

U.S. Department of the Interior
Bureau of Land Management
Glenwood Springs Field Office
50629 US Highway 6 & 24
Glenwood Springs, CO 81601

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-N040-2009-0049-EA

CASEFILE NUMBER: 0502886

PROJECT NAME: Grazing Permit Renewals on the Brush Creek Allotment

LOCATION: T5S R84W Sec 14 – Brush Creek Allotment No. 08503. Refer to attached allotment map.

APPLICANT: Grazing Permittee

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Proposed Action: The Proposed Action is to renew term grazing permit for the above applicant. The number/kind of livestock, period of use, percent public land and Animal Unit Months (AUMS) will remain the same as the previous permit. The permit would be issued for a 10-year period. The proposed action is in accordance with 43 CFR 4130.2. The tables below summarize the scheduled grazing use and grazing preference for the permits.

Scheduled Grazing Use:

Allotment Name & No.	Livestock No. & Kind	Period of use	Percent Public Land	AUMs
Brush Creek No. 08503	22 Cattle	06/01 – 06/15	100	8

Grazing Preference AUMS:

Allotment Name & No.	Active	Suspended	Total
Brush Creek No. 08503	9	0	9

The following terms and conditions were included on the previous (expiring) permits and will be carried forward on the renewed 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.

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

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:

The Colorado Standards for Public Land Health consist of 5 standards: upland soils, riparian systems, plant and animal communities, special status species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands.

The Brush Creek allotment is part of the Eagle River South landscape which had a formal land health assessment conducted in 2002 and the Determination Document was signed on December 9, 2003. The Brush Creek allotment was not meeting Standards 1 and 3. Indicators that standards were not being met included a lack of grasses, forbs and biological soil crusts, and consequently, a higher amount of bare soil than expected. Evidence of water flow patterns, pedestalling and noxious weeds were other indicators of poor condition. Fragmentation of the landscape due to housing developments and roads also contributed to failing to meet Standard 3.

Causes of failing to meet the standards included fire interval beyond the natural range (an extended period of time since the last fire or other natural disturbance in the landscape), seeding of previous disturbances to invasive, exotic grasses, roads and housing developments, and heavy historic livestock grazing. Insufficient data was available to determine whether current livestock grazing (permitted use or trespass) was a contributing factor.

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 #1009-23) was completed for the Brush Creek Allotment on February 20, 2009 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)
Brush Creek	103	534	16	1	No	No additional acres need to be inventoried to meet the 10% sampling threshold. 14% of the allotment has 30%+ slopes.
Total	103	534	16	1		

Five Class III cultural resource inventories have been conducted within this allotment resulting in the recording of no historic properties. Historic properties are cultural resources that are considered eligible or potentially eligible for listing on the National Register of Historic Places that need to be preserved. If they cannot be avoided, the adverse impacts must be mitigated. Based on available data, there is a low to moderate potential for historic properties within the allotment. Undiscovered historic era sites within this allotment could represent a time frame from the late 1800's through the 1950's; Native American sites could represent a time range from 200 to 10,000 years before present.

Subsequent site field visits, inventory, and periodic monitoring may have to be done to identify if additional historic properties are present within the term of the permit and 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 this allotment. On November 7, 2008 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. 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 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 historic properties.

No historic properties were identified during the inventories for this allotment. A determination of “**No Adverse Affect**” has been made for this renewal. The cultural resource specialist should be involved in discussions for improvements, maintenance, supplemental feeding areas, etc to ensure that the historic properties and areas of concern are avoided.

Mitigation: New improvements or maintenance of existing range improvements may require cultural resource inventories, monitoring, and/or data recovery. This allotment may also contain undiscovered historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders. 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: 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).

Invasive, Non-native Species

Affected Environment: Land health assessments conducted in 2002 on the Brush Creek Allotment report that Canada thistle is established within the allotment boundaries. The assessment also reported that the allotment was not meeting standards 1 and 3 due to lack of herbaceous vegetation, the presence of noxious weeds/invasive plants, higher than expected bare ground, and a relative reduction in water infiltration. Livestock grazing was not attributed as being the causal factor for the allotment not meeting standards. The allotment is grazed for 15 days at the beginning of June by 22 head of cattle.

Environmental Consequences/Mitigation: Livestock use the allotment before the seed set of most noxious weed species, therefore transportation of weed seed by livestock will be minimal. The reported decline in desirable native plant species and ground cover on the allotment will provide a niche for noxious weed invasion; however, current livestock operations are not attributed to the decline in rangeland health. Therefore the proposed action is not expected to substantially affect noxious and invasive plant species.

