

U.S. Department of the Interior
Bureau of Land Management
Glenwood Springs Field Office
2300 River Frontage Road
Silt, CO 81652

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-N040-2010-0043-EA

CASEFILE NUMBER: 0502901

PROJECT NAME: Issue Revised Grazing Permit on the Hogback Common Allotment

LOCATION: T5S R91 Sec 16-22. Refer to attached allotment map.

APPLICANT: Grazing Permittee

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Proposed Action: The Proposed Action is to revise the current permit held by the grazing permittee on the Hogback Common allotment. The permittee has applied to adjust the season of use and the type of livestock authorized by his permit. The adjustments would result in no additional grazing preference. The changes are detailed in the tables below:

Existing Mandatory Terms and Conditions

Scheduled Grazing Use:

Allotment Name & Number	Livestock Number & Kind	Period of use	Percent Public Land	AUMs
Hogback Common 18026	37 Cattle	5/15 to 6/24	100	50
	750 Sheep	5/1 to 5/25	100	123
	550 Sheep	12/15 to 1/20	100	134

Revised Mandatory Terms and Conditions

Scheduled Grazing Use:

Allotment Name & Number	Livestock Number & Kind	Period of use	Percent Public Land	AUMs
Hogback Common 18026	750 Sheep	5/16 to 6/19	100	173
	550 Sheep	12/15 to 1/20	100	134

Grazing Preference AUMs:

Allotment Name & Number	Active	Suspended	Total Grazing Preference
Hogback Common 18026	305	140	445

The existing permit also authorized use on two other allotments. No changes would be made to the existing use or grazing preference authorized on those allotments. Refer to the following table for other scheduled grazing use by this permit:

Existing Mandatory Terms and Conditions (not changed)

Scheduled Grazing Use:

Allotment Name & Number	Livestock Number & Kind	Period of use	Percent Public Land	AUMs
Roberts 08027	120 Sheep	12/1 to 1/1	88	22
Pretti-Roberts 18029	800 Sheep	1/1 to 2/15	100	242

Grazing Preference AUMs:

Allotment Name & Number	Active	Suspended	Total Grazing Preference
Roberts 08027	22	0	22
Pretti-Roberts 18029	244	0	244

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 these or other applicants (in case of transfer). The Proposed Action is in accordance with 43 CFR 4130.2 (Grazing Permits and Leases). The tables below describe the scheduled grazing use and grazing preference for the previous permits.

The following “Other Terms and Conditions” listed below were included on the existing permit will carried forward to the revised permit:

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.

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

Average utilization levels by livestock should not exceed 50% by weight on key grass species, and 40% of the key browse species current year’s growth. Once these levels are reached, livestock should be moved to another portion of the allotment, or removed from the allotment entirely for the remainder of the growing season. Application of this term may be flexible to recognize livestock management that includes sufficient opportunity for regrowth, spring growth prior to grazing, or growing season deferment.

Permittee may supplement winter sheep with screened corn along road ways. Hay is not permitted. Winter use will occur when there is sufficient snow cover to provide a water source for sheep. Sheep use will not be focused in small areas. Sheep are to be moved frequently to new areas for grazing. Snow plowing is not authorized by this permit.

Other permittees are authorized for grazing use on these allotments. Other grazing use is detailed below:

Other Authorized Grazing Use:

Allotment Name & Number	Livestock Number & Kind	Period of use	Percent Public Land	AUMs
Hogback Common 18026	63 Cattle	5/15 to 6/4	100	43
Pretti-Roberts 18029	150 Cattle	5/16 to 6/15	100	153

ALTERNATIVES CONSIDERED BUT ELIMINATED:

The No Grazing alternative has been eliminated from further consideration. No unresolved conflicts involving alternative use of available resources have been identified. For this reason, discontinuance of grazing use (No Grazing) will not be considered or assessed.

The No Action alternative has also been eliminated from further consideration. The No Action alternative would involve reissuing the permit/lease with current terms and conditions and no additional stipulations would be added to the permit/lease. Reissuing the permit/lease without the new stipulations would be unrealistic due to current Washington Office and Colorado State Office policies.

PURPOSE AND NEED FOR THE 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 reissuance 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.

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.”

STANDARDS FOR PUBLIC LAND HEALTH:

In January 1997, Colorado 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 pertain to all uses of the public lands. The BLM is in the process of completing land health assessments on a landscape basis. This allotment is part of the Elk Creek Landscape which had a formal land health assessment completed in 2007 and a Determination Document signed on September 23, 2008. The allotment was determined not to be meeting the Standards, due to the abundance of cheatgrass and lack of perennial grasses and forbs on the allotment. There was insufficient monitoring data available for the team to determine whether existing livestock grazing was a significant contributing factor to the current land health conditions but altering the use on the allotment could result in improved land health conditions over the long-term. The altered use would allow for more rest and deferment of grazing during critical growth periods for perennial grasses and native forbs and would focus more use on cheatgrass and sagebrush.

The impact analysis must address whether the proposed action would result in impacts which would improve, maintain or deteriorate land health conditions for each of the parameters found in the Standards for Public Land Health.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and no action alternative. In addition, the section presents

comparative analyses of the direct and indirect consequences on the affected environment stemming from the implementation of the various actions.

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of a proposed action and alternative(s) on certain critical environmental elements. Not all of the critical elements that require inclusion in this EA are present, or if they are present, may not be affected by the proposed action and alternative (Table 1). Only those mandatory critical elements that are present and affected are described in the following narrative.

In addition to the mandatory critical elements, there are additional resources that would be impacted by the proposed action and alternative. These are presented under **Other Affected Resources**.

Critical Elements

Table 1. Critical Elements of the Human Environment									
<i>Critical Element</i>	<i>Present</i>		<i>Affected</i>		<i>Critical Element</i>	<i>Present</i>		<i>Affected</i>	
	Yes	No	Yes	No		Yes	No	Yes	No
Air Quality		X		X	Prime or Unique Farmlands		X		X
ACECs		X		X	Special Status Species*	X		X	
Cultural Resources	X			X	Wastes, Hazardous or Solid		X		X
Environmental Justice	X			X	Water Quality, Surface and Ground*	X		X	
Floodplains		X		X	Wetlands and Riparian Zones*		X		X
Invasive, Non-native Species	X		X		Wild and Scenic Rivers		X		X
Migratory Birds	X			X	Wilderness/ WSAs		X		X
Native American Religious Concerns		X		X					

* Public Land Health Standard

Cultural Resources and Native American Religious Concerns

Affected Environment: Range permit renewals are undertakings under Section 106 of the National Historic Preservation Act. Additional range improvements (e.g., fences, spring improvements) are subject to compliance requirements under Section 106 and will undergo standard cultural resources inventory and evaluation procedures. During Section 106 review, a cultural resource assessment (GSFO #1010-12) was completed for the Hogback Common, allotment on March 16, 2010 following 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, CO-2001-026, and CO-2002-029. The results of the assessment are summarized in the table below. A copy of the cultural resource assessment is available at the GSFO office.

Allotment Number	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level	Percent (%) Allotment Inventory data 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)
Hogback Common	362	1956	16	2	no	No additional acres need to be inventoried. 54% of the allotment has 30%+ slopes.
Total	362	1956	16	2		

Nine Class III cultural resource inventories (GSFO#s 145, 1005, 1022, 1003-26, 1105-12, 1006-4, 2295-1, 5497-19, and 15404-2) were conducted within this allotment. One historic property (5GF1164) was identified that is considered potentially eligible for listing on the National Register of Historic Places. Based on available data, there is a low potential for historic properties within these allotments. Unidentified historic era sites within this allotment could represent a time frame from the late 1800's through the 1950's; prehistoric sites could represent a time range from 5,000 to 10,000 years before present.

Subsequent site field visits, inventory, and periodic monitoring may have to be done to identify adverse grazing impacts on the historic properties identified within the term of the permit as funds are made available. If the BLM determines that grazing activities will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO.

At present, there are no known areas of Native American concern within these allotments. On October 9, 2009, the Glenwood Springs Field Office mailed an informational letter and maps to the Ute Tribe (Northern Ute Tribe), Southern Ute Tribe, and the Ute Mountain Ute Tribes, identifying the proposed 2009 grazing permit renewals. No response has been received. In the past the Tribes have not had any concerns with grazing permit renewals. If new data is disclosed, new terms and conditions may have to be added to the permit to accommodate their concerns. The BLM will take no action that would adversely affect these areas or location without consultation with the appropriate Native Americans.

