



United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Colorado River Valley Field Office
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ENVIRONMENTAL ASSESSMENT

1. Introduction

NUMBER: DOI-BLM-CO-040-2012-0037 EA

CASEFILE NUMBER: 0507696

PROJECT NAME: Grazing Lease Renewal on the Benton Allotment No. 08654

PLANNING AREA: Routt County, North of Burns, CO

LEGAL DESCRIPTIONS:

Sixth Principal Meridian

T., 1 S., R., 84 W.,

Section 30: Lot 2, SE1/4NW1/4, S1/2NE1/4.

T., 1 S., R., 85 W.,

Section 25: SE1/4NE1/4, SW1/4SW1/4.

Section 26: Lots 1 through 11 inclusive.

Section 27: NE1/4NE1/4, E1/2SE1/4.

Section 33: W1/2SW1/4.

Section 34: E1/2NE1/4, SW1/4NE1/4.

Section 35: All.

APPLICANT: Grazing Lessee

SCOPING AND PUBLIC INVOLVEMENT AND ISSUES:

A notice of public scoping was posted on the Colorado BLM's Internet web page on September 1, 2011 regarding grazing permits/leases and associated allotments scheduled for renewal in 2011-2012. A news release was posted on September 8, 2011. The public was provided an opportunity to offer any information or concerns, or to be considered as an interested public on a permit/lease or allotment scheduled for renewal. There have been no responses received specific to the lease renewal or allotment addressed in this NEPA document. The Colorado River Valley Field Office Internet NEPA Register also lists grazing permit/lease renewal NEPA documents that have been initiated. They are generally posted approximately one month prior to the

estimated completion date. The proposed action was scoped internally on February 08, 2012. The issues raised during that scoping meeting are indicated in Table 3.1.

PURPOSE AND NEED FOR ACTION:

These 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 leases consistent with the provisions of the Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act, and Glenwood Springs Field Office’s Resource Management Plan/Environmental Impact Statement. This Plan/EIS has been amended by Standards for Public Land Health in Colorado.

The review of renewing this grazing lease is needed for the following reasons: (1) to meet the livestock grazing management objective of the Resource Management Plan of providing 56,885 animal unit months of livestock forage commensurate with meeting public land health standards, (2) to continue to allow livestock grazing on the specified allotment, (3) to meet the forage demands of local livestock operations, (4) to provide stability to these operations and help preserve their rural agricultural lands for open space and wildlife habitat, and (5) to allow use of native rangeland resource for conversion into protein suitable for human consumption.

2. Proposed Action and Alternatives Analyzed in Detail

PROPOSED ACTION:

The Proposed Action is to renew a term grazing lease. The number, kind of livestock, period of use, percent public land and animal unit months (AUMS) will all remain the same as the previous lease. The lease would be issued for a 10-year period unless the base property is leased for less, but for purposes of the EA, we are assuming 10 years of grazing by this or another applicant (in case of transfer). The proposed action is in accordance with 43 CFR 4130.2. Scheduled grazing use and grazing preference for the lease are summarized below.

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

Allotment & No.	Livestock No. & Kind	Period of use	Percent Public Land	AUMs
Benton 8654	114 Cattle	05/20 – 07/01	100	162

Table 2-2: Grazing Preference AUMS:

Allotment & No.	Active	Suspended	Total
Benton 08654	162	0	162

The following Other Terms and Conditions will be included on the renewed lease:

- Instruction Memorandum (IM) 2012-043 directs BLM field officials to implement appropriate interim conservation policies and procedures when field offices authorize activities on public land while the BLM develops and decides how to best incorporate long-term conservation measures for greater sage-grouse (*Centrocercus urophasianus*) into applicable Land Use Plans (LUP). Interim conservation measures outlined below are adapted from conservation measures outlined in *A Report on National Greater Sage-Grouse Conservation Measures* (BLM IM 2012-044). The conservation measures will be applied to

protect greater sage-grouse habitat within this allotment and ensure long-term maintenance of greater sage-grouse habitat within the allotment. The conservation measures include:

1. Manage for vegetation composition and structure consistent with ecological site potential and within the reference state to achieve sage-grouse seasonal habitat objectives.
2. Implement management actions (grazing decisions, AMP/Conservation Plan development, or other agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. Consider singly, or in combination, changes in:
 - a. Season or timing of use;
 - b. Numbers of livestock (includes temporary non-use or livestock removal);
 - c. Distribution of livestock use;
 - d. Intensity of use; and
 - e. Type of livestock (e.g., cattle, sheep, horses, llamas, alpacas and goats).
3. During drought periods, prioritize evaluating effects of the drought in priority sage-grouse habitat areas relative to their needs for food and cover. Since there is a lag in vegetation recovery following drought, ensure that post-drought management allows for vegetation recovery that meets sage-grouse needs in priority sage-grouse habitat areas.
4. Authorize new water development for diversion from spring or seep source only when priority sage-grouse habitat would benefit from the development. This includes developing new water sources for livestock as part of an AMP/conservation plan to improve sage-grouse habitat.
5. Analyze springs, seeps and associated pipelines to determine if modifications are necessary to maintain the continuity of the predevelopment riparian area within priority sage-grouse habitats. Make modifications where necessary, considering impacts to other water uses when such considerations are neutral or beneficial to sage-grouse.
6. Only allow vegetation treatments that conserve, enhance or restore sage-grouse habitat (this includes treatments that benefit livestock as part of an AMP/Conservation Plan to improve sage-grouse habitat.
7. Design any new structural range improvements and location of supplements (salt or protein blocks) to conserve, enhance, or restore sage-grouse habitat through an improved grazing management system relative to sage-grouse objectives. Structural range improvements, in this context, include but are not limited to: cattle guards, fences, exclosures, corrals or other livestock handling structures; pipelines, troughs, storage tanks (including moveable tanks used in livestock water hauling), windmills, ponds/reservoirs, solar panels and spring developments. Potential for invasive species establishment or increase following construction must be considered in the project planning process and monitored and treated post-construction.
8. When developing or modifying water developments, use best management practices mitigate potential impacts from West Nile virus.
9. Evaluate existing structural range improvements and location of supplements (salt or protein blocks) to make sure they conserve, enhance or restore sage-grouse habitat. NOTE: For this allotment, at this time, only place salt blocks at previously used locations within sagebrush shrub lands.
10. To reduce outright sage-grouse strikes and mortality, remove, modify or mark fences in high risk areas within priority sage-grouse habitat based on proximity to lek, lek size, and topography
11. Monitor for, and treat invasive species associated with range improvements.

