan Plateau Extensive Recreation Management Area (ERMA), which was designated in the Glenwood Springs Field Office Record of Decision for the Approval of Portions of the Roan Plateau Resource Management Plan Amendment and Environmental Impact Statement, 2007. The Roan Plateau ERMA is managed to ensure that custodial outcomes for the purpose of addressing identified stewardship needs associated with recreation-tourism activity participation include: visitor health and safety; use and user conflicts; and resource protection.

Environmental Effects

Proposed Action

The change in dates may directly impact visitor experiences. Expanding operations further into hunting season may create conflicts with hunters in the area. Additionally, administrative use on roads that are closed to the general public during hunting season could create potential misunderstandings and negatively impact recreational experiences, which would indirectly impact recreational benefits that the users take home with them when they leave public lands.

However, the proposed action includes a specific stipulation limiting administrative use after August 25th which would mitigate this potential negative impact.

Reduced Use Alternative

The Reduced Use Alternative would reduce the number of livestock from 175 cattle to 150 cattle (by 25 cattle). This would slightly reduce potential conflicts with recreationists during hunting season with the livestock by having less number of cattle on the landscape. Additionally, administrative use on roads that are closed to the general public during hunting season could create potential misunderstandings and negatively impact recreational experiences, which would indirectly impact recreational benefits that the users take home with them when they leave public lands. However, the Reduced Use Alternative includes a specific stipulation limiting administrative use after August 25th which would mitigate this potential negative impact.

No Action Alternative

The No Action Alternative would reissue the permit for 175 cattle between July 15 and August 30. These dates are mostly outside of the recreational use of hunting season and so conflicts between uses would be minimized.

No Grazing Alternative

The No Grazing Alternative would eliminate any conflicts between recreationists (mainly hunters) and livestock grazing. The recreationists would mostly see this impact during hunting season. Anytime outside of hunting season, most recreationists may not notice a difference.

Socio-Economics

Affected Environment

The majority of CRVFO grazing permits are issued to individuals and businesses within the following counties of Colorado. The median household income within those counties is identified in the following table.

Local Counties	Median Household Income (2010 US Census)
Garfield	\$62,716
Pitkin	\$69,352
Eagle	\$74,220
Routt	\$64,892

Local communities throughout rural areas in the western United States are often integrally tied to ranching and agriculture. Livestock grazing has been a significant part of the Colorado River valley and surrounding area for more than 100 years. Cattle companies began moving into western Colorado in the early 1870s, using the open range as winter feeding grounds for their herds (Church et al. 2007: 113). By the late 1880s, a more sedentary life of livestock raising became prevalent as ranchers established access to leased lands and irrigated pastures and were able to establish more permanent ranches (Church et al. 2007: 113-114). Many of these ranches, cattle companies, and homesteading families retain their long-standing social and economic ties to the area.

Benefits that local ranches and livestock companies bring to the surrounding communities include jobs, local business revenue, and locally produced meat (Huntsinger and Hopkinson 1996: 167-168). Additionally, reserving tracts of land for livestock grazing can preserve large expanses of contiguous property which are not open to development and segmentation. In combination, these large tracts of ranch land and public land can be beneficial to wildlife, recreation, watersheds, and aesthetics (Huntsinger and Hopkinson 1996: 168). In the West, “49.6% of all public land ranchers” are greatly dependent on ranching as a primary source of their income (Gentner and Tanak 2002: 11). Maintaining historic ties to the land through livestock grazing also preserves traditional family and community land uses. Studies show that ranchers are not only in the livestock business to make a profit, but place great value in the quality of life that comes with the ranching lifestyle (Bartlett et al. 2002).

Challenges to livestock grazing can include financial hardship, over-utilization, limitations from land development, and conflicts with other land users. Encroachment by land developers can raise property taxes and values which can create economic incentive for ranchers to fragment or sell off their lands (Huntsinger and Hopkinson 1996: 167). Livestock price fluctuations can increase the challenge for ranchers to maintain a profit (Smith and Martin 1972: 224). Livestock owners who use public lands feel pressures from other land users, such as recreationists or oil and gas development, for access and use of land. For example, tension can occur when livestock are startled by mountain bikers or pasture gates are left open. Some public land users, such as hunters, can be affected by poor grazing practices and the resulting impacts to local wildlife and environmental quality. However, the multiple use mission of the Bureau of Land Management requires that the traditional land uses, such as grazing, are managed in a way that accommodates other public land users.

Social and economic impacts of ranching and agriculture can bring both benefits and challenges to the local community. Sustainably managed grazing supports a way of life that has been established since the early twentieth century and can be an opportunity to preserve community tradition, identity, and land use patterns while accommodating other land uses and environmental protections.

Environmental Effects

Proposed Action

Under this alternative grazing would continue at past levels on the allotments. The ranching livelihood, local economic benefit, and cultural settings of the area would continue to be supported and no net increase or loss to the permittee or county would be expected.

Reduced Use Alternative

Environmental effects would be the same as the proposed action.

No Action Alternative

Environmental effects would be the same as the proposed action.

No Grazing Alternative

This alternative disproportionately impacts ranches with greater forage needs, higher public forage dependency, and no cost effective forage substitutes. Public forage losses could be

replaced with other private leases or hay. Leasing private land can be the least-cost alternative but in many areas is unrealistic due to lack of available agricultural land to lease. Buying hay to compensate for lost forage is a far more expensive option than reducing livestock numbers. (Rowe, 2001) This alternative may also require fencing along the private-BLM boundary to prevent unauthorized use on public lands. These additional costs may result in the conversion of traditional agricultural property to some other use.

The desired social outcomes of the Community Assessment Report identified the importance of rural or western lifestyles and livelihoods in this area. This alternative would hinder the ability of local ranches to maintain economies, but even more importantly, to maintain the rural/western character integral to the larger community identity. (BLM, 2007)

Soils

Affected Environment

A review of the soil survey by the NRCS for the *Rifle Area, Colorado, Parts of Garfield and Mesa Counties* indicate 7 soil map units occur within the proposed allotments (NRCS 1985). The NRCS soil map unit descriptions (NRCS 2011) are provided below:

Irgul channery loams (9-50% slopes) are shallow, well drained rolling to steep soils found on upland ridges and mountainsides. Surface runoff is generally medium and erosion hazards are described as slight. This map unit is typically for wildlife habitat and limited grazing.

Irgul channery loams (50-75% slopes) are shallow, well drained steep soils found on north facing ridges and mountainsides. Surface runoff is generally rapid and erosion hazards are described as severe. This map unit is typically for wildlife habitat.

Northwater loam (15-65% slopes) is a deep, well-drained, hilly to very steep soil found on mountainsides. Surface runoff is described as slow with a slight erosion hazard. Primary uses include wildlife habitat, limited grazing, and recreation. These soils are also suited for quaking aspen production.

Parachute loam (25-65% slopes) is a moderately deep, well-drained, hilly to very steep soil found on north and east facing mountainsides. Surface runoff is described as medium with moderate erosion hazards. Primary uses include wildlife habitat and limited grazing.

Parachute-Rhone loams (5 to 30% slopes) are described as steep to gently rolling soils found on ridge-crests and mountainsides. The Parachute soil is moderately deep and well drained while the Rhone soils are deeper. The Parachute soils are described as having medium surface runoff characteristics with moderate erosion hazards. The Rhone soils possess slow surface runoff characteristics with only a slight erosion potential.

Rhone loam (5-30% slopes) is a deep, well-drained gently sloping to steep soil found on mountainsides and ridges. Surface runoff is described as slow with a slight erosion hazard. Primary uses include wildlife habitat and limited grazing.

Silas loam (3-12% slopes) is a deep moderately, well-drained soil found in on bottom land of mountain valleys. Surface runoff is described as slow with a slight erosion hazard. Primary uses include grazing, wildlife habitat, and irrigated hay.

Soil health was evaluated in 1999 during the Roan Cliffs Land Health Assessment. BLM staff concluded that soils were meeting land health standards throughout the proposed allotment, with only slight departures from expected conditions (BLM 1999). However, more recent grazing-related photo monitoring indicated some site-specific over-utilization of vegetation resulting in soil loss/bare ground and surface compaction in areas where livestock concentrate.

Environmental Effects

Proposed Action

Livestock grazing can result in direct soil compaction and displacement that increase the likelihood of erosional processes, especially on steep slopes and areas devoid of vegetation. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. Indirect impacts include soil erosion and gullying resulting from over-utilization of upland vegetation.

Much of this allotment has slopes greater than 30%, which cattle tend to not utilize. As a result, livestock concentrate on the valley bottoms and streamside vegetation, which are susceptible to surface compaction and stream bank shearing. There is a high potential for soil loss and transport to nearby drainages. Allowing for adaptive management will help with range readiness. However, the number of AUM's and period of use proposed for this allotment may increase the potential for valley bottom soil compaction, stream bank shearing, and increased bare ground, especially where livestock concentrate.

Reduced Use Alternative

Direct and indirect livestock impacts are similar to the proposed action. However, this alternative accounts for the steepness of the terrain, and more accurately reflects the useable grazing acres. By reducing the AUMs and number of days for active grazing, this alternative provides the best protections of soil health and upland vegetation conditions. Grazing practices at this proposed level are not expected to create long term affects that would compromise soil stability.