Environmental Consequences: The change in livestock and a short period of use would likely result in fewer impacts to cultural resources. The direct impacts that occur where livestock concentrate include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art. Indirect impacts include soil erosion, gullyng, and increased potential for unlawful collection and vandalism. Continued grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to undiscovered historic properties. The change in season of use might reduce the potential of livestock damage to undiscovered cultural resources as well as reduce the potential for soil erosion. A determination of **No Adverse Affect** has been made for this renewal. The cultural resource specialist should be involved in discussions about improvements, maintenance,

supplemental feeding areas, etc to ensure that the historic properties and areas of concern are avoided

If additional historic properties are located during the subsequent range developments field inventory, these properties will also be assessed for livestock grazing impacts within the term of the permit.

Mitigation: Maintenance of range improvements not previously inventoried or new improvements may require cultural resource inventories. These allotments may be found to contain 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. The BLM may 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.

Education/Discovery stipulation needs to be added to the lease renewal.

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

Environmental Justice

Affected Environment: Review of 2004 data from US Census Bureau indicates the median annual income of Garfield County averages \$50,119 and is neither an impoverished or wealthy county. Median annual income of Mesa County averages \$40,045 and is not an impoverished or wealthy county. U.S. Census Bureau data from 2006 shows the minority population of Garfield and Mesa County comprises less than 0.7 % of the total population of Colorado¹.

Garfield County	Mesa County
Median Household Income (2004)	Median Household Income (2004)
Estimate	Estimate
\$50,119	\$40,045

¹ Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report
Last Revised: Wednesday, 02-Jan-2008 15:11:03

Environmental Consequences/Mitigation: The proposed action and alternatives are not expected to create a disproportionately high and adverse human health impact or environmental effect on minority or low-income populations within the area.

Invasive, Non-native Species

Affected Environment: Houndstongue (*Cynoglossum officinale*), Musk thistle (*Carduus nutans*), Russian knapweed (*Acroptilon repens*), Canada thistle (*Cirsium arvense*), and Cheatgrass (*Bromus tectorum*) have been documented occurring in the Hogback Common Allotment.

Environmental Consequences/Mitigation: Proposed Action: Wind, water, vehicles, animals, and people transport weeds. Weeds generally germinate and become established in areas of surface disturbing activities such as road construction and maintenance, vehicular traffic, big game and livestock grazing. 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. 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. The proposed season-of-use adjustments are designed to improve the overall range health of the allotment. By improving rangeland health, noxious or invasive weeds would less likely become established and a reduced rate of spread would result.

No Action: Under the no action alternative, adjustments to the grazing season and type of livestock would not change and a continuation of rangeland degradation would ensue. Noxious and invasive weeds would continue to spread at an increased rate due to poor rangeland health.

Migratory Birds

Affected Environment:

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 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service (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*" (U.S. Fish and Wildlife Service 2008) is the most recent effort to carry out this mandate.

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 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 is on the list. Habitat loss is believed to be the major reason for the declines of many species. When considering potential impacts to migratory birds the impact on habitat, including: 1) the degree of fragmentation/connectivity expected from the proposed project relative to before the proposed project; and 2) the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats. Continued private land development, surface disturbing actions in key habitats (e.g. riparian areas) and the proliferation of roads, pipelines, powerlines and trails are local factors that reduce habitat quality and quantity for many species.

The Glenwood Springs Field Office is within the Southern Rockies/Colorado Plateau Bird Conservation Region (BCR). The 2008 list of Birds of Conservation include the following: Gunnison Sage-Grouse (*Centrocercus minimus*), American Bittern (*Botaurus lentiginosus*), Bald Eagle (*Haliaeetus leucocephalus*), Ferruginous Hawk (*Buteo regalis*), Golden Eagle (*Aquila chrysaetos*), Peregrine Falcon (*Falco peregrines*), Prairie Falcon (*Falco mexicanus*), Snowy Plover (*Charadrius alexandrinus nivosus/tenuirostris*), Mountain Plover (*Charadrius montanus*), Long-billed Curlew (*Numenius americanus*), Yellow-billed Cuckoo (*Coccyzus americanus*), Burrowing Owl (*Athene cunicularia*), Lewis's Woodpecker (*Melanerpes lewis*), Willow Flycatcher (*Empidonax traillii*), Gray Vireo (*Vireo vicinior*), Pinyon Jay (*Gymnorhinus cyanocephalus*), Juniper Titmouse (*Baeolophus ridgwayi*), Veery (*Catharus fuscescens*), Bendire's Thrasher (*Toxostoma bendirei*), Grace's Warbler (*Dendroica graciae*), Brewer's Sparrow (*Spizella breweri*), Grasshopper Sparrow (*Ammodramus savannarum*), Chestnut-collared Longspur (*Calcarius ornatus*), Black Rosy-Finch (*Leucosticte atrata*), Brown-capped Rosy-Finch (*Leucosticte australis*), and Cassin's Finch (*Carpodacus cassinii*).

The GSFO planning area provides both foraging and nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, oakbrush, aspen, pinyon-juniper woodlands, other types of coniferous forests and riparian and wetland areas support many bird species. The Gray Vireo, Pinyon Jay, Juniper Titmouse, Lewis's Woodpecker and Grace's Warbler are characteristically found in pinyon/juniper woodlands and the Brewer's sparrow (*Spizella breweri*) is found within sagebrush habitats. Many species of raptors (red-tailed hawks, Cooper's hawks, kestrels and owls) not on the Fish & Wildlife Service's Birds of Conservation Concern list also could occur in the area. Raptor surveys have not been conducted in the area.

Bald eagle (*Haliaeetus leucocephalus*). 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 are known to winter along portions of the Colorado, Eagle and Roaring Fork Rivers and its 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.

Environmental Consequences/Mitigation:

Limited specific bird count or species data exists for the area. No intentional take of native bird species is anticipated under the proposed action. Responses of individual bird species to land management activities are often habitat and species specific. Birds generally do not respond to the presence of livestock but are impacted by improper grazing. Improper livestock grazing has the potential to reduce ground cover and forage, degrade riparian areas, the spread of exotic species, accidentally destroy ground nests through trampling, and alter natural fire regimes. Grazing can also affect riparian habitats which are vitally important to most migratory bird species. The abundance of food, water, and shade which attracts migratory birds to these areas also attracts livestock. On a landscape scale the greater concern is its cumulative impact on the fragmentation of habitats.

Given current overall existing habitat conditions/trends (see riparian and vegetation sections), it is unlikely that livestock grazing as proposed (i.e. numbers, duration, terms/conditions attached), would reduce the extent or quality of habitat available for migratory bird breeding functions or movement. In conclusion, the effects of the proposed action on migratory bird species is expected to be minimal and isolated, but not enough to influence populations of migratory birds on a landscape level or cause clear direct or indirect impacts.

Special Status Species – Aquatic Wildlife (includes an analysis of Public Land Health Standard 4)

Affected Environment:

Federally Listed, Proposed or Candidate Aquatic Wildlife Species

According to the latest species list from the U. S. Fish and Wildlife Service (U.S. Fish and Wildlife Service. 2008), the following Federally listed, proposed, or candidate aquatic wildlife species may occur within or be impacted by actions occurring within the GSFO (Table Table - Special Status Species – Aquatic Wildlife):

Table - Special Status Species – Aquatic Wildlife

Aquatic Wildlife Species	Habitat/Range	Eagle County	Garfield County	Mesa County	Pitkin County	Routt County
Greenback cutthroat trout (<i>Oncorhynchus clarki stomias</i>)	Cold, clear, gravely headwater streams and mountain lakes. Originally found in the mountain and foothill areas of the Arkansas and South Platte river systems in Colorado and part of Wyoming.	X	X	X	X	X
Bonytail (<i>Gila elegans</i>)	Large, fast-flowing waterways of the Colorado River system.	X	X	X	X	X
Colorado pikeminnow (<i>Ptychocheilus lucius</i>)	Swift flowing muddy rivers with quiet, warm backwaters of the Green, Yampa, White, Colorado, Gunnison, San Juan, and Dolores rivers.	X	X	X	X	X
Humpback chub (<i>Gila cypha</i>)	Deep, fast-moving, turbid waters often associated with large boulders and steep	X	X	X		X

Aquatic Wildlife Species	Habitat/Range	Eagle County	Garfield County	Mesa County	Pitkin County	Routt County
	cliffs such as canyon-bound portions of the Colorado River system such as Black Rocks and Westwater canyons.					
Razorback sucker (<i>Xyrauchen texanus</i>)	Deep, clear to turbid waters of large rivers and reservoirs over mud, sand or gravel. Currently low numbers in the Yampa, Colorado and Gunnison rivers. Reproducing populations remain only in the Colorado River near Grand Junction.	X	X	X	X	X

These species: their status, their distributions, habitat associations, and as appropriate their association to the project area is summarized below.

