



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
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ENVIRONMENTAL ASSESSMENT

1. Introduction

NUMBER: DOI-BLM-CO-040-2012-0010 EA

CASEFILE NUMBER: 057501

PROJECT NAME: Grazing Permit Renewal on the River Common (08613) and Sunnyside (08613) Allotments

LOCATION: Eagle County

LEGAL DESCRIPTIONS: T2S R85W Sec 1, 3, 6, 21, 29, 30 and 31; T3S R85W Sec 6 and 7; T3S R86W Sec1.

APPLICANT: Grazing Permittee

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 and associated allotments scheduled for renewal in 2011-2012. The public was provided an opportunity to offer any information or concerns, or to be considered as an interested public on a permit or allotment scheduled for renewal. There have been no responses received specific to the permit renewal or allotments addressed in this NEPA document. The Colorado River Valley Field Office Internet NEPA Register also lists grazing permit renewal NEPA documents that have been initiated. They are generally posted approximately one month prior to the estimated completion date.

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, and Glenwood Springs Field Office's Resource Management Plan/Environmental Impact Statement. This Plan/EIS has been amended by Standards for Public Land Health in Colorado.

The renewal of the grazing permit is needed for the following reasons: (1) to meet the livestock grazing management 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

DESCRIPTION OF PROPOSED ACTION

The Proposed Action is to renew a term grazing permit. The period of use, percent public land and Animal Unit Months (AUMs) will remain the same as the previous permit for River Common. For the Sunnyside allotment, the period of use and percent public land will change to reflect what is occurring on the ground; the total AUM's will remain the same. The permit would be issued for a 10-year period unless the base property is leased for less, but for purposes of the EA, we are assuming 10 years of grazing by this or another applicant (in case of transfer). The proposed action is in accordance with 43 CFR 4130.2. Scheduled grazing use and grazing preference for the permit are summarized below.

Mandatory Terms and Conditions

Proposed Scheduled Grazing Use:

Table 2-1

Allotment Name & No.	Livestock No. & Kind	Period of use	Percent Public Land	AUMs
River Common #08615	25 Cattle	5/1 – 5/31	100	25
Sunnyside #08613	50 Cattle	6/1 – 6/15	100	25

Grazing Preference AUMs:

Table 2-2

Allotment Name & No.	Active	Suspended	Total
River Common #08615	25	75	100
Sunnyside #08613	25	25	50

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

- 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. The range will be considered ready when there is a minimum of 4 inches of new growth on grasses. Use different than that shown above must be applied for in advance.
- 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 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.
- To minimize the areas of concentrated grazing use on the River Common allotment and to allow vegetation to recover, permittees shall not use the same salting areas in any two consecutive years and shall avoid salting within ¼ mile of water sources.

Additional Background Information:

Other grazing use is authorized on the River Common allotment and is represented in the table below.

Authorization Number	Livestock No. & Kind	Period of use	Active	Suspended	Total
0503702	13 Cattle	5/1 – 5/31	13	0	13
		Total	13	24	13

No other grazing use is authorized on the River Common or the Sunnyside allotments. A review of recent billings indicates that this allotment is being fully utilized.

NO GRAZING ALTERNATIVE:

Under this alternative the grazing permit described in the Proposed Action would not be reissued. As a result, no grazing would be authorized on the River Common and Sunnyside allotments. This alternative would initiate the process in accordance with 43 CFR parts 4100 and 1600 to eliminate grazing on the allotments and devote the land to some other purpose. This alternative would result in amendments to the resource management plan.

DESCRIPTION OF NO ACTION ALTERNATIVE

This alternative would involve re-issuing a grazing permit with the same “Mandatory Terms and Conditions” and same “Other Terms and Conditions” as the expiring permit. No change would be made in the season of use or numbers of livestock on the Sunnyside or River Common allotments. The Table below outlines what would be authorized under this alternative:

Mandatory Terms and Conditions
Existing Scheduled Grazing Use:

Table 2-3

Allotment Name & No.	Livestock No. & Kind	Period of use	Percent Public Land	AUMs
River Common #08615	25 Cattle	5/1 – 5/31	100	25
Sunnyside #08613	100 Cattle	5/1 – 5/31	25	25

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 June 2007 – 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.”

RELATIONSHIP TO STATUTES, REGULATIONS, OTHER PLANS

- Taylor Grazing Act of 1934 as amended;
- Federal Land Policy and Management Act of 1976;
- Public Rangelands Improvement Act of 1978;
- Title 43 of the Code of Federal Regulations Subpart 4100 – Grazing Administration;
- Noxious Weed Act of 1974;

- Endangered Species Act of 1973;
- National Environmental Policy Act of 1969;
- Migratory Bird Treaty Act of 1918;
- National Historic Preservation Act (16 USC 470f);
- Archeological Resources Protection Act;
- Native American Graves Protection and Repatriation Act;
- Indian Sacred Sites – EO 13007; and
- Consultation and Coordination with Indian Tribal Governments – EO 13175
- Colorado Public Health Standards and Livestock Grazing Management Guidelines - March 1997

STANDARDS FOR PUBLIC LAND HEALTH

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

The Sweetwater to Burns Watershed Land Health Assessment, which was conducted in 2005-2006, encompassed the River Common allotment. Although the allotment was at least marginally meeting the Standards, habitat concerns were more evident on this allotment than most of the others in the watershed. One site was marginally meeting due to dominance of the area by cheatgrass, dandelions and annual forbs, and the corresponding loss of native grasses and forbs. The site appeared to be a livestock concentration area. At other sites, concerns were associated with the poor condition of browse species on big game winter ranges. Many shrubs were old, decadent and heavily hedged. In addition, pinyon pine and Utah juniper encroachment was at a relatively advanced stage within sagebrush and mixed mountain shrub habitats.

The fieldwork for the King Mountain Landscape Land Health Assessment, which included the Sunnyside 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 this allotment was marginally meeting the standards. Indicators that departed from expected conditions included: sagebrush was denser than expected, herbaceous cover was somewhat less than expected and pinyon-juniper encroachment was at an early to intermediate stage in most sagebrush parks. Very little evidence of livestock use was observed. Fire suppression and climatic conditions were the primary causes of the pinyon-juniper encroachment and the increased sagebrush densities.

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

3. Affected Environment & Environmental 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 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	
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#1012-9) was completed for the Sunnyside and River Commons allotments on December 9, 2011 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 two allotments in this EA. The table shows known cultural resources, the potential of Historic Properties, and Management recommendations.

Allotment Name and Number	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level	Percent Allotment Inventoried at a Class III Level (%)	Number of Cultural Resources known in Allotment	High Potential of Historic Properties (yes/no)	Management Recommendations (Additional inventory required and historic properties to be visited)
Sunnyside #08613	76.2	592.4	11.3%	4	No	No additional survey needed; Revisit 2 sites (5EA.1892 and 5EA.1895)

River Commons #08615	363.3	3521.5	9.3%	9	No	Recommended additional inventory of 20.5 acres; Revisit 2 sites (5EA.493 and 5EA.1891)
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Within the Sunnyside allotment, 76.2 acres have been inventoried at a Class III level for cultural resources. Four cultural resources were identified (5EA.1892-5EA.1895) within the allotment and all are prehistoric open camp sites. Of the four sites, one (5EA.1892) site is determined potentially eligible for the National Register of Historic Places (NRHP) and one site (5EA.1895) is of interest for further study. Looking at the GLO maps from 1882 and 1918 show no historic homes, ranches, or other infrastructure.

Within the River Commons allotment, 363.3 acres have been inventoried at a Class III level for cultural resources. Nine cultural resources were identified and recorded within the allotment and include one paleontological site (5EA.1447), one historic railroad segment (5EA.214), and seven prehistoric sites or isolated finds (5EA.182, 5EA.493, 5EA.181, 5EA.2293, 5EA.1890, 5EA.1910, and 5EA.1891). Of these sites recorded, two (5EA.493 and 5EA.1891) are evaluated as potentially eligible for the NRHP. Looking at the GLO maps from 1882, 1918, and 1935 show no historic homes, ranches, or other infrastructure besides the road next to the Colorado River which is present in the 1918 map.

