

ENVIRONMENTAL ASSESSMENT

DOI-BLM-CO-040-2015-0021 EA

Renew a grazing lease for the King Mountain (No. 08666) Allotment



Prepared by:

United States Department of the Interior
Bureau of Land Management
Colorado River Valley Field Office
2300 River Frontage Road
Silt, Colorado 81652



LOCATION.

King Mountain (No. 08666) Allotment is located north of McCoy, Co in Routt County (see Appendix A).

LEGAL DESCRIPTIONS.

King Mountain Allotment (No. 08666): Township 1 South (T1S), Range 85 West (R85W), Sections 1-3, 10-15, 23 and Township 1 South (T1S), Range 84 West (R84W), Sections 4-9, 16-18.

PURPOSE AND NEED FOR ACTION.

These permits/leases are 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 permits/leases consistent with the provisions of the Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act, Roan Plateau Resource Management Plan Amendment and the Colorado Public Land Health Standards.

The mission of the BLM is “to sustain the health, diversity and productivity of the public lands, for the use and enjoyment of present and future generations”. Land Health Standards and Guidelines for Livestock Grazing Management were developed between the BLM and the Colorado Resource Advisory Council to ensure that the mission of the BLM will be achieved.

This action is needed to determine whether or not to renew a grazing lease on the King Mountain Allotment (No. 08666) and if so, under what terms and conditions to ensure that Public Land Health Standards and objectives for resource management are or will continue to be achieved.

SCOPING AND PUBLIC INVOLVEMENT AND ISSUES.

The BLM National NEPA Register (https://eplanning.blm.gov/epl-front-office/eplanning/nepa/nepa_register.do) allows the public to review and comment BLM NEPA actions and projects. This project was initiated in November 2014 and no public comments were received.

PROPOSED ACTION.

The Proposed Action is to renew a grazing lease on the King Mountain Allotment (No. 08666) with the following terms and conditions. These are substantially the existing terms and conditions and no changes from previously authorized use are proposed. The lease will 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 lease are summarized below in Table 1 and Table 2.

Table 1. Proposed Grazing Schedules.

Operator Name	Auth. No.	Allotment & Number	Livestock Number	Livestock Kind	Begin Date	End Date	Public Land %	AUMs
Eberl Ranch, LLC	0507690	King Mountain (08666)	330	Cattle	06/10	10/10	11	147

Table 2. Proposed Permitted Use AUMS.

Operator Name	Auth. No.	Allotment & Number	Active AUMs	Suspended AUMs	Temporary Suspended AUMS	Permitted Use
Eberl Ranch, LLC	0507690	King Mountain (08666)	149	310	0	459

Other Terms and Conditions.

Rotational grazing use on the King Mountain Allotment shall be practiced and grazing use will not occur in any given area for more than one month.

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 bill or permit/lease).

Adaptive management will be employed on this allotment. The BLM will allow up to 14 days of flexibility in the start and end dates on this permit depending on range readiness. Livestock use different than that shown above must be applied for in advance.

Temporary travel restrictions within the King Mountain area pursuant to the federal register, vol. 58, No. 106, June 4, 1993, pages 31745- 31747 as amended:

In summary, the travel restriction limited motorized vehicle use to designated roads and trails year round. The grazing permittee/lessee and all persons associated with allotment operations shall comply with the travel restrictions except as provided by the following exemption in the travel restriction: Grazing permittees/lessees are exempt from the restriction during the permitted grazing season for grazing related purposes provided such use is limited to existing roads and trails and subject to any additional conditions in the grazing permit/lease. Any motorized use before or after the permitted grazing season necessary for maintenance and operation of range facilities shall require advance approval by the authorized officer specifically authorizing such use and subject to whatever restrictions are deemed necessary. The permittee/lessee and all persons associated with allotment operations shall comply with any

subsequent administrative access agreement developed by the BLM and the grazing permittee/lessee.

Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits/leases. 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.

The permittee/lessees 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.

Average utilization levels by livestock should not exceed 50% by weight on key grass species, and 40% of the key browse species current year's growth. Grazing in riparian areas should leave an average minimum 4-inch stubble height of herbaceous vegetation. If utilization is approaching allowable use levels, livestock should be moved to another portion of the allotment, or removed from the allotment entirely for the remainder of the growing season. Application of this term may be flexible to recognize livestock management that includes sufficient opportunity for regrowth, spring growth prior to grazing, or growing season deferment.

NO GRAZING ALTERNATIVE.

Under this alternative, the grazing lease described in the Proposed Action would be cancelled. As a result, no grazing would be authorized on the King Mountain Allotment (No. 08666). This alternative would initiate the process in accordance with 43 CFR parts 4100 and 1600 to eliminate grazing on these allotments and would amend the Resource Management Plan.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL.

The No Action alternative would involve renewing the grazing lease with current terms and conditions and is substantially the same as the Proposed Action and was not analyzed in further detail.

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. Colorado River Valley Field Office Record of Decision (ROD) and Approved Resource Management Plan (RMP) (BLM 2015).

Date Approved. June 2015.

Decision Number/Page.

- Decision Number GRZ-GOAL-01. Livestock Grazing Management page 68.
- Decision Number GRZ- OBJ-01. Livestock Grazing Management page 68.

Decision Language.

- **GRZ-GOAL-01.** Apply flexible and sustainable livestock grazing, in accordance with BLM Colorado Standards for Public Land Health and Guidelines for Livestock Grazing Management to contribute to local economies, ranching livelihoods, and the rural western character integral to many communities.
- **GRZ-OBJ-01.** Meet the forage demands of livestock operations based on active use, by providing approximately 441,600 acres for livestock grazing, and provide approximately 35,500 AUMs of livestock forage.

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, special status species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands.

A Formal Land Health Assessment was conducted in the King Mountain landscape in 2011 (BLM 2012) which included the King Mountain Allotment (No. 08666). The allotment was considered to be meeting all the standards 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.

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 no action alternative. In addition, the section presents comparative analyses of the direct and indirect consequences 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 1). Only those elements that are present and potentially affected are described and brought forth for detailed analysis.

Table 3. Programs, Resources, and Uses (Including Supplemental Authorities).

Programs, Resources, and Uses (Including Supplemental Authorities)	Potentially Affected?	
	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	

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#1015-17) was completed for the King M Allotment (No. 08666) on May 20, 2014 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.

Table 4. Cultural Resources Assessment Summary

Allotment Name and Number	Land Status	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	Potential of Historic Properties	Management Recommendations (Additional inventory required and historic properties to be visited)
King Mtn. #08666	BLM	202.3	3786.3	5.1%	0	Moderate	Additional inventories around stock ponds (7.2 acres) and no sites to monitor
	Private	9.3	5225.8	0.17%			

A total of 12 cultural resource inventories (CRVFO CRIR# 257, 503, 542, 1095-7, 5401-10, 1003-29, 1004-2, 1004-3, 1004-4, 1004-5, 1004-6, 1006-19) have been previously conducted within the King Mountain Allotment (#08666) resulting in the survey coverage of 211.6 acres at a Class III level. No cultural resources were documented in these inventories. Looking at the GLO records from 1936 for T1S R85W and T1S R84W from 1935 there is potential for a historic ditch, road, fence lines, and a reservoir. The reservoir was not on the 1882 original survey for T1S R84W indicating it possibly was constructed between 1882 and 1935. The GLO records for T1N R84W and T1N R85W from 1882, there is nothing to indicate potential for historic properties.

ENVIRONMENTAL CONSEQUENCES.

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. Impacts from livestock standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art can also have direct impacts to cultural resources. Indirect impacts include soil erosion and gulying, which can lead to increased ground visibility, which has the potential to increase unlawful collection and vandalism. Continued livestock use in these concentration areas has the potential to cause substantial ground disturbance and in turn, irreversible adverse effects to historic properties.

Proposed Action. There are no changes to the livestock kind, livestock number, or season of use; therefore, this alternative will likely not change ground disturbing impacts to cultural resources. Additionally, the requirement to have average utilization levels and minimum stubble height will have little change on cultural resource impacts. The use of this management technique might in fact be beneficial to lessen ground disturbance because it requires four inches of new growth on grasses and therefore livestock will not be grazing when soils are more exposed or when the area is more susceptible to erosion.

A small portion of the allotment in the area of existing livestock ponds totaling 7.2 acres is recommended to be surveyed within the term of this permit. No sites have been previously recorded within the allotment and therefore no sites need to be monitored.

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.

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 this allotment which 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 November 19, 2014, requested the tribes to identify issues and areas of concern within the allotment. No comments were received at that time.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Native American tribal consultation was conducted for the undertaking with the Ute Indian Tribe of the Uintah and Ouray Reservation, Southern Ute Indian Tribe, and the Ute Mountain Ute Tribe on September 3, 2015. No concerns or comments were received regarding this project. No areas of concern to Native American tribes were identified during project inventory or during tribal consultation.

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.

Livestock Grazing Management

AFFECTED ENVIRONMENT.

The King Mountain Allotment (No. 08666) is located in Routt County approximately 10 miles northwest of McCoy, CO. The allotment receives approximately 16 inches of precipitation annually (HPRCC). The allotment consists of 3,990 acres of public land and 5,001 acres of private land. The public land acreage ranges in elevation from approximately 9,400 to 11,000 feet. The public land portion of the King Mountain Allotment is composed primarily of dense stands of mixed conifers (lodgepole pine, sub-alpine fir, and Englemann spruce). There are several small pockets of aspen and a number of small grassy parks which provide most of the livestock forage on the public lands.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The Proposed Action would authorize the same level of use as the existing expiring lease. The King Mountain Allotment would be permitted at a stocking rate of 26 acres/AUM. Existing conditions are expected to be maintained or improved at the current stocking rate. The King Mountain Allotment is grazed under a rotational system in which livestock grazing does not occur on any given area for more than a one-month period during the summer.

No Grazing Alternative. Under this alternative grazing use would be canceled entirely on the King Mountain Allotment. An alternative source of forage would be required by the permittees/lessees during the spring and summer months. Permittees/lessees would not contribute to maintenance or construction of improvements such as water developments that support wildlife. This decision would result in economic harm to the permittees/lessees.

Plants: Invasive Non-Native Species (Noxious Weeds)

AFFECTED ENVIRONMENT.

Livestock grazing can contribute to the establishment and expansion of noxious weeds and other invasive species through numerous mechanisms. Areas of disturbance provide an optimal location for noxious weed establishment and subsequent invasion (Sheley, et. al 2011). When livestock utilize an allotment they create localized areas of disturbance (i.e., bare ground), especially where animals congregate such as trails, loafing areas, salting areas, water sources, and other range improvements. When over-utilization occurs on a large scale, extensive areas of disturbance can develop, which can open up these areas to the establishment of noxious weeds and other invasive species. Seed transportation is another mechanism through which noxious weeds are spread. Livestock handlers, stock dogs, horses, feed, and equipment can potentially serve as vectors for seeds to be introduced or transported. Livestock can transport weed seeds from infested areas to uninfested areas through incomplete digestion and the attachment of seeds to body parts. Additional vectors for seed dispersal include wind, wildlife and vehicles.