Migratory Birds

Affected Environment:

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, aspen, pinyon-juniper woodlands, other types of coniferous forests, and riparian and wetland areas support many species. Within the sagebrush habitats the sage sparrow (*Amphispiza belli*) and the Brewer's sparrow (*Spizella breweri*) may occur. Many species of raptor occur within the assessment area including red-tailed hawks, golden eagles, northern goshawks, Cooper's hawks, kestrels, and a couple of owl species. In addition to these species, many other species on the Fish & Wildlife Service's Birds of Conservation Concern list could occur in the area.

Bald eagle (*Haliaeetus leucocephalus*). Bald eagles are known to winter along portions of the Eagle River and its major tributaries from mid-November to mid-April. Large mature cottonwood trees along the Eagle River and their major tributaries are used as roosting and perching sites, and these waterways provide the main food sources of fish and waterfowl. The allotments overlaps with bald eagle winter range and winter foraging areas along the Eagle River and mapped Bald Eagle roost sites are located along Brush Creek and the Eagle River. Roost sites are defined as groups of or individual trees that provide diurnal and/or nocturnal perches for

less than 15 wintering bald eagles; these trees are usually the tallest available trees in the wintering area and are primarily located in riparian habitats.

Upland habitats adjacent to these waterways are used as scavenging areas primarily for winter killed mule deer and elk. Major threats include habitat loss, human disturbance and illegal shooting. 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.

Environmental Consequences/Mitigation:

Limited bird count data exists for the area. The greater concern is the continued fragmentation of habitat and losses of large blocks of contiguous habitat required by many bird species. The on-going private land development and the proliferation of roads and trails on public lands from open travel designations will continue to reduce habitat quality and quantity. No intentional take of native bird species is anticipated under the proposed action. Grazing by cattle could result in the accidental destruction of ground nests through trampling. This impact is expected to be minimal and isolated and would not influence populations of migratory birds on a landscape level. Given current overall habitat condition and availability it is unlikely that continued livestock grazing to the same extent in both numbers and duration, as proposed, would reduce the extent or quality of habitat available for migratory bird breeding functions.

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

Affected Environment:

Federally Listed, Proposed or Candidate Fish, Wildlife, and Plant Species:

According to the latest species list from the U. S. Fish and Wildlife Service (<http://mountain-prairie.fws.gov/endspp/CountyLists/COLORADO.pdf>), the following Federally listed and candidate species may reside, have habitat, and/or be impacted by actions occurring in Eagle County: Canada lynx, black-footed ferret, Mexican spotted owl, western yellow-billed cuckoo, razorback sucker, Colorado pikeminnow, bonytail chub, humpback chub, Uncompahgre fritillary butterfly, and Ute ladies'-tresses orchid.

Plants:

Habitat for the Ute ladies'-tresses orchid is found along streams, lakes or in wetland areas below 6,500 feet with saturated or subirrigated soils. No suitable or potential habitat for the Ute ladies'-tresses orchid is found in or adjacent to the Brush Creek allotment.

Aquatic Wildlife:

The Colorado pikeminnow, bonytail, humpback chub, and razorback sucker are all located far (>50 miles) downstream in the Colorado River below Rifle, Colorado. The Eagle River does not provide habitat for any of these endangered fishes.

Terrestrial Wildlife:

No Federally listed and candidate species are known to reside, have habitat, and/or be impacted by actions occurring in this allotment.

BLM Sensitive Species:

Plants:

The BLM sensitive plant species, Harrington's penstemon (*Penstemon harringtonii*), is found in open sagebrush communities or sagebrush/mixed mountain shrub communities. This species is known to occur within and adjacent to the Brush Creek allotment.

Aquatic Wildlife:

The Eagle River, located approximately 4 miles north of this allotment contains bluehead and flannelmouth suckers. Both of these fish are BLM sensitive species.