Environmental Effects

Proposed Action

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 gullying, 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 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.

No additional inventory is needed within the Sunnyside allotment as slopes are steep and fairly far from water. A small portion of the River Commons allotment in an open area along a drainage is recommended to be surveyed totaling 20.5 acres within the term of this permit. The remaining unsurveyed area has low potential for archaeological sites as it contains steep slopes where archaeological sites are limited. Two sites (5EA.1892 and 5EA.1895) within the Sunnyside allotment and two sites (5EA.493 and 5EA.1891) within the River Commons allotment are recommended to be revisited and 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 several acts and Executive Orders, namely 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 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 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 December 16, 2011, requested the tribes to identify issues and areas of concern within the allotments. No comments were received.

Environmental Effects

Proposed Action

The Ute have a generalized concept of spiritual significance that is not easily transferred to Western models or definitions. As such 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. 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.

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

Following the Mitigation Measures in the Cultural Resources section will help to ensure direct and indirect impacts are not occurring in areas where Native American religious concerns are unknown.

Livestock Grazing Management

Affected Environment

River Common Allotment

Most of the River Common allotment consists of steep, south-east facing slopes above the Colorado River. The cliff rim at the top of Derby Mesa inhibits livestock grazing along the steep slopes below the rim. The gentler, accessible terrain on the allotment lies in small parcels above the cliff rim and in several gently sloped sagebrush parks in the southern portion of the allotment.

Approximately 75% of the allotment is pinyon-juniper woodlands. Sagebrush shrublands comprise another 15% of the vegetation. These shrublands occur as small-to-medium sized parks surrounded by pinyon-juniper woodlands. The remaining 10% of the cover is cliffs/badlands. Pinyon pine (*Pinus edulis*) and Utah juniper (*Juniperus osteosperma*) dominate the pinyon-juniper woodland. Remnant shrubs in the understory include Wyoming big sagebrush (*Artemisia tridentata Wyomingensis*) and prickly pear cactus (*Opuntia polycantha*). Sparse grasses and forbs include bottlebrush squirreltail (*Elymus elymoides*), muttongrass (*Poa fendleriana*), and rock goldenrod (*Petradoria pumila*).

The sagebrush shrublands are dominated by Wyoming big sagebrush, long-flowered rabbitbrush (*Chrysothamnus depressus*) needle-and-thread (*Hesperostipa comata*), and Sandberg bluegrass (*Poa secunda*). Most of the livestock forage is found in the sagebrush shrublands.

Sunnyside Allotment

The Sunnyside allotment lies on south-facing slopes north of Derby Creek. Roughly 80% of the allotment consists of pinyon-juniper woodlands and the remaining 20% is sagebrush shrubland. During the land health assessment it was noted that pinyon-juniper woodlands were dense with a sparse understory. Sagebrush shrublands were also denser than expected with fewer grasses and forbs. Encroachment of pinyon pine and Utah juniper trees was at an intermediate stage in most sagebrush parks.

Environmental Effects

Proposed Action

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

No Grazing Alternative

Under this alternative this grazing permit would not be renewed. Cancelling grazing use on this allotment may result in economic harm to the permittee. The permittee 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 this grazing allotment. However, given the widespread nature of noxious weed infestations throughout the area, it is assumed that some level of infestation does exist in this 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 these allotments 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.

Plants: Sensitive, Threatened or Endangered

Affected Environment

Table 3-3 summarizes the 2010 species list from the U. S. Fish and Wildlife Service for Federally listed, proposed, or candidate plant species (USFWS 2010) and the November 2009 Colorado BLM State Director's Sensitive Species List for BLM sensitive plants (BLM 2009) that may occur within Garfield County and be impacted by the proposed action.

Table 3-3. Threatened, Endangered, and Sensitive Plant Species in Eagle 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 6,800 feet included in the project area. 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 elevations above 8,500 feet and known fens on either the River Common or Sunnyside allotments.
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: Multiple populations exist in the River Common allotment. Potential habitat in Sunnyside allotment

Suitable habitat for Harrington's penstemon consists of open sagebrush parks with rocky loam or clay loam soils. Harrington's penstemon has been documented in several sagebrush parks in the River Common allotment. Although Harrington's penstemon has not yet been documented on the Sunnyside allotment, surveys in this area have been very cursory. The Sunnyside allotment has several sagebrush parks that appear to constitute potential habitat and the allotment will be presumed to be occupied until thorough surveys have discounted its presence.

Harrington's penstemon is a pioneer species which does not compete well with dense vegetative cover. The species cannot survive under a dense canopy of pinyon-juniper trees. Encroaching pinyon pine and juniper trees in the sagebrush parks reduces habitat quality by increasing competition for resources and by altering soil surface chemistry.

Environmental Effects

Proposed Action

River Common Allotment: 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 River Common allotment is from 5/1 to 5/31 which overlaps the flowering season for Harrington's penstemon.

Utilization data for the River Common allotment is extremely limited. General allotment observations in 2002, 2004 and 2005 indicated that use in most areas of the allotment was slight but heavy use was noted above the cliff rim adjacent to unfenced private property (northern part of allotment). Habitat for Harrington's penstemon and the few known populations in this area may be slightly suppressed by livestock grazing. A large population of Harrington's penstemon occurs in the largest sagebrush park in the southern portion of the allotment. Utilization in this area has been slight. Pinyon juniper encroachment here is at an advanced stage. Although livestock grazing may be one of the contributing factors, the primary factors in P-J encroachment appears to be fire suppression and climate variations favorable to establishment of trees.

Mitigation

An environmental assessment for the construction of 4 ponds in the southern part of the allotment was completed in October, 2005 but the ponds have not yet been built. The construction of these ponds should improve grazing distribution throughout the allotment and improve overall vegetative condition and habitat for Harrington's penstemon in particular.

Sunnyside Allotment: The proposed action would reduce the length of the grazing period on the Sunnyside allotment to 2 weeks in early June. Although grazing would occur 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 Action

River Common Allotment: Grazing under the No Action alternative is the same as the Proposed Action and impacts would be the same as described above.

Sunnyside: No utilization or trend data has been collected for the Sunnyside allotment. Observations during the land health assessment fieldwork in 2011 indicated that utilization levels in this allotment were very minimal. Grazing use at this level would not have any adverse impacts on Harrington's penstemon populations.

No Grazing

Under this alternative, no livestock grazing would occur on these allotments 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 Standards 4 for Threatened, Endangered and Sensitive Plant Species

The River Common allotment was included in the Sweetwater to Burns Land Health Assessment of 2005-2006. The allotment supports at least one large and several smaller populations of Harrington's penstemon. Utilization in the vicinity of one of the smaller populations was moderately heavy, but utilization in the area of the large population was slight. The allotment was meeting Standard 4 for special status plants at the time of the assessment. Constructing at least some of the 4 proposed ponds would improve grazing distribution in the allotment and should maintain or improve land health conditions for special status plants.

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

Plants: Vegetation

Affected Environment

River Common Allotment: Most of the River Common allotment consists of steep, south-east facing slopes above the Colorado River. The cliff rim at the top of Derby Mesa inhibits livestock

grazing along the steep slopes below the rim. The gentler, accessible terrain on the allotment lies in small parcels above the cliff rim and in several gently sloped sagebrush parks in the southern portion of the allotment.

Approximately 75% of the allotment is pinyon-juniper woodlands. Sagebrush shrublands comprise another 15% of the vegetation. These shrublands occur as small-to-medium sized parks surrounded by pinyon-juniper woodlands. The remaining 10% of the cover is cliffs/badlands. Pinyon pine (*Pinus edulis*) and Utah juniper (*Juniperus osteosperma*) dominate the pinyon-juniper woodland. Remnant shrubs in the understory include Wyoming big sagebrush (*Artemisia tridentata* *Wyomingensis*) and prickly pear cactus (*Opuntia polyacantha*). Sparse grasses and forbs include bottlebrush squirreltail (*Elymus elymoides*), muttongrass (*Poa fendleriana*), and rock goldenrod (*Petrorhiza pumila*).

