

**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:** CO-140-2008-035 EA

**CASEFILE/PROJECT NUMBER:** 057558

**PROJECT NAME:** Grazing Permit Renewal

**LEGAL DESCRIPTION:** T7S R87W sec 11, 14, 23, 26, and 35. See Attached Maps, West Basalt Mountain Allotment (#08316).

**APPLICANT:** Sarah L. McNulty

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

**PROPOSED ACTION:** The Proposed Action is to renew a term grazing permit for the above applicant. The grazing schedule and grazing preference animal unit months (AUMS) will remain unchanged from the previous permit. The permit would be issued for a 10-year period, unless the base property is leased for less, but for purposes of the EA, we are assuming 10 years of grazing by this or another applicant (in case of transfer). The proposed action is in accordance with 43 CFR 4130.2. The tables below summarize the level of scheduled grazing use and grazing preference for the proposed permit renewal.

**Scheduled Grazing Use:**

Allotment Name/No.	Livestock No./Kind	Grazing Period	%PL	AUMS
W Basalt Mnt/08316	260 Cattle	05/26 – 06/20	100	222
	260 Cattle	10/16-10/18	100	26

**Grazing Preference (AUMS)**

Allotment Name/No.	Total	Suspended	Active
W Basalt Mnt/08316	274	0	274

The following terms and conditions were included on the previous permit and will be included 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.
- An Actual Use Report for each allotment shall be submitted annually to the BLM office no later than 15 days after livestock have been removed (i.e., the grazing period on the billing or permit).

The following allotment term and condition will be included on the renewed permit.

- If an assessment of rangeland health results in a determination that changes are necessary in order to comply with the standards for public land health or the guidelines for livestock grazing management in Colorado, this permit will be reissued subject to revised terms and conditions.

**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.

**NEED FOR PROPOSED ACTION:**

This permit/lease is 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 action 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; and

amended in September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance.

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 Bureau of Land Management (BLM) approved the Standards for Public Land Health. The five standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. The Glenwood Springs Field Office is in the ongoing process of completing Land Health Assessments on a landscape basis.

The landscape incorporated in the West Basalt Mountain Allotment boundaries is scheduled to be assessed in 2010. As such, we are deferring determination on conformance with the Standards on this allotment until the formal Land Health Assessment is completed. If the authorized officer determines that existing livestock grazing management practices or levels of grazing use on public lands are significant factors in failing to achieve the standards and conform to the guidelines, the authorized officer shall take appropriate action as soon as practical (according to 43 CFR 4180.2) to achieve progress toward meeting the standards.

Because a standard exists for the five categories mentioned above, the impact analysis must address whether the proposed action or any alternatives being analyzed would result in impacts that would maintain, improve, or deteriorate land health conditions for that specific parameter. These analyses are located in specific elements listed below:

**COMPLIANCE WITH SECTION 302 OF FLPMA RELATIVE TO THE COMB WASH DECISION**

A review of applicable planning documents and a thoughtful consideration of new issues and new demands for the use of the public lands involved in this allotment have been made. This analysis concludes that the current land and resource uses are appropriate.

Reasons for the conclusion are: No new issues or new demands for the use of public lands involved in this grazing allotment have been identified since approval of the land use plan and amendments.

**AFFECTED ENVIRONMENT / ENVIRONMENTAL COSEQUENCES / MITIGATION MEASURES:**

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and no action alternative. In addition, the section presents comparative analyses of the direct and indirect consequences on the affected environment stemming from the implementation of the various actions.

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of a proposed action and alternative(s) on certain 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**

<b>Table 1. Critical Elements of the Human Environment</b>									
<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 #1008-5) was completed for the W. Basalt Mtn. Allotment (#08316) on February 28, 2008 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)
W. Basalt Mtn. 08316	1224	559	69	9	no	No additional acres need to be inventoried. 36% of the allotment has 30%+ slopes.
Total	1224	559	69	9		

Ten Class III cultural resource inventories (GSFO #'s 591, 645, 668, 773, 735, 874, 8204-1, 1498-1, 14904-2, and 15303-3) have been conducted within this allotment. One historic property, a transmission line (5GF2456.1) is considered eligible for listing on the National Register of Historic Places. 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.