- 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 lease depending on range readiness. The range will be considered ready when there is a minimum of 4-inches of new growth on grasses. AUMs may not exceed Active Preference. Use different than that shown above must be applied for in advance.
- Within the uplands average livestock utilization levels will be limited to 50% by weight on key grass species. Livestock grazing in riparian areas should leave an average minimum 4-inch stubble height of herbaceous vegetation and will not exceed an average utilization of 40% of the current year's growth of browse species. Livestock will be moved to another portion of the allotment, moved to the next scheduled pasture or removed immediately from the allotment when the above utilization levels occur.
- Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits. Maintenance shall be completed prior to turnout. Maintenance activities shall be restricted to the footprint (previously disturbed area) of the project as it existed when it was initially constructed. The Bureau of Land Management shall be given 48 hours advance notice of any maintenance work that will involve heavy equipment. Disturbed areas will be reseeded with a certified weed-free seed mixture of native species adapted to the site.
- The Lessee 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.
- That portion of the Benton Allotment lying within T., 1 S., R., 84 W., Section 30, S1/2NE1/4, SE1/4NW1/4 & Lot 2 and T., 1 S., R., 85 W., Section 25 SE1/4NE1/4 (6th Primary Meridian) has temporary travel restrictions as per 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 lessee and all persons associated with the allotment operations shall comply with the travel restrictions except as provided by the following exemption in the travel restriction: Grazing lessees are exempt from the restriction during the permitted grazing season for grazing related purposes provided such motorized use is limited to existing roads and trails and subject to any additional conditions in the grazing 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 grazing lessee and all persons associated with the allotment operations shall comply with any subsequent administrative access agreement developed by the BLM and grazing lessee.

Additional Background Information:

A review of last ten years of billings indicates that the allotment is being fully utilized. Use supervision has reported little to no use on the allotment.

NO GRAZING ALTERNATIVE:

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

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL:

The “No Action alternative” has been eliminated from further consideration. The No Action alternative would involve reissuing the lease with current terms and conditions and no additional stipulations would be added to the lease. This action would essentially be the same action as the proposed action and therefore is not further analyzed.

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

The fieldwork for the King Mountain Landscape Land Health Assessment, which included the Benton Allotment, was conducted in the summer of 2011. Although the Evaluation Report has not been completed, the data collected by the interdisciplinary team during the assessment indicated that the Benton Allotment was meeting all the standards.

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 included in the applicable sections below.

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: Glenwood Springs Resource Management Plan.

Date Approved: Jan. 1984, revised 1988, amended in November 1991 - Oil and Gas Leasing and Development - Final Supplemental Environmental Impact Statement; amended Nov. 1996 - Colorado Standards and Guidelines; amended in August 1997 - Castle Peak Travel Management Plan; amended in March 1999 - Oil and Gas Leasing & Development Final Supplemental Environmental Impact Statement; amended in November 1999 - Red Hill Plan Amendment; amended in September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance; amended in Sept 2009 – Record of Decision for the Approval of Portions of the Roan Plateau Resource Management Plan Amendment; and amended in March 2009 - Record of Decision for the Designation of Areas of Critical Environmental Concern for the Roan Plateau Resource Management Plan.

Decision Number/Page: The action is in conformance with Administrative Actions (pg. 5) and Livestock Grazing Management (pg. 20).

Decision Language: Administrative actions states, “Various types of actions will require special attention beyond the scope of this plan. Administrative actions are the day-to-day transactions required to serve the public and to provide optimal use of the resources. These actions are in conformance with the plan”. The livestock grazing management objective as amended states, “To provide 56,885 animal unit months of livestock forage commensurate with meeting public land health standards.”

3. Affected Environment & Environmental Consequences

DIRECT AND INDIRECT EFFECTS, MITIGATION MEASURES:

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and alternatives. In addition, the section presents comparative analyses of the direct and indirect 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 3-1). Only those elements that are present and potentially affected are described and brought forth for detailed analysis.

Table 3-1 Potentially Affected Resources

Component of the Environment, Supplemental Authorities	Potentially Affected?	
	YES	NO
Access and Travel		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
Forest Resources		X
Geology and Minerals		X
Law Enforcement		X
Livestock Grazing	X	
Minerals and Energy		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 - Endangered ,Threatened, or Sensitive	X	
Wildlife: Aquatic	X	
Wildlife: Terrestrial - Sensitive, Threatened, or Endangered	X	
Wildlife: Migratory Birds	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#1012-14) was completed for the Benton allotment on February 6, 2012 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 GIS data located 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 specific analysis for the allotment in this EA. The table shows known cultural resources, the potential of Historic Properties, and Management recommendations.

Cultural Resources Assessment Summary						
Allotment Name and Number	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level	Percent Allotment Inventoried at a Class III Level (%)	Number of Cultural Resources known in Allotment	High Potential of Historic Properties (yes/no)	Management Recommendations (Additional inventory required and historic properties to be visited)
Benton #08654	65.3	1455.5	4.3%	2	No	Additional inventory of 37.8 acres; monitor 2 sites (5RT1661 & 5RT1662)

Within the Benton allotment, one cultural resource inventory has been conducted totaling 65.3 acres at a Class III level. Two cultural resources (5RT.1661 and 5RT.1662) were identified and recorded during this inventory (CRVFO BLM# 1102-3). Both of these sites are prehistoric open camp sites which are potentially eligible for the National Register of Historic Places (NRHP). Looking at historic General Land Office (GLO) maps, there is a portion of a historic cattle trail, spring, and ditch indicated on the 1906 map which goes through the southeast corner of section 26 and northeast corner of section 35.

Environmental Consequences

Proposed Action Alternative

The direct impacts that occur where livestock concentrate, during normal livestock grazing activity, can include trampling, chiseling, artifact breakage, and churning of site soils, cultural features, and cultural artifacts. 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.

The use of adaptive management will have little change on cultural resource impacts. The use of this management technique might in fact be beneficial to cultural resources by lessening 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.

An additional 37.8 acres are recommended to be inventoried within the term of the permit. These areas include an inventory of a historic road, identification of a possible historic ditch, and the area around a spring. Additionally, two sites (5RT.1661 and 5RT.1662) are recommended to be monitored during the term of this permit.

No Grazing Alternative

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

Mitigation Measures

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

This allotment may contain undiscovered historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders. If the BLM determines that grazing activities will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO. The BLM may also require modification to development proposals to protect such properties, or disapprove any activity that is likely to result in damage to historic properties or areas of Native American concern.

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 National Historic Preservation Act and Archeological Resource Preservation Act, 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 these allotments describing known cultural resources and their condition was sent to the Southern Ute Indian Tribe, Ute Mountain Ute Tribe, and the Uinta and Ouray Agency Ute Indian Tribe. The letter, sent on March 2, 2012, requested the tribes to identify issues and areas of concern within the allotments. No comments were received.

Environmental Consequences

Proposed Action Alternative

No traditional cultural properties, unique natural resources, or properties of a type previously identified as being of interest to local tribes, were identified during the overview of the cultural resources inventory of the project area. Therefore, areas of concern to Native American tribes would not be affected.