Preventing and controlling noxious weed encroachment depends on early detection (Sheley, et al. 2011). Landscape-wide weed inventories can help with early detection and controlling noxious

weeds and other invasive species infestations. Although a landscape-wide inventory has not been completed on the King Mountain Allotment (No. 08666), infestations known to occur within or adjacent to the King Mountain Allotment are listed in Table 5. It is assumed that these and other noxious weeds/invasive species may be found in areas throughout the allotment.

Table 5. Known Noxious Weeds that Occur within the King Mountain Allotment.

Common Name	Scientific Name	State Designation
Houndstongue	<i>Cynoglossum officinale</i>	B
Canada thistle	<i>Cirsium arvense</i>	B
Musk thistle	<i>Carduus nutans</i>	B
Plumeless thistle	<i>Carduus acanthoides</i>	B

Proposed Action. A grazing lease would be renewed with the existing terms and conditions as the previously authorized use. The lease authorizes grazing for nearly the entire grazing season (mid-June to mid-October). The allotment is composed of 89% private land forage with an 11% public land portion which implies that cattle spend the majority of their time on private land. Utilization levels reported on BLM portions of the allotment have been light and no large areas of disturbance have been noted, thus no substantial impacts to noxious weeds and non-native invasive species are expected to occur. Infestations will continue to exist, regardless of grazing, around areas of disturbance where livestock congregate (e.g., trails, loafing areas, range improvements). Seed could be dispersed or introduced to the allotment by wind, wildlife and vehicles.

No Grazing Alternative. Under this alternative, no livestock grazing would occur on the allotment and there would be no direct or indirect impacts to weeds from livestock use management activities associated with grazing. Grazing by wildlife may create localized areas disturbances that would enable weed expansion and seed could be transported or introduced to the allotment by wind, wildlife, and vehicles.

Plants: Sensitive, Threatened and Endangered

AFFECTED ENVIRONMENT.

According to the latest species list from the U. S. Fish and Wildlife Service for Federally listed, proposed, or candidate species that may occur in Routt County (USFWS 2015a), there are no listed, proposed or candidate plant species with occupied or potential habitat in Routt County. There are also no sensitive plants species on the Colorado BLM State Director's Sensitive Species List (BLM 2015a) with known occurrences or potential habitat within the proposed action area.

ENVIRONMENTAL CONSEQUENCES.

All Alternatives. The Proposed Action would occur outside of any known occupied or potential habitat for any special status plant species. The Proposed Action would have “No Effect” on any listed plant species or their habitats and would have no impact on BLM sensitive plants.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 4 FOR SPECIAL STATUS PLANTS

A Land Health Assessment was conducted in the King Mountain Watershed in 2011 which included the King Mountain Allotment (BLM 2012). No special status plant species were located during the assessment and the allotment is not considered potential habitat for any special status plants. As such, Standard 4 for special status plants does not apply.

Plants: Vegetation

AFFECTED ENVIRONMENT.

The public land portion of the King Mountain Allotment (No. 08666) is comprised primarily of dense stands of mixed conifers (lodgepole pine, sub-alpine fir, and Englemann spruce). Mortality in the lodgepole pine stands is quite high due to a mountain pine beetle infestation. There are several small pockets of aspen and a number of small grassy parks which provide most of the livestock forage on the public lands. Understory vegetation is sparse under the doghair stands of lodgepole pine and dense stands of spruce-fir. Elsewhere vegetation is comprised of a diverse mix of mountain brome, elk sedge, Letterman’s needlegrass, slender wheatgrass, yarrow, lupine, whortleberry, kinnikinnick and others. Riparian vegetation is located around Grimes Brooks Reservoir and along upper tributary portions of Red Dirt Creek, at springs and in wet meadows.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Livestock grazing results in the direct removal of vegetation, both green shoots from the current year and old, dried growth from the previous year. Properly managed livestock grazing can improve plant vigor by stimulating leaf growth, and by removing dried stems and seedheads thereby improving photosynthetic activity of live plant material. If the timing or intensity of grazing does not allow adequate recovery and regrowth periods between grazing events, grazing may: reduce plant vigor or cause plant mortality by depleting root reserves, change the species’ composition in favor of less palatable plant species, and create surface disturbance and bare ground that serves as a niche for the invasion of noxious weeds. Grazing that does not exceed roughly 40-50% of the current year’s growth and does not repeatedly defoliate the same plants or species will generally maintain plant health.

Although the King Mountain grazing lease allows cattle grazing for nearly the entire growing season (from mid-June to mid-October), the allotment is grazed under a rotational system in which livestock grazing generally does not occur on any given area for more than a one-month period during the summer. This should provide sufficient growing season rest and recovery time to maintain plant health, restore root reserves, and provide for seed dissemination and seedling establishment across the allotment. Limited utilization data indicate utilization has been

generally light on the BLM portion of the allotment. The proposed action is not expected to have adverse impacts to plant communities given the proposed grazing strategy.

No Grazing Alternative. Under this alternative, no livestock grazing would occur on these allotments and there would be no direct or indirect impacts to vegetation from livestock use. There would be an increase in herbaceous vegetation (canopy cover and density) without the presence of livestock to remove vegetative material. Some trampling or removal of plant material would still occur from wildlife grazing, but this would likely be less than is currently occurring with both livestock and wildlife use. Dead and dried stems and seed stalks may build up over time, particularly on the more mesic and more productive sites, reducing photosynthetic activity and resulting in less vegetative vigor and biomass in the long-term. There would also be less surface disturbance due to trampling and removal of vegetation and therefore, less risk of noxious weed invasion.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 3 FOR HEALTHY PLANT COMMUNITIES

The 2011 King Mountain Land Health Assessment determined that the vegetative communities on the King Mountain Allotment were in good ecological condition, with the exception of lodgepole pine stands which had high mortality due to the mountain pine beetle. Herbaceous vegetation had vigorous growth, good canopy cover and moderate species diversity. Noxious weeds and invasive, non-native plants were scattered along the roads and other disturbed areas but were minimal in the overall landscape. The King Mountain Allotment were determined to be meeting Standard 3 for healthy plant communities

Socio-Economics

AFFECTED ENVIRONMENT.

Regionally, livestock operations are dependent on both federal lands (BLM and U.S. Forest Service) and nonfederal lands (state and private). The federal grazing fee for public lands managed by the BLM and the U.S. Forest Service is \$1.35 per animal unit month (AUM). An AUM is the amount of forage needed to sustain one cow and her calf, one horse, or five sheep or goats for a month. The annually adjusted grazing fee is computed by using a 1966 base value of \$1.23 per AUM for livestock grazing on public lands in the western states. The figure is then adjusted according to three factors - current private grazing land lease rates, beef cattle prices, and the cost of livestock production. The formula used for calculating the grazing fee, established by Congress in the 1978 Public Rangelands Improvement Act, has continued under a presidential Executive Order issued in 1986. Under that order, the grazing fee cannot fall below \$1.35 per AUM, and any increase or decrease cannot exceed 25 percent of the previous year's level.

Public land grazing in the CRVFO supports a traditional and historical way of life. Although historically livestock grazing in the region was at a higher intensity than at the present time, the livestock business has, and continues to be a traditional way of life for many permit holders. Income derived from public land grazing permits continues to comprise a moderate to substantial portion of their individual livelihoods.

The total economic contribution from ranching operations on BLM lands is statistically low within the region. Jobs and labor income associated with BLM grazing accounts for less than 1 percent of the area's total jobs and labor income (BLM 2014).

Fees paid to the federal government for livestock grazing permits generate revenue for the U.S. Treasury, of which 12.5 per cent is returned to the local Grazing Advisory Board to fund range improvements and maintenance projects. This provides a direct economic benefit to the permit holders who pay the fees. The support of livestock operations contributes to the economic support of local communities and to the livestock industry in the West in general.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The Proposed Action would renew a ten year term grazing lease for the livestock operator, thereby continuing an historical and traditional way of life for this area. The social value of retaining a rural, agricultural lifestyle would be preserved and would align with many of the public's perception of the western Colorado culture.

Issuance of the grazing leases would allow the lease holders to continue their grazing operations with some degree of predictability during the ten-year period of the term lease.

The local economy is benefited from capital spent to establish and maintain a ranching operation and contributions to the labor force. The Proposed Action would support some direct employment. Additional employment would be generated as the affected livestock operators purchase services and materials as inputs ("indirect" effects) and ranchers spend their earnings within the local economy ("induced" effects).

No Grazing Alternative. Under the No Grazing Alternative, the ten year term grazing lease would not be renewed. The individual lease holders could be negatively impacted in the short term by loss of income. If livestock grazing was terminated, there would also be adverse impacts to the base property owner(s). There could be an annual loss of income because they may not be able to lease their private lands without having the BLM land grazing allotments. Consequently, the value of their properties could be reduced because of the elimination of the federal grazing preference. Such a loss of income would be important to the individuals, but would likely not measurably or adversely impact the local economies.

Soils

AFFECTED ENVIRONMENT.

A review of the soil survey by the NRCS for the *Routt Area, Colorado, Parts of Rio Blanco and Routt Counties* indicate 15 soil map units occur within the proposed allotments (NRCS 2007). The NRCS soil map unit descriptions (NRCS 2015) are provided below for the dominant soil types:

Jefin-Fulvance complex, very stony (75C) – This complex is found on hills of 3 to 25 percent slopes. The Jefin component makes up 50 percent and the Fulvance component makes up 25 percent of the map

unit. The parent material consists of shale slope alluvium overlying sandstone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained.

Slater-Rouff complex (111C) - This complex is found on mountain slopes of 5 to 25 percent. The Slater component makes up 55 percent of the map unit. The parent material consists of colluvium derived from sandstone and shale and/or slope alluvium derived from sandstone and shale. The Rouff component makes up 30 percent of the map unit. The parent material consists of colluvium derived from sandstone and shale and/or slope alluvium derived from sandstone and shale. The natural drainage class is well drained.

Venable mucky loam (AW) - This complex is found on drainage ways of 0 to 3 percent slopes. The Venable component makes up 85 percent of the map unit. The parent material consists of alluvium derived from mixed sources. The natural drainage class is very poorly drained. This soil is frequently flooded.