Based on available data, there is a low potential for historic properties within this allotment. Subsequent site field visits, inventory, and periodic monitoring may have to be done to identify adverse grazing impacts to historic properties identified 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 the Allotment. On November 15, 2007 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 2008 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 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, gulying, 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.

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. This Allotment 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 2001 data from US Census Bureau indicates the median annual income of Eagle County averages \$51,578 and is not considered an impoverished or wealthy county. U.S. Census Bureau data from July, 2002 shows the minority population of Eagle County is less than 3 % of the total population<sup>a</sup>.

Eagle County	
Median Household Income	
Estimate	90% Confidence Interval
\$51,578	\$47,958 to \$55,177

<sup>a</sup> Table CO-EST2002-ASRO-02-08-County Population Estimates by Race Alone and Hispanic or Latino Origin: July 1, 2002  
 Source: Population Division, U.S. Census Bureau  
 Release Date: September 18, 2003  
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Environmental Consequences/Mitigation: The proposed action is 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: A complete landscape wide survey for the present of noxious weeds and non-native species has not been conducted on the West Basalt Mountain Allotment. However, weed infestations have been reported on the allotment. Houndstongue was present in heavily grazed areas and Scotch thistle was also present on the allotment. Although these reports represent only a small fraction of the landscape within the allotment and given the widespread nature of noxious weed infestations throughout the resource area, it is assumed that some level of infestation does exist for the remainder of land within this allotment.

Environmental Consequences/Mitigation: 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.

## MIGRATORY BIRDS:

Affected Environment: Vegetation in the allotment consists primarily of mountain shrub and sagebrush. A small pocket of Douglas fir and aspen is located adjacent to the forest boundary. These habitat types provide nesting and foraging habitat for a variety of migratory bird species. Two species on the USFWS Birds of Conservation Concern List, Virginia's warbler and sage sparrow, may nest in the area. There are no documented raptor nests within the allotment, however it is likely the allotment provides foraging habitat for golden eagles and red-tailed hawks.

Environmental Consequences/Mitigation: The proposed grazing schedule allows grazing for 26 days in the earlier summer and 3 days in the fall. This grazing schedule should allow for ample growing season rest and adequate plant recovery periods. In the past, problems with livestock distribution have been noted. Much of the oakbrush is very dense and does not allow for much livestock grazing. However, the latest monitoring

data (2007) showed the allotment to be in good condition and the allotment appeared to be in non-use at that time. The continuation of grazing under the proposed action would not be expected to degrade migratory bird habitat.

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.

#### THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes an analysis on Standard 4)

##### Affected Environment:

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, proposed, or candidate plant and animal species may occur within or be impacted by actions occurring in Eagle County: Black-footed ferret (*Mustela nigripes*), Canada lynx (*Lynx canadensis*), Mexican spotted owl (*Strix occidentalis*), yellow-billed cuckoo (*Coccyzus americanus*), Uncompahgre fritillary butterfly (*Boloria acrocneuma*), Ute ladies'-tresses orchid (*Spiranthes diluvialis*), razorback sucker (*Xyrauchen texanus*), Colorado pikeminnow (*Ptychocheilus lucius*), bonytail chub (*Gila elegans*), and humpback chub (*Gila cypha*).

The West Basalt Mountain Allotment provides habitat for the federally threatened Canada lynx. Although 311 acres of "other" lynx habitat is mapped within this allotment, most of the vegetation is oakbrush. True lynx habitat within the allotment consists of 9 acres of fir and aspen. This allotment is not included within an LAU, but lies adjacent to the White River National Forest's Red Table LAU.

There are no known occurrences and no identified potential habitat for the Ute ladies' tresses orchid within the West Basalt Mountain allotment. The BLM sensitive plant species, Harrington's penstemon (*Penstemon harringtonii*) has been documented within the southern portion of this allotment. Although the northern portion of the allotment has not been surveyed for Harrington's penstemon, potential habitat for this species is present there. This species generally occurs in open sagebrush habitat on rocky loam or rocky clay loam soils between the elevations of 6,400 to 9,200 feet.

