

**U.S. Department of the Interior
Bureau of Land Management
Kremmling Field Office
P.O. Box 68
Kremmling, CO 80459**

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-120-2007-12-EA

PROJECT NAME: BLM Grazing Permit renewal (#0501772) for the Meyring Livestock Co.

LEGAL DESCRIPTION: All or part of BLM lands in:
07111 T 7N R 80W Sec 25,26,34,35
T 6N R 80W Sec 1,2
07112 T 6N R 80W Sec 19,20,29
07114 T 6N R 80W Sec 29,31,32
07194 T 6N R 80W Sec 10,15,21,22,27,26,34,35,36

APPLICANT: The Meyring Livestock Co.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction/Issues and Concerns: The lands within Meyring LLC are a mixture of BLM and private land which is grazed in common. The grazing period and Animal Unit Months (AUMs) on this land were determined through negotiations with the past permittee and BLM staff. This information is reviewed periodically to determine if public land health needs are met as well as the needs of the private land owner.

Allotment # 07111 is comprised of 1,559 acres of public land, 640 acres of state land, and 1,058 acres of private land. The allotment is managed as a Maintain allotment.

Allotment # 07112 is comprised of 730 acres of public land and 120 acres of private land. The allotment is managed as a Custodial allotment.

Allotment # 07114 is comprised of 520 acres of public land and 2,007 acres of private land. The allotment is managed as a Custodial allotment.

Allotment # 07194 is comprised of 960 acres of public land and 500 acres of private land. The allotment is managed as a Custodial allotment

Grazing allotments in the Kremmling Field Office (KFO) are prioritized for management according to one of three levels: Maintain, Improve, or Custodial. For Maintain allotments, the BLM must maintain or improve forage production in grazing allotments that are currently in satisfactory condition. For Custodial allotments, the BLM must maintain the existing allotment situation and provide for management opportunities as needs arise for operators or other land use agencies.

During the permit renewal process, the permittee asked to continue having a spring and fall grazing period for allotment # 07111 (Allard Place) and # 07112 (Taylor). Allotment # 07111 is comprised of 4 pastures with one pasture State Land Board land. Two of the pasture would be grazed in the spring and 2 pastures in the fall. Allotment # 07112 provides spring and fall grazing to allow for trailing of cattle from this allotment to # 07114 (Spicer Peak) or their US Forest Service Permit. This is a continuation of current management and is analyzed in the Proposed Action.

Proposed Action: The Proposed Action would renew livestock grazing permit # 0501772 (See Attachment #1) that authorizes livestock grazing on allotments # 07111 (Allard Place), # 07112 (Taylor), # 07114 (Spicer Peak) and # 07194 (Meyring Ind) for a period of ten years beginning March 1, 2007 and expiring February 28, 2017, and with the Standard Terms and Conditions (see Attachment #2). A map of the proposed project area is included in Attachment #3. Grazing would continue to the following extent:

Allotment Number	Allotment Name	Livestock		Grazing Period		Type of Use	% Public Land*	AUMs**
		Number	Cattle	Begin	End			
07111	Allard Place	133	C	05/25	07/10	A	31	64
		60	C	10/07	11/01	A	31	16
		8	H	6/01	11/01	A	31	1
07112	Taylor	275	C	5/26	5/31	A	100	54
		50	C	10/16	10/21	A	100	10
07114	Spicer Peak	28	H	5/21	10/10	A	3	4
		250	C	6/01	7/01	A	3	8
07194	Meyring Ind	265	C	5/25	11/30	A	17	281

*% Public Land is the percentage of forage within the public land (BLM) portion of the allotment.

**AUM = animal unit month = amount of forage required to support 1 cow and calf for 1 month.

C - Cattle/H - Horse

A total of 438 AUMs would be permitted under the Proposed Action.

Alternative #1: Alternative #1 would remove horse grazing in allotment # 07111 as requested by the permittee. No other change would occur to the permit. The 1 AUM would still be part of the total AUMs permitted under the Proposed Action.

Allotment Number	Allotment Name	Livestock		Grazing Period		Type of Use	% Public Land*	AUMs**
		Number	Cattle	Begin	End			
07111	Allard Place	133	C	05/25	07/10	A	31	64
		60	C	10/07	11/01	A	31	16
07112	Taylor	275	C	5/26	5/31	A	100	54
		50	C	10/16	10/21	A	100	10
07114	Spicer Peak	28	H	5/21	10/10	A	3	4
		250	C	6/01	7/01	A	3	8
07194	Meyring Ind	265	C	5/25	11/30	A	17	281

A total of 438 AUMs would be permitted under the Alternative #1.

Alternatives Considered But Eliminated From Further Analysis:

No Grazing Alternative: No Livestock Grazing was considered, but eliminated from further analysis for the following reasons

- Livestock grazing within the Resource Area was fully analyzed and authorized in the RMP/EIS as recorded in the 1984 Approved Plan and Record of Decision. A “No Grazing Alternative” was considered at that time, and was not selected.
- This alternative is not consistent with the Federal Land Policy and Management Act of 1976 (FLPMA) policy that “the public lands be managed in a manner which recognizes the Nation’s need for domestic sources of minerals, food, timber, and fiber from public lands.....”
- During the public scoping and staff review there were no issues or concerns identified that would support a “No Grazing Alternative”.
- It has been determined that significant progress toward achieving the Standards for Public Land Health in Colorado would occur with appropriate grazing guidelines set forth in the Alternative #1.

No Action Alternative: Continuation of Current Management: Grazing use authorized under the No Action alternative would be the same as that authorized on the expiring grazing permit for the Meyring Livestock Co., because the applications for a permit are the same as the expiring permits (no changes in terms and conditions). Thus, the Proposed Action and the No Action alternative are the same, and impacts will be analyzed in the Proposed Action.

PURPOSE AND NEED FOR THE ACTION: The BLM is acting on a permit renewal request from the Meyring Livestock Co for BLM permit # 0501772, which authorizes livestock grazing on allotments # 07111, # 07112, # 07114 and # 07194. The permit is subject to renewal at the discretion of the Secretary of the Interior for a period of up to ten years. If approved, the permit would be renewed for a period of ten years.

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: Kremmling Resource Management Plan (RMP), Record of Decision (ROD)

Date Approved: December 19, 1984

Decision Number/Page: Livestock Grazing pages 6 through 8 as revised

Decision Language: Objectives of the RMP/ROD include allocation of a base level of livestock forage and maintaining or improving forage production and condition in areas where livestock grazing is a priority or compatible with the land use priority. Allotment 07111 has a land-use priority of Coal. Allotment 07112 has land use priority of Oil and gas. Allotment 07114 has a land use priority of timber and wildlife. Allotment 07194 has a land-use priority of oil and gas, wildlife, no priority use and coal. Grazing is compatible with each of these land-use priorities.