Terrestrial Wildlife:

Greater Sage Grouse. The sagebrush habitat, within the allotment are mapped as historic habitat, as no birds have been seen in these areas for years likely due to a variety of factors. The CDOW does not intensively manage the watershed for sage grouse and the area is not part of the *Northern Eagle/Southern Routt Greater Sage-Grouse Conservation Plan*. Habitat fragmentation and loss of habitat resulting from roads, residential and commercial development, off highway vehicle use, public recreation, powerlines and pipelines has reduced connectivity of sagebrush vegetation vital to this species. In addition, fire suppression, drought, and livestock and wild ungulate grazing have all impacted habitat quality for sage grouse. Sagebrush habitats are being invaded by juniper trees, and drought and historic grazing have reduced vegetative productivity and diversity.

Environmental Consequences/Mitigation:

Federally Listed, Proposed or Candidate Fish, Wildlife, and Plant Species:

Endangered Colorado River Fishes:

Plants:

Due to the absence of known occurrences or suitable habitat for the Ute ladies'-tresses orchid, the proposed grazing schedule would have **"No Effect"** on this listed species.

Aquatic Wildlife:

These fish are all native to the Colorado River basin. These species are adapted to the historic natural conditions related to high sediment loads periodically carried by the Colorado River. These allotments provide adequate growing season rest and plant rest and recovery periods. Given the condition of habitats and the distance to occupied habitat from these allotments, continued livestock grazing as proposed would have **"No Effect"** to these fish or their habitat.

BLM Sensitive Species:

Plants:

Harrington's penstemon flowering stalks are palatable to both livestock and wildlife. The allotment is grazed from June 1 to June 15 each year which corresponds to the flowering period for Harrington's penstemon. Heavy grazing on penstemon flower stalks each year could result in a decline in the reproductive capability of the species. As old plants eventually die, the

population would decline if there is little recruitment of young plants. Light grazing or grazing outside of the flowering period should result in few flower stalks being removed and would not affect the long-term reproductive capability of the population.

Little information exists to evaluate the impact of current livestock grazing on Harrington's penstemon in this allotment. The 2002 Land Health assessment noted that a large pipeline which traverses the allotment had been seeded with smooth brome and crested wheatgrass. The understory is now a virtual monoculture of these aggressive exotic species which may be inhibiting establishment of Harrington's penstemon. Also, poor understory conditions elsewhere on the allotment may be having an adverse affect on this plant. Utilization studies were initiated in 2008. Very slight use was noted that year. However, more years of utilization data need to be collected to make a determination on the impacts of livestock grazing (if any) on Harrington's penstemon health and reproductive capability. With implementation of the utilization limits proposed in the Vegetation section, impacts on Harrington's penstemon should be minor.

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

In 2002 the Glenwood Springs Field Office assessed area conditions as part of the Eagle River South Watershed Land Health Assessment. During that time, the 109 acres of the Brush Creek Allotment were rated as not achieving Standards 1 or 3. Some concerns were noted regarding habitat conditions for Harrington's penstemon on the Brush Creek allotment; however, insufficient data existed to determine whether livestock grazing was having an adverse impact on Harrington's penstemon populations or habitat.

The period of grazing use on the Brush Creek allotment should allow adequate rest and recovery following grazing to maintain plant health and soil conditions. Continuation of livestock grazing, with implementation of utilization limits proposed in the Vegetation section, should not contribute to the failure to achieve Standards 1 and 3 or cause a failure to achieve Standard 4 for Harrington's penstemon.

Aquatic Wildlife:

Flannelmouth & Bluehead Sucker. The bluehead and flannelmouth sucker are both native to the Colorado River basin. These species are adapted to the historic natural conditions related to high sediment loads periodically carried by the Eagle River. These allotments provide adequate growing season rest and plant rest and recovery periods. Given the condition of habitats and the distance to occupied habitat from these allotments, continued livestock grazing as proposed should have no negative impacts to either of these fishes.

Analysis on the Public Land Health Standard 4 for Aquatic Wildlife (partial, see also Vegetation and Wildlife, Terrestrial): A Land Health Assessment was completed for these lands in 2002. At that time area streams were meeting Standard 3 for aquatic wildlife. The proposed action should have little bearing on the areas ability to continue to meet this standard.

Terrestrial Wildlife:

The allotment historically supplied habitat for sage grouse, however, none have been observed here for many years. This is attributed largely to habitat fragmentation due to extensive roads and trails and development of adjacent private lands. Primary issues related to sage grouse

habitat involve habitat fragmentation and pinyon-juniper encroachment. Private lands, which border these allotments, have housing developments, roads, powerlines, and other disturbances which contribute to poor habitat connectivity on a landscape scale. The land health issues are being largely attributed to: causes of failing to meet the standards included: fire interval beyond the natural range, seeding of previous disturbances to invasive, exotic grasses, roads and housing developments, and heavy historic livestock grazing. Insufficient data was available to determine whether current livestock grazing was a contributing factor.