No Action Alternative

Direct and indirect livestock impacts are similar to the proposed action. However, this alternative does not allow for adaptive management and range readiness. Therefore, this alternative would have the greatest negative impacts to soil health.

No Grazing Alternative

Under this alternative, no livestock grazing would occur and there would be no direct or indirect impacts to soils from livestock use. Trampling or removal of plant material may still occur from wildlife grazing. In addition, soil disturbance and erosion may persist due to other surface disturbing activities, such as roads and trails that exist throughout the allotment.

Land Health Standard 1 for Soils

Based on the Roan Cliffs Land Health Assessment, BLM staff concluded that soils are meeting Standard 1 (BLM 1999). Implementation of the proposed action is not anticipated to degrade soil health from current conditions.

Water Quality, Surface and Ground

Affected Environment

This allotment lies within the East Fork Parachute Creek watershed. Forked Gulch, West Forked Gulch, East Forked Gulch, Tank Gulch and Chicken Gulch carry flow from the allotment to Parachute Creek before emptying into the Colorado River. Forked, West Forked Gulch and East Forked Gulches are projected to have perennial to intermittent flow, with the other tributaries projected to have ephemeral flow. Several springs have been mapped within the Tank and Chicken Gulch drainages, so perennial flow may also occur for very short reaches below those springs.

Water quality data were collected on East Forked Gulch by BLM in 1999, as part of the Land Health Assessment. Those data indicate excellent water quality with a flow of 0.14cfs, temperature of 22°C., conductivity of 520 µS/cm, and pH of 8.5. Water quality is projected to be similar to that collected at gaging stations that were located in Ben Good Creek and East Fork Parachute Creek. Gaging station #09092980 which operated on Ben Good Creek from 11/76 to 9/83 had an average discharge of 0.5cfs, temperature range of 0 to 22°C., conductivity ranging from 390 to 680µS/cm, and pH range from 7.1 to 8.7. East Fork Parachute Creek gaging station #09092970 which operated from 4/77 to 9/83 had an average discharge of 6.5cfs, temperature range of 0 to 19°C., conductivity ranging from 380 to 1250µS/cm, and pH range from 7.3 to 8.8.

The State of Colorado has developed *Stream Classifications and Water Quality Standards* that identify beneficial uses of water and numeric standards used to determine allowable concentrations of water quality parameters (CDPHE 2010a). All tributaries to East Fork Parachute Creek within the allotment are classified by the state as having Aquatic Life Cold 2, Recreation N, and Agriculture beneficial uses.

Aquatic life cold 2 are waters that are not capable of sustaining a wide variety of cold water biota, including sensitive species, due to physical habitat, water flows, or levels, or uncorrectable water quality conditions that result in substantial impairment of the abundance and diversity of species. Recreation N refers to stream segments with surface waters that are not suitable or intended to become suitable for primary contact recreation uses. Agriculture refers to stream segments that are suitable or intended to become suitable for irrigation or livestock use.

The State of Colorado has developed a *303(d) List of Water Quality Limited Segments Requiring TMDLS and Monitoring and Evaluation List* (CDPHE 2010b) that identifies stream segments that are not currently meeting water quality standards with technology based controls alone. No streams in the proposed allotment are on this list, suggesting water quality standards are currently being met.

Environmental Effects

Proposed Action

Direct impacts to water quality resulting from grazing include elevated nutrient levels (i.e. fecal coliform) if cattle begin to congregate near water sources for extended periods of time. Hoof action can cause direct surface compaction, stream bank shearing, elevated erosion rates and subsequent deterioration of water quality. Indirect impacts may result from excessive utilization in upland watershed areas reducing effective vegetative cover, elevating erosion potential and

increasing sediment delivery to streams, which could negatively impact water quality, particularly water temperature, fecal coliform, and turbidity.

Grazing 175 cattle would be permitted from mid-June through mid-October, though actual use would be limited to 45 days or shorter grazing period, if utilization limits are reached. With somewhat limited upland watering sources and steep terrain, livestock tend to concentrate in the valley bottoms and adjacent to streams. These locations could become sediment sources and experience increased coliform bacterial concentrations. Consequently, the timing and intensity of grazing proposed could have negative impacts to water quality, but would be less than expected under the No Action alternative.

Reduced Use Alternative

Direct and indirect livestock impacts are similar to the proposed action. However, this alternative accounts for the steepness of the terrain, and more accurately reflects the useable grazing acres. By reducing the AUMs and number of days for active grazing, this alternative provides the best protections to water quality and soil health. Grazing practices at this proposed level are not expected to create long term affects that would compromise water quality.

No Action Alternative

Direct and indirect livestock impacts are similar to the proposed action. However, this alternative does not allow for adaptive management and range readiness. Therefore, this alternative would have the greatest impacts to water quality.

No Grazing Alternative

Under this alternative, no livestock grazing would occur and there would be no direct or indirect impacts to water quality from livestock use. Trampling or removal of plant material may still occur from wildlife grazing, and soil disturbance and erosion may persist due to other surface disturbing activities, such as roads and trails that exists throughout the allotment, which could potentially affect water quality.

Land Health Standards for Water Resources

Based on the Roan Cliffs Land Health Assessment, BLM staff concluded that water quality is meeting Standard 5 (BLM 1999). Implementation of the proposed action is not anticipated to degrade water quality from current conditions.

Wetlands and Riparian Zones

Affected Environment

Table 3-6 below lists known riparian areas and their Proper Functioning Condition (PFC) assessment for the Old Mountain Allotment.

Table 3-6				
Old Mountain Allotment	1999	West Forked Gulch	0.4	Functional At Risk trending upward
		Forked Gulch	1.1	

The CRVFO ID team conducted a PFC assessment on both West Forked Gulch and Forked Gulch for the first time in 1999. These two reaches were not assessed in 1994 so there is no

comparison data. The ID team rating for these two stream reaches was functioning at risk with an upward trend citing the lack of adequate woody debris. The team did note that the bottom third of the West Forked Gulch reach was at PFC. Above the area rated at PFC, the stream was rated functional at risk with an upward trend. As with other intensely grazed riparian areas on the Roan Plateau, woody plant species are absent or barely present.

Environmental Effects

Proposed Action

The proposed action allows grazing on riparian areas within the Old Mountain Allotment by 175 head of cattle for 45-days at any time during the spring, summer and fall seasons. Seasonal livestock grazing impacts to riparian areas are different based upon forage selection, soil moisture, and livestock presence.

For example, seasonal grazing preference by livestock within this allotment focuses on both the upland and riparian vegetation when forage is most succulent, abundant and nutritious in the spring. Then as forage reaches maturity, becoming less palatable, cattle change their preference from the upland forage to the remaining succulent forage typically found in riparian areas. Then as the herbaceous riparian forage becomes mature and less palatable, livestock will begin supplementing their diet with palatable woody plant species for variety if it is available.

Hot season grazing is the use of riparian areas during critical summer growth periods when riparian plant species reach their maximum photosynthetic activity. This is the time when upland and cool-season plant growth is reduced due to decreasing soil moisture and available forage becomes rank and dry. This is when cattle grazing preference shifts to the remaining succulent vegetation typically found in riparian areas and begin to physically stress these more palatable species. Cattle will also seek out the cooler areas and shade typically found in riparian bottoms during warm weather. Stream bank alteration will decrease during the summer as the soils dry. However, cattle grazing can lead to increased streambank alteration and a decrease of desirable plant species because this is the critical time that riparian plant species need to amass carbohydrates in their roots to endure dormancy and drought conditions.

Fall riparian cattle grazing is less damaging to non-woody vegetation that has had ample time to replenish root carbohydrate reserves and set seed, provided there was no spring or summer grazing. (This is not true for woody plant species recovering from overuse.) With cooler temperatures, cool season plant forage species may begin growing again and grazing cattle may shift their preference to upland species leading to reduced pressure on riparian vegetation. However, without the need to move out of the riparian bottoms, cattle will tend to remain and continue to graze on the available forage which at this time includes woody plant species.

Stream bank alteration levels are influenced by soil moisture content, soil type, absence of woody plants and their massive root systems, bank rock content, stock density, availability of offstream water, and duration of grazing. Seasonal grazing can create physical impacts to riparian areas expressed as stream bank alteration and soil compaction which is greatest when riparian soils are moist to water logged. During the summer/fall, these soils tend to become drier and less susceptible.

Reduced Use Alternative

The reduced use alternative is much the same as the proposed action but with fewer cows (150) for a shorter annual use (33-days) on the allotment. Riparian impacts are expected to be less than the proposed action because the livestock numbers are reduced by 25 head and the annual use would also be less. This reduces the grazing pressure and presence on riparian bottoms. Moreover, with a 33-day use period that can be scheduled at any time between June 15th and October 15th, there is more flexibility for the operator to change up scheduled grazing so that it occurs at different times each year and can be used to provide rest to riparian plant species while fitting this into their overall livestock operation.

No Action Alternative

This alternative has the least amount of flexibility because of a narrow 45-day window of use for 175 head of cattle. Unlike the proposed action, livestock would graze continuously between July 15 and August 30 every year with little to no flexibility to give the riparian plant species rest from grazing during this important physiological time for riparian plant species. Riparian impacts from grazing cattle would be greater under this alternative than either the Proposed or the Reduced Use alternatives.