Standards for Public Land Health: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. The following are the approved standards:

Standard	Definition/Statement
#1 Upland Soils	Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.
#2 Riparian Systems	Riparian systems associated with both running and standing water, function properly and have the ability to recover from major surface disturbances such as fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment, and provides forage, habitat and bio-diversity. Water quality is improved or maintained. Stable soils store and release water slowly.
#3 Plant and Animal Communities	Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential. Plants and animals at both the community and population level are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological processes.
#4 Threatened and Endangered Species	Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.
#5 Water Quality	The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado. Water Quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirements set forth under State law as found in (5 CCR 1002-8), as required by Section

Because a standard exists for these five categories, a finding must be made for each of them in the environmental analysis. These findings are located in specific elements below or in the Interdisciplinary Team Analysis Review Record and Checklist (IDT-RRC) (Appendix 1).

The following table is a summary of the current situation and the total number of acres that have been assessed. A BLM interdisciplinary (ID) team assessed the allotment for compliance with standards in 2005. The ID team determined allotments # 07111 and # 07112 were in compliance with all of the Standards. Allotments # 07114 and # 07194 were not assessed for standards because of their small acreages of BLM lands within the allotment boundaries.

Project areas have been assessed for all standards; however, not all standards necessarily apply to all acres in the project area. "NA" denotes where a standard does not apply and does not influence the overall land health.

CURRENT SITUATION Total # of Acres Assessed in allotment 07111 1559 07112 730 Total acres 2289				PROPOSAL (With Mitigation)	
Standards	Acres Achieving or Moving Towards Achieving	Acres Not Achieving	Causative Factors	Acres Achieving or Moving towards Achieving	Acres Not Achieving
Std. 1 Soils	2259	0		2259	0
Std. 2 Wetlands	30	0	(not fully assessed)	30	0
Std. 3 Vegetation	2289	0		2289	0
Std. 3 Wildlife	2289	0		2289	0
Std. 4 T&E	2289			2289	
Std. 5 H2O Qual.	2289	0		2289	0
Totals	2289	0		2289	0

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

CRITICAL ELEMENTS: The following critical elements, Air Quality, Areas of Critical Environmental Concern, Environmental Justice, Farmlands- Prime and Unique, Floodplains, Wastes- Hazardous or Solid, Native American Religious Concerns, Wild and Scenic Rivers, and Wilderness were evaluated and determined that they were not present or that there would be no impact to them from the Proposed Action, Alternative #1, or No Action Alternative. See IDT-RRC in Appendix 1 for further information.

The following critical elements were determined to be potentially impacted and were carried forward for analysis from the IDT-RRC in Appendix 1.

CULTURAL RESOURCES

Affected Environment: Range permit renewals are undertakings under Section 106 of the National Historic Preservation Act. Range improvements associated with the allotment (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 was completed for each allotment in December, 2006, and February, 2007, 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, and IM-CO-00-026. The results of the assessment are summarized in the table below. Copies of the cultural resource assessments are in the Kremmling Field Office archaeology files.

Allotment Number	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level*	Percent -%- of Allotment Inventoried at a Class III level	Number of Cultural Resources known in allotment	High Potential of Historic Properties (yes/no)	Management Recommendations (Additional inventory required and historic properties to be visited)
07111	Approx. 2,280 ac.	Approx.. 1,002	69%	19	Y = Moderate	Conduct a Class II inventory on approx. 550 ac of previously inventoried (1980) area. Previously recorded sites 5JA245, 5JA259, 5JA330, 5JA231, 5JA328 and 5JA143 NEED DATA.
07112	Approx. 730 ac.	Approx. 120 ac.	85%	7	Y = Moderate	Conduct a Class III inventory on approx. 730 ac. of previously inventoried (1980) area. Previously recorded sites 5JA151, 5JA152, and 5JA162 NEED DATA.

Allotment Number	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level*	Percent -%- of Allotment Inventoried at a Class III level	Number of Cultural Resources known in allotment	High Potential of Historic Properties (yes/no)	Management Recommendations (Additional inventory required and historic properties to be visited)
07114	Approx. 89 ac.	Approx. 2,508 ac.	3%	0	N = very Low	Conduct a Class III inventory on approx. 189 ac.
07194	Approx. 530 ac.	Approx. 2,150 ac.	24%	2	N = Low	Conduct a Class III inventory on 280 ac.; Conduct a Class II inventory on 160 ac..

Class III field inventory is to be completed within the ten year expiration period of the grazing permit. If historic properties are located during the subsequent field inventory, and BLM determines that grazing activities has or will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO. The livestock impacts will be assessed within the ten-year period of the permit.

Environmental Consequences: In general, direct impacts 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.

The Class I revealed that there were no known significant sites within the parcel. Thus, there would be no impacts to cultural resources.

Mitigation Measures: The BLM standard “discovery” stipulations are made part of this environmental assessment.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Currently allotments # 07114 and # 07194 have no known weed infestations. Whitetop and houndstongue are found along county roads near BLM lands in allotments # 07112 and # 07111. Canada thistle is found along an irrigation ditch in allotment # 07112

The Jackson County Weed department, in partnership with the BLM, is currently treating known weed occurrences in the North Park area using herbicides

Environmental Consequences: Livestock operations can contribute to the introduction and spread of noxious weeds on public land because livestock are a vector which noxious weed seeds can be transported. Thus, a noxious weed stipulation is included in the Standard Terms and Conditions of livestock grazing permits/leases (Attachment 2). The stipulation informs the permittee/lessee of their responsibility to notify the BLM of any weeds in the allotment that may

be caused by their livestock operation. If the BLM is notified of any weeds in the allotment, control measures would be implemented by the BLM, in partnership with the Jackson County.

MIGRATORY BIRDS

Affected Environment: A variety of migratory bird species, primarily birds of prey and songbirds, use the allotments proposed for renewal. Surveys conducted in 1994 by the Colorado Breeding Bird Atlas Partnership recorded many species in the area including Swainson's hawks, Red-tailed hawks, Golden Eagles, Prairie Falcons, Green-tailed Towhees, Mountain and Western Bluebirds, Sage Thrashers, Killdeer, Horned Larks, American Kestrels, and Common Nighthawks in the sagebrush habitat common to allotments # 07111, # 07112, and # 07194. Species common in and adjacent to allotment # 07114 in lodgepole pine forests, include Black-capped Chickadees, Clark's Nutcrackers, Steller's and Gray Jays, and Northern Flickers.