The sagebrush shrublands are dominated by Wyoming big sagebrush, long-flowered rabbitbrush (*Chrysothamnus depressus*) needle-and-thread (*Hesperostipa tridentata*), and Sandberg bluegrass (*Poa secunda*). Most of the livestock forage is found in the sagebrush shrublands.

During the land health assessment and cultural resource inventories, areas of poor vegetative vigor, invasive plants and higher amounts of bare ground were noted where salting was occurring. The land health assessment also noted that sagebrush shrublands were severely hedged and shrubs were decadent from winter deer use.

Sunnyside Allotment: The Sunnyside allotment lies on south-facing slopes north of Derby Creek. Roughly 80% of the allotment consists of pinyon-juniper woodlands and the remaining 20% is sagebrush shrubland. During the land health assessment it was noted that pinyon-juniper woodlands were dense with a sparse understory. Sagebrush shrublands were also denser than expected with fewer grasses and forbs. Encroachment of pinyon pine and Utah juniper trees was at an intermediate stage in most sagebrush parks.



Figure 1. Pinyon-juniper encroachment on Sunnyside allotment

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.

River Common Allotment: Utilization data for the River Common allotment is extremely limited. General allotment observations in 2002, 2004 and 2005 indicated that livestock use in most areas of the allotment was slight but heavy use was noted above the cliff rim adjacent to unfenced private property (northern part of allotment). The flat areas of public land above the rim are used in conjunction with the adjacent irrigated private land and it appears that salt blocks have concentrated use on the public land.

Sunnyside Allotment: During the land health assessment, the team noted very little evidence of livestock use on this allotment. Given the very short season of use proposed (2 weeks in early June), there should be ample opportunity for palatable plants to complete their lifecycles and produce seed following the grazing period. This period of use should enable palatable plants to reproduce and increase both in abundance and canopy cover. The proposed livestock grazing permit should help to maintain or improve land health conditions on the allotment.

Mitigation

The terms of the current grazing permit state that the permittee shall not salt in the same area in the River Common allotment in any two consecutive years. If this mitigation is adhered to, livestock grazing should not result in a decline in vegetative conditions.

No Action

River Common Allotment: The proposed grazing period and numbers of livestock on the River Common allotment are the same as the expiring permit. Therefore, the No Action alternative would be the same as the Proposed Action and would have the same environmental effects.

Sunnyside Allotment: The monitoring files for the Sunnyside allotment contain no information regarding utilization levels or actual use on the allotment. During the land health assessment, the team noted very little evidence of livestock use on this allotment. The current grazing permit for the Sunnyside allotment has a period of use from May 1st to May 31st. Grazing for this period of time should still allow adequate opportunity for palatable plants to complete their lifecycles and produce seed following the grazing period. This period of use should enable palatable plants to reproduce and maintain both their populations and canopy cover.

No Grazing

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 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, reducing photosynthesis and resulting in less vegetative vigor and biomass.

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 Standards 3 for Plant Communities

River Common Allotment: The River Common allotment was included in the Sweetwater to Burns Land Health Assessment of 2005-2006. Overall, the allotment was meeting Standard 3 for healthy plant communities at the time of the assessment, but several areas of concern were noted. These included areas of poor vegetative vigor, invasive plants and higher amounts of bare ground where salting was occurring. Poor livestock distribution may be contributing to land health issues. The land health assessment also noted that sagebrush shrublands were severely hedged and shrubs were decadent from winter deer use.

Sunnyside Allotment: Fieldwork for a formal land health assessment was conducted on the Sunnyside allotment in 2011. Although the final evaluation report has not yet been completed, the data collected indicate that the Sunnyside allotment is currently meeting Standard 3 but with several problems noted. These problems included: amount of bare ground higher than expected, sagebrush density higher than expected, encroachment of pinyon pine and Utah juniper trees was at an intermediate stage in most sagebrush parks, and poor cover and diversity of grasses and forbs in parts of the allotment. These conditions are likely caused by a combination of advanced ecological succession without disturbance and historic heavy grazing on herbaceous plants. Current livestock grazing is not a significant factor contributing to current land health issues. None of the alternatives is likely to affect a substantial improvement in vegetative conditions without additional management actions to set back succession such as removal of pinyon-juniper encroachment or mechanical reduction of sagebrush density.

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 NRCS in the *Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield and Pitkin Counties* indicate 18 affected soil map units within the Sunnyside and River Common allotments (NRCS 1992). The NRCS soil map unit descriptions (NRCS 2011) are provided below for the three dominant soils throughout the allotments:

Cushool-Rentsac complex (25) – This soil map unit is found on mountains and mesa side slopes at elevations ranging from 6,200 to 7,600 feet and on slopes of 15 to 65 percent. Approximately 45 percent of this soil map unit is Cushool soil and 40 percent Rentsac soil. The Cushool soil is moderately deep, well drained, derived from sandstone and shale, and is found on slopes of 15 to 50 percent. Surface runoff for this soil is rapid and the erosion hazard is classified as severe. The Rentsac soil is shallow, well drained, derived from sandstone, and is found on slopes of 25 to 65 percent. Surface runoff for this soil is rapid and the erosion hazard is classified as severe. Primary uses for this soil map unit include rangeland and wildlife habitat.

Earsman-Rock outcrop complex (33) – This soil map unit is found on mountainsides and ridges at elevations ranging from 6,000 to 8,500 feet and on slopes of 12 to 65 percent. Approximately 45 percent of this unit is Earsman very stony sandy loam and 35 percent Rock outcrop. The Earsman soil is shallow, excessively drained, and derived from calcareous redbed sandstone. Surface runoff for this soil map unit is rapid and the water erosion hazard is classified as slight to severe depending on slope. Primary uses for this soil map unit include rangeland and wildlife habitat.

Torriorthents-Camborthids-Rock outcrop complex (104) – This soil map unit occurs on south-facing mountainsides, hills, and ridges with slopes ranging from 6 to 65 percent. Approximately 45 percent of this unit is Torriorthents, 20 percent Camborthids, and 15 percent Rock outcrop. The Torriorthents are shallow to moderately deep, well drained, and are derived from sedimentary rock. Surface runoff is rapid and the water erosion hazard is severe. The Camborthids are shallow to deep, well drained, and are derived from sandstone, shale, and basalt. Surface runoff is rapid and the water erosion hazard is severe. The Rock outcrop component of this unit consists of exposed sandstone, shale, and basalt. This soil map unit is used primarily for wildlife habitat.

During the Sweetwater to Burns and King Mountain Land Health assessments, soil conditions were field-evaluated across the River Common and Sunnyside allotments. BLM staff concluded that soils were meeting land health standards, with only slight departures from expected conditions (BLM 2006 and 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. Improper livestock grazing may cause substantial ground disturbance. However, based on existing soil conditions and generally good upland 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 allotments would not likely create

long term affects that would compromise soil stability on a large scale. Given the short season of use proposed, small-scale and localized disturbances would likely be limited to trails and watering areas. Allowing for adaptive management will provide better protection of soils and upland vegetation conditions.

No Action Alternative

The proposed numbers of livestock are the same as the expiring permit. Therefore, the No Action alternative would have similar environmental effects to soils as the Proposed Action described above.

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 Uplands Soils

Based on the Sweetwater to Burns and King Mountain Land Health Assessments, BLM staff concluded that soils are meeting Standard 1 (BLM 2006 and 2011). Implementation of the proposed action is not anticipated to degrade soil health from current conditions.