Soil health was evaluated in 2011 during the King Mountain Land Health Assessment. BLM staff concluded that soils were meeting land health standards throughout the King Mountain Allotment, with only slight departures from expected conditions (BLM 2012).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Grazing activities may 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 gullyng. Based on existing soil conditions and overall good vegetative cover; the likelihood of livestock grazing contributing to excessive soil degradation and transport to nearby drainages is not expected. Grazing activities on the proposed allotment would not likely create long term affects that would compromise soil stability on a large scale. Small-scale and localized disturbances would likely only be limited to trails and watering areas.

No Grazing Alternative. Under this alternative, no livestock grazing would occur and there would be no direct impacts to soils from livestock use. Indirectly, soil health may benefit from livestock rest. However, trampling or removal of plant material may still occur from wildlife grazing.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 1 FOR SOILS

Based on the King Mountain Land Health Assessment, BLM staff concluded that soils are meeting Standard 1 (BLM 2012). Implementation of the proposed action is not anticipated to degrade soil health from current conditions.

Water Quality, Surface and Ground

AFFECTED ENVIRONMENT.

The King Mountain Allotment (No. 08666) lies on the watershed divide between King Creek on the north and west; Sutton Creeks on the north; Egeria and Red Dirt Creeks on the east; and Elk

and Sunnyside Creeks on the south. The majority of stream flow within the allotment is intermittent or ephemeral, with snowmelt and thunderstorm activity providing runoff. There are numerous springs and seeps across the allotment, but many have never been inventoried to date. 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 2014). Tributaries in the proposed allotment are listed under the Upper Colorado River Basin (Region 12) and have water use classifications described below:

Table 6. Stream Segment Description.

Stream Segment Description	Classifications	Water Quality
7b. Mainstems of Rock Creek, Deep Creek, Sheephorn Creek, Sweetwater Creek and the Piney River, including all tributaries and wetlands, from their sources to their confluences with the Colorado River, which are not on National Forest lands.	Aquatic Life Cold 1 Recreation E Water Supply Agriculture	D.O.=6.0 mg/l pH=6.5-9.0 E.Coli=126/100ml

The aquatic life Cold 1 classification refers to stream segments that are capable of sustaining a wide variety of cold water biota. Recreation E refers to stream segments in which surface waters are used for primary contact recreation. Water supply and agriculture refer to stream segments that are suitable or intended to become suitable for potable water supplies and suitable for irrigation or livestock use. Limited water quality was sampled on streams or springs within the King Mountain Allotment due to the intermittent flow pattern. However, surrounding streams were sampled in 2011 during the land health assessment and results (shown below) suggest good water quality throughout the landscape.

Table 7. Stream Sampling.

Stream Name	Date	Visual Estimated Discharge (cfs)	pH	Temp. (°C)	Conductivity (umhos/cm)	Salinity (ppt)	Dissolved Oxygen		Hardness (mg/L)
							%	mg/l	
Egeria Cr_Upper	7/25/2011	10.00	6.64	18.7	258.6	0.2	42.4	3.97	258.6
Red Dirt Cr	7/28/2011	3.00	8.44	14.0	257.8	0.2	31.2	3.28	482.8
King Cr	7/26/2011	3.00	8.43	16.0	316.4	0.2	29.7	2.96	706.9
Sutton Cr	7/26/2011	1.00	8.5	13.3	70.5	0	28.5	2.99	155.2

The State of Colorado has also developed a *303(d) List of Impaired Waters and Monitoring and Evaluation List* (CDPHE 2012) that identifies stream segments that are not currently meeting water quality standards with technology based controls alone. No streams in the King Mountain allotment are on these lists, suggesting water quality standards are currently being met.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Direct impacts to water quality from livestock grazing may result in elevated turbidity, nutrients and fecal coliform bacteria, if livestock begin to congregate near water sources for extended periods of time. Hoof action can cause 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.

Under the Proposed Action, grazing would generally occur in early summer, following the early part of the growing season. Grazing would continue into the fall, following the active growing season. Due to a rotational grazing system, no area would be grazed for more than one month each grazing season, so the potential for overgrazing is greatly reduced. With the location of the allotment in a headwater area, good vegetative cover within the allotment, and controlled runoff from this area, little to no adverse sedimentation should occur. If sediment is generated by livestock it would not likely create a measurable increase in King Creek, Red Dirt Creek, or the Colorado River. Upland and riparian vegetation, water impoundments, and land formations in the area would likely trap sediment before reaching perennial waters.

No Grazing Alternative. Under this alternative, no livestock grazing would occur and there would be no direct impacts to water quality from livestock use. Indirectly, water quality may benefit from livestock rest.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 5 FOR WATER QUALITY

Based on the King Mountain Land Health Assessment, BLM staff concluded that water quality is meeting Standard 5 (BLM 2012). Implementation of the Proposed Action is not anticipated to degrade water quality from current conditions.

Wetland and Riparian Zones

AFFECTED ENVIRONMENT.

The King Mountain Allotment (No. 08666) contains riparian zones along a tributary to Red Dirt Creek (outlet below Grimes-Brooks Reservoir), around the perimeter of Grimes-Brooks Reservoir, a short segment of the headwaters of West Branch of Red Dirt Creek, and adjacent to numerous springs, seeps and wet meadows. The tributary to Red Dirt Creek and Grimes-Brooks Reservoir were rated in proper functioning condition (PFC), but the West Fork of Red Dirt Creek was rated Functioning-at-risk with no apparent trend (FAR-NA). The stream was rated FAR because downcutting of the channel below a headcut left the stream vertically unstable. Causal factors for the downcutting were not readily apparent. There was no sign of livestock grazing in the vicinity. Above the nick point, the riparian vegetation had reached maximum width across the valley bottom and exhibited diverse composition of life forms and species. This stream is below the spillway of the reservoir which is used for irrigation. It is possible that abrupt pulses of stream flow may have caused the nick point.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The King Mountain Allotment is grazed under a rotational system in which livestock grazing does not occur on any given area for more than a one-month period during the summer. This should allow adequate grazing rest and recovery time to maintain healthy riparian plant species. Observed livestock grazing in riparian areas has been light to moderate. Livestock grazing, as proposed, should not have adverse impacts to riparian zones.

No Grazing Alternative. Under this alternative, no livestock grazing would occur on the allotment and there would be no direct or indirect impacts to riparian vegetation from livestock use. Without livestock grazing, over time it is anticipated that riparian plant communities would progress toward later seral plant species. Some bank trampling and removal of plant material would still occur from wildlife grazing, but this would likely be less than is currently occurring with both livestock and wildlife use. With less bare ground due to trampling and grazing, the risk of noxious weed invasion and proliferation would also decrease.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 2 FOR RIPARIAN SYSTEMS

The King Mountain Land Health Assessment of 2011 determined that all riparian areas assessed on the King Mountain allotment, except for the West Branch of red Dirt Creek, were in properly functioning condition (BLM 2012). The West Branch of Red Dirt Creek was functioning-at-risk because a headcut partway down the creek rendered the creek vertically unstable. Subsequent downcutting could lower the water table and dry out the riparian zone. The cause of the headcut was uncertain; however, no livestock grazing was evident along the creek. Livestock grazing, as proposed, should not result in a deterioration of riparian conditions and would not prevent Standard 2 from being met.

Wildlife: Aquatic/Fisheries

AFFECTED ENVIRONMENT.

The action area is located in Routt County, Colorado. According to the latest species list from the U.S. Fish and Wildlife Service (USFWS), one federally listed fish species may occur within or be impacted by actions occurring in Routt County (USFWS 2015b). BLM sensitive aquatic species are also described (BLM 2015a).

Table 8. Special Status Aquatic Wildlife Species Summary.

Federally Listed, Proposed or Candidate Aquatic Wildlife Species		
Species and Status	Habitat/Range	Occurrence/Potentially Impacted
Green lineage cutthroat trout (<i>Oncorhynchus clarkii stomias</i>) Threatened	The greenback cutthroat trout is the subspecies of cutthroat trout native to the Platte River drainage on the Eastern Slope of Colorado. The USFWS is advising federal agencies to consider green lineage cutthroat trout on the Western Slope of CO as threatened until such time as review and interpretation of recent genetics and meristic research has been completed.	Absent/No
BLM Sensitive Aquatic Wildlife Species		
Species	Habitat/Range	Occurrence/Potentially Impacted
Northern leopard frog (<i>Rana pipiens</i>)	Generally found in wet meadows and in shallow lentic habitats between 3,500 to 11,000 feet. They require year-round water sources deep enough to provide ice free refugia in the winter. Within the CRVFO, this species has been documented in locales where quality riparian vegetation exists in conjunction with perennial water sources. Larger populations have been documented	Potential/No

	northwest of King Mountain within the small drainage that feeds King Mountain (Ligon) Reservoir, June Creek and East Divide Creek south of Silt, and in portions of the Rifle Creek watershed north of Rifle.	
Boreal toad (<i>Bufo boreas boreas</i>)	Occurs between 7,000-12,000 feet in the Southern Rocky Mountains in the vicinity of mountain lakes, ponds, meadows, and wetlands in subalpine forest (e.g., spruce, fir, lodgepole pine, aspen). Adults often feed in meadows and forest openings near water, but sometimes in drier forests. Restricted to areas with suitable breeding habitat in spruce-fir forests and alpine meadows. Breeding habitat includes lakes, marshes, ponds, and bogs with sunny exposures and quiet, shallow water.	Absent/No
Bluehead sucker (<i>Catostomus discobolus</i>), Flannelmouth sucker (<i>Catostomus latipinnis</i>), and Roundtail chub (<i>Gila robusta</i>)	Primarily found in larger rivers, but may also be found in smaller tributaries with good connectivity to larger river systems. These fish are endemic to the Colorado River basin and reside within the mainstem Colorado River and its major tributary streams. Given their biology, feeding habits, habitat needs, and niche in the ecosystem, these species can persist in the face of actions that increase sediments to streams and rivers containing these species.	Absent/No
Mountain sucker (<i>Catostomus platyrhynchus</i>)	Found primarily in small, low- mid elevation streams in northwestern Colorado with gravel, sand or mud bottoms. They inhabit undercut banks, eddies, small pools, and areas of moderate current. Young fish prefer backwaters and eddies. Within the CRVFO, the only known occurrence is in Piceance Creek.	Absent/No
Colorado River cutthroat trout (CRCT) (<i>Oncorhynchus clarkii pleuriticus</i>)	Select streams within the action area contain Colorado River cutthroat trout - Blue Lineage. CRCT prefer clear, cool headwaters streams with coarse substrates, well-distributed pools, stable streambanks, and abundant stream cover. CRCT occur in Trapper Creek, Northwater Creek, East Fork Parachute Creek, and JQS Gulch within the action area.	Absent/No

A portion of King Creek flows through the allotment. The stream supports brook trout (*Salvelinus fontinalis*), but none were found on BLM during sampling that was done downstream of the allotment for the King Mountain Land Health Assessment (BLM 2012). This sampling effort did find fathead minnows (*Pimephales promelas*). The stream is diverted on private lands, which reduces flow and limits fish productivity. The headwaters have not been surveyed, but are not expected to support fish.