No Grazing Alternative

Without cattle grazing on the Old Mountain Allotment, the potential to achieve an improved PFC rating would be more certain. All riparian plant species would be allowed year-long rest from grazing cattle allowing riparian plant species the time to obtain nutrients and set seed, replenishing the seed bank. Woody plant seedlings would not be impacted by grazing cattle and streambank alteration would be limited to impacts caused by wildlife.

Land Health Standards for Riparian Systems: Standard #2 for healthy riparian zones was being met on all but one site in 1999. However, grazing distribution continues to be a concern. The streambanks in the Roan Cliffs Landscape require vegetative cover to protect the streambanks from erosion and to trap sediment and debris. So, proper grazing management that retains adequate herbaceous stubble height and limits utilization of woody riparian species is critical. Also, the uplands immediately adjacent to some riparian zones are dominated by Kentucky bluegrass, houndstongue and other weedy species. Range developments and grazing management practices designed to draw livestock out of the riparian areas should be encouraged. It is anticipated that the area will continue to meet land health standard #2 with the improved grazing practices described in the proposed and reduced use alternatives.

Wild and Scenic Rivers

Affected Environment

The river corridor, including the .25 mile parameter, of East Fork Parachute Creek falls slightly within the northeast portion of Old Mountain allotment. It has outstandingly remarkable values of fish, botanical/ecological, and scenic. The segment from East Fork of Parachute Creek Falls west into the box canyon contains scenic outstandingly remarkable values due to the striking visual contrast and diversity in the narrow box canyon in line, form, and color. East Fork Parachute Creek is regionally and nationally important as a producer of native, genetically pure, and naturally reproducing Colorado River cutthroat trout, as well as provides an adequate diversity of quality habitats necessary to support and sustain this fish species. In addition, East

Fork Parachute Creek contains several indigenous plant communities, which are considered rare or imperiled within Colorado and rare to relatively common nationally, as well as contains hanging garden environments, which support the narrowly endemic Hanging garden sullivaniana.

Environmental Effects

Proposed Action

The proposed action is unlikely to affect the fisheries or scenic ORVs. The ROD for the Designation of ACECs for the Roan Plateau RMP Amendment and EIS establishes objectives for management of the relevant and important botanical and ecological values within the East Fork Parachute Creek ACEC that give indirect benefits to the Wild and Scenic River ORVs. The objectives include protecting populations of rare plants and significant plant communities from direct and indirect impacts and managing significant plant communities to retain mid-to-late seral stage conditions. The ROD also prescribes protective measures to preserve the botanical values of the ACEC that give indirect protections to the botanical/ecological ORV. The overall objectives are to preclude any surface-disturbing actions or high levels of activity that might impair the identified values and to promote plant health, maintain sufficient residual vegetation, and sustain overall watershed functions.

Management Actions affecting livestock grazing in the ACEC include:

1. Apply NGD/NSO within occupied habitat for rare plants.
2. Manage livestock grazing within 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.
3. Manage significant riparian communities to retain mid-to late-seral stage condition.

Livestock grazing would have no direct effects on the ORVs. Livestock would not graze within the Boxelder-Narrowleaf cottonwood/Red-osier dogwood community as it occurs outside of the boundary of the allotment. Direct grazing impacts to the Roan Cliffs blazing star and the hanging garden sullivaniana are also not anticipated as the blazing star occurs on steep, nearly barren talus slopes which are generally inaccessible and receive little livestock use and the sullivaniana is located within seeps along the cliffs which are inaccessible to livestock. Indirect impacts may include the expansion of noxious weeds from grazing activities into the botanic ORVs. Proper grazing management should maintain native plant health and diversity which would minimize the risk of noxious weed invasion and expansion into the ORVs.

Reduced Use Alternative

The Reduced Use Alternative will not affect the fisheries or scenic ORVs. See the ACEC and plant sections for impacts to the botanical ORV.

No Action Alternative

The No Action Alternative will not affect the fisheries or scenic ORVs. See the ACEC and plant sections for impacts to the botanical ORV.

No Grazing Alternative

The No Grazing Alternative will not affect any of the ORVs.

Wilderness/WSAs/Wilderness Characteristics

Affected Environment

The East Fork Unit was inventoried for wilderness characteristics in March 2000 through the Roadless Review and Wilderness Character Inventory Findings for the Roan Plateau. This unit was found to contain 14,342 acres of federal land. The roadless review team determined that 12,403 acres are roadless and that the unit met the roadless criteria of 5,000 contiguous acres of public lands. Within the roadless area, 8,330 acres were found to have wilderness character. The steep topography and vegetative cover in the East Fork of Parachute Creek drainage offers outstanding opportunities for solitude and primitive and unconfined recreation in the mid to lower portions of the canyon. A total of 4,073 acres lack wilderness character as numerous roads and range developments are visible from many points and are substantially noticeable. Most of Old Mountain allotment falls within the acres noted not to have wilderness character, but a very small portion on the northeast corner of the allotment are shown to have wilderness character.

Environmental Effects

Proposed Action

The period of use would remain at 45 days and the AUMs authorized would not change, although the timing of use would be flexible. Therefore, there should be no negative or beneficial impacts to the naturalness of the area from when it was inventoried in 2000 under the current 45 day length of use. This amount of use will not impact the other wilderness characteristics criteria of roadless, and outstanding opportunities for solitude or primitive, unconfined recreation. The stipulation of “Administrative access on routes identified as “Foot/Horse Trail” will be allowed from June 1 to August 25 and should only be utilized for the maintenance of assigned range improvement projects” will assist with protecting those outstanding opportunities for primitive, unconfined recreation.

Reduced Use Alternative

The Reduced Use Alternative would be the same as the Proposed Action.

No Action Alternative

The No Action alternative would be similar to the Proposed Action, except that the stipulation of Administrative Access would not be attached, and recreationalists seeing motorized use may negatively affect their opportunities for primitive, unconfined recreation.

No Grazing Alternative

The No Grazing Alternative would possibly have very little impact to the acres found to have wilderness characteristics within the Old Mountain allotment. However, the small amount of land with wilderness characteristics contained within this allotment could see enhancement in naturalness, and opportunities for solitude and/or primitive and unconfined recreation if that area does not have to compete with livestock grazing use.

Wildlife: Aquatic / Fisheries

Affected Environment

The Old Mountain allotment contains one perennial stream, Forked Gulch. This stream is small and limited by flow and does not contain fish. It does contain macroinvertebrates and is tributary to East Fork Parachute Creek. Portions of the northern allotment boundary are within a 0.25

miles of East Fork Parachute Creek below the East Fork Falls. Fish in this portion of East Fork Parachute Creek include brook trout and brown trout. Abundant macroinvertebrates are also present.

Environmental Effects

Proposed Action

The proposed action calls for 175 cows from 06/15 to 10/15 with use not to exceed 45 days within the larger grazing window. This allows for 270 AUM's. Given this stocking rate and season of use, Forked Gulch is expected to show moderate to heavy use within the riparian area. In addition, the stream is overly wide and lacks shading cover. Sediment input is increasing which impacts the macroinvertebrate community and reduces stream productivity. The lack of streamside cover and shallow, widened stream conditions are likely resulting in increased water temperatures. This warmer water is entering East Fork Parachute Creek and is likely impacting resident brown and brook trout. The effects would continue under the proposed action.

Reduced Use Alternative

The Reduced Use Alternative calls for 150 cows from 06/15 to 10/15 with use not to exceed 33 days within the larger grazing window. This would result in an effective reduction to 164 AUM's from 270. This reduced use should provide for better opportunities for some rest and recovery of Forked Gulch and riparian and stream habitats. This would be substantiated by monitoring to determine if riparian and stream habitat conditions begin to move in an upward trend over time. This should result in reduced sediment inputs, increased streamside cover, narrowing and deepening of the stream, and improved aquatic bug and stream productivity. This would help to reduce stream temperatures and provide cooler tributary water to East Fork Parachute Creek where brook and brown trout reside.

No Action Alternative

Under the No Action Alternative, grazing calls for 175 cows from 07/15 to 08/30 each year. This is essentially the same length of use and AUMs as the proposed action. This action does not contain AMP and adaptive management elements that are designed to reduce riparian/in-stream impacts. Impacts under this alternative would be similar to the proposed action, but slightly less protective.

No Grazing Alternative

Under the No Grazing Alternative, the permit would not be renewed. No livestock grazing would be authorized on the Old Mountain Allotment. This would result in faster improvement of riparian and stream habitats on the allotment. No impacts from livestock grazing would result to macroinvertebrates or downstream fish resources.

Land Health Standard 3 for Wildlife

Aquatic Species: Sensitive, Threatened, and Endangered

Affected Environment

The Old Mountain allotment contains one perennial stream, Forked Gulch. This stream is small and limited in flow and does not contain fish. It does contain macroinvertebrates and is tributary to East Fork Parachute Creek. Based on sampling efforts by Colorado Parks and Wildlife in

2007, it does not appear that any cutthroat trout reside below the waterfall in East Fork Parachute Creek. A few remnant fish may reside above the falls, but until such time as reclamation efforts are completed, East Fork Parachute Creek is currently a brook trout fishery above the falls and a brook trout and brown trout fishery below the falls. No streams within the influence zone of this grazing allotment contain any special status aquatic species.

Environmental Effects

Proposed Action

Given the lack of special status aquatic species in the area of influence associated with grazing of the Old Mountain Allotment, there would be no effects to special status aquatic species or their habitats resulting from continued grazing as proposed.

Reduced Use Alternative

Environmental effect would be the same as the Proposed Action.