##### Environmental Consequences/Mitigation:

###### *Canada lynx*

The proposed action would not result in direct mortality of individual lynx and any effects to lynx would be the result of changes in ecosystem structure. Direct impacts associated with administration of grazing on lynx are minimal and unlikely. Excessive losses of forage could result in a reduction in hiding and movement cover and directly effect lynx's ability to move through the landscape.

Indirect impacts associated with grazing are mainly associated with competition between livestock and potential lynx prey species for available forage. The Canada Lynx Conservation Assessment and Strategy identified that “grazing, in conjunction with increasing elk populations, may have resulted in increased competition for forage resources with lynx prey”. In summary, livestock compete with lynx prey species (snowshoe hare, jack rabbits, cottontails, blue grouse, voles, squirrels) for available forage. In addition, livestock can remove cover important to the survival of prey species, which could ultimately result in lower prey species productivity.

The most current range monitoring was completed in the summer of 2007 outside of lynx habitat. Vegetation was in good condition and utilization was very light across the allotment. This allotment is grazed for less than a month in early summer and for three days in the fall. The allotment receives sufficient growing season rest, adequate plant recovery periods, and ample opportunities for seed production, dissemination and seedling establishment across the allotment.

Livestock grazing as proposed would have minimal impacts to Canada lynx and its habitat. The renewal of the W. Basalt Mountain grazing permit “May Affect, but is Not Likely to Adversely Affect” the Threatened, Canada lynx. Furthermore, the proposed action will not result in the destruction or adverse modification of Fish & Wildlife Service designated critical habitat. Programmatic consultation for Canada lynx was completed on the entire grazing program as administered by the GSFO. A “May Affect, Not Likely to Adversely Affect” determination was made and concurrence was obtained from the FWS (ES/GJ-6-CO-03-F-013). Consultation specific to the W. Basalt Mountain allotment regarding Canada lynx and livestock grazing has also been completed.

#### *Harrington’s penstemon*

The flowering stalks of *P. harringtonii* are highly palatable to livestock and wildlife. The proposed period of use in this grazing permit is from 5/26 to 6/20 and for three days in the fall. The spring grazing period overlaps the flowering period for *P. harringtonii*. Impacts to the Sensitive plant populations could result if excessive grazing removes a high percentage of the flower stalks annually thereby inhibiting seed dissemination and reproduction.

No *P. harringtonii* sites have been monitored on the West Basalt Mountain allotment. Monitoring of grazing utilization levels has been conducted infrequently, however, issues with heavy grazing use in the sagebrush parks have been noted in the past. Livestock distribution appears to be a concern on this allotment due to inadequate water sources and dense Gambel oak stands. Most of the grazing use occurs adjacent to the water tanks in the north end of the allotment and in the few sagebrush parks amongst the dense oakbrush.

#### **Mitigation:**

To ensure maintenance of healthy plant communities, minimize grazing and trampling of penstemon plants, and maintain adequate vegetative cover to inhibit weed

establishment, utilization levels within sagebrush habitat should not exceed 50% by weight of current year's growth. If utilization exceeds 50%, livestock will be moved to another portion of the allotment or removed from the allotment for the remainder of the growing season.

Analysis on the Public Land Health Standard for Threatened, Endangered and Special Status Species: A formal land health assessment has not been completed on this allotment. If the above mitigation is applied, the land health standard for threatened, endangered and special status species should be achieved or maintained.

#### WATER QUALITY, SURFACE AND GROUND (includes an analysis on Standard 5)

Affected Environment: The West Basalt Mountain Allotment is located east of the Town of Carbondale within the 7,635 acre Blue Creek 6<sup>th</sup> field watershed. Drainages within the allotment include the ephemeral Blue Creek and several ephemeral tributaries. None of these drainages appear to be tributary to the Roaring Fork River to the southwest.

The ephemeral Blue Creek and its ephemeral tributaries are not currently on the State of Colorado's *Stream Classifications and Water Quality Standards* (CDPHE, Water Quality Control Commission, Regulation No. 37) list, the *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). In addition, no water quality data are currently available for these 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. 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 ephemeral Blue Creek and its ephemeral tributaries. With the implementation of grazing standards and guidelines, it is expected that the potential negative impacts described above would be short-term and localized. Consequently, no additional site specific mitigation is recommended at this time.