The reaches of Red Dirt Creek and West Branch of Red Dirt Creek that support fish are downstream of the allotment. No other fish bearing streams are documented in the allotment.

Grimes Brooks Reservoir is a large (i.e., approximately 45 acres when full) irrigation storage reservoir that does not contain fish. It is routinely drained to very low levels, limiting its potential as a fishery. The reservoir supports tiger salamanders (*Ambystoma tigrinum*) and Western chorus frogs (*Pseudacris triseriata*). Due to large fluctuations in water levels, riparian/shoreline vegetation is limited.

Aquatic habitats within the allotment include aquatic invertebrates, which are aquatic animals without backbones that live on the bottom of freshwater habitats during all or part of their life cycle. They are large enough to be seen with the naked eye. Major groups of macroinvertebrates include

arthropods (i.e., crustaceans and insects), mollusks, sponges and nematode worms. The most abundant are typically immature life states (larvae) of aquatic insects such as mayflies, stoneflies, and caddis flies.

Amphibians in Colorado need access to ponds, lakes, seeps, springs, or other bodies of water. They avoid cold winter temperatures and dry midday summer heat by taking refuge in buffered microenvironments such as underground burrows, crevices beneath rocks, or bodies of water. Amphibian records within the CRVFO are limited, and extensive surveys have not been conducted. No populations of boreal toads (*Bufo boreas boreas*) or northern leopard frogs (*Rana pipiens*), both BLM sensitive species, have been documented in the project area, but suitable habitat exists in the watershed. Western chorus frogs are found primarily in wetland marshes and pond margins, also including seasonal waters, and across a wide range of elevations. Tiger salamanders (*Ambystoma tigrinum*) occur throughout Colorado near ponds, lakes, and water impoundments up to 12,000 feet in elevation (Hammerson 1999).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Livestock grazing can alter stream banks as livestock walk along or cross streams, increase sediment loading, and alter riparian vegetation structure, composition, and function. If amphibians are present in areas with livestock grazing, there is a chance that livestock could crush or consume egg clusters in seasonal waters or trample adults or juveniles. Effects on aquatic wildlife are dependent on grazing numbers, timing (season of use), frequency, and intensity. Fish on BLM are mapped and/or are expected to only occur downstream of the allotment. Conditions potentially impacting aquatic wildlife in the Grimes Brooks Reservoir are limited by flow, volume and water diversions rather than livestock grazing. As long as acceptable utilization levels are maintained and land health standards are achieved, the potential for severe streambed alteration, sediment loading, or a reduction in streamside vegetation that would impact aquatic wildlife is minimal. The Proposed Action is not expected to adversely impact aquatic wildlife.

No Grazing Alternative. Under this alternative, no livestock grazing would occur and there would be no direct or indirect impacts to aquatic wildlife or their habitats from livestock use. Over time, riparian vegetation biomass would likely increase in the absence of livestock.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 3 FOR AQUATIC WILDLIFE AND FISHERIES.

Based on the King Mountain Land Health Assessment (BLM 2012), Standards 3 and 4 were being met for aquatic wildlife in BLM-managed streams. Conditions in the Grimes Brooks Reservoir are limited by flow, volume and water diversions, and the reservoir is routinely drained to low levels without a minimum pool depth. There are no special status fish in the allotment. There is no known boreal toad or Northern leopard frog populations in the allotment, but overall the King Mountain landscape was meeting Standard 4 for these species. The Proposed Action would not deteriorate conditions for aquatic wildlife in the allotment and would not prevent Standards 3 and 4 from being met.

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, nesting habitat is critical for supporting reproduction in terms of both nest sites and food. Also, because birds are generally territorial during the nesting season, their ability to access and utilize sufficient food is limited by the quality of the occupied territory. During non-breeding seasons, birds are generally non-territorial and able to feed across a larger area and wider range of habitats.

The allotment provides cover, forage, breeding, and/or nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. Migratory bird species that are federally listed and classified by the BLM as sensitive species are addressed in the Wildlife: Sensitive, Threatened, and Endangered Species section of this EA.

BLM Instruction Memorandum No. 2008-050 provides guidance toward meeting the BLM's responsibilities under the MBTA and the Executive Order 13186. The guidance directs Field Offices to promote the maintenance and improvement of habitat quantity and quality and to avoid, reduce or mitigate adverse impacts on the habitats of migratory bird species of conservation concern to the extent feasible, and in a manner consistent with regional or statewide bird conservation priorities.

The MBTA prohibits the "take" of a protected species. Under the Act, the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The USFWS interprets "harm" and "kill" to include loss of eggs or nestlings due to abandonment or reduced attentiveness by one or both adults as a result of disturbance by human activity, as well as physical destruction of an occupied nest.

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the USFWS to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973." The *Birds of Conservation Concern 2008* (USFWS 2008) is the most recent effort to carry out this mandate. The CRVFO is within the Southern Rockies/Colorado Plateau Bird Conservation Region 16.

The project area includes the following plant communities and potentially associated migratory bird species.

Aspen forest. Aspen forests typically contain a profuse, diverse understory of shrubs, grasses, and herbaceous plants. Foliage-dwelling insects can be abundant, and the structure can provide openings for insectivores that feed on the wing. Thick ground cover can provide ground nesting opportunities, and older forest stands, depending on their condition, provide cavities. Aspen forests typically support greater avian diversity than adjacent conifer-dominated forests. Species can include warbling vireos (*Vireo gilvus*), house wrens (*Troglodytes aedon*), red-naped sapsuckers (*Sphyrapicus nuchalis*), northern flickers (*Colaptes auratus*), tree swallows (*Tachycineta bicolor*), western wood-pewees (*Contopus sordidulus*), violet-green swallows

(*Tachycineta thalassina*), American robins, mountain bluebirds, yellow-rumped warblers (*Setophaga coronata*) and dark-eyed juncos (*Junco hyemalis*).

Spruce-fir forest. Ample snags and cavities typically present in this forest type provide nesting opportunities for breeding birds. Dense conifers can produce readily available seed-bearing cones, and insects, particularly those occurring in bark, are generally abundant. Species including boreal owls (*Aegolius funereus*), American three-toed woodpeckers (*Picoides dorsalis*), gray jays (*Perisoreus canadensis*), and pine grosbeaks (*Pinicola enucleator*) breed almost exclusively in this community. Other species associated with spruce-fir forests include ruby-crowned kinglets (*Regulus calendula*), hermit thrushes (*Catharus guttatus*), mountain chickadees (*Poecile gambeli*), yellow-rumped warblers (*Setophaga coronata*), pine siskins (*Spinus pinus*), dark-eyed juncos (*Junco hyemalis*) and red-breasted nuthatches (*Sitta canadensis*).

Raptors. Many raptors forage over wide areas, so even if they aren't known to nest in a specific area, they may still fly over searching for food. Raptors on the BCC list that occur in portions of the CRVO include the golden eagle (*Aquila chrysaetos*), Bald Eagle (*Haliaeetus leucocephalus*), Ferruginous Hawk (*Buteo regalis*), prairie falcon (*Falco mexicanus*), peregrine falcon (*F. peregrinus*) and flammulated owl (*Psiloscops flammeolus*). Prairie falcons nest on rocky ledges and cliffs and hunt in grasslands and semi-desert shrublands. Peregrine falcons hunt near nest sites and along rivers and lakes, but can be found in nearly any open vegetation community during migration and winter. Flammulated owls typically nest in ponderosa pine and aspen forests, but have been found nesting in mixed forests, and reportedly use old-growth pinyon-juniper woodlands.

A variety of raptors not on the BCC list are known to occur in the CRVO including the American kestrel (*Falco sparverius*), northern harrier (*Circus cyaneus*), Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), red-tailed hawk (*Buteo jamaicensis*), long-eared owl (*Asio otus*), great horned owl (*Bubo virginianus*), northern pygmy owl (*Glaucidium gnoma*) and northern saw-whet owl (*Aegolius acadicus*). The northern goshawk (*Accipiter gentilis*), a BLM sensitive species, is an occasional winter visitor to pinyon-juniper woodlands from its nesting habitat in montane and subalpine forests.

Beetle-Killed Trees. The mountain pine beetle normally attacks ponderosa and limber pine trees, but can also infect pinyon pine and Douglas fir. Pine beetles have impacted lodgepole pine stands on Black Mountain and King Mountain. Some bird species (e.g., nuthatches, chickadees, woodpeckers) that use dead snags and open areas can benefit from vegetation conditions created by a beetle infestation. Other species (e.g., grosbeaks, northern goshawks) that prefer mature stands of live trees may decline locally or relocate from impacted areas.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Livestock grazing can alter vegetation structure, composition, and function. Effects on migratory birds are dependent on the species of interest and may be adverse or beneficial depending on grazing timing, frequency, and intensity. Aerial, bark and canopy insectivores may be less influenced by grazing than species feeding on nectar, insects, or seeds in the understory or on the ground. Birds may be displaced as a result of grazing. Trampling of

nests, eggs, or young could occur. Losses or decreases in vegetation from overgrazing can decrease rodent prey species and affect local populations of raptors. Areas lacking vegetative structure and complexity would be expected to be lacking bird species richness. This is especially important in riparian areas, which provide habitat for many species in the arid and semiarid west, including upland birds, waders, shorebirds, raptors, neotropical migrants and passerines. Migratory birds could be temporarily displaced from vehicular traffic or human presence during maintenance of infrastructure or tending to livestock. As long as acceptable utilization levels are maintained and land health standards are achieved, any negative impacts to migratory birds from livestock grazing are expected to be minimal and isolated, and should not influence migratory bird populations on a landscape level.

No Grazing Alternative. No livestock grazing would occur, and there would be no direct or indirect impacts to migratory birds from livestock use. Perennial grass and forb cover should increase and riparian vegetation should progress toward later seral plant species over time in the absence of livestock, thereby improving conditions for many migratory birds. There would also be no disturbance to migratory birds from vehicular traffic or human presence during maintenance of infrastructure or tending to livestock.

ANALYSIS OF PUBLIC LAND HEALTH STANDARDS 3 AND 4 FOR MIGRATORY BIRDS.

Based on the King Mountain Land Health Assessment (BLM 2012), most sites assessed seemed to provide healthy and productive habitat for migratory birds. The King Mountain landscape was determined to be achieving Standards 3 and 4 for terrestrial wildlife species with an overall stable trend. The Proposed Action would not deteriorate conditions migratory birds and would not prevent Standards 3 and 4 from being met.