No Action Alternative

Environmental effect would be the same as the Proposed Action.

No Grazing Alternative

Environmental effect would be the same as the Proposed Action.

Land Health Standard 4 for Threatened, Endangered and Sensitive Aquatic Wildlife Species

Wildlife: Migratory Birds

Affected Environment

The Migratory Bird Treaty Act (MBTA) provides protections to native birds, with the exception of certain upland fowl managed by state wildlife agencies for hunting. Within the context of the MBTA, “migratory” birds include non-migratory “resident” species as well as true migrants. For most migrant and resident species, breeding habitat is of special importance because it is critical for supporting reproduction in terms of both nest sites and food. In addition, because birds are generally territorial during the nesting season, their ability to access and utilize sufficient food is limited by the quality of the territory occupied. During non-breeding seasons, birds are generally non-territorial and able to feed across larger areas and wider ranges of habitat.

A variety of migratory bird species occupy, or have the potential to occupy, the geographic area. Migratory bird species that are federally listed under the Endangered Species Act of 1973, as amended, or classified by the BLM as sensitive species, are addressed under the section on Special Status Wildlife and Fish Species. The current section addresses migratory birds that may inhabit the proposed project area. Emphasizing the need to conserve declining species, the U.S. Fish and Wildlife Service (USFWS) has published a list of Birds of Conservation Concern (BCC) that warrant conservation attention to stabilize or increase populations or secure threatened habitats. This section also addresses species that are listed as BCC species (USFWS 2008). This analysis focuses on BCC species, on non-BCC species that are neotropical (long-distance) migrants, and raptors—three groups highly vulnerable to habitat loss or modification on their breeding grounds.

Species on the BCC list that are potentially present based on habitat preferences and known geographic ranges, include the flammulated owl (*Otus flammeolus*), Lewis's woodpecker (*Melanerpes lewis*), pinyon jay (*Gymnorhinus cyanocephalus*), Brewer's sparrow (*Spizella breweri*), and Cassin's finch (*Carpodacus cassinii*). The flammulated owl and Brewer's sparrow are also listed as BLM sensitive species and addressed in the section on Special Status Wildlife. The potential for occurrence of Lewis's woodpecker is low due to its close association with riparian cottonwood woodlands and to pinyon-juniper habitats with a component of ponderosa pine—neither of which is a major habitat type within the project vicinity.

Cassin's finch nests at higher elevations in montane and subalpine coniferous forests but often disperses to lower elevations following the breeding season and may remain there until the following spring. Mixed mountain shrub habitats containing large, tree-like oak brush are among the vegetation types sometimes supporting winter use by Cassin's finch.

Brewer's sparrow prefer open contiguous big sage and to a lesser extent mountain shrub or salt brush communities for nesting. These sparrows use the plant or its understory for a nesting site (Kingery 1998). Nest failure will not usually necessitate re-nesting for this species, which makes habitat availability a key component for the successful conservation of this species.

Non-BCC species likely to occur in the geographic area of the allotment include several neotropical migrants associated with mixed mountain shrub habitats. These include the common nighthawk (*Chordeiles minor*)(not a raptor), common poorwill (*Phalaenoptilus nuttallii*), broad-tailed hummingbird (*Selasphorus platycercus*), dusky flycatcher (*Empidonax oberholseri*), western scrub-jay (*Aphelocoma californica*), Virginia's warbler (*Oreothlypis virginiae*), orange-crowned warbler (*O. celata*), MacGillivray's warbler (*Oporornis tolmiei*), lazuli bunting (*Passerina amoena*), lesser goldfinch (*Spinus psaltria*), black-headed grosbeak (*Pheucticus melanocephalus*), and spotted towhee (*Pipilo maculata*).

Neotropical migrants such as the black-chinned hummingbird (*Archilochus alexandri*), mountain bluebird (*Sialis currucoides*), western bluebird (*S. mexicana*), plumbeous vireo (*V. plumbeus*), black-throated gray warbler (*Dendroica nigrescens*), and chipping sparrow (*Spizella passerina*). Two other Neotropical migrants, the ash-throated flycatcher (*Myiarchus cinerascens*) and gray flycatcher (*Empidonax wrightii*) are potentially present.

Raptors use the area for nesting and hunting. Species most likely to occur within or near the Old Mountain Allotment include the American kestrel (*Falco sparverius*), sharp-shinned hawk (*Accipiter striata*), Cooper's hawk (*A. cooperi*), red-tailed hawk (*Buteo jamaicensis*), great horned owl (*Bubo virginiana*), long-eared owl (*Asio otus*), and northern pygmy-owl (*Glaucidium gnoma*).

Environmental Effects

Proposed Action

The proposed action is requesting current numbers of cattle at an extended timeframe under a 45 day duration. This timeframe could include a one month overlap with the migratory bird primary nesting season which could have potential direct and indirect impacts. Concentrated cattle use could lead to localized nest abandonment prior to fledging timeframes that could cause decrease

nesting success for some species but would unlikely have population impacts under this alternative and would be minimized through use of the AMP conservation standards. The ground nesting of the Virginia's warbler and Green-tailed towhee will not be inadvertently affected due to the nest being located in dense vegetation usually beneath shrubs or dense undergrowth. Although the Brewer's sparrow's nesting period overlaps the proposed livestock grazing periods, placement of their nests off the ground and well within a sagebrush plant would protect them from being trampled by livestock. Ground nesting neotropical migrants are generally small in size and do not require large amounts of herbaceous cover that may be perceived as an indirect competition for nesting material.

Reduced Use Alternative

The reduced use alternative calls for 150 cattle for a timeframe of 33 days or less from 6/15-10/15. This decreases the overall pressure on migratory birds and minimizes the impacts in comparison to other grazing alternatives. This timeframe could include a one month overlap with the migratory bird primary nesting season which could have potential direct and indirect impacts. Concentrated cattle use could lead to localized nest abandonment prior to fledging timeframes that could cause decreased nesting success for some species but would unlikely have population impacts under this alternative given AMP conservation standards. The ground nesting of the Virginia's warbler and Green-tailed towhee will not be inadvertently affected due to the nest being located in dense vegetation usually beneath shrubs or dense undergrowth. Although the Brewer's sparrow's nesting period overlaps the proposed livestock grazing periods, placement of their nests off the ground and well within a sagebrush plant would protect them from being trampled by livestock. Ground nesting neotropical migrants are generally small in size and do not require large amounts of herbaceous cover that may be perceived as an indirect effect for competition for nesting material. Warblers and flycatcher habitat could be compromised if these cows are allowed to remain within riparian areas and even at lower numbers could impact shrub and willow nesting habitats. Impacts would be likely minimal under this alternative and some species such as the Cassin's finch and Chipping sparrow would benefit from managed grazing.

No Action Alternative

This action is not expected to have any direct effects on migratory birds as it is outside of the primary nesting season of May 15 –July 15. This action could potentially have large indirect impacts to residual habitat available the following year for migratory birds if cattle are grazed at a high intensity during the growing season. Warblers and flycatcher habitat could be compromised if these cows are allowed to remain within riparian habitat at full numbers/duration as shrub and willow would likely be damaged in this scenario. Concentrated cattle use could also lead to localized nest abandonment prior to fledging timeframes that could cause decreased nesting success for some species.

No Grazing Alternative

Under this alternative no livestock grazing would occur. This would benefit the primary nesting season for most migratory bird species. The few species expected in the allotment area that are

more adapted grazed vegetation use would likely not be impacted by this alternative as many of the adjacent lands would provide suitable nesting and foraging conditions.

Terrestrial Wildlife: Sensitive, Threatened, and Endangered

Affected Environment

Greater Sage-Grouse (*Centocercus urophasianus*):

A candidate for Federal listing. Sage-grouse are found only in areas where sagebrush is abundant. Sage-grouse prefer relatively open sagebrush flats or rolling sagebrush hills. In winter, sagebrush accounts for 100% of the diet for these birds. In addition, it provides important escape cover and protection from the elements. In late winter, males begin to concentrate on traditional strutting grounds or leks. Females arrive at the leks 1-2 weeks later. Leks can occur on a variety of land types or formations (windswept ridges, knolls, areas of flat sagebrush, flat bare openings in the sagebrush. Breeding occurs on the leks and in the adjacent sagebrush, typically from March through May. Females and their chicks remain largely dependent on forbs and insects for food well into early fall.. The potentially affected Sage-grouse habitat incorporated in the Old Mountain allotment area is part of the Parachute-Piceance-Roan (PPR) population which is part of a smaller sub-population (<200 birds) that is on the most southerly range of Greater Sage-grouse habitat.

The Old Mountain allotment is generally included within Greater Sage-grouse overall habitat. This habitat is identified from models that consider nearby occupied habitat, historic habitat and potential habitat. Colorado Parks and Wildlife show no telemetry data of birds occupying the Old Mountain area from 2002-2006. An updated habitat map has been developed by Colorado Parks and Wildlife based on telemetry data and high resolution habitat selection models. These high resolution mapping models are used to help guide habitat management activities for Sage-grouse within the PPR population and have buffered suitable habitat outside of tracked birds. (CPW website). This allotment is outside of the defined “breeding habitat” as outlined in the Colorado Greater Sage-Grouse Conservation Plan (2008).