Environmental Consequences/Mitigation: Under the Proposed Action, the permit would be renewed without any changes. Under Alternative # 1, the permit would be renewed with only the removal of horses from allotment # 07111. Both alternatives would not change the current conditions for migratory birds. Thus, there would be minimal impacts.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes a finding on Standard 4)

Affected Environment: A list of threatened, endangered, and candidate species which could inhabit the proposed project area was received from the U.S. Fish and Wildlife Service on February 27, 2007. Analysis of this list indicated that no threatened, endangered, or candidate species reside in the proposed allotments.

Greater sage-grouse, a BLM designated Sensitive Species, are residents in allotments # 07111, # 07112, and # 07194. One sage-grouse lek is within the north pasture of allotment # 07111 and another lek is within 2 miles of the allotment. Thus, allotment # 07111 provides important nesting and brood rearing habitat for sage-grouse and is also mapped as winter habitat by the Division of Wildlife. The northern part of allotments # 07112 and # 07194 are mapped as brood rearing habitat due to the presence of an inactive lek approximately 1.25 to the northwest. Although the lek is inactive, sage-grouse may still use parts of these allotments.

Environmental Consequences/Mitigation: Under the Proposed Action, the permit would be renewed without any changes. Under Alternative # 1, the permit would be renewed with only the removal of horses from allotment # 07111. Both alternatives would not change current conditions for sensitive or listed species. Thus, there would be minimal impacts to greater sage-grouse.

Finding on the Public Land Health Standard for Threatened & Endangered species: Allotments # 07111 and # 07112 were assessed in 2005 and found to meet this standard.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The allotments are all within the Grizzly Creek 5th Order watershed, in the North Platte River basin. Allotments # 07111 and # 07194 are the only ones with perennial streams, with Lost Creek and Coyote Creek, both which are tributaries of Buffalo

Creek, a tributary to Grizzly Creek. While there are no identified water quality concerns for Coyote or Lost Creek, Grizzly Creek is on the state's Monitoring and Evaluation List for possible impaired Aquatic life use. Additional data is needed to determine if impairment exists, and if so, to what extent.

There is one known seep on Allotment # 07114 which is on public lands. There is no surface water and the seep supports a small wetland area. Due to the seep's location in the allotment, livestock would not be expected to heavily utilize the spring, and more likely the spring is used primarily by wildlife. There are also three artesian wells that were drilled by the USGS on allotment # 07111. Two of the wells have been developed as springs for livestock use, the other has been ponded. The sources are protected from livestock trampling, helping to protect the groundwater's quality and flow. Further discussion of the runoff pathway's and potential water quality impacts are detailed in the attached Water Quality Report (see Appendix 2).

Environmental Consequences/Mitigation: The two allotments that were field assessed (# 07111 and # 07112) appear to have fairly good ground cover on the public parcels. The permittee rotates through 4 pastures in allotment # 07111 and Alternative #1 eliminates the horse use, thereby helping maintain the ground cover. Ground water quality is protected by preventing livestock use around the artesian wells. Allotment # 07112 is used as a driveway, as livestock pass from one area to another. Planned vegetation treatments in # 07112 should also help improve livestock distribution and maintain overall watershed conditions.

Most of the runoff from the public land parcels would be intercepted by irrigation ditches and reservoirs, and is not likely to reach surface waters. Due to the limited public acreage that could affect water quality and the uncertainty of water quality impairment (or its source), no further action would be taken at this time. If additional water quality concerns are raised, then the BLM would revisit this permit and determine if actions are needed.

WETLANDS & RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: None of the allotments have been inventoried for wetland or riparian values. Allotment # 07111 contains approximately 5 acres of a playa in the northwest corner of the allotment, and 0.4 miles of Lost Creek. In addition, several of the swales could have small seeps or potholes that are fairly common in the area. The artesian wells support small wetland areas also, especially the one that is ponded in the northwest pasture. Although the observed wetland areas were in good condition, livestock use tends to be fairly heavy on Lost Creek. The creek has scattered willows and is primarily sedge/grass vegetation. The creek is also impacted by upstream private irrigation diversions and impoundments, and is in fairly poor condition along its entire length.

Allotment # 07114 contains an undeveloped seep called Arapaho Peak Spring. The seep is decreed for 0.004 cfs and generally does not have any surface water. The seep supports a small sedge wetland that occurs in a depression, surrounded by forest and fairly steep slopes.

Allotment # 07194 has a small public parcel that includes about 0.3 miles of Coyote Creek. Coyote Creek is also heavily used for irrigation water. The public parcel is located at the very north boundary of the allotment, so depending on how livestock are moved in and out of the allotment, and the location of gates, it could receive very heavy or light use.

Environmental Consequences/Mitigation: The BLM has not inventoried allotment # 07111 nor does it monitor livestock use of the playa, wetlands, and riparian area. Alternative #1 would eliminate the horse use on allotment # 07111, which is expected to be a benefit to the wetlands and Lost Creek. Fall use can often result in more use of the willows, and whether the allotment can support both the summer and fall use has not been determined. The observed conditions during the field assessment support reissuing the permit under Alternative #1, as the wetlands around the pond and spring in the northwest pasture were in good condition. At this time, the small segment of Lost Creek would not be fenced off from grazing, especially since it appears that upstream diversions deplete so much of the flow. Monitoring of allotment # 07111 is recommended to help determine if the two grazing periods/year is affecting long term wetland and riparian health.

The small wetland in allotment # 07114 is probably not used by livestock, as the public lands are estimated at 3% of the allotment's forage.

Allotment # 07194 has a very long season of use, with no potential for vegetative re-growth. It is currently estimated that only 17% of the forage is found on public lands, with the majority of the use on private land. There is no public access to the 0.3 miles of Coyote Creek, and at this time, no further assessment of the creek is planned.

Finding on the Public Land Health Standard for wetland and riparian systems: The field assessment of allotment # 07111 found two wetlands to be meeting the standard for wetland health. Alternative #1 eliminates horse use of allotment # 07111, which should benefit the riparian and wetland areas. Initiating some monitoring of # 07111 is recommended to insure long term health. At this time, it is not feasible to manage the riparian area in allotment # 07194 or the wetland area in # 07114.

NON-CRITICAL ELEMENTS: The following non-critical elements were determined to be potentially impacted and were carried forward for analysis from the IDT-RRC in Appendix 1.