Wildlife: Sensitive, Threatened, and Endangered

AFFECTED ENVIRONMENT.

Table 9 summarizes Federally listed, proposed and candidate terrestrial wildlife species potentially occurring in Routt County (USFWS 2015b) and species on the Colorado BLM State Director’s Sensitive Species List (BLM 2015a) that may occur in the project area.

Table 9. Special Status Terrestrial Wildlife Species.

Federally Listed, Proposed, or Candidate Terrestrial Wildlife Species		
Species and Status	Habitat/Range Summaries	Occurrence/ Potentially Impacted

<p>Canada lynx (<i>Lynx Canadensis</i>)</p> <p>Threatened</p>	<p>Canada lynx occupy high-latitude or high-elevation coniferous forests characterized by cold, snowy winters and an adequate prey base. In the western US, lynx are associated with mesic forests of lodgepole pine, subalpine fir, Engelmann spruce, and quaking aspen in the upper montane and subalpine zones, generally between 8,000 and 12,000 feet in elevation. Although snowshoe hares (<i>Lepus americanus</i>) are the preferred prey, lynx also feed on mountain cottontails (<i>Sylvilagus nuttallii</i>), pine squirrels (<i>Tamiasciurus hudsonicus</i>), and blue grouse (<i>Dendragapus obscurus</i>). The Forest Service has mapped suitable denning, winter, and other habitat for lynx within the White River and Routt National Forests. The mapped suitable habitat comprises areas known as Lynx Analysis Units (LAUs) that are the approximate size of a female's home range. Several LAUs include small parcels of BLM lands. There are no LAUs mapped in the project area. The project area is part of the Egeria linkage area.</p>	<p>Possible/No</p>
<p>Greater Sage-grouse (<i>Centrocercus urophasianus</i>)</p> <p>Candidate</p>	<p>Sage-grouse are found only in areas where sagebrush is abundant, providing both food and cover. Sage-grouse prefer relatively open sagebrush flats or rolling sagebrush hills. 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. Within the CRVFO, sage-grouse are present in the northeast part of the Field Office in the Northern Eagle/Southern Routt population. While small (<500 birds), this population probably has, or had, a relationship with the larger population in Moffat, Rio Blanco and western Routt counties, and probably with the Middle Park population to the east. There is no preliminary priority or preliminary general habitat mapped in the project area.</p>	<p>Absent/No</p>
<p>Yellow-billed cuckoo (<i>Coccyzus americanus</i>)</p> <p>Threatened</p>	<p>This secretive species occurs in mature riparian forests of cottonwoods and other large deciduous trees with a well-developed understory of tall riparian shrubs. Western cuckoos breed in large blocks of riparian habitats, particularly woodlands with cottonwoods (<i>Populus fremontii</i>) and willows (<i>Salix</i> sp.). A few sightings of yellow-billed cuckoo have occurred in western Colorado along the Colorado River near Grand Junction. There is no proposed critical habitat in the Colorado River Valley Field Office.</p>	<p>Absent/No</p>
<p>Colorado BLM Sensitive Terrestrial Wildlife Species Present or Potentially Present in the Project Area</p>		
<p>Species</p>	<p>Habitat/Range Summaries</p>	<p>Occurrence/Potentially Impacted</p>

<p>Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)</p> <p>Fringed myotis (<i>Myotis thysanodes</i>)</p> <p>Spotted bat (<i>Euderma maculatum</i>)</p>	<p>Townsend's big eared bats and fringed myotis occur as scattered populations at moderate elevations on the western slope of Colorado. Habitat associations are not well defined. Both bats will forage for aerial insects over pinyon-juniper, montane conifer and semi-desert shrubland communities. These species roosts in caves, rock crevices, mines, buildings and tree cavities. Both species are widely distributed and usually occur in small groups. Townsend's big-eared bats are not abundant anywhere in its range due to patchy distribution and limited availability of suitable roosting. Spotted bats have been detected in Colorado in ponderosa pine woodlands or montane forests, pinyon-juniper woodlands, and riparian vegetation; over sand and gravel bars; and in open semi-desert shrublands. The species needs access to water and suitable cracks and crevices in rocky cliffs for roosting. Limited information is available for this species in the CRVFO. No roosts or hibernaculum for any of these species are documented in the project area.</p>	Possible/No
<p>Rocky mountain bighorn sheep (<i>Ovis canadensis</i>)</p>	<p>Rocky Mountain bighorn sheep typically inhabit steep, precipitous mountain and canyon terrain with good visibility and escape terrain. The CRVFO includes the Glenwood Canyon, Derby Creek, Deep Creek and Battlement Mesa herds. Additional herds inhabit nearby USFS lands.</p>	Absent/No
<p>Northern goshawk (<i>Accipiter gentilis</i>)</p>	<p>Montane and subalpine coniferous forests and aspen forests; may move to lower elevation pinyon-juniper woodlands in search of prey during winter. Preys on small-medium sized birds and mammals. Breeds in coniferous deciduous and mixed forests. Nests are typically located on a northerly aspect in a drainage or canyon and are often near a stream. Nest areas contain one or more stands of large, old trees with a dense canopy cover. A goshawk pair occupies its nest area from March until late September. The nest area is the center of all movements and behaviors associated with breeding from courtship through fledging.</p>	Present/No
<p>Ferruginous hawk (<i>Buteo regalis</i>)</p>	<p>Open, rolling and/or rugged terrain in grasslands and shrub-steppe communities; also grasslands and cultivated fields; nests on cliffs and rocky outcrops. Fall/ winter resident, non-breeding.</p>	Possible/No
<p>Golden eagle (<i>Aquila chrysaetos</i>)</p>	<p>Nesting/Roosting: cliffs and trees. Forages widely over open habitats, including grasslands and sagebrush, particularly in areas with abundant rabbits. Suitable mixes of sagebrush and cliffs can support high concentrations. Primary forages include small rodents, hares, and rabbits, and carrion during winter. There are no documented nests in the allotment.</p>	Possible/No
<p>Bald eagle (<i>Haliaeetus leucocephalus</i>)</p>	<p>Nesting/Roosting: mature cottonwood forests along rivers. Foraging: fish and waterfowl along rivers and lakes; may feed on carrion, rabbits and other foods in winter. The allotment does not overlap with mapped winter range, and there are no documented nests in the area.</p>	Possible/No
<p>American Peregrine Falcon (<i>Falco peregrines anatum</i>)</p>	<p>Rare spring and fall migrant in western valleys. Peregrine falcons inhabit open spaces associated with high cliffs and bluffs overlooking rivers. The falcon nests on high cliffs and forages over nearby woodlands. There are no mapped nesting or potential nesting areas in the allotment.</p>	Absent/No
<p>Greater Sage-grouse (<i>Centrocercus urophasianus</i>)</p>	<p>See Federally Listed, Proposed or Candidate Terrestrial Wildlife Species portion of table.</p>	Absent/No

Columbian sharp-tailed grouse (<i>Tympanuchus phasianellus columbianus</i>)	Use a variety of habitats within sagebrush, mountain shrub, and riparian areas. From spring to fall a component of denser riparian or mountain shrub vegetation is important for escape cover. Winter habitat contains a dominant component of deciduous trees and shrubs. In Colorado, leks typically occur in sagebrush.	Absent/No
Black swift (<i>Cypseloides niger</i>)	Nest in colonies on vertical rock faces, near waterfalls or in dripping caves. Birds arrive in Colorado in June and take all summer to raise a single nestling. Adults forage widely on aerial insects.	Absent/No
Brewer's sparrow (<i>Spizella berveri</i>)	Summers in western Colorado mountain parks and is a spring/fall migrant at lower elevations. Sagebrush obligate with an apparently secure conservation status in Colorado. Primary habitat is mature big sagebrush 1.6-3 ft. tall with low to moderate canopy cover, and habitat patches ≥ 15 acres. Mesic sites, particularly riparian areas within sagebrush habitats, are also an important primary habitat component.	Possible/Yes
White-faced ibis (<i>Plegadis chihi</i>)	Primarily inhabits freshwater wetlands, especially cattail (<i>Typha</i> spp.) and bulrush (<i>Scirpus</i> spp.) marshes. Rare, non-breeding, summer migrant to western Colorado valleys and mountain lakes. Feeds in flooded hay meadows, agricultural fields, and estuarine wetlands. Breeds in isolated colonies in mainly shallow marshes with "islands" of emergent vegetation.	Absent/No
Midget faded rattlesnake (<i>Crotalus viridis concolor</i>)	Found in northwestern Colorado, including western Garfield County. Sagebrush communities with an abundance of south-facing rock outcroppings and exposed canyon walls. Rocky outcrops are essential for cover, variable thermal conditions and hibernation.	Absent/No
Utah milk snake (<i>Lampropeltis triangulum taylori</i>)	In Colorado, milk snakes occur in shortgrass prairie, sandhills, shrubby hillsides, canyons and open stands of ponderosa pine in the foothills, pinyon-juniper woodlands, and arid river valleys. <i>L. triangulum taylori</i> occurs in west-central Colorado below 6,000 feet elevation.	Absent/No

Canada Lynx. There is no mapped lynx habitat within these allotments. The allotment is part of the Egeria linkage area, which provides for movement opportunities from the Flattops (White River Plateau) east to the Routt, and includes mixed land ownership (USDA 2008). Linkage areas facilitate movements of lynx beyond their home range, such as dispersal, breeding season movements or exploratory movements. Linkage areas may incorporate topographic features that tend to funnel animal movements and may encompass areas of non-lynx habitat (Interagency Lynx Biology Team 2013). The goal of linkage areas is to ensure population viability through population connectivity. They are not "corridors" which imply only travel routes; they are broad areas of habitat where animals can find food, shelter and security. They can be maintained or lost by management activities or developments.

The King Mountain Land Health Assessment 2011 (BLM 2012) reported that within the Egeria linkage area, assessment sites were found to be generally in good condition, with the landscape providing healthy and productive habitat for lynx prey and connectivity between LAUs. The King Mountain Allotment was meeting Land Health Standard 3 for plant and animal communities and Land Health Standard 4 for special status terrestrial wildlife species.

Northern Goshawk. This species was documented in the allotment in 2013, and a nest site was discovered adjacent to the allotment the same year.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Livestock grazing can alter vegetation structure, composition, and function. The response of special status wildlife to livestock grazing varies by habitat, species, and grazing (e.g., numbers, timing, frequency, intensity). Direct impacts include the removal and/or trampling of vegetation that would otherwise be used for food and cover; trampling of nests, eggs, or young; and livestock-wildlife interactions that may result in wildlife displacement or disease transmission. Wildlife could be displaced by vehicular traffic or human presence during maintenance of infrastructure or tending to livestock. Indirect impacts result from changes in plant community composition, structure, and productivity which together largely determine the suitability of wildlife habitat and habitat for insect and rodent prey species. Conversely, 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.