Water Quality

Affected Environment

The Sunnyside allotment lies within the Cabin Creek 6th level watershed. The perennially flowing Cabin Creek and Cedar Creek form the western and eastern boundaries of the allotment respectively. Natural stream flow has been modified by irrigation withdrawals and augmentations from Derby Creek. Cabin and Cedar Creeks were assessed as part of the King Mountain Land Health Assessment in 2011. Both streams rated properly functioning for riparian conditions. Limited water quality parameters were collected in the field; however, the data indicate good water quality as shown below:

Stream Name	Date	Discharge (cfs)	pH	Temp. (°C)	Conductivity (umhos/cm)	Salinity (ppt)	Dissolved Oxygen		Hardness (mg/L)
							%	mg/l	
Cedar Cr	7/18/11	2.03	6.33	16.4	334.7	0.2			632.7
Dry Fk Cabin Cr	7/19/11	17.40	5.90	13.4	62.5	0.0	43	4.05	153.9

The River Common allotment is primarily drained by ephemeral unnamed tributaries to the Colorado River. A few acres in the northern portion of the allotment lie within the Derby Creek watershed, while some of the western portion is within the Red Dirt Creek watershed. No water quality data has been collected on the ephemeral tributaries within this allotment.

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 in the proposed allotments are listed under the Upper Colorado River Basin (Region 12) and have water use classifications described below:

Stream Segment Description	Classifications	Numeric Standards
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.	Aquatic Life Cold 1 Recreation E Agriculture Water Supply	T=TVS(CS-II)oC D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=630/100ml
7c. Mainstem of Muddy Creek from the source to a point immediately below the confluence with Eastern Gulch as well as all tributaries to and wetlands of Muddy Creek from the source to the outlet of Wolford Mountain Reservoir, except for listings in Segment 4. The mainstems of Derby, Blacktail, Cabin, and Red Dirt Creeks (all below Wolford Mountain Reservoir), including all tributaries and wetlands, from their sources to their confluences with the Colorado River, except for listings in Segment 4.	Aquatic Life Cold 1 Recreation E Agriculture Water Supply	T=TVS(CS-I)oC D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=630/100ml

Aquatic life cold 1 indicates that a stream segment is 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.

The State of Colorado has developed a *303(d) List of Water Quality Limited Segments Requiring TMDLS and Monitoring and Evaluation List* (CDPHE 2010b) that identifies stream segments that are not currently meeting water quality standards with technology based controls alone. No streams in the proposed allotments 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 short 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. Allowing for adaptive management may provide for better protection of upland and riparian vegetation and subsequently improve water quality conditions.

No Action Alternative

The proposed numbers of livestock are the same as the expiring permit. Therefore, the No Action alternative would have similar environmental effects to water quality as the Proposed Action described above.

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 Sweetwater to Burns and King Mountain Land Health Assessments, BLM staff concluded that water quality is meeting Standard 1 (BLM 2006 and 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 each allotment:

Allotment	Year Assessed	Riparian Area Name	Miles	Acres	Condition Rating
Sunnyside	1994	Cabin Creek Lower #2	0.1	0.8	Functional At Risk Trend not apparent
	1995	Cedar Creek	0.6	4.4	Proper Functioning Condition
	1995	Cabin Creek Upper #1	1.4	6.8	Proper Functioning Condition
	1995	Dry Fork Cabin Creek	1.3	11.8	Functional At Risk Trend not apparent
	2011	Cedar Creek	0.6	4.4	Proper Functioning Condition
	2011	Cabin Creek Upper #1	1.4	6.8	Proper Functioning Condition
	2011	Cabin Creek Lower #2	0.1	0.8	Proper Functioning Condition
	2011	Dry Fork Cabin Creek	1.3	11.8	Proper Functioning Condition
River Common	2011	No known riparian resources			

Cabin Creek:

There are two reaches on Cabin Creek that were assessed in 1994, 1995 and again in 2011. In 1994, Cabin Creek Lower #2 was rated as Functional At Risk (FAR) with Trend not apparent. Field notes indicated that the FAR rating rationale was that the lack of woody plants species with root masses needed to stabilize stream bank erosion, even though the banks were well vegetated with sedges & riparian grasses. The channel was very mature with large meanders through a

mostly low gradient grassy banked riparian zone. When Cabin Creek was reassessed in 1995 and again in 2011, all reaches received a PFC rating.

The upper reach of Cabin Creek is a B-channel perennial stream with step pools in places along this high gradient stream channel. Surrounding uplands showed no sign of livestock grazing and the vegetation was dense and lush. Grazing was impeded by topography. Other observations included elk trailing.

Cedar Creek:

One reach on Cedar Creek was assessed in 1995 and again in 2011. At both times, this reach was rated at PFC. Cedar Creek is a steep, A-channel perennial stream that has several diversions that reduce overall flow, but it retains a good base flow. This riparian area was populated with mature cottonwoods and a diverse understory of riparian vegetation in spite of diversions. Because of high water flows, the ID Team assessed a side channel that was representative of the main channel which was noted as being a “very health riparian system”. There was no indication of grazing.

Dry Fork Cabin Creek:

One reach on Dry Fork Cabin Creek was assessed in 1995 and again in 2011. In 1995, this reach received a FAR rating with no apparent trend. Causal factors for the FAR rating included reduced beaver activity leading to washed out dams and heavy grazing pressure leading to unstable and un-vegetated steep banks. Adjacent areas were noted as being in poor shape and functioning at risk. Below this reach, livestock grazing pressure was much reduced and the ID team felt that this area was at PFC.

When assessed in 2011, this area was rated at PFC as evidenced by healing banks and an expanding riparian zone. The ID team identified a small, easily accessible portion of the upper reach that receives heavy grazing but is slowly recovering. The ID team recommended additional monitoring because of easy livestock access.

River Common Allotment:

Although this allotment flanks along the north, northwest side of the Colorado River, the cliff rim of Derby Mesa inhibits livestock movements from the allotment down to the Colorado River. Any channeled overland flows through this allotment are ephemeral in nature and this allotment does not host a riparian plant community.

Land Health Standard 2 for Riparian Systems

During the King Mountain Land Health Assessment of 2011, BLM staff determined that these riparian areas in the Sunnyside Allotment are meeting standard 2 for riparian areas. Implementation of the proposed action is not anticipated to degrade riparian systems from current conditions. River Common does not support riparian habitat that would be impacted by livestock grazing.

Environmental Effects

Proposed Action

Sunnyside Allotment:

Under the proposed grazing schedule, the period of use would remain May 01 through to May 31 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 the entire 31 days. The duration and period of use would still allow for ample grazing rest and recovery time for riparian plant species. In consideration of the above, and the conditions of riparian zones described in the Affected Environment, renewal of the grazing permit is not expected to cause adverse impacts to the riparian zones. The condition of riparian areas would be maintained or improved. There would be no cumulative impacts.

River Common Allotment:

With no known riparian areas, livestock impacts are not expected.

No Action:

Under the No Action alternative, the seasons of use would coincide, however the impacts from grazing Sunnyside at the same time as River Common would not be substantially different than the proposed action.

No Grazing:

Under this alternative, no livestock grazing would occur on these allotments and there would be no direct or indirect impacts to riparian habitat from livestock use. Without livestock grazing, riparian plant communities would be allowed to proliferate and expand to their maximum extent on the available resources present in riparian areas. Livestock caused bank shearing would not occur allowing riparian zones would widen and deepen which leads to riparian succession.

River Common Allotment: Because the River Common Allotment does not provide riparian habitat there are no environmental consequences from the proposed action.

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 Sunnyside allotment contains one perennial stream, Cabin Creek including the Dry Fork of Cabin Creek. The Colorado River forms the eastern border of the River Common allotment.

Cabin Creek:

Cabin Creek was sampled in 2011. A section within the allotment contained no fish based on limited sampling. It is not clear why no fish were seen or collected. This stream segment was relatively high gradient and was an A channel type with small step pool habitat. Riparian

vegetation was lush and dense and consisted of willows, alder, maple, redosier dogwood, rose, cottonwood, aspen, and spruce. Water was slightly turbid and flow was estimated at 2 cfs.

Dry Fork Cabin Creek.