Environmental Effects

Proposed Action

Although acreage of suitable habitat has not been quantified within the Old Mountain allotment boundary, it is of such a small contribution (estimated to < 2 acres of summer-fall habitat) to the overall use and habitat availability that this proposed grazing alternatives would have little to no impact to grouse habitat.

Reduced Use Alternative

Although acreage of suitable habitat has not been quantified within the Old Mountain allotment boundary, it is of such a small contribution (estimated to < 2 acres of summer-fall habitat) to the overall use and habitat availability that this proposed grazing alternative would have little to no impact to grouse or their habitat. This alternative would have the least of amount of potential impact to grouse habitat of all grazing alternatives.

No Action Alternative

This action is similar to the proposed action within a shorter time-frame. Although acreage of suitable habitat has not been quantified within the Old Mountain allotment boundary, it is of such

a small contribution (estimated to < 2 acres of summer-fall habitat) to the overall use and habitat availability that this proposed grazing alternative would have little to no impacts to grouse or their habitat.

No Grazing Alternative

No direct or indirect effects to grouse or their habitat are anticipated under this alternative.

Mitigation

Section IV under the existing AMP would be adequate to benefit grouse for a selected grazing action.

Land Health Standards

The 1999 Land Health determinations did not address Standard 4 for Threatened and Endangered Species as sage grouse were not believed to be present at the time of assessment and no data exists for the allotment area relative to this species. This discussion would defer to standard 3 since only a small amount of habitat would be available for this species and the habitat would be tied closely to this standard. Although acreage of suitable habitat has not been quantified within the Old Mountain allotment boundary, it is of such a small contribution (estimated to < 2 acres of summer-fall habitat) to the overall use and habitat availability that the proposed grazing alternatives would have little to no impacts to grouse or their habitat and is not expected to impact Land Health Standard 4 for this species or its habitat for the Old Mountain allotment.

Wildlife: Terrestrial

Affected Environment

The allotment supports terrestrial wildlife species that summer, winter, or migrate through the region. The current condition of wildlife habitats varies across the landscape. Regionally, some habitat is altered by power lines, pipelines, fences, public recreation use, residential and commercial development, vegetative treatments, livestock, oil and gas development, and roads/trails. These factors have contributed to degradation/fragmentation of habitat and caused disturbance to some species. Conditions on this allotment are considerably less developed, with only limited range improvements, recreation, and livestock grazing as anthropogenic influences on wildlife habitat.

Big Game

The CRVFO's RMP allocated existing forage proportionately to livestock and big game, the criterion being active preference for livestock and 5-year average demand for big game. The mule deer (*Odocoileus hemionus*) is a recreationally important species that is common throughout suitable habitats in the region. Another recreationally important big game ungulate (hoofed animal), the Rocky Mountain elk (*Cervus elaphus nelsonii*), is also present. Mule deer and elk usually occupy higher elevation, forested habitat during the summer and then migrate to sagebrush-dominant ridges and south-facing slopes at lower elevation in the winter. BLM lands provide a large portion of the undeveloped winter range available to deer and elk. Elk prefer higher elevation sagebrush communities to calf. Allotments on the Roan Plateau are generally associated with summer use by big game. Elk are currently estimated to be exceeding herd objectives set by Colorado Parks and Wildlife.

Numerous small mammals may reside within allotment or the surrounding area including ground squirrels (*Spermophilus spp.*), chipmunks (*Neotamias spp.*), rabbits (*Sylvilagus spp.*), skunks (*Mephitis mephitis*), and raccoons (*Procyon lotor*). Many of these small mammals provide the main prey for raptors and larger carnivores. These species are most likely to occur along the drainages, near the margins of dense oakbrush, in pinyon-juniper woodland, or in the small area of aspen and spruce/fir. Larger carnivores expected to occur include the bobcat (*Lynx rufus*) and the coyote (*Canis latrans*). Black bears (*Ursus americanus*) make use of oaks and the associated chokecherries and serviceberries for cover and food, while mountain lions (*Felis concolor*) are likely to occur during seasons when mule deer (*Odocoileus hemionus*) are present.

Resident Raptors and Other Birds

Although no known raptors are known to nest in the Old Mountain allotment, foraging and perching opportunities exist along riparian and ridge top corridors. Birds of prey (eagles, falcons, hawks, and owls) may migrate through the area or nest in cottonwoods, conifers, or very tall oaks, while the numerous songbirds and small mammal populations provide the primary prey base. Common raptor species in the CRVFO include the red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chrysaetos*) American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), Cooper's hawk (*Accipiter cooperii*), and sharp-shinned hawk (*A. striatus*).

Passerine (perching) birds commonly found in the area include the: American robin (*Turdus migratorius*), pinyon jay (*Gymnorhinus cyanocephalus*) western scrub-jay (*Aphelocoma californica*), and black-billed magpie (*Pica pica*). Two gallinaceous species, the wild turkey (*Meleagris gallopavo*) and the Dusky grouse (*Dendragapus obscurus*), are found throughout the CRVFO.

Reptiles and Amphibians. Reptile species possible in the area include the western fence lizard (*Sceloporus undulatus*) and gopher snake (bullsnake) (*Pituophis catenifer*) in xeric shrublands or grassy clearings and the western terrestrial garter snake (*Thamnophis elegans*) along creeks/riparian areas. Other reptiles potentially present along creeks, although more commonly found at lower elevations than the site, are the milk snake (*Lampropeltis triangulum*) and smooth green snake (*Opheodrys vernalis*). The allotment does not contain any fish-bearing streams however springs and stock ponds could provide habitat for species such as the Tiger Salamander (*Ambystoma tigrinum*), Great Basin Spadefoot Toad (*Spea intermontana*) or the Western Toad (*Bufo boreas*).

Environmental Effects

Proposed Action

Livestock grazing can alter vegetation structure, composition, and function. On the other hand, livestock grazing can have a beneficial effect on forage quality by removing the rough or dried seedheads and stems, while leaving or creating the more palatable leaves for deer or elk to graze later in the season. Effects on terrestrial wildlife are dependent on the species of interest and may be adverse or beneficial depending on grazing: numbers, timing, frequency, and intensity. Riparian areas and species that inhabit riparian areas (e.g., nesting migratory birds) are especially vulnerable to disturbance because riparian areas are very limited and often fragmented. Year-long and summer grazing can be particularly damaging to riparian vegetation (Kauffman and Krueger 1984) whereas late fall and winter grazing occurs when: water levels are low, stream

banks are dry, and vegetation is dormant, thus minimizing the effects of grazing (e.g., trampling, soil compaction, erosion, and browsing).

The proposed action has the same AUM numbers as the No Action alternative over a wider time frame to maximize operational flexibility. Based on current time frames this may allow the permittee to adjust the 45 day window to a time-frame more suitable for range conditions. Given that the current GMU 32 elk numbers are exceeding herd objectives and that this area is thought to experience high summer use by big game, sensitive riparian habitats may be negatively affected by this action.

Elk numbers in GMU 32 are currently exceeding CPW herd objectives by 2,760 animals (2009 population estimates). Management of big game numbers is the responsibility of the state and cannot be directly manipulated by the BLM. Due to the fact that 1,149 out of the 1,309 acres (approx. 88%) of the Old Mountain allotment are considered calving grounds, it is anticipated that that forage competition would be a factor on range health conditions, primarily in grass production where livestock grazing and elk grazing overlap the most. Cow elk will be heavily dependent on spring grasses for milk production and post-partum/winter nutritional deficits.

Reduced Use Alternative

This alternative requests fewer cattle (150 head) under the proposed time frame of 6/15 – 10/15 with up to 33 days of use. This action would be similar to the proposed action with the exception of less cattle use of forage and thus less competition with big game. This alternative is the most compatible for maintaining or improving Land Health Standard 3 for terrestrial wildlife.

No Action Alternative

This alternative would be similar to the proposed action but under a much shorter grazing window. While this alternative may allow more time for rest of grasses and provide more herbaceous cover for wildlife, it may also account for more localized damage by cattle in that shorter time period during the growing season of sensitive areas such as riparian habitats. This is expected to have similar affects to wildlife as described in the proposed action discussion.

No Grazing Alternative

This alternative is expected to benefit terrestrial wildlife by allowing rest on herbaceous cover and forage species thus making a greater availability to wild fauna.

Mitigation:

Section IV under the AMP would need to be adhered to as big game numbers are currently exceeding herd objectives and may concentrate use in riparian habitats. BLM would continue to comment on CPW herd objective planning to reduce this impact. Wildlife use should be a factor when considering range readiness and assessing the capability of maintaining acceptable utilization.

Land Health Standards

Limiting factors were not identified for terrestrial wildlife species in the Old Mountain allotment under the 1999 Roan Cliffs assessment. . Grazing alternatives described in this document are not expected to negatively impact Land Health Standard 3. A Land Health Assessment will be conducted during the field season of 2013.

CUMULATIVE EFFECTS

Soil and Water. Cumulative impacts to soil and water resources can occur from existing roads and trails throughout the allotment. Roads and trails can contribute to increased surface runoff and accelerated erosion, especially where proper drainage is lacking. Other impacts such as vegetation treatments or weed treatments may also change water infiltration or runoff rates and affect soil and water resources. Based on limited land management activities occurring across the allotment, it is assumed that cumulative effects to soil and water are minor and unmeasurable if proper best management practices are implemented.