Analysis on the Public Land Health Standard for Water Quality: At this time there are land health assessments planned that will include the West Basalt Mountain Allotment. Based on existing information, it can be assumed that the proposed activities would not likely prevent Standard 5 for Water Quality from being met.

#### WETLANDS and RIPARIAN ZONES (includes an analysis on Standard 2)

Affected Environment: No riparian zones or wetlands have been identified through Proper Functioning Condition assessment or other inventories; however, these resources may exist around springs/seeps that occur on the allotment. Current monitoring, inventory or documented field observations is lacking for these riparian/wetland areas.

Environmental Consequences/Mitigation: The W. Basalt Mtn. Allotment would be grazed by cattle for a 26 day period in the spring and a 3 day period in the fall. There would be a 4 month period of grazing rest between the two grazing periods. The period of use would allow for ample grazing rest and recovery time for riparian plant species. Renewal of the grazing permit is not expected to cause adverse impacts to riparian zones.

Analysis on the Public Land Health Standard for riparian systems: The proposed action would not result in failure to achieve this standard and should maintain and/or improve land health conditions for riparian systems.

## NON-CRITICAL ELEMENTS

### SOILS (includes an analysis on Standard 1)

Affected Environment: According to the *Soil Survey of Aspen-Gypsum Area, Colorado: Parts of Eagle, Garfield, and Pitkin Counties* (USDA 1992) the West Basalt Mountain Allotment contains eight different soil map units that can be identified by the numerical code assigned by the soil survey. These soil map units are scattered throughout the allotment and most of them have been identified as having moderate erosion hazards. Following is a brief description of the soil map units found within the West Basalt Mountain Allotment.

- Cochetopa-Antrobus association (18, 19) – This soil map unit is found on mountainsides at elevations from 8,500 to 10,500 feet and on slopes of 12 to 50 percent. Approximately 45 percent of this unit is Cochetopa loam and 40 percent of this unit is Antrobus very stony loam. The other 15 percent of this unit is composed of other soil types. The Cochetopa soil is deep, well drained and derived from basaltic alluvium and colluvium. The surface runoff is rapid and the water erosion hazard is moderate to severe. The Antrobus soil is deep, well drained and derived from basaltic alluvium and colluvium. The surface runoff is rapid and the water erosion hazard is moderate. Primary uses for this soil map unit include rangeland and homesite development.
- Forelle-Brownsto complex (43, 44) – This soil map unit is found on mountains and benches at elevations ranging from 6,500 to 7,500 feet and on slopes of 6 to 25 percent. Approximately 55 percent of this unit is Forelle soil, 30 percent Brownsto soil, and the other 15 percent a mixture of several soil types. The Forelle soil is deep, well drained and is derived from sedimentary rock alluvium. Surface runoff is medium to rapid and the water erosion hazard is moderate to severe. The Brownsto soil is deep, well drained and is derived from calcareous sandstone and basalt alluvium. Surface runoff is medium to rapid and the water erosion hazard is moderate. Primary uses for this soil map unit include rangeland and wildlife habitat.