SOILS (includes a finding on Standard 1)

Affected Environment: Soil information for the allotments is from the Jackson County Soil Survey (SCS, 1981) and is detailed in the attached Water Quality Report (Appendix 2). Allotment # 07111 supports primarily Dry Mountain Loam and Valley Bench range sites, while allotment # 07112's public lands are Dry Mountain Loams and Mountain Loams. The soils are not considered highly erodible, slopes are gentle to moderate, and in general, plant available moisture is high. Allotment # 07114's public parcels are forested and are mapped as loams with rock outcrops. The soils are protected by a duff layer and have clay textures below the surface/subsurface loams. Although permeabilities are slow, the soils are not considered highly erodible. The public parcels in allotment # 07194 vary from steep forested areas in the southeast corner of the allotment to gentle rangeland slopes in the northern portion. The northern parcels are rated as being highly erodible by winds. In general, the rangeland areas are Dry Mountain Loams, with some Dry Exposures and Valley Benches. In general, these are less productive soils.

Environmental Consequences/Mitigation: Field review of allotment # 07111 found most of the allotment to have good soil conditions. There was a small area of accelerated erosion associated with the road in the northwest pasture. Soils had good vegetative cover and there was an accumulation of litter and little surface movement.

Allotment # 07112 was also in fairly good condition, with erosion limited to some road problems and ditch maintenance. Stop 2 was in a small valley in the central-southeast portion of the allotment. The site had some evidence of livestock camping in the area and production/vigor was less than expected. The yearly early spring and late fall use probably often occurs when soils are wet and easily compacted. There are planned vegetative treatments that should help improve overall distribution in the allotment, and lessen the impacts in this one site.

Finding on the Public Land Health Standard for upland soils: Field assessments of allotments # 07111 and # 07112 found public lands to be meeting Standard #1. Renewing the permit under Alternative #1 would maintain these conditions. The other 2 allotments were not field assessed at this time, but there are no known soil concerns on these allotments.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Allotments # 07112 (Taylor), # 07111 (Allard Place), and # 07194 (Meyring Ind) are comprised of a mixture of sagebrush with an understory of grasses. Big sagebrush (*Artemisia tridentata*) is the dominant shrub with minor amounts of antelope bitterbrush (*Purshia tridentata*), serviceberry (*Amelanchier alnifolia*), rabbitbrush (*Chrysothamnus* spp), and snowberry (*Symphoricarpos* spp). Grasses and forbs make up the majority of the forage available to livestock and wildlife. Prevalent grasses include bluebunch wheatgrass (*Pseudoroegneria spicata*), pine needlegrass (*Stipa pinetorum*), needle-and-thread (*Hesperostipa comata*), Indian ricegrass (*Achnatherum hymenoides*), western wheatgrass (*Pascopyrum smithii*), and bluegrasses (*Poa* spp). Forbs that are found include buckwheat (*Eriogonum* spp), rose pussytoes (*Antennaria rosea*), fringed sage (*Artemisia frigida*), chiming bells (*Mertensia* spp), penstemon (*Penstemon* spp), lupine (*Lupinus* spp), and milkvetch

(*Astragalus* spp), among others. The forb component can vary greatly in species composition and production from year to year depending on precipitation timing and amounts. Allotment # 07112 also has a few stands of aspen tress (*Populus tremuloides*).

Allotment # 07114 (Spicer Peak) is comprised mostly of lodgepole pine (*Pinus contorta*) and a few aspen trees (*Populus tremuloides*) with an understory of grasses. Because of its inaccessibility, no on site review has been conducted in this allotment. However, the grasses and forbs found in this allotment should be similar to what is found in the above allotments.

Environmental Consequences/Mitigation: Under the Proposed Action, the permit would be renewed without any changes. Under Alternative # 1, the permit would be renewed with only the removal of horses from allotment # 07111 (Allard Place). Thus, there would be minimal impacts to vegetation.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Allotment # 07111 and allotment # 07112 was assessed for standards in 2005, and found to meet this standard. The other 2 allotments were not field assessed at this time, but there are no known vegetation concerns on these allotments.

PALEONTOLOGY

Affected Environment: Allotment # 7111: The primary geologic rock units are the Coalmont fm., and Old gravels and alluvium (pre-Bull Lake). The Coalmont fm. is classified as Class II. This classification indicates that, "Fossils of scientific significance are occasionally found in the fm." The Old gravels and alluvium are classified as Class III. This classification indicates that, "Fossils of some significance (usually due to fragmentary or poor preservation) are found in the fm."

Allotment # 7112: The primary geologic rock units are the Coalmont formation (fm.), and Young gravels (Bull Lake and younger). Both units are classified as class II. This classification indicates that, "Fossils of scientific significance are occasionally found in the fm. within the Kremmling Field Office."

Allotment # 7114: The primary geologic rock units are the Coalmont fm. and Old gravels and alluvium. The Coalmont fm. is classified as Class II. This classification indicates that, "Fossils of scientific significance are occasionally found in the fm." The Old gravels and alluvium are classified as Class III. This classification indicates that, "Fossils of some significance (usually due to fragmentary or poor preservation) are found in the fm."

Allotment # 7194: The primary geological rock units are the Coalmont fm., and Young gravels and landslide deposits. The Coalmont fm., and the Young gravels and landslide deposits are classified as Class II. This classification indicates that, "Fossils of scientific significance are occasionally found in the fm."

Environmental Consequences/Mitigation: There would be no impacts to paleontological resources from renewing the grazing permit. Ground disturbing projects or undertakings will be reviewed to determine the need for paleontological inventory.

CUMULATIVE IMPACTS SUMMARY: Livestock grazing has been an important use of the public lands in the Kremmling Field Office since the introduction of domestic livestock in the 1870s. Presently, the Field Office supports a grazing program on approximately 378,000 acres of BLM-administered public lands. Currently, these public ranges are licensed at a level of approximately 39,726 Animal Unit Months (AUMs) for livestock.

For the purpose of this EA, the general geographic boundary for cumulative impact analysis is North Park. The Kremmling Field Office is divided east to west by the Continental Divide. The public lands to the north of the divide are generally referred to as North Park, and those to the south of the divide, Middle Park. In North Park, there are approximately 260,000 acres of BLM-administered public lands that are currently being grazed, and 26,656 AUMs that are licensed.

In looking at past actions within the geographic area over the past ten years, there have not been any major changes to the North Park allotments. A majority of the allotments have been assessed for standards and the permits modified where needed due to non-compliance with specific standards or new information that has arrived (i.e. new sage grouse lek). A BLM interdisciplinary Team (IDT) assessed the two allotments for compliance with the Colorado Public Land Health Standards in 2005, and found the allotments to be in compliance with all of the standards. There are not any reasonably foreseeable actions outside of minor range improvement projects that are projected to occur in the North Park allotments.