Wildlife (including Special Status Species). The area covered by the proposed action only comprises a small portion of the watershed. Many other land use activities (e.g., recreation, road construction/maintenance) occur within the allotment boundaries and the watershed. All of these activities have altered the amount of suitable and potentially suitable habitats for terrestrial wildlife species. Cumulatively, many of the future actions planned on private and other lands may have some undetermined effect on wildlife including special status species habitat. The proposed action would create negligible landscape-level cumulative impacts to wildlife when viewed in comparison with those activities currently occurring and reasonably certain to occur on adjacent private/other lands. High elk numbers compounded with increased forage demand during calving activities could make land health achievement more difficult with the proposed action.

RESIDUAL EFFECTS

None

5. Tribes, Individuals, Organizations, or Agencies Consulted

Erin Leifeld consulted with the Southern Ute Tribe, Ute Tribe of the Uinta and Ouray Bands, and Ute Mountain Ute Tribe regarding this proposal.

Grazing permittee
Rod Cogburn, Encana

6. List of Preparers

Members of the CRVFO Interdisciplinary Team who participated in the impact analysis of the Proposed Action and alternatives, development of appropriate mitigation measures, and preparation of this EA are listed in Table 6-1, along with their areas of responsibility.

Table 6-1. BLM Interdisciplinary Team Authors and Reviewers		
<i>Name</i>	<i>Title</i>	<i>Areas of Participation</i>
Isaac Pittman	Rangeland Management Specialist	NEPA lead, Range
Carla DeYoung	Ecologist	Areas of Critical Environmental Concern; Vegetation; T/E/S Plants; Land Health Standards

Table 6-1. BLM Interdisciplinary Team Authors and Reviewers		
Name	Title	Areas of Participation
Greg Wolfgang	Outdoor Recreation Planner	VRM, Travel Management
Kimberly Miller	Outdoor Recreation Planner	Wild and Scenic Rivers, Wilderness, Recreation
Erin Leifeld	Archaeologist	Cultural Resources and Native American Concerns
Darren Long	Wildlife Biologist	Migratory Birds, Terrestrial Wildlife and T/E/S Terrestrial Wildlife, Aquatic Wildlife and T/E/S Aquatic Wildlife
Everett Bartz	Rangeland Management Specialist	Wetlands & Riparian Zones
Pauline Adams	Hydrologist	Air Quality, Water Quality, Soils

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Appendix

**OLD MOUNTAIN
ALLOTMENT MANAGEMENT PLAN**

Colorado River Valley Field Office
Prepared By
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Rangeland Management Specialist

Concurrence of Permittees:

Jack and Renee Farris

Date

Approved By:

Matt Thorburn (Natural Resources Supervisor)

Date

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I. Introduction

The Old Mountain allotment, consisting of 1,309 acres, is located on the Roan Plateau south of the East Fork of Parachute Creek; Township 6 South Range 95 West, section 5-7 and Township 5 South Range 95 West, section 35. The allotment lies within Garfield county 10 miles northeast of Parachute, CO. The allotment ranges in elevation from 8,000 to 8,500 feet and averages 20 inches of precipitation a year. Common vegetation types include aspen, conifer, mountain shrub and sagebrush.

The 1990 evaluation summary of this allotment recommended preparing and implementing an Allotment Management Plan, constructing range improvement projects, increased efforts to eliminate trespass and improving the quality of monitoring data. In that evaluation it was noted that more emphasis be placed on monitoring of riparian zones. The main objectives of this plan are to maintain or improve the ecological health of the allotment, to improve the quantity and diversity of forage in the uplands and maintain or improve riparian habitats by improving livestock distribution and allowing adequate vegetation rest and regrowth periods.

II. Land Use Planning Guidance

Grazing and Rangeland Goal:

- Provide livestock forage while maintaining or enhancing healthy landscapes.

Vegetation, Weeds, and Riparian/Wetland:

- Develop and implement economically feasible grazing systems and range improvements.
- Defer grazing use for two growing seasons on disturbed areas larger than 0.5 acres (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.
- Avoid or mitigate activities that could cause a downward trend in the condition of riparian resources or functioning condition.
- Initiate activity plans that identify habitat improvement projects to achieve desired conditions.
- Implement grazing management on riparian/wetland areas that will result in achieving Proper Functioning Condition and late-seral stage plant community development and improve fisheries habitat.
- Require the use of weed free hay and feed for livestock.

Special Status Fish and Wildlife:

- Implement appropriate actions as soon as practicable, not later than the start of the next grazing year if livestock grazing management practices or utilization levels are found to be substantial factors in stream bank damage along any occupied cutthroat trout streams.

Cultural Resources:

- A qualified archeologist on site during construction/maintenance activities as determined by the Cultural Resource Specialist.

Grazing and Rangeland:

- Develop, implement, monitor, and review AMPs (Allotment Management Plans) on a regularly scheduled basis with grazing permittees with priority for allotments determined not to be meeting Colorado Standards for Public Land Health. Apply guidelines and BMPs (Best Management Practices) to rest and defer grazing of riparian areas.
- Ensure that Colorado Standards for Public Land Health are being met through land health surveys, and application of the GSFO Resource Monitoring Plan. Use a combination of administrative solutions (season of use revisions, livestock exclusion, and stocking level adjustments) and rangeland projects (fences, ponds, and so forth) to direct livestock use to meet resource objectives and Colorado Standards for Public Land Health...
- Abandon and rehabilitate rangeland projects that do not function to maintain resource values and meet management objectives.
- Identify criteria for determining the beginning and end of droughts.
- Initiate proactive management (i.e. season of use adjustments, reduced stocking levels, or complete rest) to mitigate the drought effects upon a determination by the Field Manager that a drought has begun.
- Initiate gradual restocking and season of use adjustments upon a determination by the Field Manger that a drought has ended.

Livestock Management BMPs:

- Require implementation of management tools such as fencing, stock ponds, and salt to manage livestock distribution as needed, and discourage grazing in unwanted areas such as riparian vegetation and sensitive wildlife habitat.
- Adjust livestock grazing in heavily used areas to allow native vegetation an adequate period of recovery to maintain plant health.
- Where an adequate seed bank does not exist, restore temporarily disturbed areas by seeding with native species and planting woody species. A weed-free straw or hay mulch may be applied and crimped in place or a biodegradable erosion-control fabric may be used to enhance germination and seedling establishment.
- Install fences around revegetated areas to exclude livestock for at least two full growing seasons.
- Construct fences and gates to ensure that livestock do not enter areas being protected for another resource that would be diminished by grazing or trampling.
- Construct alternative water sources to disperse livestock use and reduce dependence on natural streams and riparian corridors.

Appendix B (Grazing Management Guidelines for Riparian Areas):

- Grazing management practices maintain sufficient residual vegetation on both uplands and riparian sites to protect the soil from wind and water erosion, to assist in maintaining appropriate soil infiltration and permeability, and to buffer temperature extremes. In riparian areas, vegetation dissipates energy, captures sediment, recharges ground water, and contributes to stream stability.

- Control the timing of grazing to prevent damage to streambanks when they are most vulnerable to trampling.
- Recommended “Rule of Thumb” Guidelines:
 1. Avoid continuous season long grazing strategies
 2. Adopt grazing strategies that allow ample regrowth periods.
 3. Place salt and supplements at least 0.25 and preferably 0.5 mile from riparian areas
 4. Develop additional water sources
 5. Adopt frequent riding and/or herding
 6. Avoid using streams as fenced pasture boundaries
 7. Consider exclusion fencing where practical or riparian pasture fencing
 8. Adopt utilization and/or residual vegetation targets
 9. Apply guidelines that limit streambank shearing and trampling
 10. Conduct upland vegetation treatments to attract livestock away from riparian areas

Areas of Critical Environmental Concern:

- East Fork Parachute Creek ACEC (6,571 acres)
 - Trapper/Northwater Creek ACEC (4,810 acres)
- (See Appendix 3)

Specific management actions will be applied to protect the relevant and important values for which these Areas of Critical Environmental Concern were designated. The relevant and important values include: scenic qualities, fisheries and botanical/ecological resources.

Management Actions affecting livestock grazing in these ACECs are:

1. Manage livestock grazing within the ACECs so that streambank damage does not exceed 25 percent of the stream length. (see note in Plan Conformance Review section of EA No. DOI-BLM-CO-040-2013-0023)
2. 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.
3. Allow No Ground Disturbance (NGD/NSO) within high and moderate risk habitat areas for Colorado River cutthroat trout. Allow no loss or degradation of fish habitat that supports Colorado River cutthroat trout high risk habitat.
4. 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 CSU (Controlled Surface Use) would apply within 500 feet of the outer edge of the wetland or riparian area.

III. Specific Resource Objectives

Riparian Areas

1. Achieve Proper Functioning Condition (PFC) on all riparian areas by 2018.

2. Achieve or be moving toward late seral stage riparian communities at key areas by 2018. This objective will be achieved if all of the following conditions are met:
 - a. Carex (Nebraska sedge or beaked sedge) has increased by at least 5% (ex. from 5% to 10%).
 - b. Riparian zones have widened by at least 5% (ex. From 5ft to 5 ½ ft).
 - c. Evidence of woody riparian species recruitment where expected (e.g. willow)

Upland Areas

3. Maintain at least 25% canopy cover of key upland grasses at key areas.
 - a. The following have been identified as key upland grass species: needlegrass spp., wheatgrass spp., mountain brome, and elk sedge.
 - b. Maintain the relative abundance of each key upland grass species within the appropriate range for the ecological site.
4. Maintain at a minimum, the canopy cover of desirable, native forbs measured in baseline studies in 2005.
5. On upland terraces immediately adjacent to key riparian areas, increase native perennial grass species by at least 5% by 2018.