No Grazing Alternative

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

Mitigation Measures

Following the *Mitigation Measures* in the **Cultural Resources** section will help to ensure direct and indirect impacts are not occurring in areas where concern is unknown.

Livestock Grazing

Affected Environment

The Benton Allotment ranges in elevation from around 7,600 feet to 9,300 feet. The allotment consists of two separate parcels that are separated by about two miles of private land. The western parcel is just over 161 acres and the eastern parcel is just over 1,504 acres. Vegetation consists primarily of upper elevation sagebrush with some pockets of aspen. The eastern parcel contains aspen and some spruce-fir. Although the grazing lease shows 100% public lands, the lessee has advised BLM that much of the allotment is unfenced from their adjacent private land and other leased lands such as state land in Section 36. Livestock grazing on the allotment begins around May 20 and all livestock are removed by July 01.

Environmental Effects

Proposed Action

Under this action grazing would continue to be authorized at the same levels as previous leases. Grazing utilization is expected to remain light. Impacts from grazing would be minimal and would be focused around water sources.

No Grazing Alternative

Under this alternative this grazing lease would not be renewed. Cancelling grazing use on this allotment may result in economic harm to the lessee. The lessee or adjacent land owner, to protect themselves from trespass proceedings, may need to fence any unfenced portions of their private property where livestock would tend to cross onto public lands. This alternative is

currently not in conformance with the Land Use Plan and would amend the Resource Management Plan.

Plants: Invasive Non-Native Species (Noxious Weeds)

Affected Environment

A landscape-wide inventory has not been completed on the proposed project site. However, given the widespread nature of noxious weed infestations throughout the area, it is assumed that some level of infestation does exist in the project area.

Environmental Effects

Proposed Action

Weeds generally germinate and become established in areas of surface disturbing activities. Livestock grazing can contribute to the establishment and expansion of noxious weeds through various mechanisms. Improperly managed grazing, (over-grazing), can cause a decline in desirable native plant species and ground cover which provides a niche for noxious weed invasion. In addition, noxious weed seed can be transported and introduced to new areas by fecal deposition or by seed that clings to the animal’s coat. However, this effect is minimal as compared to other weed seed dispersal vectors such as vehicle routes and ground disturbing activities. Conversely, properly managed livestock grazing which does not create areas of bare ground and which maintains the vigor and health of native plant species, particularly herbaceous species, is not expected to cause a substantial increase in noxious weeds. Since the proposed action was designed to sustain and/or improve land health, no significant impacts to non-native, invasive species are expected. Noxious and invasive plant species are not expected to radically increase as a result of the continuation of livestock grazing practices and most infestations will be isolated to watering facilities, salting areas, and other livestock high concentration locations.

No Grazing Alternative

Under this alternative, no livestock grazing would occur on this allotment and there would be no direct or indirect impacts to weeds from livestock use. Trampling or removal of plant material may still occur from wildlife grazing and noxious weeds may still become established from adjacent areas disturbed for oil and gas development.

Plants: Sensitive, Threatened or Endangered

Affected Environment

Table 3-3 summarizes the latest species list from the U. S. Fish and Wildlife Service for Federally listed, proposed, or candidate plant species (USFWS 2011) and the November 2009 Colorado BLM State Director's Sensitive Species List for BLM sensitive plants (BLM 2009) that may occur within Routt or Eagle County and be impacted by the proposed action.

Table 3-3. Threatened, Endangered, and Sensitive Plant Species in Eagle/Routt County

Federally Listed, Proposed or Candidate Plant Species		
Species	Habitat	Potential Habitat Present / Absent

Ute ladies'-tresses orchid (<i>Spiranthes diluvialis</i>)	Habitat for this threatened species is found below 6,500 feet along streams, lakes or in wetland areas with seasonally saturated or subirrigated soils.	Absent: No riparian or wetland habitat below 7,800 feet exists in the Benton allotment. No known suitable habitat.
Penland Alpine Fen mustard (<i>Eutrema penlandii</i>)	Found at margins of moss-dominated fens fed by perennial snowbeds. Known from Lake, Park and Summit Counties in Colorado at elevations between 11,900 and 13,280 ft.	Absent: No habitat above 8,800 feet and no known fens on the Benton allotment.
BLM Sensitive Plant Species		
Species	Habitat	Potential Habitat Present/Absent
Harrington's penstemon (<i>Penstemon harringtonii</i>)	Open sagebrush communities on rocky loam or rocky clay loam soils between the elevations of 6,200 to 10,000 feet.	Present: The Benton allotment appears to contain potential habitat for Harrington's penstemon, but none were found during the land health assessment in 2011.

Environmental Effects

Proposed Action

Suitable habitat for Harrington's penstemon consists of open sagebrush parks with rocky loam or clay loam soils. The Benton allotment contains open slopes of sagebrush/mixed mountain shrubland with basaltic rocks that appear to constitute potential habitat for Harrington's penstemon. No plants of this species were found during the land health assessment in 2011; however only a small portion of the entire allotment was visited. As such, the Benton Allotment will be presumed to be occupied until thorough surveys have discounted its presence.

The flowering stalks of Harrington's penstemon are highly palatable to livestock and wildlife and reductions in Harrington's penstemon populations could result if excessive grazing removes a high percentage of the flower stalks annually thereby inhibiting seed dissemination and reproduction. The existing and proposed grazing schedule for the Benton allotment is from 5/20 to 7/1 which overlaps the flowering season for Harrington's penstemon.

Livestock utilization data was collected for the Benton allotment only in 2010. In that year, very light grazing use was observed on public land. Cattle were observed close to a creek on adjacent private lands. The Benton allotment is used in conjunction with unfenced private and state lands to the east and west of the allotment. Cattle drift between public and private land, with more use probably occurring on the private. Although livestock grazing occurs during the peak flowering season for Harrington's penstemon, the level of use would be slight and would not be expected to result in the removal of a substantial percentage of flowering stalks. Grazing under the proposed action would not have any adverse impacts on Harrington's penstemon populations.

No Grazing Alternative

Under this alternative, no livestock grazing would occur on the Benton allotment and there would be no direct or indirect impacts to special status plants from livestock use. Without livestock grazing, there would be less surface disturbance due to trampling and removal of vegetation and therefore, less risk of noxious weed invasion. Wind, wildlife and vehicular traffic would continue to distribute weed seeds and contribute to weed expansion.

Land Health Standard 4 for Threatened, Endangered and Sensitive Plant Species

No populations of Harrington's penstemon were discovered during the land health assessment fieldwork in the Benton allotment, but comprehensive surveys have not been conducted for this species. Overall habitat conditions are adequate to support Harrington's penstemon and neither the proposed action nor the no grazing alternative would prevent Standard 4 for special status plants from being met.