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

In 2002 the Glenwood Springs Field Office assessed area conditions as part of the Eagle River South Watershed Land Health Assessment. Some concerns were noted regarding habitat conditions for terrestrial wildlife on the Brush Creek allotment; however, insufficient data existed to determine whether livestock grazing was having an adverse impact on terrestrial wildlife populations or habitat.

The period of grazing use on the Brush Creek allotment should allow adequate rest and recovery following grazing to maintain plant health and soil conditions. Continuation of livestock grazing, with implementation of utilization limits proposed in the Vegetation section, should not contribute to the failure to achieve Standard 4 for terrestrial wildlife.

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

Affected Environment: The Brush Creek Allotment is located southeast of the Town of Eagle and west of the perennial Brush Creek within the 10,073 acre Brush Creek above Eagle 6th field watershed. Within the allotment is one mapped unnamed ephemeral drainage that is intercepted by the McKenzie Ditch to the northeast. This drainage is not currently listed on the State of Colorado's *Stream Classifications and Water Quality Standards* (CDPHE, Water Quality Control Commission, Regulation No. 37) list, *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 a water-body suspected to have water quality problems. In addition, no water quality data is available at this time.

Environmental Consequences/Mitigation: Grazing activities could 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 and could lead to stream bank trampling. The introduction of livestock feces to waterbodies often leads to water quality degradation by increasing fecal coliform bacteria levels and often leads to algal blooms which increase water temperatures. However, based on the lack of perennial drainages in the allotment or tributaries to Brush Creek, the potential for measureable water quality degradation in nearby perennial drainages associated with the proposed activities is minimal.

Analysis on the Public Land Health Standard 5 for Water Quality: In 2002 the Glenwood Springs Field Office assessed water quality conditions in the area as part of the Eagle River South Watershed Land Health Assessment. During the assessment, limited water quality parameters were collected none of which were in the Brush Creek Allotment. Based on the period of use and the distance of the allotment from perennial drainages, the proposed activities 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

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

Affected Environment: According to the *Soil Survey of Aspen-Gypsum Area, Colorado: Parts of Eagle, Garfield, and Pitkin Counties* (USDA 1992), the Brush Creek Allotment contains three different soil map units that can be identified by the numerical code assigned by the soil survey. The soil map units from north to south in the allotment include: Mussel loam, Gypsum land-Gypsiorthids complex, and Yamo loam. In addition, a small percentage of the allotment is 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 three soil map units found within the Brush Creek Allotment.

- Gypsum land-Gypsiorthids complex (55) – This soil map unit is found on mountainsides, hills, and in drainageways on slopes of 12 to 65 percent. Approximately 65 percent of the unit is Gypsum land and 20 percent Gypsiorthids. The remaining 15 percent of the unit is composed of a mix of map units. The Gypsum land is primarily exposed gypsum material while the Gypsiorthids are moderately deep, well drained and derived from colluvium with high gypsum content. Surface runoff for this unit is very rapid and the water erosion hazard is slight to severe. This unit is used primarily for wildlife habitat.
- Mussel loam (89) – This deep, well drained soil is found on terraces and slopes at elevations ranging from 6,500 to 7,500 feet and on slopes of 1 to 6 percent. This alluvium derived soil has slow runoff and slight water erosion hazard. Primary uses for this soil include hayland and homesite development.
- Yamo loam (115) – This deep, well drained soil is found on fans and toe slopes at elevations ranging from 6,200 to 7,500 feet and on slopes of 6 to 12 percent. This soil is derived primarily from sandstone, shale, and gypsum colluviums. Surface runoff for this soil is medium and the water erosion hazard is slight. Primary uses for this soil include rangeland, hayland, pasture, and homesite development.

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. Based on the scheduled period of use and the lack of drainages within this allotment, the potential for measureable sediment transport and negative soil impacts is minimal.

Analysis on the Public Land Health Standard 1 for Upland Soils: In 2002 the Glenwood Springs Field Office assessed area conditions as part of the Eagle River South Watershed Land Health Assessment. During that time, the 109 acres of the Brush Creek Allotment were rated as not achieving Standard 1. This was based on the presence of water flow patterns, pedestalling, and minor compaction layers. Based on the period of use in the proposed action, the proposed activities would not likely contribute to existing or degrading conditions.