Greenback Cutthroat Trout (*Oncorhynchus clarki stomias*). Federally listed as threatened. The greenback cutthroat trout was not identified on the USFWS list for Garfield County; however, recent surveys have identified a population in Cache Creek, located several drainages east of the project area. The greenback is the subspecies of cutthroat trout native to the Platte River drainage on the Eastern Slope of Colorado, while the Colorado River cutthroat trout is the subspecies native to Garfield County and throughout the Western Slope of Colorado. Although the occurrence of greenbacks in Cache Creek and potentially elsewhere in the GSFO and WRNF areas is apparently the result of human intervention (e.g., sanctioned or *ad hoc* transplantation of fish from the Eastern Slope), its status as threatened applies to Western Slope populations. However, because drainages within the project area do not support this species, it is not considered further.

These four species of Federally listed big-river fishes occur within the Colorado River drainage basin downstream from the project area.

Bonytail (*G. elegans*). Federally listed as endangered. This large chub is a member of the minnow family. Their current distribution and habitat status are largely unknown due to its rapid decline prior to research into its natural history. Historically, bonytails were present in the Colorado River system, which includes the Yampa, Green, Colorado and Gunnison rivers. The bonytail is extremely rare in Colorado and no self-sustaining population exist throughout the Colorado River basin. Only one has been captured in the state since 1980. Restoration stocking of bonytail in the wild to develop adult populations is the priority recovery action in Colorado.

Colorado Pikeminnow (*Ptychocheilus lucius*). Federally listed as endangered. The Colorado pikeminnow (formerly Colorado squawfish) Colorado pikeminnow were once abundant in the main stem of the Colorado River and most of its major tributaries in Colorado, Wyoming, Utah, New Mexico, Arizona, Nevada, California and Mexico. Now, they exist primarily in the Green River below the confluence with the Yampa River, the lower Duchesne River in Utah, the Yampa River below Craig, Colo., the White River from Taylor Draw Dam near Rangely downstream to the confluence with the Green River, the Gunnison River in Colorado, and the Colorado River from Palisade, Colo., downstream to Lake Powell. Biologists believe Colorado pikeminnow populations in the upper Colorado River basin are now relatively stable and in some

areas may even be growing. Designated Critical Habitat for the Colorado pikeminnow includes the Colorado River and its 100-year floodplain west (downstream) from the town of Rifle.

Humpback Chub (*Gila cypha*). Federally listed as endangered. The nearest known habitat for the humpback chub and bonytail is within the Colorado River approximately 70 miles downstream from the project area. Only one population of humpback chub, at Black Rocks west of Grand Junction, is known to exist in Colorado.

Razorback Sucker (*Xyrauchen texanus*). Federally listed as endangered. The razorback sucker was once widespread throughout most of the Colorado River Basin from Wyoming to Mexico. In the upper Colorado River Basin, they are now found only in the upper Green River in Utah, the lower Yampa River in Colorado and occasionally in the Colorado River near Grand Junction. Because so few of these fish remain in the wild, biologists have been actively raising them in hatcheries in Utah and Colorado and stocking them in the Colorado River. Designated Critical Habitat for the razorback sucker includes the Colorado River and its 100-year floodplain west (downstream) from the town of Rifle.

BLM Sensitive Aquatic Wildlife Species

According to the latest *Colorado BLM State Director's Sensitive Species List (Animals and Plants) June, 2000*, the following aquatic wildlife species may occur within or be impacted by actions occurring within the GSFO (Table - Colorado BLM Sensitive Species - Aquatic):

Table - Colorado BLM Sensitive Species - Aquatic

Name	Habitat	Habitat Potential Present / Absent
Northern leopard frog (<i>Rana pipiens</i>)	Wet meadows and the banks and shallows of marshes, ponds, glacial kettle ponds, beaver ponds, lakes, reservoirs, streams, and irrigation ditches.	Present
Flannelmouth sucker (<i>Catostomas latipinnis</i>)	Generally restricted to rivers and major tributaries.	Absent
Roundtail chub (<i>Gila robusta</i>)	Generally restricted to rivers and major tributaries.	Absent
Colorado River cutthroat trout (<i>Oncorhynchus clarki pleuriticus</i>)	Occurs in clear, cool headwaters streams with coarse substrates, well-distributed pools, stable streambanks, and abundant stream cover.	Absent

The following paragraphs address species with a habitat potential to be present in the project area.

Leopard Frog (*Rana pipiens*). Northern leopard frogs are generally found between 3,500 to 11,000 feet in Colorado, in wet meadows and in shallow lentic habitats. Northern leopard frogs require year 'round water sources, deep enough to provide ice free refugia in the winter. The presence of northern leopard frogs has been associated with sites with more herbaceous cover as opposed to sites with earlier successional stages of emergent vegetation. Leopard frogs feed primarily on emergent adults of aquatic insects or on terrestrial insects attracted to the water. Within the GSFO, this species has been documented in various locales. Suitable habitat is

abundant within the GSFO, and is located where quality riparian vegetation exists in conjunction with reliable perennial water sources. Larger populations of this species have been documented northwest of King Mountain within the small drainage that feeds and exits King Mountain (Ligon) Reservoir, June Creek and East Divide Creek south of Silt, Colorado, and in portions of the Rifle Creek watershed north of Rifle, Colorado. Population declines have been attributed to habitat alteration and loss, the effects of introduced bullfrogs and gamefish, aerial pesticide applications, and droughts that limit the availability of year ‘round water

Environmental Consequences/Mitigation:

Federally Listed, Proposed or Candidate Aquatic Wildlife Species. Neither the greenback cutthroat trout nor the four species of Federally listed big-river fishes are found within the allotment or the vicinity of the proposed action. Livestock grazing as proposed would have “no effect” to these fishes or their habitat.

BLM Sensitive Aquatic Wildlife Species. The Bluehead sucker, Flannelmouth sucker, and Roundtail chub are endemic to the Colorado River basin and reside within the mainstem Colorado River and its major tributary rivers/streams. The proposed action would have negligible negative impact to these species or their habitats.

Analysis on the Public Land Health Standard 4 for Aquatic Wildlife Special Status Species: (partial, see also Plants and Terrestrial Wildlife): A Land Health Assessment was conducted for the area in 2007 and the Determination Document was signed on September 24, 2008. The land health assessment determined much of the sagebrush on the allotment was old and decadent and the understory was dominated by cheatgrass or other noxious weeds with few native perennial grasses or forbs. The proposed action would have an un-measurable, negligible impact on meeting Standard 4.

Special Status Species – Terrestrial Wildlife (includes an analysis of Public Land Health Standard 4)

Affected Environment:

Federally Listed, Proposed or Candidate - Terrestrial Wildlife Species

According to the latest species list from the U. S. Fish and Wildlife Service (U.S. Fish and Wildlife Service. 2008), the following Federally listed, proposed, or candidate terrestrial wildlife species may occur within or be impacted by actions occurring within the GSFO (Table 1):

Table 1.

Terrestrial Wildlife Species	Habitat/Range	Eagle County	Garfield County	Mesa County	Pitkin County	Routt County
Black-footed Ferret (<i>Mustela nigripes</i>)	In Colorado habitat includes the eastern plains, the mountain parks and the western valleys. Specifically grasslands or shrublands that supported some species of prairie dog, the ferret’s primary prey.	X				
Canada lynx (<i>Lynx Canadensis</i>)	Mesic forests of lodgepole pine, subalpine fir, Engelmann spruce, and quaking aspen in the upper montane and	X	X	X	X	X

Terrestrial Wildlife Species	Habitat/Range	Eagle County	Garfield County	Mesa County	Pitkin County	Routt County
	subalpine zones, generally between 8,000 and 12,000 feet in elevation.					
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	Mature montane forests, shady canyons, and steep canyons. The key components in montane forests are common to old-growth forests: uneven-age stands with high canopy closure and tree density, fallen logs and snags.	X	X		X	
Greater sage grouse (<i>Centrocercus urophasianus</i>)	Resident of relatively large, open sagebrush flats or rolling sagebrush hills. Uncommon and unlikely in this part of the GSFO or associated habitats	X				X
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	Mature riparian forests of cottonwoods and other large deciduous trees with a well-developed understory of tall riparian shrubs. Uncommon summer resident of Colorado.	X	X	X	X	X
Uncompahgre fritillary butterfly (<i>Boloria acrocne</i>)	Patches of snow willow (<i>Salix spp.</i>) at high elevations.	X			X	

These species: their status, their distributions, habitat associations, and as appropriate their association to the project area is summarized below.