Dry Fork Cabin Creek is believed to be perennial largely due to diversion flows from Derby Creek located to the south. On the BLM segment the stream is a lower gradient pool run riffle channel that is in balance with the valley bottom floor. The stream has a good mix of pools and spawning habitat. Riparian vegetation varies from fair to good with willows, sedges, rushes, and alder in the lower BLM portions. Brook trout are dominant in the stream system.

In 2007 a 1,000 foot long segment was sampled via 1 pass to determine fish species composition and distribution and to collect CRCT fin clips for genetic analysis. Sampling was conducted by backpack electro-shocker. A total of 30 Colorado River cutthroat trout were collected and fin clips taken. Genetic samples revealed the Colorado River Cutthroat trout in Dry Fork Cabin creek are 96% pure. In addition, approximately 300+ brook trout were counted and returned back to the water. All fish collected appeared healthy and robust. Aquatic insect productivity appears good with a diversity of stone, caddis, and mayflies present

Colorado River.

The Colorado River contains cold water fisheries including rainbow, brown, and brook trout. In addition, the Colorado River contains native fishes including mountain whitefish, bluehead suckers, and mottled sculpin.

Table 3-5 summarizes the latest: 1) species list (USFWS 2010) from the U. S. Fish and Wildlife Service for Federally listed, proposed, or candidate aquatic wildlife species and 2) Colorado BLM State Director's Sensitive Species List for aquatic species; that may occur within the CRVFO and be impacted by the proposed action.

Table 3-5 Special Status Aquatic Wildlife Species Potentially Present within the Allotments.

Federally Listed, Proposed or Candidate Aquatic Wildlife Species	
None	
Colorado BLM Sensitive Aquatic Species	
Species	Habitat/Range
Bluehead sucker (<i>Catostomus discobolus</i>)	Primarily found in larger rivers just down stream of the allotments 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.
Colorado River cutthroat trout (CRCT) (<i>Oncorhynchus clarkii pleuriticus</i>)	CRCT are one of three subspecies of native trout found in Colorado. CRCT prefer clear, cool headwaters streams with coarse substrates, well-distributed pools, stable streambanks, and abundant stream cover. It is likely that all of the perennial waters capable of harboring fish historically contained this native trout species. CRCT have hybridized with non-native salmonids in many areas, reducing the genetic integrity of this subspecies. Rainbow trout hybridize with cutthroat trout. Brook and brown trout tend to replace them in streams and rivers.

Environmental Effects

Proposed Action

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. Current aquatic habitat conditions are adequate in both suitability and connectivity to ensure aquatic species are maintained at viable population levels commensurate with the species potential and habitat potential.

No Action Alternative

The proposed numbers of livestock are the same as the expiring permit. Therefore, the No Action alternative would have similar environmental effects to soils as the Proposed Action described above.

No Grazing Alternative

In the absence of livestock grazing, any competition for forage between livestock and wildlife would be eliminated, and the public land within the allotment would be available for exclusive use by 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 Sunnyside Allotment was assessed in 2011 however a report is not yet available. Sampling reports for Cabin Creek and the Dry Fork of Cabin Creek show that indicators of LHS 3 and 4 are likely being met in the Sunnyside Allotment.

The 2006 Sweetwater to Burns Watershed Land Health Assessment Report included the River Common Allotment. The Colorado River along the River Common Allotment was determined to be meeting LHS 3 for aquatic wildlife.

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 the allotments. 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 LHSs for aquatic species.

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 are 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.

Species	Habitat Description
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Bald eagles are increasing in numbers throughout their range and were removed from the federal threatened and endangered species list in 2007 however bald eagles are still protected under the Migratory Bird Treaty Act. Bald eagles occasionally summer in this region but usually winter along portions of the Colorado, Eagle and Roaring Fork Rivers and their major tributaries. Wintering bald eagles are generally present from mid-November to mid-April. 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 primarily for winter killed animals. Major threats include habitat loss, human disturbance and illegal shooting.
Ferruginous Hawk (<i>Buteo regalis</i>)	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.
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.
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.
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.
Willow Flycatcher (<i>Empidonax traillii</i>)	Riparian and moist, shrubby areas; winters in shrubby openings with short vegetation. Summer resident, breeding.
Gray Vireo (<i>Vireo vicinior</i>)	Open pinyon-juniper woodlands. Uncommon summer resident, breeding.

Species	Habitat Description
Pinyon Jay (<i>Gymnorhinus cyanocephalus</i>)	Pinyon-juniper woodland. Year-round resident, breeding.
Juniper Titmouse (<i>Baeolophus ridgwayi</i>)	Pinyon-juniper woodlands, especially juniper; nests in tree cavities. Year-round resident, breeding.
Brewer's Sparrow (<i>Spizella breweri</i>)	Summer resident that primarily breeds in sagebrush-grass stands and shrublands. Migrant at low elevations.
Black Rosy-Finch (<i>Leucosticte atrata</i>)	Open country including mountain meadows, high deserts, valleys, and plains; breeds/ nests in alpine areas near rock piles and cliffs. Winter resident, non-breeding.
Brown-capped Rosy-Finch (<i>Leucosticte australis</i>)	Alpine meadows, cliffs, and talus and high-elevation parks and valleys. Summer residents, breeding.
Cassin's Finch (<i>Carpodacus cassinii</i>).	Open montane coniferous forests; breeds/ nests in coniferous forests. Year-round resident, breeding.

Special Status Terrestrial Wildlife Species: Table 3-7 summarizes the latest: 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.

Federally Listed, Proposed or Candidate Terrestrial Wildlife Species		
Species	Habitat/Range	Occurrence
Canada lynx (<i>Lynx Canadensis</i>)	Federally listed as threatened. 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 in 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 the size of a female's home range. Several LAUs border BLM lands however no areas large enough to be considered LAUs occur within the CRVFO. BLM lands within the project area generally support the movement of lynx dispersing to new areas or moving to lower elevations during severe winter weather in search of prey. The Castle Peak landscape linkage includes portions of the River Common Allotment.	Rare
Colorado BLM Sensitive Terrestrial Wildlife Species		
Species	Habitat/Range	Occurrence

Federally Listed, Proposed or Candidate Terrestrial Wildlife Species		
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

Environmental Effects

Proposed Action

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 usually is generally more desirable for plant growth and protecting wildlife habitat than season-long grazing.

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 maintain vertical and horizontal vegetative structure and complexity where it presently exists. The proposed periods of use (5/1 – 5/31) would allow for herbaceous and woody plant recovery and regrowth following defoliation in the spring.

No current issues between terrestrial wildlife and grazing are known. It is unlikely that the proposed action would influence terrestrial wildlife populations locally or on a landscape level. Also see the vegetation and riparian sections.

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.

Canada Lynx. This analysis is: a) in conformance with and tiered to the programmatic consultation regarding the CRVFO livestock grazing program (ES/GJ-6-CO-03-F-013) and b) summarizes the main points in the unpublished Biological Assessment (BA) for Federally Listed Threatened, Endangered, and Proposed Species for the Colorado River Valley Field Office - 2011 Grazing Permit Renewals (BLM 2010).

The mapped landscape linkage portion of the Red Hill Common Allotment consists of a portion of a sloping mesa (Derby Mesa) with a steep hillside dropping down to the Colorado River and the Colorado River Road. The mesa top is irrigated fields, sagebrush (*Artemisia spp.*) shrublands and pinyon pine (*Pinus edulis*) - juniper (*Juniperus osteosperma*) woodlands and some gambel's oak (*Quercus gambelii*). The cliff rim and the rocky steep slopes inhibits livestock grazing in a large portion of the allotment that overlaps with the linkage area.

Figure 2. River Common Allotment



The 2006 Sweetwater to Burns Watershed Land Health Assessment Report included the River Common Allotment. Four sites were looked at within this allotment and all were meeting Standard 3. However, habitat concerns included: (1) loss of native grasses and forbs, (2) condition of browse species located on low to mid elevation big game winter ranges, (3) some shrubs are decadent and heavily hedged, (4) some livestock distribution issues, and (5) pinyon pine and Utah juniper encroachment was at a relatively advanced stage within sagebrush and mixed mountain shrub habitats. Overall condition of habitats located within the Castle Peak landscape linkage was determined to be sufficient to facilitate movement of lynx through the area and the vegetation is capable of providing prey species for lynx.