Plants: Vegetation

Affected Environment

The Benton allotment is a moderately-sloping allotment on the southwestern flank of King Mountain. Vegetation on the allotment consists primarily of mountain big sagebrush (*Artemisia tridentata* var. *pauciflora*), antelope bitterbrush (*Purshia tridentata*), green rabbitbrush (*Chrysothamnus viscidiflorus*), and other mesic mountain shrubs. The understory vegetation is a diverse mix of cool-season perennial grasses and forbs. The Benton allotment is in good condition and no noxious weeds were detected during the land health assessment in 2011.

Vegetation composition closely matches the NRCS' Ecological Site Description, except that arrowleaf balsamroot is more abundant than expected for the site. A few stringers of aspen occur within the drainages and a few pinyon pine and Utah juniper trees are sparsely scattered throughout the allotment. Most of the mature aspen are dead, but aspen sprouts are numerous.

Environmental Effects

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. Improper livestock grazing may reduce total vegetative cover, change species composition in favor of shrubs and less palatable grasses and forbs, and may contribute to the establishment of noxious weeds and other invasive plants. Grazing management that allows for adequate rest prior to grazing or recovery time following grazing so that plants can replenish root reserves, disseminate seed and establish seedlings maintains individual plant health and plant community composition and vegetative cover. 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.

Livestock utilization data was collected for the Benton allotment only in 2010. In that year, very light grazing use was observed on public land. Cattle were observed close to a creek on adjacent private lands. The Benton allotment is used in conjunction with unfenced private and state lands to the east and west of the allotment. Cattle drift between public and private land, with more use probably occurring on the private. No noxious weeds or other invasive, exotic plant species were noted during the land health assessment which indicates that grazing is not resulting in substantial areas of bare ground that serve as a niche for noxious weeds.

According to the permittee, the allotment receives quite a bit of use by elk in the late winter and early spring and also receives moderate deer use in the winter. During the land health assessment, a moderate amount of big game pellets were observed and palatable shrubs such as bitterbrush and Gambel oak were heavily hedged.

Considering the fact that livestock utilization levels appear to be slight and that livestock grazing ends by 7/1, there should be adequate opportunity for plant regrowth and recovery following grazing. Continuation of livestock grazing at the current levels should continue to maintain plant health.

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 a short-term increase in herbaceous vegetative biomass without the presence of livestock to remove vegetative material. Over time, without grazing by livestock, dead and dried stems and seed stalks may accumulate, resulting in less vegetative vigor and biomass in the long-term. Wildlife would continue to use the allotment, thus there would continue to be heavy hedging on palatable shrubs.

Land Health Standard 3 for Plant Communities

The fieldwork for the King Mountain Landscape Land Health Assessment, which included the Benton Allotment, was conducted in summer 2011. Although the Evaluation Report has not been completed, the data collected by the interdisciplinary team during the assessment indicated that the Benton Allotment was meeting Standard 3 for plant communities. Continuation of livestock grazing at the current levels would likely result in maintaining the current ecological condition.

Social and Economics

Affected Environment

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

Table 3-5

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

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

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

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

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

Environmental Effects

Proposed Action

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

No Grazing Alternative

This alternative disproportionately impacts ranches with greater forage needs, higher public forage dependency, and no cost effective forage substitutes. Public forage losses could be replaced with other private leases or hay. Leasing private land can be the least-cost alternative but in many areas is unrealistic due to lack of available agricultural land to lease. Buying hay to compensate for lost forage is a far more expensive option than reducing livestock numbers. (Rowe, 2001) This alternative may also require fencing along the private-BLM boundary to prevent unauthorized use on public lands. These additional costs may result in the conversion of traditional agricultural property to some other use.

The desired social outcomes of the Community Assessment Report identified the importance of rural or western lifestyles and livelihoods in this area. This alternative would hinder the ability of

local ranches to maintain economies, but even more importantly, to maintain the rural/western character integral to the larger community identity. (BLM, 2007)

Soils

Affected Environment

A review of the soil survey by the NRCS for the *Routt Area, Colorado, Parts of Rio Blanco and Routt Counties* indicate 12 soil map units occur within the proposed allotments (NRCS 2007). The NRCS soil map unit descriptions (NRCS 2011) are provided below for the three dominant soils:

Woosley loam (54C) - 3 to 25 percent slopes, very stony

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. Shrink-swell potential is low.

Evna-Lintim complex (111) - 5 to 25 percent slopes

The Evna component makes up 45 percent of the map unit and the natural drainage class is well drained. Shrink-swell potential is low. The Lintim component makes up 40 percent of the map unit and the water movement in the most restrictive layer is moderately low. Shrink-swell potential is high. The parent material consists of colluvium and slope alluvium derived from shale and sandstone. This soil map unit does not meet hydric criteria.

Ustorthents-Rock outcrop association (101) - 25 to 200 percent slopes

The Ustorthents component makes up 50 percent of the map unit. Slopes are 25 to 75 percent. 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. Shrink-swell potential is low. The Rock outcrop component makes up 40 percent of the map unit.

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 proposed allotment, with only slight departures from expected conditions (BLM 2011).

Environmental Effects

Proposed Action

Grazing activities could 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 generally 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 Benton allotment would not likely create long term affects that would compromise soil stability on a large scale. Small-scale and localized disturbances would likely be limited to trails and watering areas. Allowing for adaptive management may provide better protection of soils and upland vegetation conditions.

No Grazing Alternative

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

Land Health Standard 1 for Upland Soils

Based on the King Mountain Land Health Assessment, BLM staff concluded that soils are meeting Standard 1 (BLM 2011). Implementation of the proposed action is not anticipated to degrade soil health from current conditions.

Water Quality

Affected Environment

The Benton allotment lies within the Sunnyside Creek and Cabin Creek 6th level watersheds. Most of the allotment is drained by intermittent tributaries to Sunnyside Creek which then flows into Cabin Creek. A very small portion of Cedar Creek is also contained in the western portion of the allotment and flows into Cabin Creek. Cabin Creek is perennial with seasonal variation in flow. Most flow occurs in the spring of the year from snowmelt. Natural stream flow has been modified by irrigation withdrawal. Portions of the stream may be dewatered in some reaches some years. Limited water quality collected in 2011 during the King Mountain Land Health Assessment indicates good water quality. Cedar Creek was found to have specific conductance of 334 umhos/cm, pH of 6.33, and salinity of 0.2ppt. Sunnyside did not have site specific water quality data collected, but is suspected to be comparable to Cedar Creek given its similar geology, topography, and aspect.