Black-footed Ferret (*Mustela nigripes*). Federally listed as endangered. Black-footed ferrets have ranged statewide but never have been abundant in Colorado. Their habitat included the eastern plains, the mountain parks and the western valleys – grasslands or shrub lands that supported some species of prairie dog, the ferret’s primary prey. Little is known about their natural history. They mate in early spring and give birth to a litter of three or four mouse-sized pups after a seven-week gestation period. Black-footed ferrets are reported to be killed. They are susceptible to distemper, predators like owls and coyotes, and vehicles. It is assumed that plowing for agriculture and programs to eradicate prairie dogs have driven the black-footed ferret to the verge of extinction. State and federal biologists have established two major black-footed ferret colonies: one at Coyote Basin (Colorado-Utah border west of Rangely) and another at the BLM's Wolf Creek Management Area southeast of Dinosaur National Monument (CDOW 2009). Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Canada Lynx (*Lynx canadensis*). Federally listed as threatened. Canada lynx (*Lynx canadensis*) was listed as a federally threatened species, effective April 24, 2000 (Federal Register Volume 65, No. 58). Canada lynx occupy high-latitude or high-elevation coniferous forests characterized by cold, snowy winters and an adequate prey base (Ruggiero et al. 1999). The preferred prey of Canada lynx throughout their range is the snowshoe hare (*Lepus americanus*). In the western United States, 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 are the preferred prey in Colorado, lynx

in also feed on other species such as the mountain cottontail (*Sylvilagus nuttallii*), pine squirrel (*Tamiasciurus hudsonicus*), and blue grouse (*Dendragapus obscurus*).

The U.S. Forest Service (USFS) has mapped suitable denning, winter, and other habitat for lynx within the White River National Forest (WRNF). The mapped suitable habitat in the WRNF comprises several areas known as Lynx Analysis Units (LAUs). Lynx analysis units (LAUs) are management areas that contain suitable lynx habitat and approximate the size of a female home range. Several LAUs border BLM lands however no areas large enough to be considered LAUs occur within the GSFO. BLM lands within the GSFO area generally support the movement of lynx dispersing to a new area or, potentially, moving to lower elevations during severe winter weather in search of prey. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Greater sage grouse (*Centrocercus urophasianus*). The U.S. Fish and Wildlife Service announced on Friday, March 5, 2010 that the greater sage-grouse (*Centrocercus urophasianus*) would be added to the Endangered Species Act “Candidate” list. The USFWS determined that proposing the species for protection is precluded by the need to take action on other species facing more immediate and severe extinction threats. As a result, the greater sage-grouse was placed on the list of species that are candidates for Endangered Species Act Protection. Evidence suggests that habitat fragmentation and destruction across much of the species’ range has contributed to significant population declines over the past century. If current trends persist, many local populations may disappear in the next several decades, with the remaining fragmented population vulnerable to extinction.

Sage grouse, as the name implies, are found only in areas where sagebrush is abundant, providing both food and cover. Although these birds are found at altitudes of 6000-8500 feet, they are not forest grouse and prefer relatively open sagebrush flats or rolling sagebrush hills. In winter, sagebrush accounts for 100% of the diet for these birds. In addition, it provides important escape cover and protection from the elements. In late winter, males begin to concentrate on traditional strutting grounds or leks. Females arrive at the leks 1-2 weeks later. Leks can occur on a variety of land types or formations (windswept ridges, knolls, areas of flat sagebrush, flat bare openings in the sagebrush. Breeding occurs on the leks and in the adjacent sagebrush, typically from March through May. Females and their chicks remain largely dependent on forbs and insects for food well into early fall. Cultivated herbaceous broad-leaved plants (alfalfa, clover) are important early fall food sources when available (CDOW 2009a).

The Northern Eagle/Southern Routt population, while small (<200 birds), probably has, or had, a relationship with the larger population in Moffat, Rio Blanco and western Routt counties, and probably with the Middle Park population to the east. Sage-grouse are still present in the Radium area between State Bridge and Kremmling (Northern Eagle/Southern Routt Greater Sage-Grouse Work Group 2004) and likely to occur in the Gypsum Hills area and the area north of Wolcott which includes the Ute Creek allotment. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Mexican Spotted Owl (*Strix occidentalis*). Federally listed as endangered. This owl nests, roosts, and hunts in mature coniferous forests in canyons and foothills. The only extant populations in Colorado are in the Pikes Peak and Wet Mountain areas of south-central Colorado and the Mesa Verde area of southwestern Colorado. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*). Candidate for Federal listing. This secretive species occurs in mature riparian forests of cottonwoods and other large deciduous trees with a well-developed understory of tall riparian shrubs. Western cuckoos breed in large blocks of riparian habitats, particularly woodlands with cottonwoods (*Populus fremontii*) and willows (*Salix* sp.). A few sightings of yellow-billed cuckoo have occurred in western Colorado along the Colorado River near Grand Junction (USFWS 2009b). Riparian areas in the project area do not provide suitable habitat for this species due to the patchy nature of the stands and the general lack of a tall-shrub understory. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Uncompahgre fritillary butterfly (*Boloria acrocne*). Federally listed as endangered. The butterfly has been verified at only two areas in the San Juan Mountains in Colorado. There is anecdotal evidence of other colonies in the San Juans and southern Sawatch ranges in Colorado. The butterfly exists above treeline in patches of its larval host plant, snow willow. The butterfly is most often found on north and east facing slopes, which provide a moist, cool, microclimate. The greatest known controllable threat is butterfly collecting. Climatological patterns, disease, parasitism, predation, and trampling of larvae by humans and livestock might pose additional threats. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range, elevation and habitat conditions, this species is not considered further.

BLM Sensitive - Terrestrial Wildlife Species

According to the latest *Colorado BLM State Director's Sensitive Species List (Animals and Plants) June, 2000*, the following terrestrial wildlife species may occur within or be impacted by actions occurring within the GSFO (Table - BLM Sensitive - Terrestrial Wildlife Species):

Table - BLM Sensitive - Terrestrial Wildlife Species

Name	Habitat/Range	Habitat Potential Present / Absent
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, along the foothills of the Front Range and the mesas of southeastern Colorado. Maximum elevation is 7,500 feet. Breeds and roosts in caves, trees, mines, and buildings; hunts over pinyon-juniper, montane conifer, and semi-desert shrubland habitats. Known occurrences - Potential in caves, mines or trees	Possibly Present
Northern goshawk (<i>Accipiter gentilis</i>)	Resident in foothills and mountains and occasional in migration and winter at lower elevations. Predominantly uses mature stands of aspen, and pines (ponderosa and lodgepole). Uncommon – seasonal visitor.	Absent

Table - BLM Sensitive - Terrestrial Wildlife Species

Name	Habitat/Range	Habitat Potential Present / Absent
Goldeneye, Barrow's (<i>Bucephala islandica</i>)	Rare winter resident and spring/fall migrant in lowlands and mountains; a few breed in the northern mountains. Uncommon - seasonal	Absent
Ibis, white-faced (<i>Plegadis chihi</i>)	Inhabits wet meadows, marsh edges and reservoir shorelines. Very rare, non-breeding, summer migrant to western Colorado valleys and mountain lakes. Main breeding area is in the San Luis valley.	Absent

The following paragraphs address species with a habitat potential to be present in the project area.

Fringed Myotis (*Myotis thysanodes*) and Townsend’s Big-eared Bat (*Plecotus townsendii*).

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 (pinyon-juniper woodlands, montane conifer woodlands, semi-desert shrublands) 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. The animals roost in rock crevices, caves, mines, buildings and trees. 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).