Under the proposed action, there would be no changes to the grazing permit for this allotment. Impacts to special status species from livestock grazing would not change in this allotment. As long as acceptable utilization levels are maintained and land health standards are achieved, any negative impacts to special status species from livestock grazing are expected to be minimal and isolated, and should not influence special status species populations on a landscape level.

Canada Lynx. The King Mountain Land Health Assessment 2011 (BLM 2012) reported that within the Egeria linkage area, assessment sites were found to be generally in good condition, with the landscape providing healthy and productive habitat for lynx prey and connectivity between LAUs.

The proposed action is anticipated to continue to provide sufficient forage for lynx prey species and adequate cover for movement and dispersal of lynx through the Egeria linkage area. Connectivity in the Egeria linkage area would not be degraded. The Proposed Action would not directly or indirectly impact lynx habitat because this allotment are not in a LAU. The allotment is expected to continue to meet Land Health Standards 3 and 4 under this alternative, and mechanisms would be in place for adherence to this standard. Continued livestock grazing as proposed on this allotment would have *No Effect* on Canada lynx or their habitat.

Northern Goshawk. Because goshawks typically nest in coniferous and aspen forests, livestock grazing is not expected to directly impact the species. A significant loss of understory vegetation could potentially lead to a decrease in prey species; however, grazing levels would remain the same under the Proposed Action.

Brewer's Sparrow. Alteration of vegetation in sagebrush habitats due to livestock grazing may affect Brewer's sparrow abundance. Grazing may occasionally affect Brewer's sparrow nests through trampling or disturbance (Vasquez 2005). Because grazing levels would remain the same under the Proposed Action, no new impacts are anticipated.

No Grazing Alternative. No livestock grazing would occur, so there would be no direct or indirect competition with livestock for forage, cover and space. There would be no potential

disturbance to special status wildlife from vehicular traffic or human presence during maintenance of infrastructure or tending to livestock.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 4 FOR SPECIAL STATUS WILDLIFE

According to King Mountain Land Health Assessment (BLM 2012), the landscape was providing sufficient habitat and connectivity for special status species, and the allotment was achieving Land Health Standard 4 for special status terrestrial wildlife. The Proposed Action is not expected to affect the continued achievement this standard.

Wildlife: Terrestrial

AFFECTED ENVIRONMENT.

Diverse plant communities across the CRVFO support a variety of terrestrial wildlife that summer, winter, or migrate through the area. Wildlife needs to move across the landscape for food, cover and in response to seasonal conditions. Human development and activities have fragmented habitat, and in some cases, created barriers to wildlife movement. Factors contributing to wildlife disturbance or degradation and fragmentation of habitat include power lines, pipelines, fences, public recreation use, residential and commercial development, vegetation treatments, livestock and wild ungulate grazing, oil and gas development, fire suppression, roads and trails.

Big Game. Mule deer (*Odocoileus hemionus*) and Rocky Mountain elk (*Cervus elaphus nelsonii*) are recreationally important species that occur in the project area. BLM managed lands provide a large portion of the undeveloped habitat for big game in Colorado. Mule deer and elk typically occupy higher elevation, forested areas during summer and migrate to lower elevation sagebrush-dominated ridges and south-facing slopes during winter. CPW maintains maps of habitat for big game and other wildlife species. The entire allotment is mapped as elk and mule deer summer range, and portions of the allotment are mapped as elk winter range and an elk production area.

Moose (*Alces alces*) rarely compete with livestock or other big game for forage as they forage primarily on willows (CDOW 2008). Moose tend to be found along riparian areas and in timbered areas, though they will sometimes cross semi-desert shrublands.

Other Mammals. Numerous small mammals could reside within the planning area, including mice (*Peromyscus* spp.), woodrats (*Neotoma* spp.), ground squirrels (*Spermophilus* spp.), chipmunks (*Neotamias* spp.), rabbits (*Sylvilagus* spp.), skunks (*Mephitis mephitis*), raccoons (*Procyon lotor*) and porcupines (*Erethizon dorsatum*). Many of these mammals are prey for raptors and larger carnivores. Larger carnivores expected to occur include bobcats (*Lynx rufus*) and coyotes (*Canis latrans*). CPW has mapped the entire project area as mountain lion (*Felis concolor*) and black bear (*Ursus americanus*) habitat. Mountain lions are most likely to be in the vicinity when mule deer are present. Bats documented in Northwest Colorado that could occur in the CRVFO that are not on the BLM special status species list include pallid bats (*Antrozous pallidus*), big brown bats (*Eptesicus fuscus*), spotted bats (*Euderma maculatum*), silver-haired bats (*Lasiurus noctivagans*), hoary bats (*Lasiurus cinereus*), California myotis (*Myotis*

californicus), Western small-footed myotis (*M. ciliolabrum*), long-eared myotis (*M. evotis*), little brown myotis (*M. lucifugus*), long-legged myotis (*Myotis volans*), Yuma myotis (*M. yumanensis*), big free-tailed bats (*Nyctinomops macrotis*), canyon bats (*Parastrellus hesperus*), and Brazilian free-tailed bats (*Tadarida brasiliensis*).

Gallinaceous Birds. Game birds commonly found in the project area include dusky grouse (*Dendragapus obscurus*), ring-necked pheasant (*Phasianus colchicus*) and wild turkey (*Meleagris gallopavo*).

Waterfowl. Rivers, streams, reservoirs, ponds and associated riparian vegetation are used by a wide variety of waterfowl and shorebirds. Common species in the CRVFO include great blue herons, Canada geese (*Branta canadensis*), mallards (*Anas platyrhynchos*), northern pintails (*A. acuta*), gadwalls (*A. strepera*) and American wigeon (*A. americana*).

Reptiles. Reptile species most likely to occur in the project area include sagebrush lizards (*Sceloporus graciosus*), prairie and plateau lizards (*S. undulatus*), tree lizards (*Urosaurus ornatus*), gopher snakes or bullsnakes (*Pituophis catenifer*), and western terrestrial garter snakes (*Thamnophis elegans*). Gopher snakes can be found throughout Colorado in most plant communities, including riparian areas, semidesert and mountain shrublands, pinyon-juniper woodlands, and ponderosa pine and other montane woodlands. Western terrestrial garter snakes occur throughout most of western Colorado, usually below 11,000 feet. Smooth green snakes (*Opheodrys vernalis*) can be present in riparian areas, but in western Colorado, may also be common in mountain shrublands far from water (Hammerson 1999).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Domestic livestock can compete with wild ungulates for herbaceous forage, although moderate levels of grazing can also help promote shrub growth by limiting grasses. Conversely, livestock grazing can have a beneficial effect on forage quality by removing the rough or dried seedheads and stems, while leaving or promoting the more palatable leaves for deer or elk to graze later in the season. Terrestrial wildlife could be temporarily displaced by vehicular traffic or human presence during maintenance of infrastructure or tending to livestock. As long as acceptable utilization levels are maintained and land health standards are achieved, particularly on winter range, any negative impacts to big game and other terrestrial wildlife from livestock grazing are expected to be minimal and isolated, and should not influence populations on a landscape level.

No Grazing Alternative. No livestock grazing would occur, and there would be no direct or indirect impacts to terrestrial wildlife from livestock use. There would also be no disturbance to terrestrial wildlife from vehicular traffic or human presence during maintenance of infrastructure or tending to livestock.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 3 FOR TERRESTRIAL WILDLIFE.

Based on the King Mountain Land Health Assessment (BLM 2012), the King Mountain Allotment is currently achieving Land Health Standard 3 for terrestrial wildlife. Based on

habitat condition and current livestock management, the continuation of livestock grazing should not impact the continued achievement of standard 3 for terrestrial wildlife.

CUMULATIVE EFFECTS.

Soil and Water. Cumulative impacts to soil and water resources may occur from existing roads and trails, and historic and future timber harvesting activity throughout the allotment. Roads, trails and harvested areas can contribute to increased surface runoff and accelerated erosion, especially where proper drainage is lacking. Based on existing and future land management activities occurring across the allotment, it is assumed that cumulative effects to soil and water are minor 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, housing, road maintenance, oil and gas development) occur within 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.

CONSULTATION.

The following stakeholders were contacted:

- Southern Ute Indian Tribe
- Ute Mountain Ute Tribe
- Uinta and Ouray Agency Ute Indian Tribe
- Grazing permittee/lessees

LIST OF PREPARERS.

Members of the CRVFO Interdisciplinary Team who participated in the impact analysis of the Proposed Action and alternative, development of appropriate mitigation measures, and preparation of this EA are listed in Table 10, along with their areas of responsibility.

Table 10. BLM Interdisciplinary Team Authors and Reviewers.

Name	Title	Areas of Participation
Kristy Wallner	Rangeland Management Specialist	NEPA lead, Invasive, Non-Native Species (Noxious Weeds), Livestock Grazing
Carla DeYoung	Ecologist	Areas of Critical Environmental Concern: Special Status Plants; Vegetation; Wetlands & Riparian Zones; Land Health Standards

Name	Title	Areas of Participation
Kimberly Leitzinger	Outdoor Recreation Planner	Wilderness, Wild and Science Rivers, Recreation
Pauline Adams	Hydrologist	Soil, Water, Air, Geology
Hilary Boyd	Wildlife Biologist	Terrestrial and Aquatic Wildlife (including Special Status Species), Migratory Birds
Erin Leifeld	Archeologist	Cultural Resources and Native American Religious Concerns
Brian Hopkins	Assistant Field Manager	NEPA Compliance

REFERENCES.