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

Affected Environment:

Brush Creek Allotment is a small allotment just west of Brush Creek. Vegetation on the allotment consists of pinyon-juniper woodlands on steeper slopes and ridgetops, and sagebrush shrublands on the flatter terrain. Sagebrush on the allotment appears healthy and vigorous with good seed production. However, there is more bare ground than expected and Utah junipers are beginning to encroach into the sagebrush parks.

A large pipeline which traverses the allotment had been seeded with smooth brome and crested wheatgrass. The understory along the pipeline and in adjacent rangeland is now a virtual monoculture of these aggressive, exotic species. In parts of the allotment farther away from this disturbance, native perennial grasses such as Indian ricegrass, prairie junegrass and needle and

thread grass appear, but these species are less abundant than expected. Forb species are almost nonexistent.

Environmental Consequences/Mitigation:

The Brush Creek allotment is grazed by cattle for 15 days in late spring (June 1 to June 15). This period of grazing use should provide adequate growing season rest and recovery periods following grazing to allow for maintenance of plant health and opportunities for seed formation and seedling establishment. However, the understory vegetation on the allotment is less abundant than expected and the cause has not been determined.

Little information exists to evaluate the impact of current livestock grazing on land health conditions in this allotment. Utilization studies were initiated in 2008. Very slight use was noted that year. However, more years of utilization data need to be collected to make a determination on the impacts of livestock grazing on vegetative conditions.

Mitigation: Within the uplands, average livestock utilization levels will be limited to 50% by weight on key grass species. Livestock will be removed from the allotment immediately if this utilization level is reached.

Analysis on the Public Land Health Standard for Plant and Animal Communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial):

The Brush Creek allotment was not meeting Standard 3 for plant communities and habitat for wildlife. The amount of bare ground was somewhat higher than expected, with fewer grasses and forbs than expected and biological soil crusts confined to protected areas under sagebrush shrubs. Drought conditions obviously contributed to the poor vigor and cover of herbaceous vegetation, however, this allotment had less herbaceous vegetation than other areas of the landscape at the same elevations.

Other factors contributing to the failure to meet the standards included fire interval beyond the natural range (an extended period of time since the last fire or other natural disturbance in the landscape), seeding of previous disturbances to invasive, exotic grasses, fragmentation from roads and housing developments, and heavy historic livestock grazing. Insufficient data was available to determine whether current livestock grazing (permitted use or trespass) was a contributing factor.

Given the adequate growing season rest and plant recovery periods and implementation of the proposed mitigation, the proposed action should not prevent the Brush Creek allotment from meeting Standard 3 for plant communities.

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

Affected Environment:

The Brush Creek allotment contains no perennial streams. Brush Creek is located within 0.25 miles and contains brown, rainbow, and brook trout and aquatic invertebrates.

Environmental Consequences/Mitigation:

Continued grazing activities would result in some soil compaction and displacement and increase the likelihood of erosional processes, especially on steep slopes, areas devoid of vegetation, and at livestock concentration areas such as stock waters, salting sites, and drainage bottoms. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. Although Brush Creek is located within 0.25 miles of the allotment it is buffered by a paved county road (County Road 307). This helps to limit the potential for increased sediments. However, it is still possible that the proposed activities could result in small amounts of additional sediment associated with grazing practices reaching this creek.

Sediment can impact trout species by silting in important spawning substrates and in the event eggs are present, by smothering eggs which leads to loss of productivity. Excessive sediment can also fill in important pool habitats reducing their depth and usability during critical summer and winter periods when they are needed for thermal refuge and survival. Aquatic insect productivity can be impaired as sediment covers clean gravels and cobbles and fills in the interstitial spaces used by these insects. This can reduce food sources for fish and terrestrial bird and bat species. The reauthorization of grazing as proposed provides for plenty of growing season rest and adequate plant rest and recovery periods which should maintain good vegetative cover and help to limit offsite soil movement. The allotment is only grazed by 22 cows for 14 days. Stream and riparian habitats are in good condition, and continued livestock grazing as proposed should have minimal impact to nearby streams, fish, or their habitats.

Analysis on the Public Land Health Standard 3 for Plant and Animal Communities (partial, see also Vegetation and Wildlife, Terrestrial):

A formal Land Health Assessment was completed for these lands in 2002. At that time area streams were meeting Standard 3 for aquatic wildlife. The proposed action should have little bearing on the areas ability to continue to meet this standard.