*Resource objectives will be monitored at key areas identified on the attached map. Key areas may be adjusted if it is determined these are no longer representative of grazing use or if they do not capture the information necessary to access objectives.

IV. Management Prescriptions Necessary to Meet Resource Objectives

1. Grazing management on the Old Mountain allotment will be in accordance with the Old Mountain Allotment Management Plan (AMP).
2. Adaptive management will be employed on this allotment. The period of use may not be extended beyond a 33 day period but may be used anytime within the dates on the permit. The permittee may use the allotment when the range is ready but not earlier than the beginning dates described in the permit. The range will be considered ready when there is a minimum of 4 inches of new growth on grasses. AUM usage may not exceed active preference.
3. Supplemental feed such as salting blocks should be placed at least ¼ mile from water developments and riparian areas and, where applicable, up to a ½ mile. This will encourage livestock distribution and give permittees more control over what areas are being used.
4. The following use levels are considered to be the maximum allowed use to sustain or improve resource conditions in the Old Mountain allotment. Once any of these levels have been reached livestock will be moved to another portion of the allotment, moved to the next scheduled pasture, or removed immediately from the allotment.

Riparian Key Areas:			
Maximum allowable utilization levels on key riparian forage species*	Maximum allowable streambank alternation	Maximum allowable browse of current year's growth on key woody species	Minimum greenline stubble height
40%	25%	40%	4-inches
Upland Key Areas:			
Maximum allowable utilization levels on key upland forage species*	Minimum stubble height on uplands and terraces adjacent to riparian areas		
40%	4-6 inches		

*Key riparian forage species include tufted hair-grass, redtop, all riparian sedge and rush species, and willow. Key upland species are listed above under Resource Objectives.

5. The period of use within specific areas should be altered annually to provide rest from grazing pressure during different times of the year. This will allow for recovery of root reserves and seed dissemination and seedling establishment. Pasture rotations will be coordinated with the BLM prior to the grazing season.
6. Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits. Maintenance shall be completed prior to turnout. Maintenance activities shall be restricted to the footprint (previously disturbed area) of the project as it existed when it was initially constructed. The Bureau of Land Management shall be given 48 hours advance notice of any maintenance work that will involve heavy equipment. Disturbed areas will be reseeded with a certified weed-free seed mixture of native species adapted to the site. (See Map Appendix for Existing Range Improvements)
7. An actual use report shall be submitted annually to the BLM office no later than 15 days after livestock have been removed (i.e. the grazing end period on the permit).

V. Specifications of Flexibility

1. Preference will be consistent with past use. The following table shows what will be authorized under this AMP:

Livestock Kind and No.	Begin	End	AUMs
150	15-Jun	15-Oct	164

2. Flexibility will be allowed to the permittee as to number of livestock and season of use on the allotment. The permittee may increase the number of livestock and decrease the period of use if they wish. The period of use may not be extended

beyond a 33 day period but may be used anytime within the dates on the permit identified here. On-off dates may be adjusted based on range readiness and forage availability. The range will be considered ready when there is a minimum of 4 inches of new growth on grasses. The BLM authorized officer must be notified of any changes in numbers of livestock or dates prior to turn-out.

VI. Provisions of Monitoring

1. The following key sites will be monitored for both short term indicators and long term trend and are listed by study name and legal description. These locations are also identified on the attached map.

Riparian Site

Forked Gulch – T6S R95W Section 6 NWSE

Upland Site

Ridge East of Forked Gulch- T6S R95W Section 5 NWSW

2. Riparian monitoring:
 - a. Will be conducted using the Multiple Indicator Monitoring of Stream Channels and Streamside Vegetation (MIM), BLM TR 1737-23 and Monitoring the Vegetation Resources in Riparian Areas, General Technical Report RMRS-GTR-47.
 - b. Photos will be taken at the key areas around 6/1 and again around 10/15 to capture pre-use and vegetation recovery conditions.
 - c. Short-term monitoring of riparian areas and upland terraces will be conducted each year during the livestock use period. Monitoring will include stubble height and utilization by weight. Bank alteration along the streams will also be measured. Utilization monitoring may occur several times during the use period and will be used as a trigger to move livestock when necessary to achieve objectives. Photos will be repeated during each utilization monitoring. Utilization transects will be a minimum of 300 feet.
 - d. Long-term trend monitoring will occur at 5 year intervals to determine if objectives are being achieved. Monitoring will consist of greenline and riparian cross-section measurements.
 - e. Exclosures may be constructed in riparian areas to establish reference sites for riparian potential.
3. Upland monitoring:
 - a. Utilization monitoring will be completed once annually using the Key Species Method as described in the Glenwood Spring Monitoring Plan and will be conducted at the key upland area after livestock use has occurred and livestock have been moved to another area.
 - b. Trend monitoring will be conducted every 5 years using the Daubenmire method or other method from the Sampling Vegetation Attributes, Interagency TR 1730-02, at the key upland site and those terraces adjacent to key riparian sites.

4. The permittee is responsible for monitoring utilization levels and moving livestock when utilization levels have been reached.
5. Compliance Inspections will be conducted throughout the grazing period to determine if management and range improvement maintenance is adequate. Other studies may also be conducted according to the Glenwood Springs Resource Monitoring Plan if needed.
6. As indicated in the grazing regulations, active use will be reduced if utilization levels exceed the livestock carrying capacity and are causing a negative impact to watersheds, habitat, water quality, vegetative composition, or ecological processes. If monitoring determines that the resource objectives in this plan are not being achieved, the authorized officer may require 1 or more years of rest to make significant progress toward achieving the objectives in this plan

VII. Terms and Conditions (43 CFR 4130.3)

“Livestock grazing permits and leases shall contain terms and conditions determined by the authorized officer to be appropriate to achieve management and resource condition objectives for the public lands and other lands administered by the Bureau of Land Management, and to ensure conformance with land health standards.”

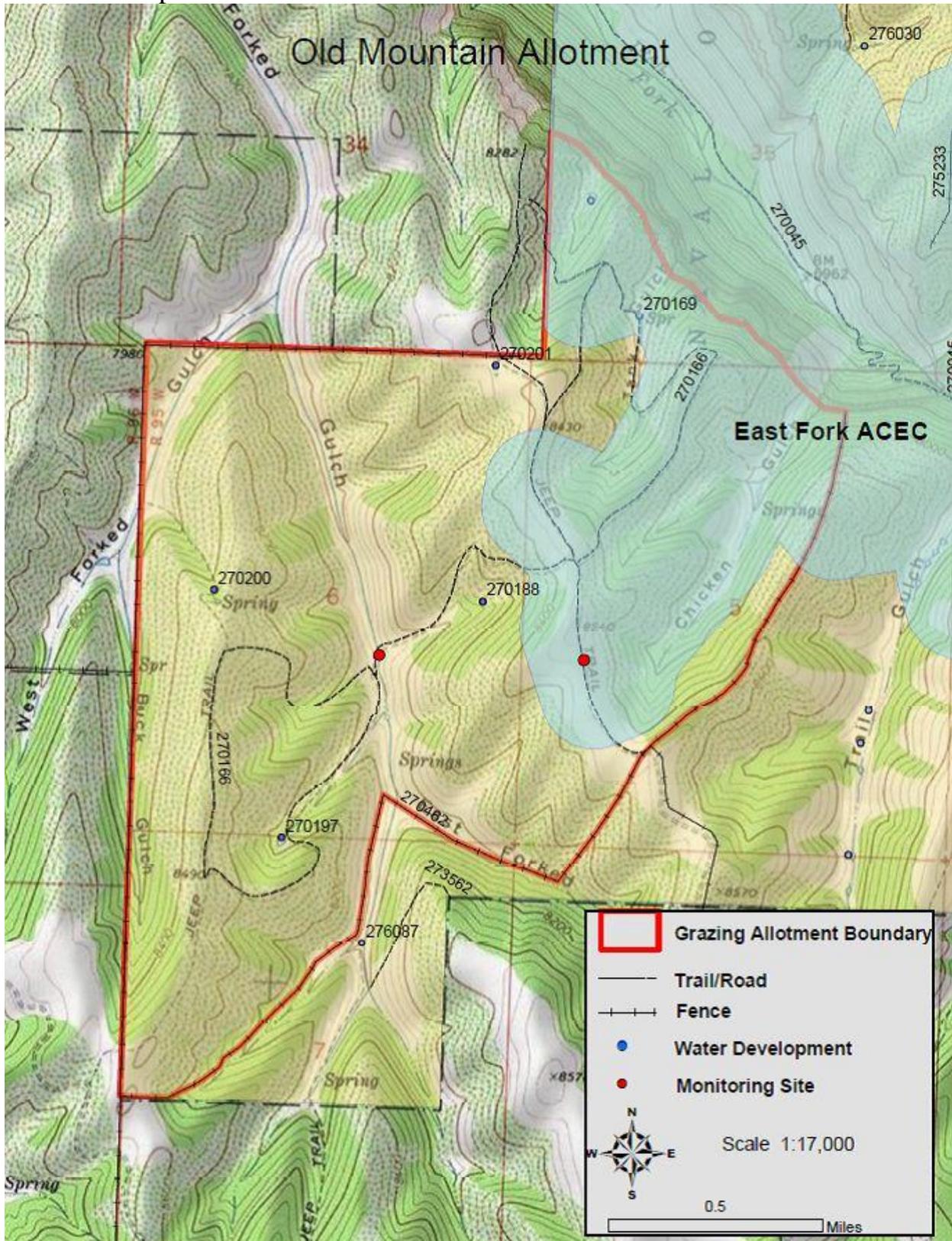
The terms and conditions of this plan are included as “Management Prescriptions Necessary to Meet Resource Objectives” and are not relisted here. These management prescriptions will be included as terms and conditions in the grazing permits.