Greater sage-grouse, a BLM designated Sensitive Species, are residents in allotments # 07111, # 07112, and # 07194. Alternative #1 would reduce the number of AUMs that have been licensed on the allotment for the past ten years by eight. Thus, there would be minimal cumulative impacts to Greater sage-grouse and to the over-all public land health.

In terms of cumulative impacts to cultural resources, grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties throughout the Kremmling Field Office. However, as part of the BLM permit renewal process, allotments are being assessed and inventoried for cultural resources. If resources are found, and eligible for NRHP, mitigation is implemented. This process is attempting to mitigate any major cumulative impacts to cultural resources in the Kremmling Field Office.

PERSONS / AGENCIES CONSULTED: Starting in January 2006, a scoping process was begun to request information concerning the renewal of grazing permits/leases and to prioritize areas or allotments with issues and concerns. The Field Office sent scoping letters, along with land status maps showing the affected allotments, to the following groups and agencies: Colorado Division of Wildlife (Steamboat, Walden, Hot Sulphur Springs, Ft Collins); District Board of Grazing Advisors; County Commissioners (Grand, Jackson); Stock Growers (Middle Park, North Park, Upper Big Laramie River Ranch Assoc.); Northwest Resource Advisory Council; United States Forest Service (Silverthorne, Granby, Walden); US Fish and Wildlife Service (Arapaho Wildlife Refuge); Tribal Councils (Arapaho, Shoshone, Southern Ute); Colorado Commission of Indian Affairs; Ute Indian Tribe Uintah & Ouray Agency Business Committee; Colorado Environmental Coalition; Colorado State Land Board.

The BLM Colorado State Office also mailed outreach letters, concerning the renewal of grazing permits/leases, to all Congressional offices, State and Federal agencies, and major environmental, conservation, and user group organizations.

In addition, individual letters were sent to the affected permittees/lessees informing them that their permit/lease was up for renewal and requested any information they wanted included in, or taken into consideration, during the renewal process. A Notice of Public Scoping was posted on the Internet, at the Colorado BLM home page, asking for public input on permit/lease renewals and the assessment of public land health standards within the Field Office. This notice was followed up in October with an Internet posting of the Field Office prioritization of allotments and a determination as to which allotments would be assessed according to the land health standards. The proposed project was also posted on the Kremmling Internet NEPA Register.

INTERDISCIPLINARY REVIEW: See IDT-RRC in Appendix 1.

FONSI

CO-120-2007-12-EA

Based on the analysis of potential environmental impacts contained in the attached environmental assessment, and considering the significance criteria in 40 CFR 1508.27, I have determined that Alternative #1 will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

DECISION RECORD

DECISION: It is my decision to implement the proposed action and renew livestock Grazing Permits # 051772 (Meyring Livestock) until February 28, 2017. The new permit will be subject to the authorized grazing plan and mitigation measures included below.

RATIONALE: When a livestock grazing permit/lease expires, it is subject to renewal at the discretion of the Secretary of the Interior for a period of up to ten years. Livestock grazing, when properly managed in accordance with good rangeland ecology practices, has been proven to result in improved land health. The public benefits from public lands which are maintained in a healthy condition and are able to produce sustainable resources for a variety of uses.

The livestock producer benefits from a renewed livestock grazing permit/lease to graze forage on BLM managed land. Livestock grazing on BLM managed land is an integral part of the livestock producer's operation, and an important part of local rural economies

MITIGATION MEASURES: (see below and Attachment #2)

Cultural:

Class III field inventory is to be completed within the ten year expiration period of the grazing permit.

If historic properties are located during the subsequent field inventory, and BLM determines that grazing activities has or will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO. The livestock impacts will be assessed within the ten-year period of the permit.

When known historic properties are field visited to assess the livestock grazing impacts, BLM will determine if grazing activities has or will adversely impacts the properties. Mitigation measures, identified in consultation with the Colorado SHPO, will be implemented within the ten year period of the permit.

If historic properties are located during the subsequent field inventory, BLM will determine if grazing activities has or will adversely impact the properties. Mitigation measures, identified in consultation with the Colorado SHPO, will be implemented with the ten year period of the

permit.

The holder is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for disturbing historic or archaeological sites, or for collecting artifacts.

The holder shall immediately bring to the attention of the Authorized Officer any and all antiquities, or other objects of historic, paleontological, or scientific interest including but not limited to, historic or prehistoric ruins or artifacts DISCOVERED as a result of operations under this authorization (16 U.S.C. 470-3, 36 CFR 800.112). The holder shall immediately suspend all activities in the area of the object and shall leave such discoveries intact until written approval to proceed is obtained from the Authorized Officer. Approval to proceed will be based upon evaluation of the object(s). Evaluation shall be by a qualified professional selected by the Authorized Officer from a Federal agency insofar as practicable (BLM Manual 8142.06E). When not practicable, the holder shall bear the cost of the services of a non-Federal professional.

Within five working days the Authorized Officer will inform the holder as to:

- whether the materials appear eligible for the National Register of Historic Places;
- the mitigation measures the holder will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
- a timeframe for the Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the Authorized Officer are correct and that mitigation is appropriate.

If the holder wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Officer will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the holder will be responsible for mitigation costs. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that the required mitigation has been completed, the holder will then be allowed to resume construction.

Antiquities, historic, prehistoric ruins, paleontological or objects of scientific interest that are outside of the authorization boundaries but directly associated with the impacted resource will also be included in this evaluation and/or mitigation.

Antiquities, historic, prehistoric ruins, paleontological or objects of scientific interest, identified or unidentified, that are outside of the authorization and no associated with the resource within the authorization will also be protected. Impacts that occur to such resources that are related to the authorizations activities will be mitigated at the holder's cost.

Pursuant to 43 CFR 10.4(g), the holder of this authorization must notify the Authorized Officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR

10.4 (c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the Authorized Officer.

COMPLIANCE/MONITORING: Compliance with the renewed livestock grazing permit and its associated terms and conditions will be accomplished through the Kremmling Field Office Range Management Program. Livestock grazing will be monitored by the range staff and other area personnel, as appropriate, to ensure compliance. The Kremmling Field Office Range Monitoring Plan will be used to schedule periodic utilization checks, collect trend data, and evaluate allotment condition. When activity plans have been developed covering an allotment, monitoring methods and schedules included in them will be applied to the allotment. Changes will be made to the permit, based on monitoring, when changes are determined necessary to further protect land health.

Wetlands and Riparian Zones:

-Monitoring of allotment # 07111 will occur to help determine if the two grazing periods/year is affecting long term wetland and riparian health.