Grazing compliance inspections have generally indicated the forage utilization as slight. Cheatgrass infestations and sagebrush hedging have also been noted.

The September 2011 on-site biological assessment concurred with the findings of the 2006 land health assessment and previous grazing compliance inspections. Broad areas of habitat where animals can find food, shelter and security existed in the linkage area portion of the allotment. Sufficient residual herbivore upland forage to sustain lynx and/or prey remained at the end of the season of grazing use. Ocular utilization levels within the linkage area were estimated to be light (0-20%). Neither livestock grazing nor any other BLM land management practices were found to be hindering the ability of native plant communities to support alternative prey species and lynx during dispersal movements.

As per the programmatic consultation (ES/GJ-6-CO-03-F-013), for allotments that contain no lynx habitat but overlap with a mapped linkage area, the assessment of public land health standard 3 was used to determine vegetative and wildlife condition. The proposed action is anticipated to continue to leave sufficient forage for lynx prey species and provide adequate cover for movement and dispersal of lynx between larger forested habitats. Thus it was

concluded the allotment with the current grazing system and stocking rates continues to achieve public land health standards for LHS 3.

Directly, indirectly or cumulatively the proposed actions have been determined not to result in the destruction or adverse modification of USFWS designated critical habitat for Canada lynx. The proposed action would not negatively affect the suitability of habitats within a LAU. Connectivity to other habitats across the linkage area would not be degraded. The allotment and the grazing management operation are anticipated to meet land health standard 2 and 3 within linkage areas and mechanisms are in place for adherence to these standards.

This project level analysis has reached a determination of “No Affect” for the Canada lynx because: (1) the action area is not part of a lynx analysis unit (LAU); (2) the action area does not include mapped habitat or mapped critical habitat; (3) no changes are being proposed that would create new or additional vegetation impacts in the landscape linkage; (4) the proposed action will not reduce connectivity between LAUs or mapped habitat; and (4) in areas where livestock grazing is being renewed, the allowable number of AUMs and periods of use, along with the land health standards and terms/conditions are anticipated to result in acceptable residual herbivore forage and riparian conditions necessary to maintain adequate lynx prey habitat.

As long as acceptable utilization levels are maintained and land health standards are achieved there would be no direct or indirect effects of grazing on bat species that forage over these areas.

No Action Alternative

The proposed numbers of livestock are the same as the expiring permit. Therefore, the no action alternative would have similar environmental effects to terrestrial wildlife as the proposed action described above.

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 wildlife, without disturbance by the presence of livestock. However other land uses affecting wildlife would continue to occur. Since this action only affects public lands, fenced private lands could see an increase in use to make up for the loss of cattle forage on public lands.

Land Health Standard 3 and 4 for Terrestrial Wildlife Communities

The Sunnyside Allotment was assessed in 2011 however a report is not yet available. The 2006 Sweetwater to Burns Watershed Land Health Assessment Report included the River Common Allotment. The River Common Allotment was determined to be meeting LHS 3 and 4 for terrestrial wildlife and livestock was not negatively affecting the achievement of LHS 3 or 4 for terrestrial wildlife. 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 the allotments. 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 LHSs for terrestrial wildlife species.

CUMULATIVE EFFECTS SUMMARY:

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 proposed allotments. 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 fuels reduction may also change water infiltration or runoff rates and affect soil and water resources. Based on limited land management activities occurring across the allotments, it is assumed that cumulative effects to soil and water are minor and immeasurable if proper best management practices are implemented.

RESIDUAL EFFECTS

None

4. Tribes, Individuals, Organizations or Agencies Consulted

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

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.

<i>Name</i>	<i>Title</i>	<i>Areas of Participation</i>
Monte Senor	Rangeland Management Specialist	NEPA Lead, Range Management, Invasive, Non-native Species
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	WSR, Wilderness, Recreation
Erin Leifeld	Archaeologist	Cultural Resources and Native American Concerns
Brian Hopkins	Wildlife Biologist	Migratory Birds, Terrestrial Wildlife and T/E/S Terrestrial

Table 5-1 BLM Interdisciplinary Team Authors and Reviewers		
Name	Title	Areas of Participation
		Wildlife, Aquatic Wildlife and T/E/S Aquatic Wildlife
Pauline Adams	Hydrologist	Air Quality, Water Quality, Soil,
Everett Bartz	Rangeland Management Specialist	Wetlands & Riparian Zones