- Morval-Tridell complex (87) – This soil map unit is found on alluvial fans and mountainsides at elevations ranging from 6,800 to 8,000 feet and on slopes of 12 to 50 percent. Approximately 55 percent of this unit is Morval loam, 30 percent Tridell moderately stony loam, and the other 15 percent a mixture of soil types. The Morval soil is deep, well drained and is derived from basaltic alluvium. Surface runoff is medium and the water erosion hazard is moderate. The Tridell soil is deep, well drained and is derived from basaltic alluvium and colluvium. Surface runoff is rapid and the water erosion hazard is high. Primary uses for this soil map unit include rangeland and firewood production.
- Showalter-Morval complex (95) – This soil map unit is found on alluvial fans, high terraces, and valley sides at elevations ranging from 7,000 to 8,500 feet and on slopes of 15 to 25 percent. Approximately 45 percent of this unit is Showalter very stony loam, 35 percent Morval loam, and the other 20 percent a mixture of soil types. The Showalter soil is deep, well drained and is derived from basaltic alluvium. Surface runoff is medium and the water erosion hazard is moderate. The Morval soil is deep, well drained and is derived from basaltic alluvium. Surface runoff is medium and the water erosion hazard is slight. Primary uses for this soil map unit include rangeland, hayland, and homesite development.
- Torriorthents-Camborthids-Rock outcrop complex (104) – This soil map unit occurs on south-facing mountainsides, hills, and ridges with slopes ranging from 6 to 65 percent. Approximately 45 percent of this unit is Torriorthents, 20 percent Camborthids, and 15 percent Rock outcrop. The Torriorthents are shallow to moderately deep, well drained, and are derived from sedimentary rock. Surface runoff is rapid and the water erosion hazard is severe. The Camborthids are shallow to deep, well drained, and are derived from sandstone, shale, and basalt. Surface runoff is rapid and the water erosion hazard is severe. The Rock outcrop component of this unit consists of exposed sandstone, shale, and basalt. This soil map unit is used primarily for wildlife habitat.
- Tridell-Brownsto stony sandy loams (106) – This soil map unit is found on terraces and mountainsides at elevations ranging from 6,400 to 7,700 feet and on slopes of 12 to 50 percent. Approximately 45 percent of this unit is Tridell soil and 35 percent Brownsto soil with the other 20 percent being a mixture of several soil types. The Tridell soil is deep, well drained and is derived from sandstone and basalt alluvium and colluvium. Surface runoff is rapid and the water erosion hazard is moderate. The Brownsto soil is deep, well drained and is derived from calcareous sandstone and basalt alluvium. Surface runoff is rapid and the water erosion hazard is moderate. Primary uses for this soil map unit include livestock grazing and wildlife habitat.

Environmental Consequences/Mitigation: Grazing activities within the West Basalt Mountain Allotment would result in soil compaction and displacement, especially in areas where livestock would be concentrated such as watering areas and stock trails. Soil compaction and displacement would increase the likelihood of erosional processes such as soil detachment and sediment transport 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. These processes could result in rilling, rutting, and sediment deposition.

Due to the close proximity of the proposed activities to area drainages, there is a potential that sediment associated with grazing practices could be transported to the numerous drainages mentioned in the water section. With the implementation of grazing standards and guidelines, it is expected that the potential negative impacts described above would be short-term and localized. Consequently, no additional site specific mitigation is recommended at this time.

Analysis on Public Land Health Standard 1 for Upland Soils: At this time no land health assessment has been completed in the proposed action area, however, one is planned for the future. Based on existing information, it can be assumed that the proposed activities would not likely prevent Standard 1 for Upland Soils from being met.

#### VEGETATION (includes an analysis on Standard 3)

Affected Environment: Vegetation within the West Basalt Mountain allotment consists primarily of dense oakbrush with small pockets of sagebrush.

Environmental Consequences/Mitigation: Given proper livestock management and distribution, the period of grazing use on this allotment should allow ample time for vegetative recovery following grazing. However, issues with heavy grazing use in the sagebrush parks have been noted in the past. Inadequate water sources and dense Gambel oak stands make it difficult to distribute livestock evenly throughout the allotment. Most of the grazing use occurs adjacent to the water tanks in the north end of the allotment and in the few sagebrush parks amongst the dense oakbrush. Noxious weeds were noted in the heavily grazed areas in the north end of the allotment.

Analysis on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): A formal land health assessment has not been conducted on this allotment. Old monitoring data in the files indicate there may be some concerns with vegetative conditions in the sagebrush habitat. It is unknown whether these conditions continue to exist under the current livestock operations. The land health assessment is scheduled for 2010. If the assessment determines that one or more standards are not being achieved and identifies existing livestock grazing is a contributing factor, the terms and conditions of this permit may need to be modified to make progress towards meeting the standards.

#### WILDLIFE AQUATIC (includes an analysis on Standard 3)

Affected Environment:

The West Basalt Mountain allotment contains no known perennial waters. The allotment is drained via several small ephemeral drainages that carry water primarily in response to spring snowmelt and summer thunderstorm activity. Just to the west of the allotment within 0.5 miles are Spring Park Reservoir and several small ponds along

ephemeral Blue Creek. Spring Park Reservoir contains an unknown fishery, the ponds along Blue Creek are not known to contain fish. The Roaring Fork River located approximately 0.5 miles from the allotments southern boundary contains brown, brook, and rainbow trout, mountain whitefish, mottled sculpin, and suckers.