Northern Goshawk (*Accipiter gentilis*). The Northern Goshawk is the largest North American accipiter. The goshawk is a forest habitat generalist that uses a variety of forest type, forest ages, structural conditions and successional stages. Goshawks prey on small-medium sized birds and mammals. It breeds in coniferous deciduous and mixed forests. The nest is typically located on a northerly aspect in a drainage or canyon and is often near a stream. Nest areas contain one or more stands of large, old trees with a dense canopy cover. A goshawk pair occupies its nest area from March until late September. The nest area is the center of all movements and behaviors associated with breeding from courtship through fledging. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Goldeneye, Barrow's (*Bucephala islandica*). This bird is a rare and local breeder in Flat Tops Wilderness Area in Garfield and adjacent counties. First confirmed record this century of fledged young or broods on 3 shallow lakes in Flat Tops Wilderness in 1990; also found in 1991 and 1994 (CLO 2009). Goldeneye’s prefer alkaline-freshwater lakes in parkland areas and to a lesser extent subalpine/alpine lakes/beaver ponds for breeding. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Ibis, white-faced (*Plegadis chihi*). The species inhabits primarily freshwater wetlands, especially cattail (*Typha* spp.) and bulrush (*Scirpus* spp.) marshes. This species feeds in flooded hay meadows, agricultural fields, and estuarine wetlands. This species breeds in isolated colonies in

mainly shallow marshes with “islands” of emergent vegetation. This species is more commonly found on the eastern slope of Colorado. Sparse historical records indicate that this species is uncommon within the CRVFO. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Environmental Consequences/Mitigation:

Federally Listed, Proposed or Candidate - Terrestrial Wildlife Species

Due to the absence of any occupied or suitable habitat within or adjacent to these allotments, the proposed action would have “no effect” on any federally listed, Proposed or Candidate - terrestrial wildlife species.

BLM Sensitive Terrestrial Wildlife Species.

Fringed Myotis and Townsend’s Big-eared Bats. Distribution seems is likely to be locally determined by availability of roosts, such as caves, mines, tunnels, crevices and masonry structures with suitable temperatures. No bat roosts or hibernaculum have been documented within the area of the proposed action.

The greatest threats to Townsend’s Big-eared Bat (and likely Fringed Myotis) are the: (a) loss/modification/disturbance of roosting habitat resulting from uninformed closure of abandoned mines, recreation and renewed mining at historical sites; (b) loss/modification/disturbance of foraging habitat resulting from elimination of forest canopy, elimination or alteration of wetland habitat and conversion of native shrub and grasslands to urban or agricultural uses; and (c) exposure to environmental toxins (Gruver, J.C. and D.A. Keinath 2006). It is plausible that over-grazing by livestock could contribute to the decline of the functionality of foraging habitat for bats. The allowable number of animal unit months and periods of use, along with land health standards and terms/conditions; should continue to maintain adequate habitat conditions (suitability and connectivity) for bats.

Analysis on the Public Land Health Standard 4 for Terrestrial Wildlife Special Status Species:

(also see Plants and Aquatic Wildlife Special Status Species). A Land Health Assessment was conducted for the area in 2007 and the Determination Document was signed on September 24, 2008. The land health assessment determined that the Hogback Common allotment was not meeting Standard 3 for plant and animal communities because much of the sagebrush on the allotment was old and decadent and the understory was dominated by cheatgrass or other noxious weeds with few native perennial grasses or forbs. Given the proposed changes in season of use, it is anticipated that upland habitat condition should improve over time and the allotment should move toward meeting Standard 3.

Special Status Species - Plants (includes an analysis of Public Land Health Standard 4)

Affected Environment:

Federally Listed, Proposed or Candidate Plant Species

According to the latest species list from the U. S. Fish and Wildlife Service (U.S. Fish and Wildlife Service. 2008), the following federally listed, proposed, or candidate threatened or endangered plant species may occur within or be impacted by actions occurring in Garfield County:

Table 3. Federally Listed, Proposed and Candidate Plant Species in Garfield County

Name	Habitat	Habitat Potential Present / Absent
Colorado hookless cactus (<i>Sclerocactus glaucus</i>)	Gravelly or rocky soil surfaces on river terraces and lower mesa slopes. Salt desert shrub communities on alkaline soils; 4,500-6,000 feet	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
Parachute beardtongue (<i>Penstemon debilis</i>)	Steep, talus slopes of the Parachute Creek Member of the Green River Shale Formation between 8,000 to 8,400 feet. Occasionally on alluvial or colluvial deposits of Green River shale at lower elevations.	Absent
DeBeque phacelia (<i>Phacelia submutica</i>)	Sparsely vegetated soils of chocolate brown or gray clay soil on the Atwell Gulch or Shire Members of the Wasatch Formation; 4,700-6,400 feet	Absent

Colorado hookless cactus. This cactus species occurs on old river terraces and lower mesa slopes, usually on gravelly soils and flat or southern aspects. The species is found in salt desert shrub communities or occasionally in sagebrush communities with slightly to moderately alkaline soils. The Hogback Common allotment lies on north-facing slopes with vegetation consisting of sagebrush, mixed mountain shrublands and pinyon-juniper woodlands. No Colorado hookless cacti have been documented in the area and the allotment does not contain any potential habitat for this species. Colorado hookless cactus will not be analyzed further.

Ute ladies'-tresses orchid. The Ute ladies'-tresses orchid is found in riparian and wetland areas with subirrigated soils. No riparian or wetland areas are known to occur within the Hogback Common allotment. The allotment does not contain any potential habitat for this species and it will not be analyzed further.

DeBeque phacelia. This plant species is found on barren or sparsely vegetated soils of the Atwell Gulch and Shire Gulch Members of the Wasatch Formation. There are no exposures of this soil type within the Hogback Common allotment. There are no known occurrences or known suitable habitat for these plant species within or immediately adjacent to the proposed action area. This species will not be analyzed further.

Parachute beardtongue (Parachute penstemon). This species is found on steep, south or southwest facing talus slopes of the Green River shale formation between the elevations of 8,000 to 8,400 feet. There are no exposures of the Green River shale formation within the Hogback Common allotment. The allotment does not contain any potential habitat for this species and it will not be analyzed further.

BLM Sensitive Plant Species

According to the latest *Colorado BLM State Director's Sensitive Species List (Animals and Plants)*, November, 2009, the following plant species may occur within or be impacted by actions occurring within Garfield County:

Table 4. BLM Sensitive Plants Species with habitat or occurrences in Garfield County

Name	Habitat	Habitat Potential Present / Absent
DeBeque milkvetch (<i>Astragalus debequaeus</i>)	Variegated, fine-textured, seleniferous, saline soils of the Atwell Gulch Member of the Wasatch formation at elevations from 5,100 to 6,400 feet.	Absent
Naturita milkvetch (<i>Astragalus naturitensis</i>)	Shallow soils on sandstone mesas, ledges and crevices in pinyon-juniper woodlands at elevations from 5,000 to 7,000 feet	Absent
Piceance bladderpod (<i>Lesquerella parviflora</i>)	Steep, nearly barren talus slopes of Green River Shale Formation, at elevations from approx. 8,000 to 9,000 feet (Garfield and Rio Blanco Counties)	Absent
Roan Cliffs blazing star (<i>Mentzelia rhizomata</i>)	Steep, eroding talus slopes of the Green River Shale Formation from 5,000 to 8,200 feet	Absent
Harrington's beardtongue (<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.	Absent

DeBeque milkvetch. DeBeque milkvetch grows on the Atwell Gulch Member of the Wasatch formation. This formation is not found within the Hogback Common. The allotment has no known occurrences and no potential habitat for this species and it will not be discussed further.

Naturita milkvetch. This species is found on shallow soils on sandstone mesas, ledges and crevices. There are no shallow sandstone soils on the Hogback Common allotment. Naturita milkvetch is not known to occur within this allotment, and no potential habitat has been identified in the allotment. Naturita milkvetch will not be analyzed further.

Piceance bladderpod and Roan Cliffs blazing star. Piceance bladderpod and the Roan Cliffs blazing star both occur on steep talus slopes of the Green river Shale Formation. The Green River Shale is not exposed in the Hogback Common allotment. The allotment does not contain any potential habitat for these species and they will not be analyzed further.

Harrington's beardtongue (Harrington's penstemon). Harrington's penstemon is found in open sagebrush habitat on rocky loam or rocky clay loam soils between the elevations of 6,200 to 10,000 feet. Although the Hogback Common allotment falls within the elevational range for this species and portions of the allotment support sagebrush habitat, the soils within the allotment do not appear suitable for this species. Harrington's penstemon has not been documented within the allotment, and is not anticipated to be found there. This species will not be considered further.

Environmental Consequences/Mitigation:

Federally Listed, Proposed or Candidate Plant Species

Due to the absence of any occupied or suitable habitat for any of the four federally listed, proposed or candidate plant species within or adjacent to the Hogback Common allotment, the proposed action would have "No Effect" to any of these listed, proposed or candidate plant species.

BLM Sensitive Plant Species

The Hogback Common allotment does not contain any occupied or suitable habitat for any of the five BLM sensitive plant species known to occur in Garfield County. The proposed action would have “No Effect” on any of these sensitive plant species.