The State of Colorado has developed *Stream Classifications and Water Quality Standards* that identify beneficial uses of water and numeric standards used to determine allowable concentrations of water quality parameters (CDPHE 2010a). Streams within the Benton allotment are listed under the Upper Colorado River Basin (Region 12) and have water use classifications described below:

Stream Segment Description	Classifications
7a. All tributaries to the Colorado River, including all wetlands, from a point immediately above the confluence with the Blue River and Muddy Creek to a point immediately below the confluence with the Roaring Fork River, which are not on National Forest lands, except for specific listings in Segment 7b, 7c and in the Blue River, Eagle River, and Roaring Fork River basins.	Aq Life Cold 1 Recreation N Water Supply Agriculture

Aquatic life cold 1 indicates that a stream segment is capable of sustaining a wide variety of cold water biota. Recreation N refers to stream segments in which surface waters are not suitable or intended to become suitable for primary contact recreation uses. 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.

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

Environmental Effects

Proposed Action

Direct impacts to water quality resulting from grazing could be elevated nutrient levels (i.e. fecal coliform) if cattle 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. The proposed stocking rates and duration are not expected to have a negative effect on water quality. Any sediment that is produced in areas where livestock may congregate would likely be captured by the existing vegetative ground cover and healthy riparian systems along Cedar Creek and Sunnyside Creek. Allowing for adaptive management may provide for better protection of upland and riparian vegetation and subsequently maintain water quality conditions.

No Grazing Alternative

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

Land Health Standard 5 for Water Quality

Based on the King Mountain Land Health Assessment, BLM staff concluded that water quality is meeting Standard 5 (BLM 2011). Implementation of the proposed action is not anticipated to degrade water quality from current conditions.

Wetlands and Riparian Zones

Affected Environment

The table below lists known riparian areas and their Proper Functioning Condition (PFC) assessment for the allotment:

Allotment	Year Assessed	Riparian Area Name	Miles	Acres	Condition Rating
Benton	1993	Sunnyside Creek	0.1	0.8	Proper Functioning Condition
	1995	Cedar Creek	0.1	4.4	
	2011	Sunnyside Creek	0.1	6.8	
	2011	Cedar Creek	0.1	11.8	

There are two very short (~0.1 miles) segments of two different creeks on the Benton Allotment. These same creeks flow directly southward into the Sunnyside Individual Allotment where the 2011 results from PFC assessments were obtained by the land health assessment team to

represent riparian conditions on the Benton Allotment. PFC assessments were conducted in 1993, 1995 and 2011. In all years these two riparian areas were rated at PFC.

The period of grazing use is from May 20 through the end of June and is the early portion of the growing season and could cause adverse impacts (e.g., reduction in plant vigor, decline in riparian species composition and production, bank damage) to riparian plants species that green up early. Following the end of the grazing season, the riparian areas have some time to rest and recovery from livestock grazing.

Environmental Effects

Proposed Action

Under the proposed grazing schedule, the period of use would remain May 20 through to July 01 and the AUMs would remain the same. Livestock generally move to higher elevations of the allotment as the grazing period progresses so grazing use along riparian zones may not occur during portions of the entire 31 days. Moreover, in riparian areas that limit livestock movements or access because of dense woody vegetation or rugged topography, grazing impacts are usually kept to a minimum.

The duration and period of use would still allow for ample grazing rest and recovery time for riparian plant species. In the event cattle congregate along the creek for an extended period, the potential for severe utilization and trampling of the riparian vegetation could result. This could cause a decline in condition (i.e. a reduction in coverage and a decrease in species composition) of the riparian zone.

In consideration of the above and the conditions of riparian zones described in the Affected Environment, renewal of this grazing lease is not expected to cause adverse riparian zones impacts with riparian condition maintained or improved. There would be no cumulative impacts.

No Grazing Alternative:

Under the No Grazing alternative, impacts from grazing the Benton Allotment from May 20 to July 01 would not occur. All available forage production would remain for wildlife utilization and all remaining vegetation materials would be incorporated locally into the soil adding to soil nutrients.

Land Health Standard 2 for Riparian Systems

During the King Mountain Land Health Assessment 2011, BLM staff determined riparian areas throughout the Benton Allotment were considered to be meeting standard 2. Therefore, implementation of the proposed action is not anticipated to degrade riparian systems from current conditions.

Wildlife: Aquatic / Fisheries (including Endangered, Threatened, or Sensitive)

Affected Environment

Aquatic wildlife includes animals, either vertebrate or invertebrate, which live in water for most or all of their life. Aquatic habitats include: lakes, ponds, springs, seeps, rivers and streams. Aquatic wildlife species are vulnerable to grazing and other authorized land use activities due to the fragility of their aquatic environments.

Amphibians possibly present in wetlands would include various species of frogs (e.g., western chorus frog (*Pseudacris triseriata*)), and toads (e.g., Great Basin spadefoot (*Spea intermontana*)), which are adapted to seasonal flow regimes in arid environments. Aquatic macroinvertebrates most likely to occur in the allotment include water striders, water boatmen, predaceous diving beetles, and the aquatic larvae of caddis flies and true flies.

The allotment contains two small (less than 1/10 mile) portions of Sunnyside Creek. Sunnyside Creek, below the allotment, was sampled on July 15, 2011. Sunnyside Creek was reported to have brook trout per Colorado Parks and Wildlife records however no fish were discovered at the location sampled based.

No Federally listed, proposed, or candidate aquatic wildlife species or aquatic species found on the Colorado BLM State Director's Sensitive Species List are known to occur in Sunnyside Creek.

Environmental Effects

Livestock grazing can alter riparian vegetation structure, composition, and function. Effects on aquatic wildlife are dependent on grazing: numbers, timing (season of use), frequency, and intensity.

Riparian areas and aquatic species are especially vulnerable to negative habitat changes because riparian areas are very limited and often fragmented. Year-long and summer grazing can be particularly damaging to riparian vegetation (Kauffman and Krueger 1984) whereas late fall and winter grazing occurs when: water levels are low, stream banks are dry, and vegetation is dormant, thus minimizing the effects of grazing (e.g., trampling, soil compaction, erosion, and browsing). A livestock management strategy that incorporates rest periods and movement of animals through different pastures usually is more desirable for protecting aquatic wildlife habitat than season-long grazing.

Proposed Action

The King Mountain area was assessed in 2011; however, the final report has not been completed. During the 2011 King Mountain Land Health Assessment field work BLM staff determined the Benton Allotment was meeting land health standard 2 for riparian areas and land health standard 5 for water quality. Current aquatic habitat conditions also seem adequate in both suitability and connectivity to ensure aquatic macroinvertebrates, amphibians and potentially fish are maintained at viable population levels commensurate with the species potential and habitat potential. Maintaining the current number of animal unit months and periods of use, along with application of proposed terms/conditions; should continue to maintain the current aquatic habitat conditions.