NAME OF PREPARER: Pete Torma

NAME OF ENVIRONMENTAL COORDINATOR: Joe Stout

DATE: 4/4/07

SIGNATURE OF AUTHORIZED OFFICIAL: /s/ Charles Cesar

DATE SIGNED: 4/23/07

ATTACHMENTS:

- 1). Livestock Grazing Permit #051772
- 2). Standard Terms and Conditions
- 3). Project Map

APPENDICES:

Appendix 1 – Interdisciplinary Team Analysis Review Record and Checklist
Appendix 2 - Water Quality Report

Appendix 1

INTERDISCIPLINARY TEAM ANALYSIS REVIEW RECORD AND CHECKLIST:

Project Title: BLM Grazing Permit renewal (#0501772) for the Meyring Livestock Co.

Project Leader: Peter Torma

Date Submitted for Comment: 1/9/07

Due Date for Comments: 3/9/07

Need for a field Exam: No, conducted during 2005.

Scoping Needs/Interested or Affected Publics: See Persons/Agencies Consulted section.

Consultation/Permit Requirements:

Consultation	Date Initiated	Date Completed	Responsible Specialist/ Contractor	Comments
Cultural/Archeological Clearance/SHPO	2/27/07	2/28/07	B.Wyatt	
Native American	1/11/07	2/28/07	B.Wyatt	
T&E Species/FWS	N/A	3/8/07	M. Mcguire	
Permits Needed (i.e. Air or Water)	N/A	2/13/07	P. Belcher	None needed

(NP) = Not Present

(NI) = Resource/Use Present but Not Impacted

(PI) = Potentially Impacted and Brought Forward for Analysis.

(N/A) = Not applicable

NP NI PI	Discipline/Name		Date Review Comp.	Initials	Review Comments (required for Critical Element NIs, and for elements that require a finding but are not carried forward for analysis.)
CRITICAL ELEMENTS					
NI	Air Quality	Belcher	3/13/07	PB	The Proposed Action and Alternative #1 would not impact Air Quality, which is considered in compliance with federal air quality regulations.
NP	Areas of Critical Environmental Concern	Stout	4/4/07	JS	There are no Areas of Critical Environmental Concern in the proximity of the proposed project area.
PI	Cultural Resources	Wyatt	2/28/07	BW	See analysis in EA.
NP	Environmental Justice	Stout	4/4/07	JS	According to the most recent Census Bureau statistics (2000), there are no minority or low income communities within the Kremmling Planning Area.
NP	Farmlands, Prime and Unique	Belcher	3/13/07	PB	The allotments do not contain nor would impact any prime or unique farmlands.
NI	Floodplains	Belcher	3/13/07	PB	The small floodplain of Lost Creek and Coyote Creek are included in this permit renewal. The permit would not affect the functionality of the floodplain or the flood hazard.
PI	Invasive,		2/14/07	PT	See analysis in EA.

	Non-native Species	Torma			
PI	Migratory Birds	McGuire	3/8/07	MM	See analysis in EA.
NI	Native American Religious Concerns	BW	3/9/07	BW	In February 2007, the Kremmling Field Office sent scoping letters to the Native American tribes that are concerned parties in the livestock grazing permit renewal process within the Kremmling Field Office. No comments were received from any of the Native American tribes that were solicited for comments concerning the 2007 livestock grazing permit renewals. Thus, there would be no impacts
PI	T/E, and Sensitive Species (Finding on Standard 4)	McGuire	3/8/07	MM	See analysis in EA.
NP	Wastes, Hazardous and Solid	Hodgson	3/12/07	KH	There are no quantities of wastes, hazardous or solid, located on BLM-administered lands in the proposed project area, and there would be no wastes generated as a result of the Proposed Action, Alternative #1, or No Action Alternative.
PI	Water Quality, Surface and Ground (Finding on Standard 5)	Belcher	3/13/07	PB	See analysis in EA.
PI	Wetlands & Riparian Zones (Finding on Standard 2)	Belcher	3/13/07	PB	See analysis in EA and attached Water Quality Report (Appendix 2)
NI	Wild and Scenic Rivers	Sterin	2/22/07	BGS	Lost Creek and Coyote Creek were evaluated for their Wild and Scenic Eligibility, and neither river was recommended as eligible. Thus, there would be no impacts.
NP	Wilderness	Monkouski	2/27/07	JM	There is no designated Wilderness or Wilderness Study Areas in the proximity of the proposed project area.
NON-CRITICAL ELEMENTS (A finding must be made for these elements)					
PI	Soils (Finding on Standard 1)	Belcher	3/13/07	PB	See analysis in EA and the attached Water Quality report for details (Appendix 2)
PI	Vegetation (Finding on Standard 3)	Torma	2/14/07	PT	See analysis in EA.
NI	Wildlife, Aquatic (Finding on Standard 3)	McGuire	3/8/07	MM	Neither the Proposed Action or Alternative 1 would be expected to change current conditions for aquatic wildlife. Finding: Allotments # 07111 and # 07112 meet standard 3 and will continue to meet. Allotments 07194 & 07114 not assessed.
NI	Wildlife, Terrestrial (Finding on Standard 3)	McGuire	3/8/07	MM	Neither the Proposed Action or Alternative 1 would be expected to change current conditions for terrestrial wildlife. Finding: Allotments # 07111 and # 07112 meet standard 3 and will continue to meet. Allotments # 07194 & # 07114 not assessed.
OTHER NON-CRITICAL ELEMENTS					
NI	Access/Transportation	Monkouski	2/27/07	JM	No change in use, Access/ Transportation would not be affected
NI	Forest Management	Rosene	3/16/07	RR	There would be no impacts
NI	Geology and Minerals	Hodgson	3/12/07	KH	There would be no impacts
NI	Hydrology/Water Rights	Belcher	3/13/07	PB	BLM only holds one water right on a spring in allotment # 07114. Livestock on the allotments

				use private irrigation ditches, ponds, and developed wells for water. The permittee holds the water rights and no other water right holder would be impacted by this use.
NI	Paleontology Rupp	2/18/207	FGR	There would be no impacts from livestock grazing. Ground disturbing projects or undertakings will be reviewed to determine the need for paleontological inventory.
NI	Noise Monkouski	2/27/07	JM	There would be no impacts from noise.
NI	Range Management Torma	1/31/07	PT	There is only a minor change to the permit under alternative #1 which would have no impact on grazing management.
NI	Lands/ Realty Authorizations Cassel	1/12/07	SC	There are no leases or permits in the location of the proposed action. There is a road ROW to Richard McLeod Living Trust and F.S. Rocky Mountain Region, a telephone line ROW to CenturyTel of Eagle and a powerline ROW to Mountain Parks Electric. These ROW would have no impact on the proposed action.
NI	Recreation Monkouski	2/27/07	JM	There would be no changes in use thus recreation would be unaffected.
NI	Socio-Economics Stout	4/4/07	JS	Since there would be only a minor change in use, there would be no socio-economic impacts.
NI	Visual Resources Straub	2/15/07	RS	Allotment 7111 is 73% Class III and 27% Class IV, Allotment 7112 is Class III, Allotment 7114 is 76% Class II and 24% Class III, Allotment 7194 is 54% Class II and 46% Class III
PI	Cumulative Impact Summary Stout	4/4/07	JS	There would be no cumulative impacts.
FINAL REVIEW				
	P&E Coordinator Stout	4/20/07	JS	
	Field Manager McFadden			