Analysis on the Public Land Health Standard 4 for Plant Special Status Species:

The Elk Creek Landscape Unit, which encompasses the Hogback Common allotment, had land health assessment field work conducted in 2007 and a determination document signed in September 2008. Although the allotment was not meeting Standard 3 due to poor vegetative conditions, the allotment was determined to be meeting Standard 4 for threatened, endangered, and special status species, primarily because there were no known special status species or potential habitat for special status species within the Hogback Common allotment. The proposed action would have no impact on the ability of the landscape to meet Standard 4 for threatened, endangered, and other special status species.

Water Quality, Surface & Ground (includes an analysis of Public Land Health Standard 5)

Affected Environment: The Hogback Common Allotment is located northwest of the Town of New Castle within the 7,228 acre Mouth of Elk Creek (east portion) and the 5,974 acre Tributary to West Elk Creek (west portion) 6th field watersheds. The Hogback Common allotment contains numerous ephemeral drainages that are directly tributary to the perennials West Elk Creek and Elk Creek.

According to the *Stream Classifications and Water Quality Standards* (CDPHE, Water Quality Control Commission, Regulation No. 37) list, the ephemeral tributaries mentioned above are within the Lower Colorado River Basin segment 7 that includes the mainstem of Elk Creek and all tributaries, wetlands, lakes and reservoirs. This segment has been classified aquatic life cold 1, recreation 1a, water supply, and agriculture. Aquatic life cold 1 indicates that this water course is capable of sustaining a wide variety of cold water biota. Recreation class 1a refers to waters in which primary contact recreation is presumed to be present. In addition, this segment is suitable or intended to become suitable for potable water supplies and agricultural purposes that include irrigation and livestock use.

The ephemeral drainages mentioned above are not currently listed on the State of Colorado’s *303(d) List of Water Quality Limited Segments Requiring TMDLS* (CDPHE, Water Quality Control Commission, Regulation No. 93) or the *Monitoring and Evaluation List* (CDPHE, Water Quality Control Commission, Regulation No. 94) as waterbodies suspected to have water quality problems. In addition, no water quality data are currently available for these ephemeral drainages.

Environmental Consequences/Mitigation: Grazing activities would result in 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. In addition, the number of livestock in the area would increase the amount of feces present in close proximity to nearby drainages. The introduction of livestock feces to waterbodies often leads to water quality degradation by increasing fecal coliform bacteria levels. Due to the close

proximity of the proposed activities to area drainages, there is a high potential that additional sediment associated with grazing practices as well as fecal coliform bacteria from livestock feces could reach the numerous ephemeral drainages mentioned above and could in turn be transported to West Elk Creek and Elk Creek.

While some negative impacts associated with grazing are anticipated as stated above, the proposed action would eliminate sheep grazing in June and July giving perennial grasses and native forbs an opportunity to become established. The intent is to provide better vegetative cover than the current grazing schedule which would in turn minimize erosional processes in the early summer and decrease the likelihood of sediment delivery to nearby drainages. In addition, anticipated fecal coliform bacteria levels in nearby drainages would be much lower than if sheep grazing were to continue into July.

Analysis on the Public Land Health Standard 5 for Water Quality: While no water quality problems were observed during the 2007 assessment of Elk Creek Landscape Unit, both the proposed action and no action alternative could have local short duration impacts on water quality if runoff events are significant enough to transport contaminants to the nearby perennial drainages. However, given the distance of the Hogback Common Allotment from West Elk Creek and Elk Creek it is assumed that both the proposed action and the no action alternative would not likely prevent Standard 5 for Water Quality from being met.

Other Affected Resources

In addition to the critical elements, the resources presented in Table 2 were considered for impact analysis relative to the proposed action and no action alternative. Resources that would be affected by the proposed action and no action alternative are discussed below.

Table 2. Other Resources Considered in the Analysis.			
<i>Resource</i>	<i>NA or Not Present</i>	<i>Present and Not Affected</i>	<i>Present and Affected</i>
Access and Transportation		X	
Cadastral Survey	X		
Fire/Fuels Management	X		
Forest Management	X		
Geology and Minerals	X		
Law Enforcement		X	
Paleontology	X		
Noise	X		
Range Management			X
Realty Authorizations		X	
Recreation		X	
Socio-Economics		X	
Soils*			X
Vegetation*			X
Visual Resources		X	
Wildlife, Aquatic*	X		
Wildlife, Terrestrial*			X

*Public Land Health Standard

Range Management

Affected Environment: The Hogback Common allotment is located approximately 4 miles north of Silt, Colorado and directly adjacent to Harvey Gap Reservoir on the north side of the Grand Hogback. The allotment is 1977 acres consisting mostly of sagebrush steppe on the lower elevations with pinyon/juniper in the higher portions of the allotment. Recently the area has been targeted for vegetation treatments focused on improving wildlife habitat.

Environmental Consequences/Mitigation: The proposed changes would have no negative impacts to range management. Spring use by sheep would be focused on a mixture of grasses, forbs, and shrubs. Sheep are intermediate grazers and would therefore focus on a broader range of forage resources than the previously authorized cattle. Grazing use has been designed to focus on spring green-up of cheatgrass which is a large portion of the vegetation community. Based on field observations and permittee input the best time to graze the cheatgrass is May through June. The Permittee's operation prevents him from using the allotment in early May because the lambs are too young to be turned out onto the open range. The later turn-out allows the lambs to mature another two weeks prior to turn-out.

Soils (includes an analysis of Public Land Health Standard 1)

Affected Environment: According to the *Soil Survey of Rifle Area, Colorado: Parts of Garfield and Mesa Counties* (USDA 1985), the Hogback Common Allotment contains 10 different soil map units that can be identified by the numerical code assigned by the soil survey (7, 9, 24, 31, 56, 58, 66, 67, 69, 70). These soil map units are scattered throughout the allotment and many of them have been identified as having severe erosion hazards. In addition, the higher elevations within the allotment which are found on the northern slopes of the Grand Hogback are mapped as CSU 4 (Controlled Surface Use) for erosive soils on slopes greater than 30% and NSO 15 (No Surface Occupancy) for slopes greater than 50% regardless of soil type. Following is a brief description of the 10 soil map units found within the Hogback Common Allotment.

- Ascalon-Pena complex (7) – This soil map unit is found on the sides of valleys and alluvial fans at elevations ranging from 5,000 to 6,500 feet and on slopes of 6 to 25 percent. The Ascalon soil makes up about 65 percent of the unit and is found on lower angle slopes while the Pena soil makes up about 25 percent of the unit and is found on steeper slopes. The Ascalon soil is deep, well drained and has medium surface runoff with moderate erosion hazard. The Pena soil is deep, well drained and has slow surface runoff with moderate erosion hazard. Primary uses for this complex include wildlife habitat and limited grazing.
- Badland (9) – This soil map unit consists of steep, barren land that has been dissected by intermittent drainages. This unit occurs in soft shale, sandstone, and siltstone of the Green River, Wasatch, Mancos, and Mesa Verde Formations. This soil map is approximately 85 percent unvegetated, has very severe erosion hazard, and frequent active erosion.
- Dollard-Rock outcrop, shale, complex (24) – This complex consists of shale outcrops and shale derived soils that are found on hills and mountainsides at elevations ranging from 6,000 to 7,500 feet and on slopes of 25 to 65 percent. Approximately 60 percent of the

complex is the Dollard soil and 20 percent is shale outcrop. The Dollard soil is moderately deep, well drained and has rapid surface runoff with severe erosion hazard. Surface runoff for the Rock outcrop is rapid and the erosion hazard is very severe. This complex is primarily used for limited grazing and wildlife habitat.