No Grazing Alternative

In the absence of livestock grazing, any competition for forage between livestock and aquatic wildlife would be eliminated, and the public land within the allotment would be available for exclusive use by aquatic wildlife, without disturbance by the presence of livestock. However other land uses or authorizations affecting aquatic wildlife and riparian vegetation would continue to occur. Since the proposed action only affects public lands, fenced private lands could see an increase in use to make up for the loss cattle forage.

Land Health Standard (LHS) 3 and 4 for Aquatic Wildlife Communities

The King Mountain area was assessed in 2011; however the final report has not been completed. During the 2011 King Mountain Land Health Assessment BLM staff determined the Benton Allotment was meeting land health standard 2 for riparian areas and land health standard 5 for water quality. The current habitat trends lead to a conclusion that the proposed action (continuation of current management) should have little bearing on the area's ability to continue to meet land health standard 3 for aquatic species. Renewal of the same number/kind of livestock, period of use, percent public land and AUMs as the current livestock grazing permit would likely result in maintaining the current ecological condition of aquatic habitats on the allotment.

Wildlife: Terrestrial –(inc. Migratory Birds; Endangered, Threatened, and Sensitive Species)

Affected Environment:

The CRVFO supports a wide variety of terrestrial wildlife species that summer, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, aspen, pinyon-juniper woodlands, other types of coniferous forests, and riparian/wetland areas support many species. The current condition of wildlife habitats varies across the landscape. Some habitat is altered by power lines, pipelines, fences, public recreation use, residential and commercial development, vegetative treatments, livestock and wild ungulate grazing, oil and gas development, and roads/trails. These factors have contributed to some degradation/fragmentation of habitat as well as causing disturbance to some species.

Mammals

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

Big Game

The mule deer (*Odocoileus hemionus*) is a recreationally important species that is common throughout suitable habitats in the region. Another recreationally important big game ungulate (hoofed animal), the Rocky Mountain elk (*Cervus elaphus nelsonii*), is also present. Mule deer and elk usually occupy higher elevations, forested habitat, during the summer and then migrate to sagebrush-dominant ridges and south-facing slopes at lower elevation in the winter. BLM lands provide a large portion of the undeveloped winter range available to deer and elk. The CRVFO's RMP allocated existing forage proportionately to livestock and big game, the criterion being active preference for livestock and 5-year average demand for big game.

Reptiles and Amphibians

Reptile species most likely to occur in the project area include the western fence lizard (*Sceloporus undulatus*) and gopher snake (bullsnake) (*Pituophis catenifer*) in xeric shrublands or

grassy clearings and the western terrestrial garter snake (*Thamnophis elegans*) along creeks/riparian areas. Other reptiles potentially present along creeks, although more commonly found at lower elevations than the site, are the milk snake (*Lampropeltis triangulum*) and smooth green snake (*Opheodrys vernalis*).

Resident Raptors and Other Birds

Birds of prey (eagles, falcons, hawks, and owls) may migrate through the area or nest in cottonwoods, conifers, or very tall oaks, while the numerous songbirds and small mammal populations provide the primary prey base. Common raptor species in the CRVFO include the: red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), Cooper's hawk (*Accipiter cooperii*), and sharp-shinned hawk (*A. striatus*).

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

Numerous streams, rivers, reservoirs, ponds, and associated riparian vegetation provide habitat for a wide variety of waterfowl and shorebirds. Common species include: great blue herons (*Ardea Herodias*), Canada geese (*Branta canadensis*), mallards (*Anas platyrhynchos*), pintails (*A. acuta*), gadwalls (*A. strepera*), and American wigeon (*A. americana*) are common.

Migratory Birds

The CRVFO planning area provides both foraging and nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. BLM Instruction Memorandum No. 2008-050 provides guidance toward meeting the Bureau of Land Management's (BLM) responsibilities under the Migratory Bird Treaty Act (MBTA) and the Executive Order (EO) 13186. The guidance directs Field Offices to promote the maintenance and improvement of habitat quantity and quality. 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 2009) is the most recent effort to carry out this mandate. The CRVFO is within the Southern Rockies/Colorado Plateau Bird Conservation Region (BCR). The 2008 list of Birds of Conservation Concern potentially present, and not discussed above, are described in Table 3-6.

The conservation concerns are the result of population declines - naturally or human-caused, small ranges or population sizes, threats to habitat, or other factors. Although there are general patterns that can be inferred, there is no single reason why any species was on the list. Habitat loss is believed to be the major reason for the declines of many species.

Table 3-6 - Birds of Conservation Concern Potentially Present.

Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Bald eagles were removed from the federal threatened and endangered species list in 2007 but are still protected under the MBTA. Bald eagles occasionally summer in this region but usually winter (mid-Nov. to mid-April) along portions of the Colorado, Eagle and Roaring Fork Rivers and their major tributaries. Large mature cottonwood trees along the rivers and their major tributaries are used as roosting and perching sites, and these waterways provide the main food sources of fish and waterfowl. Upland habitats adjacent to these waterways are used as scavenging areas.	Irregular
Ferruginous Hawk (<i>Buteo regalis</i>)	Open, rolling and/or rugged terrain in grasslands and shrubsteppe communities; also grasslands and cultivated fields; nests on cliffs and rocky outcrops. Fall/winter resident, non-breeding.	Unlikely
Golden Eagle (<i>Aquila chrysaetos</i>)	Open country, grasslands, woodlands, and barren areas in hilly or mountainous terrain; nests on rocky outcrops or large trees. Year-round resident, breeding.	Likely Present
Peregrine Falcon (<i>Falco peregrines</i>)	Open country near cliff habitat, often near water such as rivers, lakes, and marshes; nests on ledges or holes on cliff faces and crags. Spring/summer resident, breeding.	Unlikely
Lewis's Woodpecker (<i>Melanerpes lewis</i>)	Open woodland, often logged or burned, including oak, coniferous forest (often ponderosa), riparian woodland, and orchards, less often in pinyon-juniper.	Likely Present
Gray Vireo (<i>Vireo vicinior</i>)	Open pinyon-juniper woodlands. Uncommon summer resident, breeding.	Uncommon
Pinyon Jay (<i>Gymnorhinus cyanocephalus</i>)	Common to abundant resident of pinyon-juniper woodlands. Year-round resident that travels broadly in flocks.	Likely Present
Juniper Titmouse (<i>Baeolophus ridgwayi</i>)	Pinyon-juniper woodlands, especially juniper; nests in tree cavities. Year-round resident, breeding.	Likely Present

Special Status Terrestrial Wildlife Species. Table 3-7 summarizes a recent: 1) species list (USFWS 2010) from the U. S. Fish and Wildlife Service for Federally listed, proposed, or candidate terrestrial wildlife species and 2) Colorado BLM State Director's Sensitive Species List (BLM 2009) for terrestrial species; that may occur within the CRVFO and be impacted by the proposed action.