Appendix 2

Permit #0501772 Water Quality Report NEPA Compliance Record Rationale

CO-120-2007-12-EA

Renewal of grazing permit #051772 required an assessment of compliance with the Clean Water Act and the Colorado Land Health Standard #5. The permit authorizes grazing on allotments 7111, 7112, 7114, and 7194 which are located in the North Platte River Basin. A review of Colorado's Nonpoint Source Assessment Report (plus updates), the 305(b) Report, the 303(d) List, the Monitoring and Evaluation List, and BLM field data was done to determine if water quality concerns exist. Specific stream segments and runoff pathways from the allotments are detailed in the Discussion Section.

Summary:

The four allotments are all located within the Grizzly Creek 5th order watershed, within the North Platte River Basin. Allotment 7111 and 7194 contain perennial streams, and both have short segments of the streams (Lost and Coyote Creek respectively) on public lands. The two other allotments are crossed and surrounded by irrigation ditches and any runoff from the public lands would be intercepted by ditches or reservoirs, and are not likely to reach surface waters. Lost and Coyote Creeks are both tributaries of Buffalo Creek, which feeds into Grizzly Creek. Reviewing Colorado's 303(d) List and Monitoring and Evaluation List, Grizzly Creek is listed for possible water quality impairment for Aquatic life uses. The Monitoring and Evaluation List identifies streams that could have impairments, but additional data is needed to determine if any impairment exists, and if so, to what extent. The lack of information, coupled with the fact that the BLM segments are very short (0.4 and 0.3 miles long) does not warrant additional actions at this time.

If additional water quality concerns are identified or a TMDL is developed, the BLM will review these allotments and if necessary, other best management practices implemented. Compliance monitoring would then be initiated.

Discussion:

Allotment 7111:

Northwest & Northeast Pastures:

Allotment 7111's northwest and northeast pastures consist of gentle slopes and narrow swales, all trending to the northwest. The hilltops are mapped as Cryorthents, which are Dry Exposure range sites. Cryorthents are located on steep slopes and have little to no soil horizon development. They are considered highly erodible and tend to have little vegetative cover. The hillsides are primarily Fluetsch-Tiagos association. These fine sandy to sandy loams soils are the most prevalent soil unit in Jackson County, and are Valley Bench/Dry Mountain Loams range sites. The soils have moderate to moderately rapid permeability, and plant available moisture is high. The swales are Spicerton sandy loams, which tend to support seasonally high water tables and occasional potholes. The swales are mapped as Salt Flats, and can accumulate salts to a concentration that prevents plants from extracting moisture in the soil. During the field assessment on June 14, 2005 the area appeared to be meeting the Upland Soils Land Health Standard. The pastures did not have areas of accelerated erosion and had good ground cover for their range sites. The road into the northwest pasture had some erosion (gulying alongside short steep portion), but does not affect the area's overall ability to meet the standard.

The north pastures have not been inventoried for wetland values. Due to the soils and topography, many of the swales could support wetland areas. From aerial photography and some field work, the pastures support at least 10.6 acres of wetlands, including most of a 5 acre playa. The known wetlands tend to be dominated by rushes. There is one developed water source within the northeast pasture on BLM lands. The "Meyering Livestock Spring No. 1" is located in the NESW of Section 25. The right is for 0.01 cfs,

and was adjudicated in case WO912-75 on December 31, 1975. The spring is actually an artesian well drilled by the U.S.G.S. The well has a reported depth of 775 feet. In the northwest pasture, two more artesian wells are located. One, located in the SENENW of Section 35, feeds a pond that creates a small wetland area. The well is reported to be 800 feet deep. Although there are no water rights on the well, the well permit was filed on by Meyring Livestock Company. The other well was developed as a spring by the Owl Mountain Partnership. It is located in the NENESE of Section 35 and has not been filed on for water rights. Once again, Meyring holds the well permit with the state on the USGS well. This well's reported depth is 770 feet. Since the northeast pasture has only one developed spring, it is considered to be the limiting pasture. Using the decreed 0.01 cfs, the spring would produce sufficient water for the permitted number of cattle.

The pastures are within the Grizzly Creek 5th order watershed. Runoff travels in ephemeral/intermittent drainages that flow to the northwest. The western half of the northwest pasture has very little slope and some temporal ponding occurs. If any runoff leaves the pasture, the Burke and New Burke irrigation ditches would intercept flows from sections 34 and 35. Runoff from Sections 25 and 26, if any, would be tributary to the Hebron Sloughs and detained in the waterfowl ponds. Releases from those ponds are tributary to Buffalo Creek, a tributary to Grizzly Creek.

Seeded and Lost Creek Pastures:

The Seeded and Lost Creek Pastures are primarily private land, with public land parcels occurring along the edges of the pasture. The Lost Creek Pasture's public land occurs in one block in the northeast corner of the pasture. Lost Creek flows through the public land parcel from southeast to west, and at least one Lost Creek irrigation ditch parallels the creek. Lost Creek is a small perennial stream that is heavily used for irrigation water, with upstream impoundments and diversions. This segment of stream was not visited during the field assessment and is approximately 0.4 miles long. The stream joins Buffalo Creek just at the pasture's south boundary. The stream is primarily a carex dominated riparian area, although some segments do have willows. Wildlife browsing and livestock grazing tend to be fairly high.

The public land parcel's soils include 19 acres that are mapped as Stumpp clay loams. These soils support a mountain meadow range site, and indicate the potential riparian area of the stream. Water tables are within 20-36 inches of the surface and the shallow clay loam layer is underlain by clay. Very gravelly loamy sand lies beneath the clay, about 32 inches from the surface. Stumpp soils are considered highly wind erodible soils. The band of soils south of the riparian area are Fleutsch-Tiagos association and those to the north are primarily Cryorthents (see North pastures descriptions of these soils).