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

Affected Environment:

Terrestrial Habitat. The latest assessment of habitat condition occurred in the 2002 Eagle River South Watershed Landscape Health Assessment. The current condition of terrestrial wildlife habitats varies across the landscape. Upland habitats have been altered by disturbances (powerlines, pipelines, fences, public recreation use, residential and commercial development, vegetative treatments and livestock and wild ungulate grazing). The human uses have helped contribute to degradation of habitat quality, fragmentation of habitat for several species and the expansion of areas supporting noxious and exotic vegetative species.

Species of High Public Interest. 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 bulk of the landscape, except the Seven Hermits portion of the East Hardscrabble allotment overlap with severe winter range for both elk and deer. Severe winter range is considered that part of the overall range where 90% of the

individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten.

The Lower Colorado River Habitat Management Plan 2008-2012 indicates the 2006 post hunt elk population to be an estimated 5,950 within data analysis unit (DAU) E-16 (game management units 44,444, 45 and 47). The CDOW recommended population objective for elk is 6,000. As indicated the elk population is stable and meeting the population objectives set by the CDOW. CDOW recommended population objective for deer is 7,000. The 2006 post hunt population estimate was 10,160 deer in game management DAU D-14 (GMU 44). Currently the deer numbers are likely near the 7,000 deer population objective due to the locally severe winter of 2007-08.

Environmental Consequences/Mitigation:

It is unlikely that the proposed action would have any large scale negative impacts to density, composition, or frequency of terrestrial species or terrestrial wildlife habitat. This allotment is small and it will receive adequate growing season plant rest and recovery periods. The landscape health assessment said insufficient data was available to determine whether current livestock grazing (permitted use or trespass) was a contributing factor. The proposed grazing management of 15 days per year should maintain habitat condition and provide for the forage and cover needs of resident wildlife that move through this allotment.

Species of High Public Interest. 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. Qualitatively viewing the big game population trends and objectives in relationship to the proposed stable level of livestock AUMs, it can be assumed that the current stocking rates will continue to be compatible with CDOW big game objectives.

Analysis on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): Based on the grazing management in place, the LHA and the existing allotment data, the proposed action should have little bearing on the areas ability to meet, maintain, or move towards meeting Standard 3 for terrestrial wildlife.

SUMMARY OF CUMULATIVE IMPACTS

No cumulative impacts have been identified.

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 November 13, 2008 regarding grazing permits and associated allotments scheduled for renewal in 2009. 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:

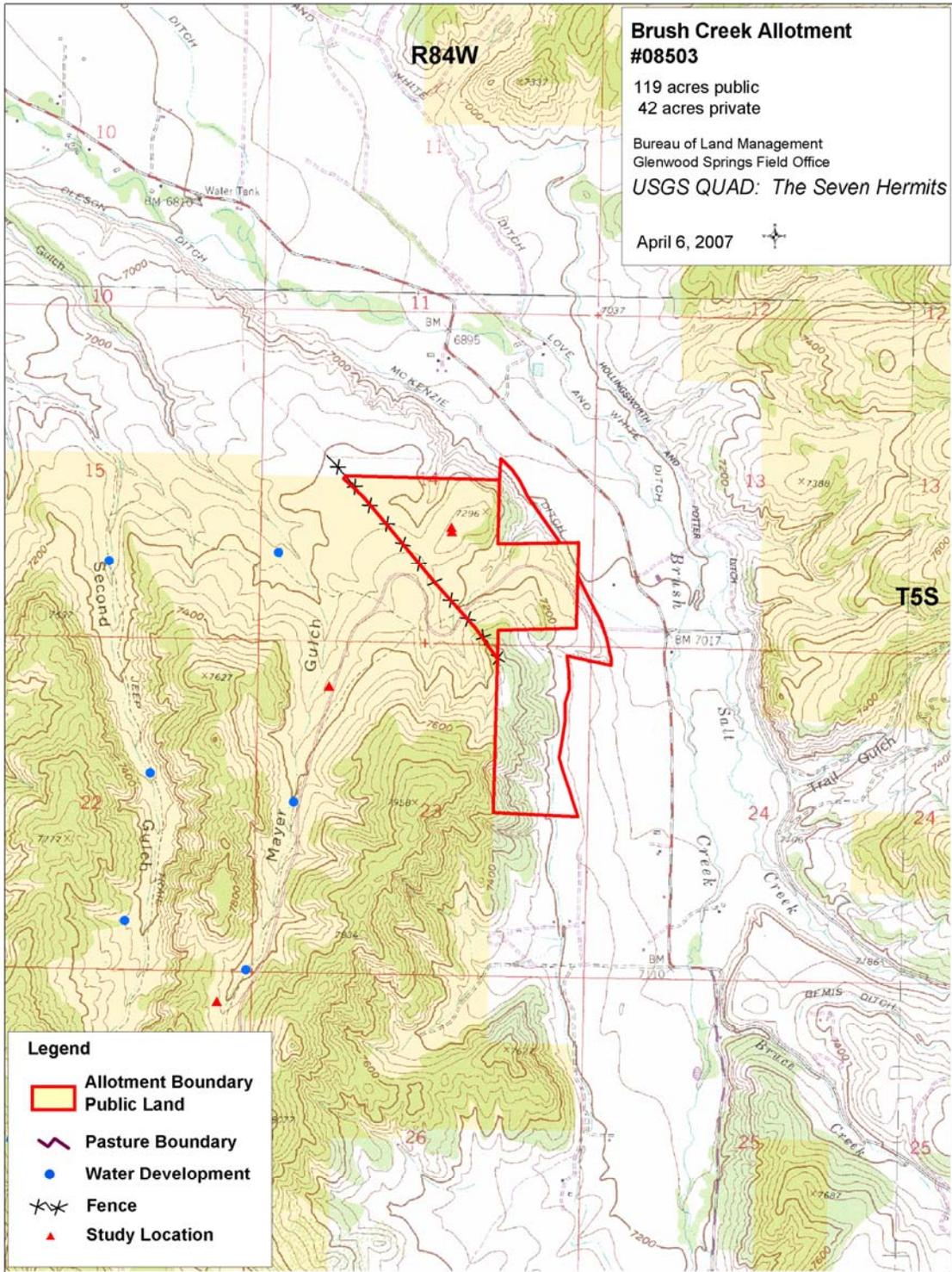
Grazing permittee associated with the permit renewal
 Southern Ute Tribe, Chairman
 Northern Ute Tribe, Chairman
 Ute Mtn. Ute Tribe, Chairman

INTERDISCIPLINARY REVIEW:

<i>Name</i>	<i>Title</i>	<i>Responsibility</i>
Michael Kinser	Rangeland Management Specialist	NEPA Lead, Wetlands and Riparian Zones, Range Management
Jeff O’Connell	Hydrologist/Geologist	Soil, Air, Water, Geology
Kay Hopkins	Outdoor Recreation Planner	WSR, Wilderness, VRM
Cheryl Harrison	Archaeologist	Cultural Resources and Native American Concerns
Brian Hopkins	Wildlife Biologist	Migratory Birds, Terrestrial Wildlife, T/E/S Terrestrial Wildlife
Carla DeYoung	Ecologist	ACEC, Vegetation, T/E/S Plants, Land Heath Stds
Tom Fresques	Fisheries Biologist	Aquatic Wildlife and T/E/S Aquatic Wildlife

APPENDDICES: None

ATTACHMENTS: Allotment Map



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

Grazing Permit Renewal on the Brush Creek Allotment.

DOI-BLM-CO140-2009-0049-EA

Finding of No Significant Impact

I have reviewed the direct, indirect and cumulative effects of the proposed action documented in the EA for the grazing permit renewal on the Brush Creek 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.

The EA did not identify any unique characteristics that occur in the allotment.

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

The analysis did not identify any effects that are 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 Brush Creek Allotment. It is not expected to set precedent for future actions with significant effects or represent a decision in principle about a future management consideration in or outside of this allotment.

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

The analysis in the EA did not identify any related actions with cumulative significant effects.

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.

The proposed action is not considered to adversely affect districts, sites, highways, structures, or historic properties.

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.

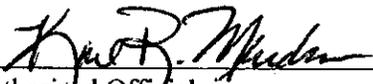
There is no designated critical habitat for any listed Threatened or Endangered species within the project area. The EA discloses that the proposed action would have no adverse impacts to any species listed as threatened or endangered.

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

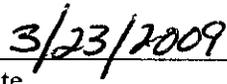
The proposed action does not violate or threaten to violate any Federal, State or local laws or requirements imposed for the protection of the environment.

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.

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 Official
Glenwood Springs Field Office



Date