Table 3-7 Special Status Terrestrial Wildlife Species Potentially Present.

Species	Habitat/Range	Occurrence
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Greater Sage-grouse (<i>Centrocercus urophasianus</i>)	Candidate for Federal listing. Sage-grouse, as the name implies, 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 winter, sagebrush accounts for 100% of the diet for these birds. In addition, it provides important escape cover and protection from the elements. In late winter, males begin to concentrate on traditional strutting grounds or leks. Females arrive at the leks 1-2 weeks later. Leks can occur on a variety of land types or formations (windswept ridges, knolls, areas of flat sagebrush, flat bare openings in the sagebrush. Breeding occurs on the leks and in the adjacent sagebrush, typically from March through May. Females and their chicks remain largely dependent on forbs and insects for food well into early fall. Within the CRVFO sage-grouse are still present in the northeast part of the Field Office in the Northern Eagle/Southern Routt population, while small (<500 birds), 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.	Present (within mapped occupied range)
Species	Habitat/Range	Occurrence
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>) and Fringed myotis (<i>Myotis thysanodes</i>)	Occur as scattered populations at moderate elevations on the western slope of Colorado. Habitat associations are not well defined. Both of these bats will forage over water and along the edge of vegetation for aerial insects. Although they commonly roost in caves, rock crevices, mines, or buildings, they also may roost in tree cavities. Both species are widely distributed and usually occur in small groups. Townsend's big-eared bat is not very abundant anywhere in its range and this is attributed to patchy distribution and limited availability of suitable roosting habitat (Gruver, J.C. and D.A. Keinath 2006).	Likely Present
Brewer's sparrow (<i>Spizella berweri</i>)	Neotropical migrant that summers in western Colorado mountain parks and spring/fall migrant at lower elevations. A sagebrush shrubland obligate with an apparently secure conservation status in Colorado.	Likely Present

Environmental Effects

Livestock grazing can alter vegetation structure, composition, and function. The response of wildlife to livestock grazing varies by habitat. Effects on terrestrial wildlife are dependent on the species of interest and may be adverse or beneficial depending on grazing: numbers, timing, frequency, and intensity. Direct impacts include: (1) the removal and/or trampling of vegetation that would otherwise be used for food and cover; (2) the trampling of nests, eggs, or young; and (3) livestock-wildlife interactions that may result in wildlife displacement or disease transmission. Indirect impacts result from changes in plant community composition, structure, and productivity which together largely determine the suitability of wildlife habitat (USFWS 2012) and habitat for insect and rodent prey species. On the other hand, livestock grazing can have a beneficial effect on forage quality by removing the rough or dried seedheads and stems, while leaving or creating the more palatable leaves for deer or elk to graze later in the season. A management strategy that incorporates rest periods and movement of livestock through different pastures is generally more desirable for plant growth and protecting wildlife habitat than season-long grazing.

Potential impacts of herbivory on greater sage-grouse and their habitat can include:

- 1) Long-term effects of historic overgrazing on sagebrush habitat;
- 2) Sage-grouse habitat changes due to herbivory;

- 3) Direct effects of herbivores on sage-grouse, such as trampling of nests and eggs;
- 4) Altered sage-grouse behavior due to presence of herbivores; and
- 5) Impacts to sage-grouse and sage-grouse behavior from structures associated with grazing management (BLM 2011a).

Proposed Action

No current issues between terrestrial wildlife and grazing are known to occur on this allotment. Livestock AUMs in the CRVFO are authorized based on an estimate of livestock to remove 50% or less of the annual vegetative component - thereby leaving no less than 50% of the vegetative resource for use by wildlife and their prey species. Grazing at up to 50% of current year's growth would be expected to continue to maintain vertical and horizontal vegetative structure and complexity where it presently exists. The proposed periods of use (5/20 – 7/01) would continue to maintain upland vegetation for wildlife by allowing for herbaceous and woody plant recovery and regrowth following defoliation. With consistent monitoring, the proposed action should theoretically continue to provide for adequate amounts of upland herbaceous vegetation necessary to continue to meet the needs of the various terrestrial wildlife species. Also see the vegetation and riparian sections.

Global positioning system (GPS) monitoring of individuals in the local population indicates use in the northern portion of this allotment by greater sage-grouse. Field observations indicate current livestock grazing schedule seems to be maintaining sufficient residual cover of herbaceous vegetation and the integrity of riparian vegetation to support greater sage-grouse.

Routine maintenance of fences, waters and other livestock operations should not negatively impact terrestrial wildlife or their habitats over the ten-year term of the permits. Such activities would be short term in duration and localized and would not result in new surface disturbances or loss of habitat.

The proposed action with the attached interim terms and conditions for greater sage-grouse will sustain the local greater sage-grouse population and conservation of its habitat while not closing any future options in the BLM Northwest District land use planning process that is now underway in accordance with the 2011 National Greater Sage-Grouse Planning Strategy.

No Grazing Alternative

In the absence of livestock grazing, any competition for forage between livestock and terrestrial wildlife would be eliminated, and the public land within the allotment would be available for exclusive use by terrestrial wildlife, without disturbance by the presence of livestock. However other land uses or authorizations affecting terrestrial wildlife and their habitat would continue to occur. Since the proposed action only affects public lands, fenced private lands could see an increase in use to make up for the loss cattle forage.

Land Health Standard (LHS) 3 and 4 for Terrestrial Wildlife Communities

The King Mountain area was assessed in 2011 however the final report has not been completed. Initial results indicate that the Benton Allotment is meeting land health standards 3 and 4 for wildlife, as well as land health standards 2 and 5. The current habitat trends lead to a conclusion that the proposed action (continuation of current management) should have little bearing on the area's ability to continue to meet land health standard 3 for terrestrial wildlife species. Renewal of the same number/kind of livestock, period of use, percent public land and AUMs as the

current livestock grazing permit would likely result in maintaining the current ecological condition of terrestrial wildlife habitats on the allotment.

CUMULATIVE EFFECTS SUMMARY:

Vegetation

The Benton allotment is only a small part of the surrounding watershed that includes public, private and state-owned lands. The level of livestock grazing that has occurred on the Benton allotment is having only a minor impact on vegetative resources. However, cumulative impacts to vegetation result from the incremental impact of the proposed action when added to other past, present and reasonably foreseeable future actions which have or may occur across the watershed. There are few roads or trails on the public and state lands in the area, therefore there has been little disturbance to vegetation due to roads and transportation. Much of the public land is surrounded by private property and thus there is limited public access and use of the area for recreation.