The Seeded Pasture's public parcels are on the edges of the pasture, but the northwest ones do contain segments of the New Burke irrigation ditch. The ditch provides water and better vegetation than adjacent upland sites, so livestock would be expected to use these parcels. The northern 40-acre parcel is entirely Spicerton clay loam and has very little slope. The southern 40-acres are Fluetsch-Tiagos association, banded on both sides by Cryorthents. Runoff from the parcels would go directly into the New Burke ditch. The eastern parcel contains portions of the MacFarlane Ditch, but this portion is not currently used. Livestock may loaf in this parcel due to a pasture gate. Any runoff from the parcel would travel to the northwest pasture's pond.

Allotment 7112:

Allotment 7112 is also within the Grizzly Creek 5th Order Watershed. The allotment does not contain any known perennial waters, but does include about 19 acres of Seymour Reservoir and 1.2 acres of Hecla Reservoir. Both reservoirs store irrigation water, and Seymour Reservoir is also used for fishing. The allotment also has two segments of the Eureka irrigation ditch crossing the allotment. Most of the allotment is moderately sloped, with scattered small valleys draining to the west, northwest, east, and north. Due to the irrigation ditches and Seymour Reservoir, it is unlikely that any runoff that leaves the allotment reaches surface waters, but is intercepted first.

The Soil Survey maps the allotment as almost entirely Fleutsch-Tiagos association with multiple stringers of Cryorthents. From the field assessment, this mapping does not appear correct. There is a small doughnut shaped area in the southeast corner that is mapped as a Blevinton sandy loam, 8-20% slopes. The Dry Exposure (Cryorthents) ridgelines and mountain tops are much smaller in size and the valley areas are primarily Dry Mountain Loam/Mountain Loam. In the southern portion of the allotment are several small patches of aspen that appear to better fit the Blevinton soils. These soils often occur where snow accumulates, and are in the Mountain Loam range site. Runoff is slow and plant available water is moderate. The field assessment found some small areas impacted by roads and irrigation ditch operation/maintenance, but overall, soils were in good condition. Stop 2 in a large valley southeast of the Eureka Ditch appeared to have low vigor and perhaps experience heavier utilization. It appears that the early season use often occurs on wet soils and some compaction occurs. Sagebrush treatments, including 1 year of rest, are proposed for the allotment. This may help improve livestock distribution and reduce areas of heavier utilization. Initiating some field checks will help insure that the use is as reported, and that the allotment continues to have good production.

Allotment 7114:

The allotment is within the Grizzly Creek 5th order watershed, and has no perennial streams. Hecla Reservoir, a private irrigation reservoir, straddles the north boundary, and at least three irrigation ditches cross the southern, western and northern portions of the allotment. If any runoff left the BLM parcels, it would be intercepted by the irrigation ditches or reservoir, or the Wading Reservoir northeast of the allotment. It is unlikely that any runoff would reach surface waters.

Allotment 7114's public land consists of two parcels- the largest is located in the center of the allotment, and includes Spicer Peak and its north-northwest slopes. The other is a 40-acre parcel in the southwest portion of the allotment. The parcels are both moderately sloped, and primarily consist of forested land. The Soil Survey maps both parcels as mostly Cowdrey loam, 10-50% slopes. These soils formed in fine-textured glacial till and below the duff layer and surface/subsurface loams are clay soils. Permeability is slow, with rapid runoff and moderate-severe water erosion, depending on the slopes. Plant available moisture is high. Also on the large parcel are small areas of Rock Outcrops or Rocklands. The large parcel has a small contact seep on the south side that has no standing water. Arapaho Peak Spring supports a sedge wetland and is a public water reserve (PWR) adjudicated in 1970. The water right is for 0.004 cfs.

Due to the parcels' locations in the allotment, lack of water, and slopes, it is unlikely that livestock congregate on the public parcels. Although the allotment was not field assessed, it is unlikely that the public lands are heavily grazed or that runoff from the parcels is impacting water quality.

Allotment 7194:

Allotment 7194 is within the Grizzly Creek 5th Order watershed and contains portions of Coyote Creek, which flows into Buffalo Creek, a tributary of Grizzly Creek. Approximately 1600 feet of Coyote Creek is on public lands within the allotment. The small stream is heavily influenced by private irrigation practices and has not been inventoried by the BLM. There are no other known surface waters on the public lands in the allotment. There are six parcels of BLM lands within the allotment. Any runoff from the parcels is tributary to Coyote Creek, except the long north-south parcel on the west side of the allotment. Most of this parcel's runoff would be intercepted by the Eureka ditch to the west and an unnamed ditch on the parcel's east property line.

The two parcels on the east side of the allotment are steep to moderately steep, with the southeast parcel timbered. The timbered parcel is mapped as having Cowdrey loam soil, with some small areas of Cryorthents or rock outcrops on bare steep slopes. The W1/2SE1/4 of section 35 is mapped as Peeler sandy loams, 25-40% slopes. This soil formed in old alluvium, and unlike the Cowdrey loams, has a

coarse sandy loam texture with depth. Permeability is moderate and plant available moisture is low. Runoff is medium and the hazard of water erosion is moderate to severe, depending on slopes. The north parcel is mapped as several bands of soils, with Peeler sandy loams supporting trees, interspersed with Cryorthents, Blevinton sandy loams, and Parkview very stony loams, 20-35% slopes. Parkview soils formed in very stony glacial till, and are underlain by sandstone and siltstone at a depth of 20-40 inches. The soil profile ranges from 35-80% coarse fragments, and the soil is in the Rocky Loam range site. Permeability is moderate and plant available moisture is low.

The rest of the parcels have more gentle slopes and are range sites rather than forested areas. The 40 acre parcel in Section 27 and the long narrow parcel are both mapped as mostly Cabin sandy loams that formed in gravelly alluvium. Gravelly sand is within 20-40 inches of the surface, and plant available water is low. The Dry Mountain Loam range site has medium runoff, and is considered highly erodible by wind. Interspersed with this soil is some Fleutsch-Tiagos association. The 40-acre parcel in section 15 and the 80-acre parcel to the north are both mapped as Fleutsch-Tiagos association soils, with about equal portions of Cryorthents. Coyote Creek's riparian portion on the northern parcel is mapped as a Cryaquents, approximately 220 feet wide (8.2 acres). This is a recent alluvial soil with water channels and an uneven surface, and would be expected to support sedges, rushes, willows, and tufted hairgrass. The water table fluctuates between the surface to 2 feet, and the soil is annually flooded.

The two eastern parcels most likely receive little grazing pressure due to the slopes, vegetation, and their distance from the private irrigated lands within the allotment. Livestock would be expected to concentrate on the irrigated private lands along Coyote Creek, with some use occurring on the adjacent BLM parcels. At this time, there were no concerns raised about the allotment, nor indications that there are water quality impacts.

Paula Belcher
3/13/07