- Heldt clay loam (31) – This deep, well drained soil is found on alluvial fans and sides of valleys at elevations ranging from 5,000 to 6,000 feet and on slopes of 12 to 25 percent. Parent material for this soil is shale and sandstone. Erosion hazard for this soil is moderate and surface runoff is medium. Primary uses for this soil include grazing and wildlife habitat.
- Potts loam (56) – This deep, well drained soil is found on mesas, benches, and the sides of valleys at elevations ranging from 5,000 to 7,000 feet and on slopes of 6 to 12 percent. Parent material for this soil includes sandstone, shale, and basalt. Surface runoff for this soil is medium and the erosion hazard is severe. Primary uses for this soil include grazing, wildlife habitat, and dryland farming.
- Potts-Ildefonso complex (58) – This complex is found on mesas, alluvial fans, and the sides of valleys at elevations ranging from 5,000 to 6,500 feet and on slopes of 12 to 25 percent. Parent material for this soil complex consists of sandstone, shale, and basalt. This soil complex is deep, well drained, and has medium surface runoff and moderate erosion hazard. Uses for this soil complex include limited grazing and wildlife habitat.
- Torriorthents-Camborthids-Rock outcrop complex, steep (66) – This soil map unit consists of sandstone and shale bedrock and soils of variable depth occurring on slopes of 15 to 70 percent. About 45 percent of this complex is Torriorthents, 20 percent is Camborthids, and 15 percent is Rock outcrop. The Camborthids occur on the lower toe slopes on foothills and mountainsides while the Torriorthents are found on the foothills and mountainsides below the Rock outcrop. The Torriorthents are shallow to moderately deep, and clayey to loamy with gravel, cobbles, and stones. The Camborthids are shallow to deep and clayey to loamy. Rock outcrop primarily consists of Mesa Verde sandstones and Wasatch shales with occasional basaltic boulders and stones. This complex is characterized by moderate to severe erosion hazard. Primary uses for this complex include grazing, wildlife habitat, and recreation.
- Torriorthents-Rock outcrop complex, steep (67) – This complex consists of stony soils and exposed outcrops of Mesa Verde sandstone and Wasatch shale that occur on slopes of 15 to 70 percent. Approximately 60 percent of this complex is Torriorthents and 25 percent is Rock outcrop. The Torriorthents are clayey to loamy and contain gravel, cobbles, and stones; many of which are basaltic in origin. They are found on mountainsides below the Rock outcrop. Erosion hazard for this complex varies from moderate to severe. Primary uses for this complex include limited grazing, wildlife habitat, and recreation.
- Vale silt loam (69) – This deep, well drained, moderately sloping soil is found on mesas, benches, and alluvial fans at elevations ranging from 5,000 to 7,200 feet and on slopes of 6 to 12 percent. This soil is derived from calcareous eolian material. Surface runoff for this soil is medium and the erosion hazard is classified as moderate. Primary uses for this soil include irrigation for crops and hay with some areas being used for grazing.

- Vale silt loam (70) – This deep, well drained, strongly sloping soil is found on mesas, mesa sides, and alluvial fans at elevations ranging from 5,000 to 7,200 feet and on slopes of 12 to 25 percent. This soil is derived from calcareous eolian material. Surface runoff for this soil is medium and the erosion hazard is severe. Primary uses for this soil include wildlife habitat, recreation, and grazing.

Environmental Consequences/Mitigation: As mentioned above, a high percentage of the Hogback Common Allotment occurs on soils with severe erosion hazards and on slopes greater than 30% (17°). Grazing activities would result in 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. Due to the close proximity of the proposed activities to area drainages, there is a high potential that additional sediment associated with grazing practices could reach the numerous ephemeral drainages mentioned above and could in turn be transported to West Elk Creek and Elk Creek.

While some negative impacts associated with grazing are anticipated as stated above, the proposed action would eliminate sheep grazing in June and July giving perennial grasses and native forbs an opportunity to become established. The intent is to provide better vegetative cover than the current grazing schedule which would in turn minimize erosional processes in the early summer and decrease the likelihood of sediment delivery to nearby drainages.

Analysis on the Public Land Health Standard 1 for Upland Soils: The proposed action and no action alternatives would occur within the Elk Creek Landscape (north of Rifle to Glenwood Springs) Unit, which had land health assessment field work conducted in 2007 and a determination document signed in September 2008. During that time, it appeared that area soils were achieving or moving towards achieving Standard 1 for Upland Soils. While both the proposed action and the no action alternative could have short term localized effects on area soils, it is anticipated that these alternatives would not likely prevent Standard 1 for Upland Soils from being met.

Vegetation (includes an analysis of Public Land Health Standard 3)

Affected Environment:

The Hogback Common Allotment is on the north side of the Grand Hogback. Vegetation on the allotment is comprised primarily of big sagebrush and pinyon-juniper woodlands, with oakbrush/mixed mountain shrublands on the steeper slopes. Cheatgrass and annual forbs dominate the understory within the sagebrush and some of the sagebrush communities are old, decadent and denser than expected under healthy conditions. Other noxious weeds, such as houndstongue and musk thistle are also noted in the allotment. Native perennial grasses found on the allotment include Sandberg bluegrass, Indian ricegrass, and Prairie junegrass, but these species are less abundant than expected. Mountain shrub communities found on the steeper slopes are in better condition.

Environmental Consequences/Mitigation:

The proposed grazing permit would eliminate some cattle grazing on the Hogback Common allotment, convert those AUMs to sheep grazing and slightly alter the spring period of use. In the spring, sheep utilize a mixture of grasses, forbs, and shrubs. The timing of the spring use has been designed to focus on spring green-up of cheatgrass which is a large component of the existing vegetative community. Based on field observations and permittee input, cheatgrass in the Hogback Common allotment would be most palatable (i.e. actively growing but not yet setting seed) in May through June. Focused grazing on cheatgrass at the right time of year may reduce its competitive advantage and prevent it from going to seed, thereby enabling perennial grasses and forbs to become established. Noticeable improvements in range condition are likely to be slow and gradual, however, because cheatgrass is so prevalent within the allotment and perennial grasses and forbs are present but very low in numbers and cover.

Analysis on the Public Land Health Standard for Plant Communities:

A Land Health Assessment was conducted for the area in 2007 and the Determination Document was signed on September 24, 2008. The land health assessment determined that the Hogback Common allotment was not meeting Standard 3 for plant and animal communities because much of the sagebrush on the allotment was old and decadent and the understory was dominated by cheatgrass or other noxious weeds with few native perennial grasses or forbs. Given the proposed changes in season of use, it is anticipated that upland habitat condition should improve over time and the allotment should move toward meeting Standard 3.

Wildlife, Aquatic (includes an analysis of Public Land Health Standard 3):

Affected Environment:

Fish. No fish are known to exist within the area of the proposed action.

Amphibians. Several amphibians of interest are found within the GSFO, the Boreal Toad (*Bufo boreas boreas*) and the Great Basin spadefoot toad (*Spea intermontana*). The distribution of the boreal toad is restricted to areas with suitable breeding habitat in spruce-fir forests and alpine meadows generally between 7,500 and 12,000 feet elevation. Breeding habitat includes lakes, marshes, ponds, and bogs with sunny exposures and quiet shallow water. Great Basin spadefoot toads occupy arid grasslands and high sagebrush, desert shrub, and piñon-juniper woodlands. Great Basin spadefoot toad has been documented in the western third of the field office from the town of Rifle west to the boundary with the Grand Junction Field Office. This represents the eastern extent (fringe) of the species overall range and populations are believed to be small and sporadic.

Environmental Consequences/Mitigation:

Amphibians. It is plausible that over-grazing by livestock could contribute to the decline of the functionality of the habitat for amphibians. Overgrazing impacts on wetlands and riparian vegetation could impact individual animals and prey populations. Primarily, the allotment is outside the range (overall, elevation, and habitat) of most amphibian species of interest and known to occur in the GSFO.

Analysis on the Public Land Health Standard 3 for Plant and Animal Communities (partial, see also Vegetation and Wildlife, Terrestrial): A Land Health Assessment was conducted for the area in 2007 and the Determination Document was signed on September 24, 2008. The land health assessment determined that the Hogback Common allotment was not meeting Standard 3 for plant and animal communities because much of the sagebrush on the allotment was old and decadent and the understory was dominated by cheatgrass or other noxious weeds with few native perennial grasses or forbs. Given the proposed changes in season of use, it is anticipated that upland habitat condition should improve over time and the allotment should move toward meeting Standard 3.

Wildlife, Terrestrial (includes an analysis of Public Land Health Standard 3)

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.

Reptiles. Reptile species most likely to occur 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. 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*).

Birds. 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 Dusty grouse (*Dendragapus obscurus*), are found here.

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 area include the: red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chrysaetos*) American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), Cooper's hawk (*Accipiter cooperii*), and sharp-shinned hawk (*A. striatus*).

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.

Mammals. Numerous small mammals reside within the planning area, including ground squirrels (*Spermophilus* spp.), chipmunks (*Neotamias* spp.), rabbits (*Sylvilagus* spp.), skunks (*Mephitis mephitis*), and raccoons (*Procyon lotor*). Many of these small mammals provide the main prey for raptors and larger carnivores. These species are most likely to occur along the drainages, near the margins of dense

oakbrush, in pinyon-juniper woodland, or in the small area of aspen and spruce/fir. Larger carnivores expected to occur include the bobcat (*Lynx rufus*) and the coyote (*Canis latrans*). Black bears (*Ursus americanus*) make use of oaks and the associated chokecherries and serviceberries for cover and food, while mountain lions (*Felis concolor*) are likely to occur during seasons when mule deer (*Odocoileus hemionus*) are present.