Some of the sagebrush habitat on private lands to the west of the allotment was treated with herbicide approximately 15 years ago. Sagebrush density and canopy cover have been substantially reduced in this area. Private lands in the lower terraces and valley bottoms are being irrigated for hay production, but this represents a small portion of the overall watershed. Based on limited land management activities that have occurred across the landscape and are anticipated in the future, it is assumed that cumulative effects to vegetation would be minor.

Wildlife (inc. Special Status Species).

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.

Soil and Water

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

RESIDUAL EFFECTS AFTER MITIGATION MEASURES HAVE BEEN APPLIED:

4. Tribes, Individuals, Organizations or Agencies Consulted

- Southern Ute Indian Tribe,
- Ute Mountain Ute Tribe,

- Uinta and Ouray Agency Ute Indian Tribe
- Grazing Lessee

5. List of Preparers

Members of the CRVFO Interdisciplinary Team who participated in the impact analysis of the Proposed Action, development of appropriate mitigation measures, and preparation of this EA are listed in Table 5.1, along with their areas of responsibility.

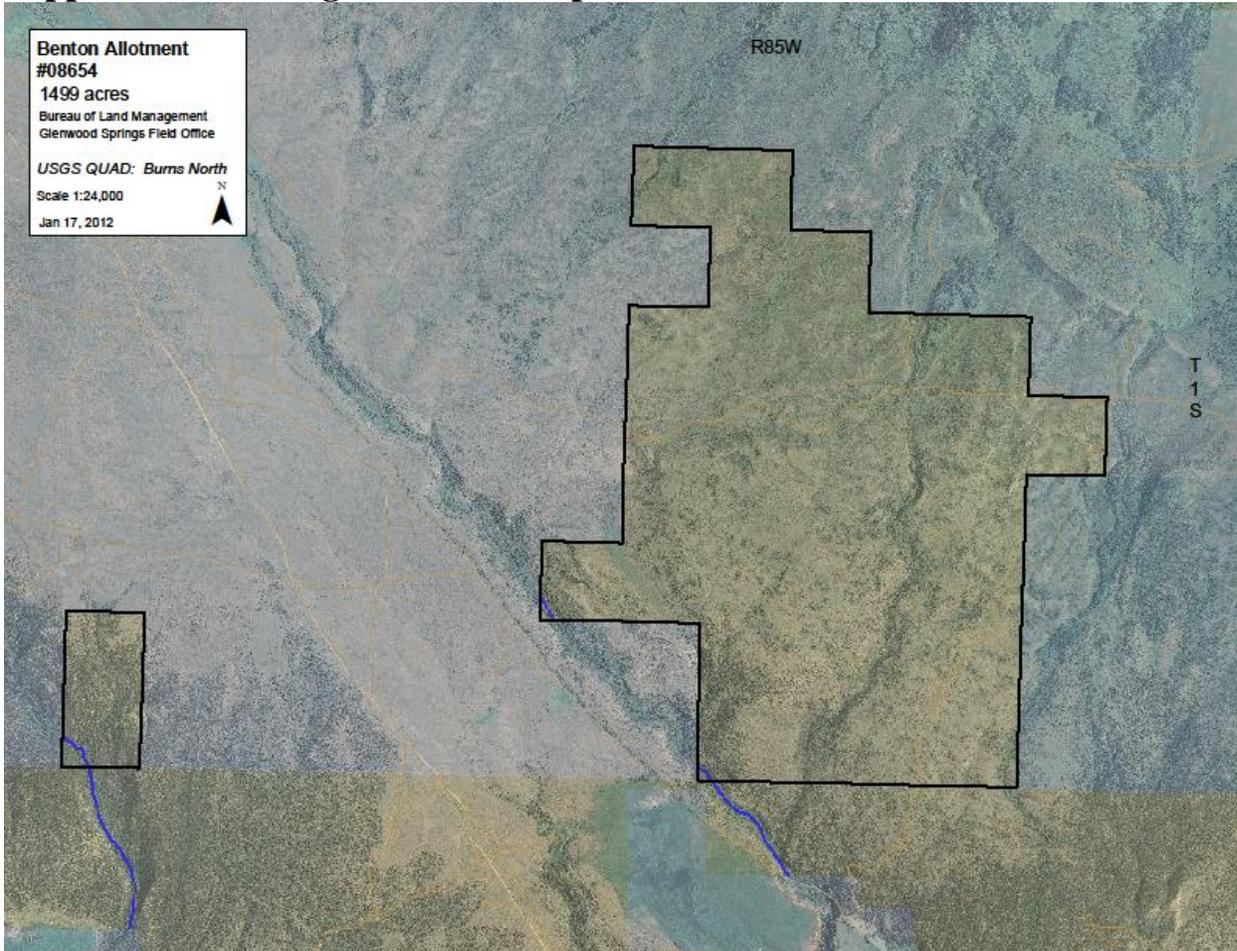
Table 5-1 BLM Interdisciplinary Team Authors and Reviewers		
<i>Name</i>	<i>Title</i>	<i>Areas of Participation</i>
Everett Bartz	Rangeland Management Specialist	NEPA Lead, Range Management, Riparian
Pauline Adams	Hydrologist	Air Quality, Water Quality, Soils
Carla DeYoung	Ecologist	ACEC, Vegetation, T/E/S Plants, Land Health Standards
Greg Wolfgang	Outdoor Recreation Planner	VRM, Recreation, Travel Management
Kimberly Miller	Outdoor Recreation Planner	Wild and Scenic Rivers, Wilderness, Recreation
Erin Leifeld	Archaeologist	Cultural Resources and Native American Concerns
Brian Hopkins	Wildlife Biologist	Migratory Birds, Terrestrial Wildlife and T/E/S Terrestrial Wildlife, Aquatic Wildlife and T/E/S Aquatic Wildlife
Monte Senior	Rangeland Management Specialist	Invasive, Non-native Species

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Appendix – Grazing Allotment Map



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

FINDING OF NO SIGNIFICANT IMPACT

Grazing Lease Renewal on the Benton Allotment

DOI-BLM-N040-2012-0037-EA

Finding of No Significant Impact

I have reviewed the direct, indirect and cumulative effects of the proposed action documented in the EA for the grazing lease renewal on the Benton Allotment. The effects of the proposed action are disclosed in the Alternatives and Environmental Impacts 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):

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

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

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

Impacts associated with this livestock grazing lease renewal are identified and discussed in the Affected Environment and Environmental Consequences section 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.

No unique characteristics occur in the allotment.

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

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

The area covered by 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.

Within the Benton Allotment, there is potential for encountering historic sites based on historic GLO maps. Areas that have potential to contain historic sites have largely been surveyed by previous cultural resource inventories and no historic properties were identified relating to the historic GLO records.

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.

There is no endangered or threatened species or its habitat included within the assessment area.

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 laws or requirements imposed for the protection of the environment.

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



Authorized Officer
Colorado River Valley Field Office

4-13-2012

Date