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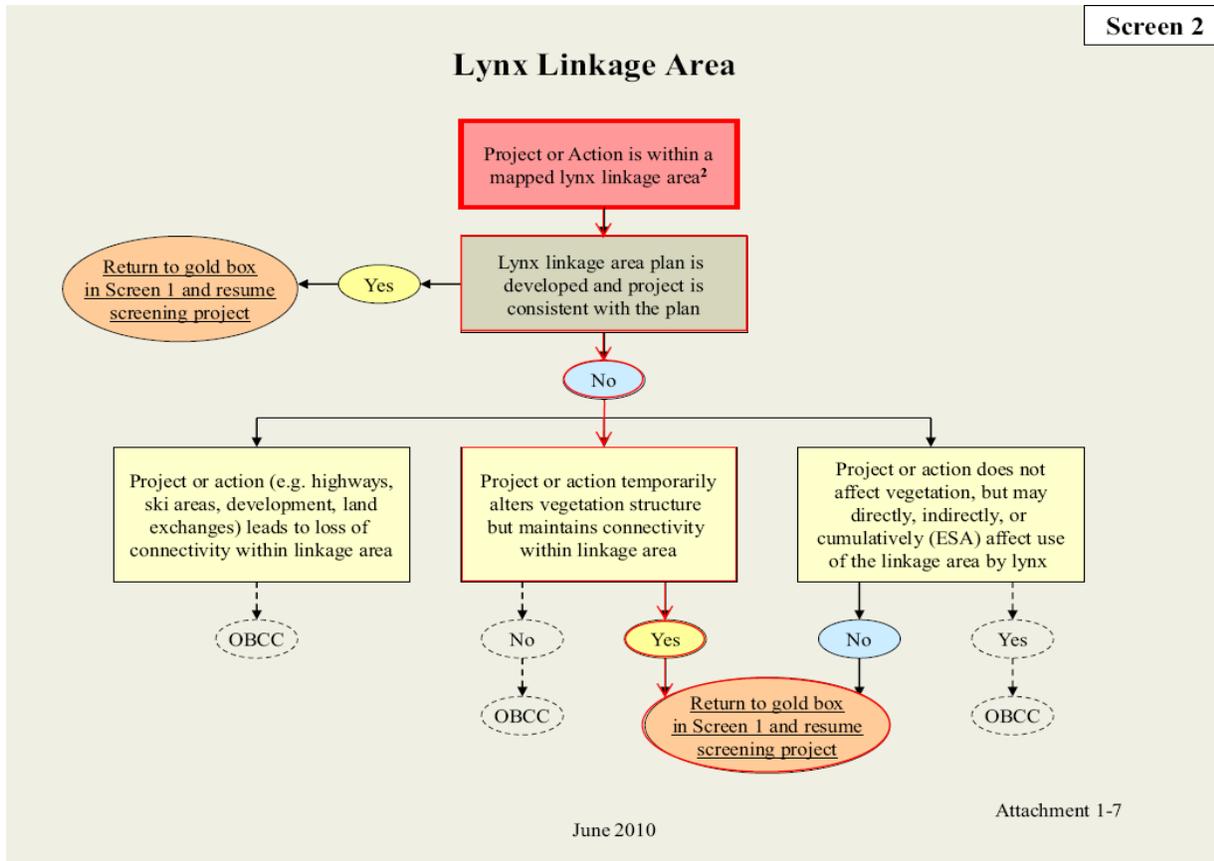
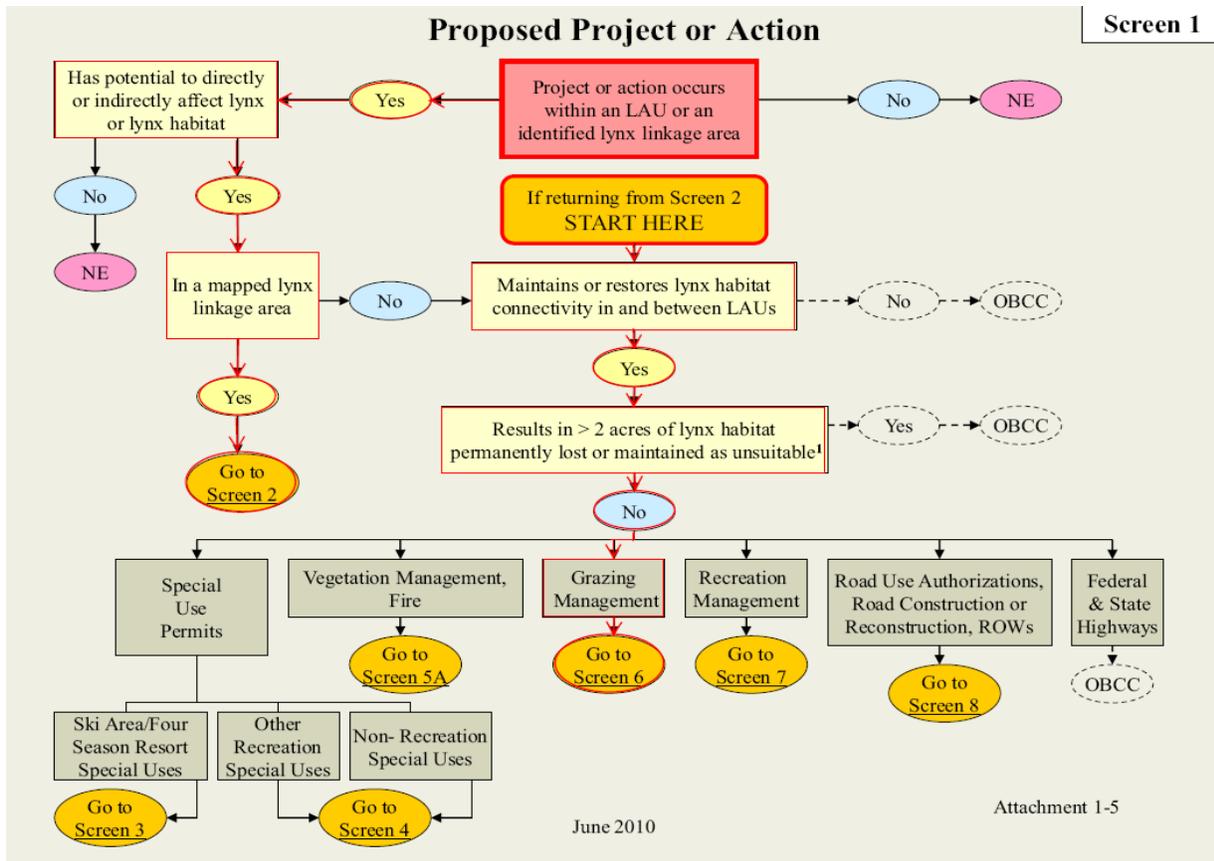
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Appendix A – Canada Lynx Screens

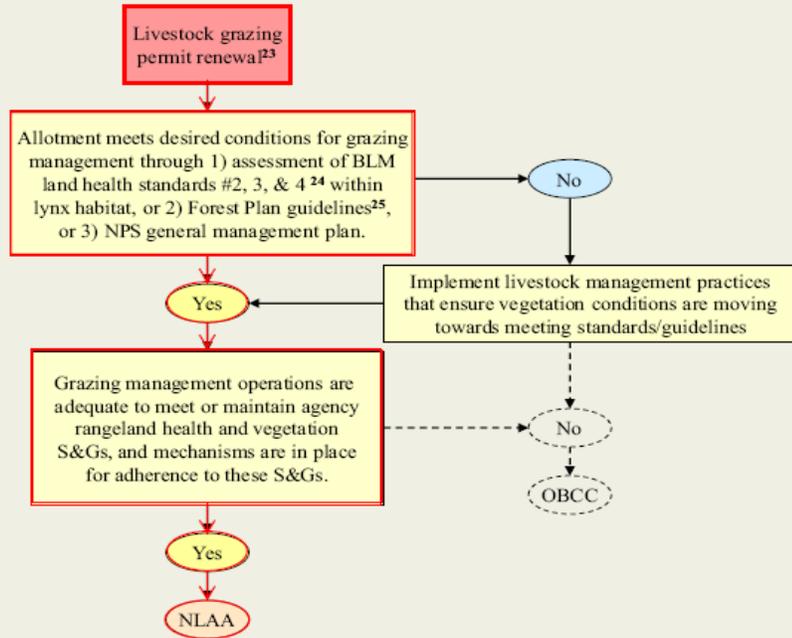
CONSULTATION SUMMARY SHEET FOR PROJECT ASSESSMENT OF CONSISTENCY WITH THE COLORADO LYNX SCREENS & PROGRAMMATIC CONCURRENCE

Instructions - Project biologists must complete a brief effects review of the proposal but in sufficient detail on the items below to be able to complete this summary sheet for each project screened and claimed under the programmatic concurrence.

Contact (Project Biologist): Brian Hopkins					
Project Name and Description	Species	Effects of Action	Cumulative Effects (ESA)	How does the project meet the screening criteria?	Determination of Effects
The Colorado River Valley Field Office is preparing an environmental assessment to renew term grazing permits. The proposed action consists of the renewal of a grazing permit. The grazing permit would be issued for a 10-year period. This allotment was included in the Field Office's programmatic biological assessment.	Canada lynx	<p>Project or action occurs within an LAU or an identified lynx linkage area.</p> <p>It has potential to directly or indirectly affect lynx or lynx habitat.</p> <p>Project or action temporarily alters vegetation structure but maintains connectivity within linkage area.</p>	<p>Future actions reasonably certain to continue include: population growth, recreation, travel and transportation, gas development, grazing, forest management (including the bark beetle epidemic) and wildfire /fuels management. For the Canada lynx, where these activities fall within an LAU or a linkage area, they cumulatively have the potential to affect Canada lynx or their prey species either through: habitat loss, habitat degradation, direct mortality, disturbance or displacement. On private lands, where the Federal government's ability to regulate/mitigate impacts to lynx are diminished, the negative effect of such land uses on lynx may be more severe than those occurring from similar actions on BLM lands. The proposed action is not anticipated to result in negative cumulative impacts to lynx when view in conjunction with those activities currently occurring and reasonably certain to occur on adjacent private and state lands.</p>	<p>Allotment meets desired conditions for grazing management through the assessment of BLM land health standards #2, #3, & #4 within lynx habitat or linkage area.</p> <p>Maintains or restores lynx habitat connectivity in and between LAUs. Results in no permanent loss of lynx habitat or loss of suitability.</p> <p>Proposed grazing management operations are adequate to meet or maintain agency rangeland health and vegetation S&Gs, and mechanisms are in place for adherence to these S&Gs.</p>	May affect not likely to adversely affect