**Environmental Consequences/Mitigation:**

Continued grazing activity within the West Basalt Mountain allotment would result in some site-specific soil compaction and displacement, especially in areas where livestock concentrate such as waters, salt block sites, and along stock trails. Soil compaction and displacement would increase the likelihood of erosional processes such as soil detachment and sediment transport 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 potential that sediment associated with grazing practices could be transported to Spring Park Reservoir and the Roaring Fork River. Sediment can impact trout species by silting in spawning substrates and limited pool habitats. Reservoirs are natural sediment traps. Sediment can impede aquatic insect productivity which can reduce food sources for resident fishes. Given the timing of grazing and the minimal amount of anticipated erosion from grazing, it is unlikely that sediment concerns caused by grazing would present a problem. Upland habitats are in good condition and would help to filter and minimize offsite sediment concerns. In addition, the majority of grazing on this allotment coincides with spring peak flow periods which should be sufficient to move sediment. Spring Park Reservoir may see some minor deposition of sediment related to the proposed action, but due to irrigation demands it sees large fluctuations in elevation throughout the year.

Analysis on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): A formal Land Health Assessment has not been completed for the area. Based on current/proposed grazing management, the proposed action should have little bearing on the watersheds ability to meet Standard 3 for aquatic wildlife.

**WILDLIFE TERRESTRIAL** (includes an analysis on Standard 3)

**Affected Environment:** Vegetation in the allotment consists primarily of mountain shrub and sagebrush. A small pocket of Douglas fir and aspen is located adjacent to the forest boundary. These communities typically provide habitat for big game species as well as small mammals, reptiles and birds. Portions of the allotment are mapped as important big game winter range.

**Environmental Consequences/Mitigation:** The proposed grazing schedule allows for grazing or 26 days in the earlier summer and 3 days in the fall. This grazing schedule should allow for ample growing season rest and adequate plant recovery periods. In the past, problems with livestock distribution have been noted. Much of the oakbrush is very

dense and does not allow for much livestock grazing. However, the latest monitoring data (2007) showed the allotment to be in good condition and the allotment appeared to be in non-use at that time. The continuation of grazing under the proposed action would not be expected to degrade wildlife habitat.

Analysis on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): A formal Land Health Assessment has not been completed for the allotment. The proposed action would allow for ample growing season rest and current grazing would not prevent the allotments from meeting this standard.

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, those brought forward for analysis will be formatted as shown above.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Travel/Access		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
Transportation		X	
Visual Resources		X	

**CUMULATIVE IMPACTS SUMMARY:**

Continued grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties. No other cumulative impacts were identified.

**PERSONS/AGENCIES CONSULTED:**

Notices of public scoping were issued through the Colorado BLM's Internet web page providing the public an opportunity to obtain information or offer concerns on grazing permits or allotments scheduled for renewal. There have been no responses received specific to the permit renewal or allotment 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.

Southern Ute Tribe

Ute Tribe of the Uintah and Ouray Bands  
 Ute Mountain Ute Tribe

INTERDISCIPLINARY REVIEW:

<u>Name</u>	<u>Title</u>	<u>Area of Responsibility</u>
Dereck Wilson	Rangeland Management Specialist	Range, Weeds, NEPA Lead
Mike Kinser	Rangeland Management Specialist	Riparian Zones
Jeff O'Connell	Hydrologist	Soil, Air, Water, Geology
Kay Hopkins	Outdoor Recreation Planner	Wilderness, ACECs, WSR, VRM
Carla DeYoung	Ecologist	T&E Plants, Standards, Vegetation
Cheryl Harrison	Archaeologist	Cultural & Native American Concerns
Tom Fresques	Fisheries Biologist	Wildlife Aquatic, T&E (Fish)
Desa Ausmus	Wildlife Biologist	Wildlife Terrestrial, T&E (Terrestrial Wildlife)



# W Basalt Mnt Allotment

**Legend**

- W Basalt Mnt Allotment
- gsfohwys
- Bureau of Land Management
- Bureau of Reclamation
- Department of Energy
- National Forest Lands
- Private
- State



0 3 6 12 18 24 Miles