Other terms and conditions listed here were not identified to achieve vegetation resource objectives but will also be included on the permits as part of other regulatory guidance.

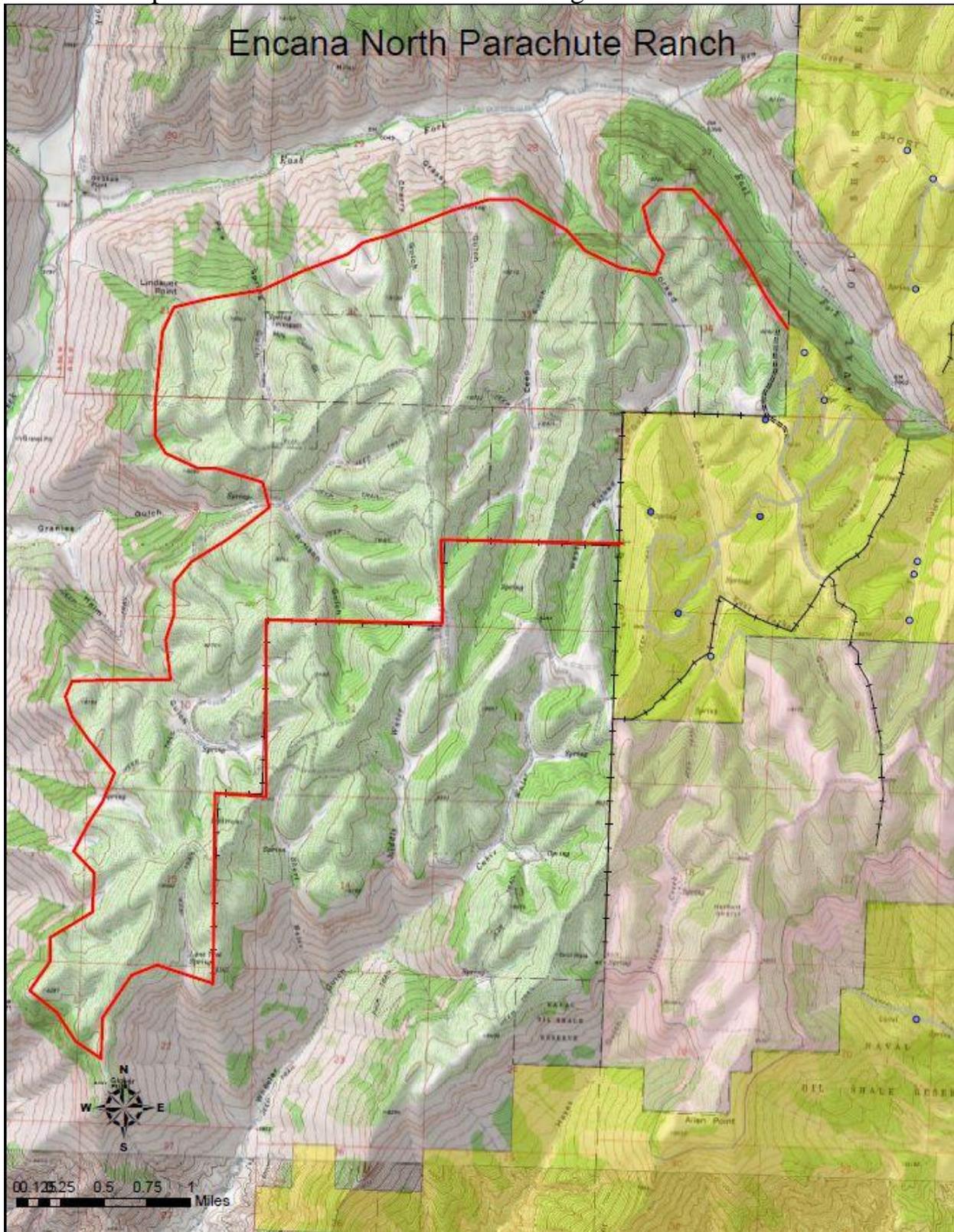
1. The permittee and all persons associated with grazing operations must be informed that any person who injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law. If in connection with allotment operations under this authorization any of the above resources are encountered, the proponent shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM authorized officer of the findings. The discovery must be protected until further notified in writing to proceed by the authorized officer.
2. Administrative access on routes identified as “Foot/Horse Trail” will be allowed from June 1 to August 25 and should only be utilized for the maintenance of assigned range improvement projects. Motorized administrative access on “Foot/Horse Trail” routes for grazing operation after August 25th will require the permit holder to seek and receive prior authorization from an authorized BLM officer.
3. New range improvements, maintenance of existing range improvements, or additional

feeding areas may require cultural resource inventories, monitoring, and/or data recovery.

1. Map of Old Mountain Allotment



2. Map of North Parachute Ranch Including Old Mountain Allotment



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COLORADO RIVER VALLEY FIELD OFFICE

FINDING OF NO SIGNIFICANT IMPACT

Grazing Permit Renewal on the Old Mountain Allotment

DOI-BLM-N040-2013-0023-EA

Finding of No Significant Impact

I have reviewed the direct, indirect and cumulative effects of the actions documented in the EA for the grazing permit issuance on the Old Mountain Allotment. The effects of the actions are disclosed in the Affected Environment and Environmental Effects section of the EA. Implementing regulations for NEPA (40 CFR 1508.27) provide criteria for determining the significance of the effects. Significant, as used in NEPA, requires consideration of both *context* and *intensity* as follows:

(a) Context. This requirement means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short and long-term effects are relevant (40 CFR 1508.27):

The disclosure of effects in the EA found the actions limited in context. The planning area is limited in size and activities limited in potential. Effects are local in nature and are not likely to significantly affect regional or national resources.

(b) Intensity. This requirement refers to the severity of the impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following are considered in evaluating intensity (40 CFR 1508.27).

1. Impacts that may be both beneficial and/or adverse.

Impacts associated with this livestock grazing permit issuance are identified and discussed in the Affected Environment and Environmental Effects section of the EA. The actions described in the EA would not have significant beneficial or adverse impacts on the resources identified and described in the EA.

2. The degree to which the action affects health or safety.

The action will not significantly affect public health or safety. The purpose of the action is to allow for multiple uses while maintaining or improving resource conditions to meet standards for

rangeland health in the allotment. Similar actions have not significantly affected public health or safety.

3. Unique characteristics of the geographic area such as prime and unique farmlands, caves, wild and scenic rivers, wilderness study areas, or ACECs.

The action partially occurs within the East Fork Parachute Creek ACEC. The ACEC is managed to preserve the existing character of the landscape for the East Fork Falls viewshed and to protect native plant communities and wildlife.

4. The degree to which the effects are likely to be highly controversial.

The possible effects of continued livestock grazing are not likely to be highly controversial.

5. The degree to which the effects are highly uncertain or involve unique or unknown risks.

The possible effects on the human environment are not highly uncertain nor do they involve unique or uncertain risks. The technical analyses conducted for the determination of the impacts to the resources are supportable with the use of accepted techniques, reliable data, and professional judgment. Therefore, I conclude that there are no highly uncertain, unique, or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration.

This EA is specific to the Old Mountain Allotment. It is not expected to set precedent for future actions with significant effects or represent a decision in principle about a future management consideration in or outside of this allotment.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The area covered by this action only comprises a small portion of the watershed. Cumulatively, many of the future actions planned on private and other lands may have some undetermined effect on wildlife including special status species habitat. The actions would create negligible landscape-level cumulative impacts to wildlife when viewed in conjunction with those activities currently occurring and reasonably certain to occur on adjacent private/other lands.

8. The degree to which the action may adversely affect scientific, cultural, or historical resources, including those listed in or eligible for listing in the National Register of Historic Places.

A total of five cultural resources have been located and documented within the Old Mountain allotment. One prehistoric isolated find (5GF.2397) and four prehistoric sites (5GF.83, 5GF.85, 5GF.871 and 5GF.1116). None of these sites are eligible for the National Register of Historic

Places (NRHP). If the BLM determines that grazing activities adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO.

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*

Although acreage of suitable habitat has not been quantified within the Old Mountain allotment boundary, it is of such a small contribution (estimated to < 2 acres of summer-fall habitat) to the overall use and habitat availability that these actions would have insignificant impacts to sage grouse habitat.

10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The action does not violate or threaten to violate any Federal, State or local laws or requirements imposed for the protection of the environment.

Based upon the review of the test for significance and the environmental analyses conducted, I have determined that the actions analyzed in the EA will not significantly affect the quality of the human environment. Accordingly, I have determined that the preparation of an Environmental Impact Statement is not necessary for this proposal.



Authorized Officer
Colorado River Valley Field Office

5-28-2013
Date