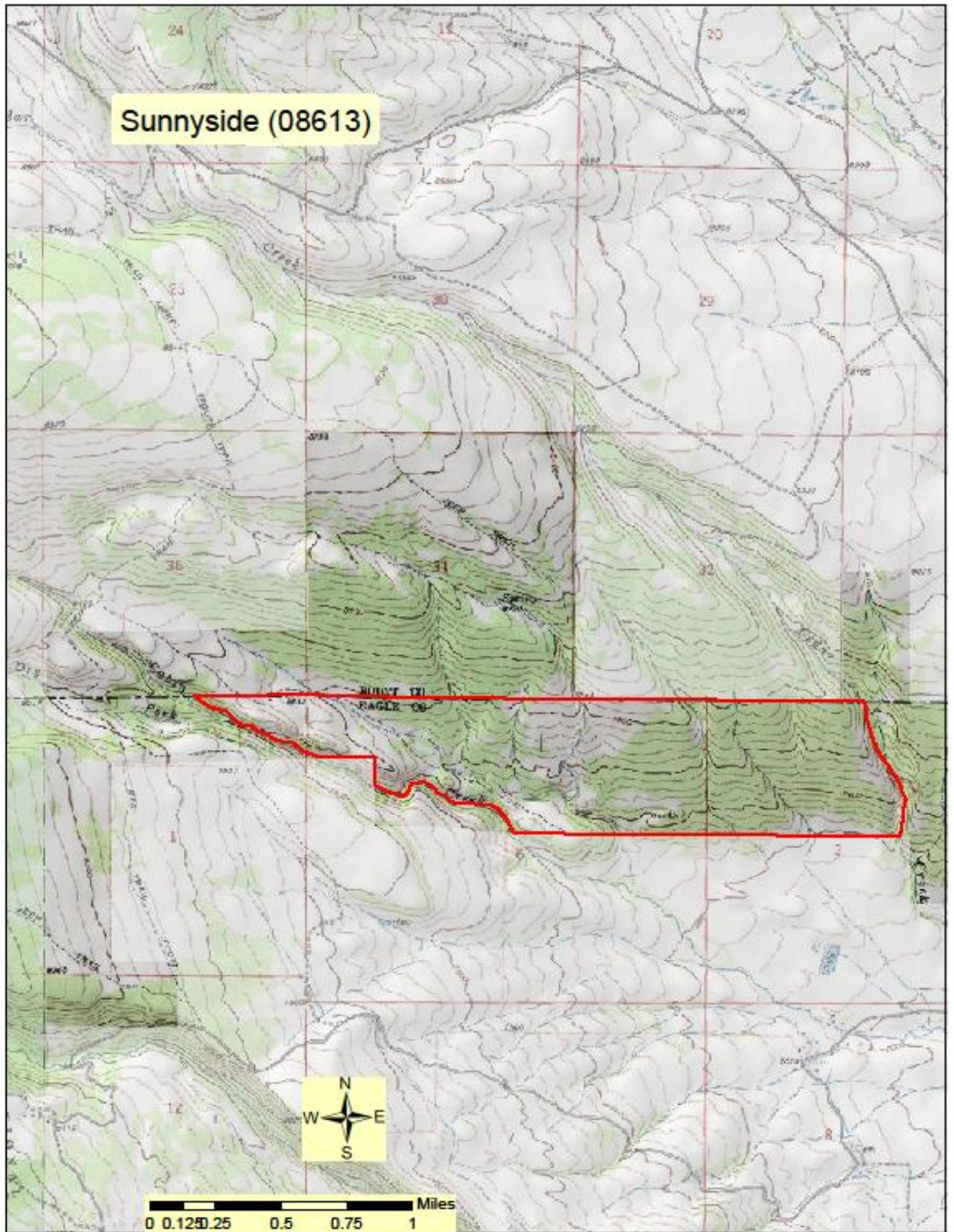


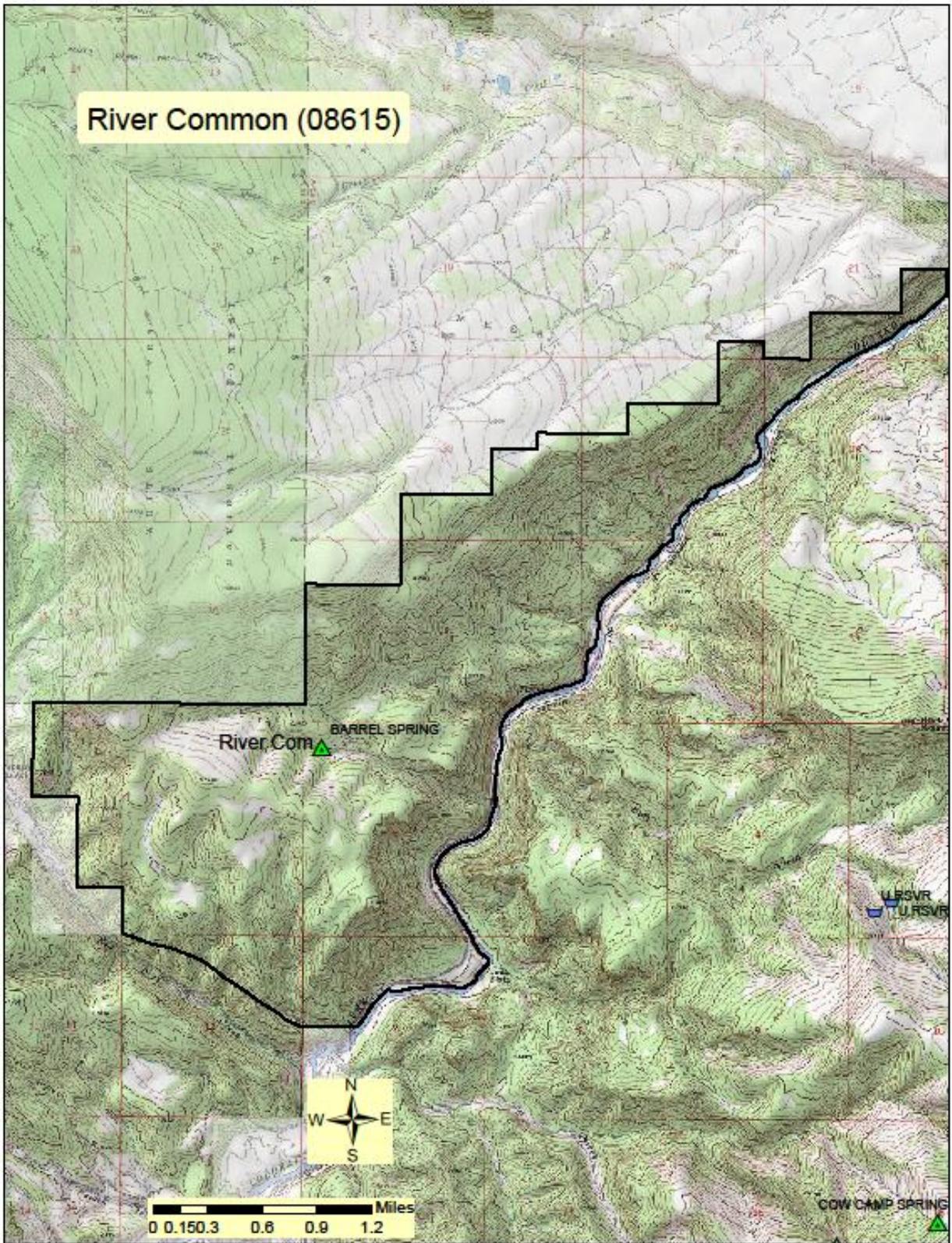
Grazing Management



June 2010

Attachment 1-16





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

FINDING OF NO SIGNIFICANT IMPACT

Grazing Permit Renewal on the River Common and Sunnyside Allotments

DOI-BLM-N040-2012-0010-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 permit renewal on the River Common, and Sunnyside Allotments. 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 permit 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 River Common, and Sunnyside Allotments. 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.

Of the 13 cultural resources identified, three Historic Property's were identified. 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. A determination of a Conditional No Adverse Effect has been made for historic properties that may occur in the allotment.

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.*

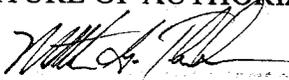
There is no endangered or threatened species or its habitat included within the assessment area.

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.

SIGNATURE OF AUTHORIZED OFFICIAL



Matthew Thorburn
Supervisory Natural Resource Specialist

DATE: 2-9-2012