- Bartlett, E. Tom, L. Allen Torell, Neil R. Rimbey, Larry W. Van Tassell, Daniel W. McCollum. 2002. *Valuing Grazing Use on Public Land*. Journal of Range Management, Vol. 55, No.5, pp.426-438.
- Bureau of Land Management (BLM). 2015. Colorado River Valley Field Office Record of Decision and Approved Resource Management Plan. Silt, CO.
- _____. 2007. North-Central Colorado Community Assessment Report for the Bureau of Land Management Glenwood Springs Field Office and Kremmling Field Office.
- _____. 2012. King Mountain Land Health Assessment Summary Report. Unpublished report. Colorado River Valley Field Office, Silt, CO.
- _____. 2014. Colorado River Valley Field Office Proposed Resource Management Plan Final Environmental Impact Statement.
- _____. 2015a. Information Bulletin No. CO-2015-034. State Director's Sensitive Species List, June 22, 2015.
- Census 2010 U.S. Census. County-Level Unemployment and Median Household Income for Colorado <http://www.ers.usda.gov/Data/Unemployment/RDList2.asp?ST=CO>
- Church, Minette C., Steven G. Baker, Bonnie J. Clark, Richard F. Carrillo, Johnathon C. horn, Carl D. Spath, David R. Guifoyle, and E. Steve Cassells. 2007. *Colorado History: A Context for Historical Archaeology*. Colorado Council of Professional Archaeologists, Denver, Colorado.
- Colorado Department of Public Health and the Environment (CDPHE). 2012. Regulation No. 93, Colorado's 303 (d) List of Impaired Waters and Monitoring and Evaluation List, (5 CCR 1002-93). Water Quality Control Commission. Available online: <http://www.cdphe.state.co.us/regulations/wqccregs/>

- _____. 2014. Regulation No. 33, Classifications and Numeric Standards for Upper Colorado River Basin and North Platte River (5 CCR 1002-33). Water Quality Control Commission. Available online: <http://www.cdphe.state.co.us/regulations/wqccregs/>
- Colorado Division of Wildlife (CDOW). 2008. Moose Management Plan Data Analysis Unit M-5 Grand Mesa and Crystal River Valley. Available online: http://cpw.state.co.us/Documents/Hunting/BigGame/DAU/Moose/M5DAUPlan_GrandMesaCrystalRiver2009.pdf. [Accessed on 3/20/15].
- Gentner, Bradley J. and John A. Tanak. 2002. *Classifying Federal Public Land Grazing Permittes*. Journal of Range Management, Vol. 55, No.1, pp.2-11.
- Hammerson, G. A. 1999. Amphibians and Reptiles in Colorado. University Press of Colorado and Colorado Division of Wildlife. Niwot, CO, USA.
- HPRCC (High Plains Regional Climate Center), Data collected from the Yampa COOP station, <http://www.hprcc.unl.edu/data/historical/index.php>
- Interagency Lynx Biology Team. 2013. Canada lynx conservation assessment and strategy. 3rd edition. USDA Forest Service, USDI Fish and Wildlife Service, USDI Bureau of Land Management, and USDI National Park Service. Forest Service Publication R1-13-19, Missoula, MT. 128 pp.
- Natural Resource Conservation Service (NRCS). 2007. Soil Survey of *Routt Area, Colorado, Parts of Rio Blanco and Routt Counties*. Available online: http://soils.usda.gov/survey/online_surveys/colorado/
- _____. 2015. Map Unit Descriptions for *Routt Area, Colorado, Parts of Rio Blanco and Routt Counties*. Soil Data Viewer application. Available online: <http://soils.usda.gov/sdv/>.
- Rowe, Helen Ivy, E. T. Bartlett, Louis E. Swanson, Jr., 2001. *Ranching Motivations in 2 Colorado Counties*. Journal of Range Management, Vol. 54, No.4, pp.314-321.
- Sheley, R., M. Manoukian, G. Marks. 2011. Preventing Noxious Weed Invasions. Montana State University Extension. [Online version available at <http://store.msuextension.org/publications/AgandNaturalResources/MT199517AG.pdf>]
- Smith, Arthur H. and William E. Martin. 1972. *Socioeconomic Behavior of Cattle Ranchers, with Implications for Rural Community Development in the West*. American Journal of Agricultural Economics, Vol.54, No.2,pp.217-225.
- U.S. Department of Agriculture (USDA), Forest Service. 2008. Final Environmental Impact Statement Southern Rockies Lynx Management Direction Volume 1. Appendix D.
- U.S. Fish and Wildlife Service (USFWS). 2008. Birds of Conservation Concern 2008. United States

Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, Virginia. 85 pp. [Online version available at <http://www.fws.gov/migratorybirds/>

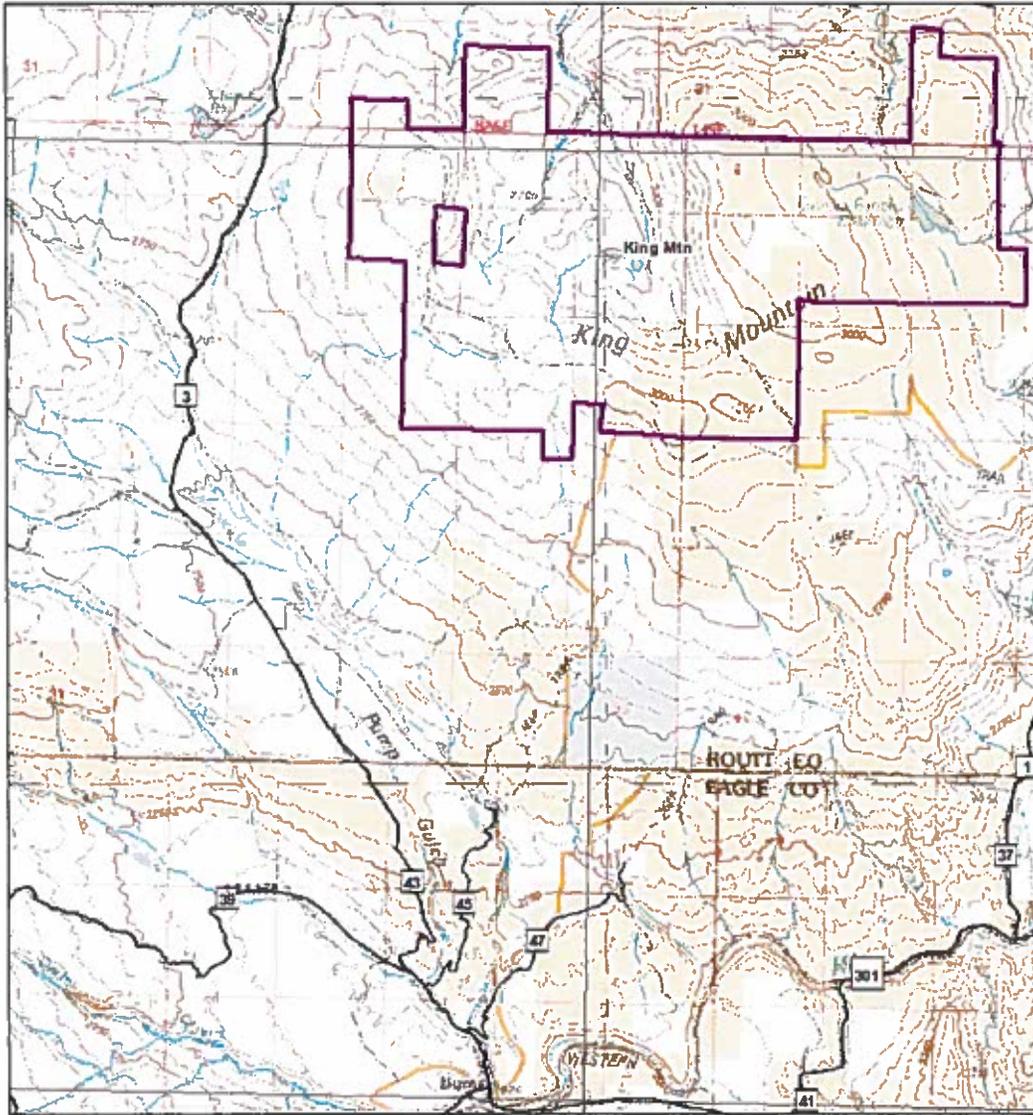
_____. 2015a. Endangered Species Act Species List [Online]. Website: <http://ecos.fws.gov/ipac/wizard/trustResourceList!prepare.action>. [Accessed on 1-28-2015].

_____. 2015b. [Online]. Website: <http://www.fws.gov/endangered/>. [Accessed on 8-25-15].

Vasquez, M. 2005. Brewer's Sparrow (*Spizella breweri*) Species Assessment (Draft). Prepared for the Grand Mesa, Uncompahgre, and Gunnison National Forests. Website: http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5199815.pdf. Accessed on 9-30-14.

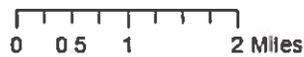
Appendix A – Map of grazing allotment associated with the Proposed Action.

King Mountain Allotment



Legend

- County Road
- Grazing Allotment
- Bureau of Land Management
- Private



DOI-BLM-CO-N040-2015-0021-EA
 T1N R84 W Sec. 33
 T1S R84 W Sec. 4-9, 18
 T1S R85W Sec. 3, 13
 Blue Hill, Toponas, Burns North
 & Trapper USGS Quads
 Routt County, Colorado
 Colorado River Valley Field Office
 Bureau of Land Management

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This project was developed through digital means and may be updated without notice.

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

FINDING OF NO SIGNIFICANT IMPACT
for
DOI-BLM-N040-2015-0021-EA

Finding of No Significant Impact.

I have reviewed the direct, indirect and cumulative effects of the proposed action documented in the EA referenced above. The effects of the proposed action are disclosed in the Alternatives and Environmental Effects sections 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 proposed 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):

(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 issuing these livestock grazing permits are identified and discussed in the Affected Environment and Environmental Effects sections of the EA. The proposed action will not have any significant beneficial or adverse impacts on the resources identified and described in the EA.

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

The proposed activities will not significantly affect public health or safety. The purpose of the proposed 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.

There are no unique characteristics of the area.

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 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 King 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 these allotments.

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

The area covered by the proposed 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 proposed action 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.

No cultural resources have been documented within the King Mountain Allotment. There is moderate potential for additional cultural resources to be documented based on historic GLOs which indicate potential for a historic ditch, road, fence lines, and a reservoir within the allotment. A small portion of the allotment in the area of existing livestock ponds totaling 7.2 acres is recommended to be surveyed within the term of this permit. Subsequent site field visits, inventory, and periodic monitoring may have to be done to identify if other historic properties are present as well as determine if there are impacts to these properties within the term of the permit and as funds are made available. If the BLM determines that grazing activities adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO. The EA discloses the adverse impacts that could occur to cultural resources from livestock grazing.

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.*

Properly managed livestock grazing (i.e. meeting land health standards) is generally compatible with all wildlife species. The development and maintenance of water sources for livestock may unintentionally provide beneficial effects to foraging bat and bird species. As long as acceptable utilization levels are maintained and land health standards are achieved there would be no anticipated direct or indirect impact of grazing on special status bat or bird species.

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

The proposed action does not violate or threaten to violate any Federal, State, or local law 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.

SIGNATURE OF AUTHORIZED OFFICIAL.