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 Resource Management Plan (RMP) allocated existing forage proportionately to livestock and big game, the criterion being active preference for livestock and 5-year average demand for big game. The RMP allocated all available forage on allotments in big game winter range -unavailable to livestock because of stocking rate limitations or slope restrictions - to big game. Summer range was not limiting to big game; therefore, allocating forage beyond CDOW population goals in summer range was deemed to be unnecessary since winter range is what limits herd size. In addition, the RMP allocated additional forage produced through vegetation manipulation on wildlife winter range first to big game and then to livestock up to active preference. On summer range, additional forage was allocated to livestock first.

Environmental Consequences/Mitigation:

Reptiles. It is plausible that over-grazing by livestock could contribute to the decline of the functionality of the habitat for reptiles. Impact on upland and riparian vegetation could impact individual animals and prey populations. Primary, the project area is outside the range (overall, elevation, and habitat) of most reptile species of interest and known to occur in the CRVFO. Secondly, land health standard 2 for riparian systems and standard 3 for productive plant communities are being achieved (BLM 2004). Thus the allowable number of animal unit months and periods of use, along with land health standards and terms/conditions; should continue to maintain adequate habitat conditions (suitability and connectivity) to ensure reptiles are maintained at viable population levels commensurate with the species and habitat's potential.

Birds and Mammals. Overgrazing affects bird and mammals by altering habitat structure and food availability. Grazing invariably reduces the height and ground cover of plants, at least temporarily, thus reducing the cover they need for protection, feeding, roosting and nesting. There is no indication or data to support that the proposed action would have any large scale negative impacts to density, composition, or frequency of terrestrial species or the quality or connectivity of terrestrial wildlife habitat. This area receives adequate growing season plant rest and recovery periods. The land health assessment data along with range compliance data indicates that current livestock grazing consistent with achieving land health standards for bird and mammal species.

Mule Deer. The allotment is winter range for mule deer. Mule deer within the landscape assessment area are managed in DAU D-42, which encompasses GMU 33 and DAU D-43, which encompasses GMU 25, 26 and 34. The current population objective for deer in DAU D-42 is between 7,700 and 9,400. The current population estimate is 8,300 animals. The current population objective for DAU D-43 is 10,890 animals. The CDOW recommended population objective is for 7,000 animals. These deer populations appear to have peaked about four times in the past 50 years. Populations reached a low point in 1993 after the severe winter of 1992. Since

that time the herds appear to be growing. In the past 25 years, there have been two notable bad winters that caused short-term declines – 1978-79 and 1992-93. The winter of 1983-84 was very severe in most parts of the state but this area was spared from the very deep snows.

Elk. The allotment is winter range for elk. Elk in the watershed are managed in Data Analysis Unit (DAU) E-6, which encompasses Game Management Units (GMU) 11, 12, 13, 23, 24, 25, 26, 33, 34, 131, 211 and 231. The current population estimate for E-6 is 39,020 animals. The current population objective for elk in DAU E-6 is 28,500 animals but is being proposed for somewhere between 32,000 and 39,000 animals. Elk herds within this watershed have steadily increased over the years and are currently near their peak.

Most issues between domestic livestock and big game concerns forage allocation and land health.

Forage Allocation. Managing the timing and intensity of livestock grazing is critical to maintaining habitat conditions preferable to big game. For example, cattle grazing during the early season could improve the quality of winter forage for elk but cattle must be removed early enough to allow plants to re-grow. However, the magnitude of competitive interactions between big game and livestock is poorly understood. Livestock and wild ungulate carrying capacities should be evaluated holistically and be used to guide stocking rate decisions and wild ungulate population objectives. The GSFO's RMP allocated existing forage proportionately (50/50) to livestock and big game and that seem to be adequate on this allotment.

Overall, elk populations since the late 1970s to present have been increasing while livestock numbers and periods of use have decreased. Qualitatively viewing the big game population trends and CDOW objectives in relationship to the proposed action (maintaining the existing level of livestock AUMs and periods of use, along with land health standards and terms/conditions), it can be assumed that the proposed action (based on the cumulative annual use of forage by big game and domestic livestock) remains compatible with the CDOW big game objectives while achieving public land health standards.

BLM is currently working over the last few years with the permittee to change the grazing system on this allotment. The proposed plan has shifted the timing of some of the sheep grazing from the active growing season to winter use. The proposed changes should be providing some growing season rest for cool-season grasses and forbs. Winter sheep grazing may also reduce some of the sagebrush density, allowing for more herbaceous growth. All these actions would benefit terrestrial wildlife.

Analysis on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): A Land Health Assessment was conducted for the area in 2007 and the Determination Document was signed on September 24, 2008. The land health assessment determined that the Hogback Common allotment was not meeting Standard 3 for plant and animal communities because much of the sagebrush on the allotment was old and decadent and the understory was dominated by cheatgrass or other noxious weeds with few native perennial grasses or forbs. Given the proposed changes in season of use, it is anticipated

that upland habitat condition should improve over time and the allotment should move toward meeting Standard 3.

SUMMARY OF CUMULATIVE IMPACTS

Wildlife. 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 is not anticipated to result in negative cumulative impacts to wildlife when viewed in conjunction with those activities currently occurring and reasonably certain to occur on adjacent private/other lands.

SUMMARY OF MITIGATION IDENTIFIED

Maintenance of range improvements not previously inventoried or new improvements may require cultural resource inventories. These allotments may be found to contain 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. The BLM may 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.

Education/Discovery stipulation needs to be added to the lease renewal.

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

PERSONS AND AGENCIES CONSULTED:

A notice of public scoping was posted on the Colorado BLM's Internet web page and a news release was issued on October 20, 2009 regarding grazing permits and associated allotments scheduled for renewal in 2010. 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 Glenwood Springs 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.

The following individuals, groups, organizations and/or local governments were also consulted:
Grazing permittee associated with the permit renewal
Southern Ute Tribe

Northern Ute Tribe
Ute Mtn. Ute Tribe

INTERDISCIPLINARY REVIEW:

<i>Name</i>	<i>Title</i>	<i>Responsibility</i>
Isaac Pittman	Rangeland Management Specialist	NEPA Lead
Michael Kinser	Rangeland Management Specialist	Wetlands and Riparian Zones, Range Management
Jeff O'Connell	Hydrologist/Geologist	Soil, Air, Water, Geology
Kimberly Miller	Outdoor Recreation Planner	WSR, Wilderness/WSAs
Greg Wolfgang	Outdoor Recreation Planner	VRM, Recreation, Travel Management
Cheryl Harrison	Archaeologist	Cultural Resources and Native American Concerns
Brian Hopkins	Wildlife Biologist	Migratory Birds, Terrestrial Wildlife, T/E/S Terrestrial Wildlife, Aquatic Wildlife and T/E/S Aquatic Wildlife
Carla DeYoung	Ecologist	ACECs, Vegetation, T/E/S Plants, Land Heath Stds
Monte Senor	Rangeland Management Specialist	Invasive, Non-native Species

Attachments: Map of Hogback Common Allotment

Name of Preparer: Isaac Pittman

Date: 4/6/2010

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
GLENWOOD SPRINGS FIELD OFFICE
FINDING OF NO SIGNIFICANT IMPACT

Grazing Permit Revision on the Hogback Common Allotment

DOI-BLM-CO140-2010-0043-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 revision on the Hogback Common Allotment. The effects of the proposed action are disclosed in the Alternatives and Environmental Impacts sections of the EA. Implementing regulations for NEPA (40 CFR 1508.27) provide criteria for determining the significance of the effects. Significant, as used in NEPA, requires consideration of both *context* and *intensity* as follows:

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

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

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

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

Impacts associated with the 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 proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

One historic property (5GF1164) was identified that is considered potentially eligible for listing on the National Register of Historic Places. Based on available data, there is a low potential for historic properties within these allotments. At present, there are no known areas of Native American concern within these allotments.

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

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

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

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

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

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

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

This EA did not identify any cumulatively significant impacts from the issuance of a revised grazing permit on the Hogback Common allotment.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant, cultural, or historical resources.

One historic property (5GF1164) was identified that is considered potentially eligible for listing on the National Register of Historic Places. Based on available data, there is a low potential for historic properties within these allotments. At present, there are no known areas of Native American concern within these allotments.

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

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

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

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

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


Authorized Officer
Glenwood Springs Field Office

4/7/2010
Date