Matthew Magaletti

Acting Associate Field Manager
Colorado River Valley Field Office


Date



United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652



IN REPLY REFER TO:
ON 0507690 (CON040)

CERTIFIED MAIL 70132630000027329643
RETURN RECEIPT REQUESTED

Ebel, Ranch, L.L.C
c/o Kirk J. Eberl
7276 West Mansfield
Lakewood, CO 80235

NOTICE OF PROPOSED DECISION

Dear Mr. Eberl:

Introduction & Background.

On November 8, 2014 you applied to renew your grazing lease on the King Mountain Allotment. The review and NEPA compliance has been completed as documented in the Environmental Assessment (EA) No. DOI-BLM-CO-N040-2015-0021. A copy of the EA is enclosed. Renewal of the lease has also been reviewed for compliance with 43 Code of Federal Regulations (CFR) 4110.1(b)(1) which requires a satisfactory record of performance prior to renewal.

Finding Of No Significant Impact (FONSI).

The environmental assessment, analyzing the environmental effects of the action, has been reviewed. The analysis of the action with mitigation measures did not identify any impacts that would be significant in nature either in context or intensity. The grazing authorization allows for adequate plant growth recovery and promotes healthy rangelands as it relates to rangeland standards. In addition, there is nothing to indicate the action is highly controversial or that it is related to other actions with individually insignificant but cumulatively significant actions. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

Proposed Decision.

As a result of this process, it is my proposed decision to renew grazing lease #0507690 for a period of 10 years (February 1, 2016 – December 31, 2026). My proposed decision results in the following authorized use and terms and conditions:

Table 1. Grazing Schedule.

Operator No.	Allotment Name & Number	Livestock Number & Kind	Period of Use	% PL	AUMs
0507690	King Mountain #08666	330 Cattle	06/10- 10/10	11	147

Table 2. Permitted Use AUMS.

Operator No.	Allotment Name & Number	Active	Suspended	Total
0504952	King Mountain #08666	149	310	459

Terms and Conditions.

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

1. Rotational grazing use on the King Mountain Allotment shall be practiced and grazing use will not occur in any given area for more than one month.
2. 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 bill or permit/lease).
3. Adaptive management will be employed on these allotments. The BLM will allow up to 14 days of flexibility in the start and end dates on this permit depending on range readiness. Livestock use different than that shown above must be applied for in advance.
4. Temporary travel restrictions within the King Mountain area pursuant to the federal register, vol. 58, No. 106, June 4, 1993, pages 31745- 31747 as amended:
In summary, the travel restriction limited motorized vehicle use to designated roads and trails year round. The grazing permittee/lessee and all persons associated with allotment operations shall comply with the travel restrictions except as provided by the following exemption in the travel restriction: Grazing permittees/lessees are exempt from the restriction during the permitted grazing season for grazing related purposes provided such use is limited to existing roads and trails and subject to any additional conditions in the grazing permit/lease. Any motorized use before or after the permitted grazing season necessary for maintenance and operation of range facilities shall require advance approval by the authorized officer specifically authorizing such use and subject to whatever restrictions are deemed necessary. The permittee/lessee and all persons associated with allotment operations shall comply with any subsequent administrative access agreement developed by the BLM and the grazing permittee/lessee.
5. Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits/leases. 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.

6. 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.
7. Average utilization levels by livestock should not exceed 50% by weight on key grass species, and 40% of the key browse species current year's growth. Grazing in riparian areas should leave an average minimum 4-inch stubble height of herbaceous vegetation. If utilization is approaching allowable use levels, livestock should be moved to another portion of the allotment, or removed from the allotment entirely for the remainder of the growing season. Application of this term may be flexible to recognize livestock management that includes sufficient opportunity for regrowth, spring growth prior to grazing, or growing season deferment.

Rationale for the Proposed Decision.

Renewal of the grazing permit/lease is in conformance with the Colorado River Valley Field Office Record of Decision (ROD) and Approved Resource Management Plan (RMP), approved June. 2015.

The Proposed Action helps to achieve the goal of the plan by applying flexible and sustainable livestock grazing, in accordance with BLM Colorado Standards for Public Land Health and Guidelines for Livestock Grazing Management to contribute to local economies, ranching livelihoods, and the rural western character integral to many communities. It also achieves the objective of the plan by meeting the forage demands of livestock operations based on active use, by providing approximately 441,600 acres for livestock grazing, and provide approximately 35,500 AUMs of livestock forage.

An interdisciplinary team prepared an EA (No. DOI-BLM-CO-N040-2016-0021) for the proposed grazing permit/lease renewal. My proposed decision is based on the findings of the analyses contained in the EA. The analysis of the Proposed Action indicated that the current conditions and land health standards on the King Mountain Allotment are expected to be maintained or improved. The grazing use proposed allows for adequate plant growth recovery and promotes healthy rangelands as it relates to rangeland standards.

Other terms and conditions have been included to mitigate potential impacts from grazing use and to authorize flexibility in the permit.

Authority.

43 CFR 4100.0-8 states: “The authorized officer shall manage livestock grazing on public lands under the principle of multiple use and sustained yield, and in accordance with applicable land use plans. Land use plans shall establish allowable resource uses (either singly or in combination), related levels of production or use to be maintained, areas of use, and resource condition goals and objectives to be obtained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan as defined at 43 CFR 1601.0- 5(b).”

43 CFR 4110.2-2(a) states: “Permitted use is granted to holders of grazing preference and shall be specified in all grazing permits or leases. Permitted use shall encompass all authorized use including livestock use, any suspended use, and conservation use, except for permits and leases for designated ephemeral rangelands where livestock use is authorized based upon forage availability, or designated annual rangelands. Permitted livestock use shall be based upon the amount of forage available for livestock grazing as established in the land use plan, activity plan or decision of the authorized officer under § 4110.3-3, except, in the case of designated ephemeral or annual rangelands, a land use plan or activity plan may alternatively prescribe vegetation standards to be met in the use of such rangelands.”

43 CFR 4130.2(a) states: “Grazing permits or leases authorize use on the public lands and other BLM-administered lands that are designated in land use plans as available for livestock grazing. Permits and leases will specify the grazing preference, including active and suspended use. These grazing permits and leases will also specify terms and conditions pursuant to §§4130.3, 4130.3-1, and 4130.3-2.”

43 CFR 4130.2(d) states: “The term of the grazing permits or leases authorizing livestock on the public lands and other lands under the administration of the Bureau of Land Management shall be 10 years unless -- (1) The land is being considered for disposal; (2) The land will be devoted to a public purpose which precludes grazing prior to the end of 10 years; (3) The term of the base property lease is less than 10 years, in which case the term of the Federal permit or lease shall coincide with the term of the base property lease; or (4) the authorized officer determines that a permit or lease for less than 10 years is the best interest of sound land management.”

43 CFR 4130.3 states: “Livestock grazing permits and leases shall contain terms and conditions determined by the authorized officer to be appropriate to achieve the management and resource condition objectives for the public lands and other lands administered by the Bureau of Land Management, and to ensure conformance with the provisions of subpart 4180 of this part.”

43 CFR 4130.3-1(a) states: “The authorized officer shall specify the kind and number of livestock, the period(s) of use, the allotment(s) to be used, and the amount of use, in animal unit months, for every grazing permit or lease. The authorized livestock grazing use shall not exceed the livestock carrying capacity of the allotment.”

43 CFR 4130.3-2 states: “The authorized officer may specify in grazing permits or leases other terms and conditions which will assist in achieving management objectives, provide for proper range management or assist in the orderly administration of the public rangelands.”

43 CFR 4160.1(a) states: “Proposed decisions shall be served on any affected applicant, permittee or lessee and any agent and lien holder of record, who is affected by the proposed actions, terms or conditions, or modifications relating to applications, permits and agreements (including range improvement permits) or leases, by certified mail or personal delivery. Copies of the proposed decisions shall also be sent to the interested public”.

Protest and/or Appeal.

Any applicant, permittee, lessee or other interested public may protest a proposed decision under Sec. 43 CFR 4160.1 and 4160.2, in person or in writing to Matthew Magaletti, Acting Associate Field Manager, Bureau of Land Management, 2300 River Frontage Road, Silt, Colorado 81652 within 15 days after receipt of such decision. The protest, if filed, should clearly and concisely state the reason(s) as to why the proposed decision is in error.

In accordance with 43 CFR 4160.3 (a), in the absence of a protest, the proposed decision will become the final decision of the authorized officer without further notice unless otherwise provided in the proposed decision.

In accordance with 43 CFR 4160.3 (b) upon a timely filing of a protest, after a review of protests received and other information pertinent to the case, the authorized officer shall issue a final decision.

Any applicant, permittee, lessee or other person whose interest is adversely affected by the final decision may file an appeal in accordance with 43 CFR 4.470 and 43 CFR 4160.3 and 4160 .4. The appeal must be filed within 30 days following receipt of the final decision, or within 30 days after the date the proposed decision becomes final. The appeal may be accompanied by a petition for a stay of the decision in accordance with 43 CFR 4.471 and 4.479, pending final determination on appeal. The appeal and petition for a stay must be filed in the office of the

authorized officer, as noted above. The person/party must also serve a copy of the appeal on any person named [43 CFR 4.421(h)] in the decision and the Office of the Solicitor, United States Department of Interior, 755 Parfet Street, Suite 151, Lakewood, Colorado 80215. The BLM does not accept appeals by facsimile or email.

The appeal shall state the reasons, clearly and concisely, why the appellant thinks the final decision is in error and otherwise complies with the provisions of 43 CFR 4.470.

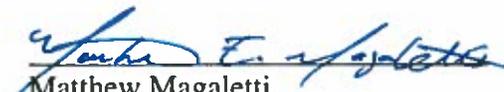
Should you wish to file a petition for a stay, see 43 CFR 4.471 (a) and (b). In accordance with 43 CFR 4.471(c), a petition for a stay must show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied.
- (2) The likelihood of the appellant's success on the merits.
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

As noted above, the petition for stay must be filed in the office of the authorized officer and serviced in accordance with 43 CFR 4.473. Any person named in the decision from which an appeal is taken (other than the appellant) who wishes to file a response to the petition for a stay may file with the Hearings division a motion to intervene in the appeal, together with the response, within 10 days after receiving the petition. Within 15 days after filing the motion to intervene and response, the person must serve copies on the appellant, the office of the Solicitor and any other person named in the decision (43 CFR 4.472(b)).

Please take a moment to review your enclosed grazing lease. **If you do not have any concerns with the lease as offered, please sign, date, and return both copies to our office.** If you have any questions, contact Kristy Wallner of my range staff at (970) 876-9023.

Sincerely,


Matthew Magaletti,
Acting Associate Field Manager
Colorado River Valley Field Office

12/17/15
Date

Enclosure(s):
Environmental Assessment (No. DOI-BLM-CO-040-2015-0021)
BLM Form 4130-2a (Grazing permit)