

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

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-N040-2009-0053-EA

CASEFILE/PROJECT NUMBER: 0507620

PROJECT NAME: Grazing Permit Renewal on the Pitman Allotment

LEGAL DESCRIPTION: T.7S., R.93W. Sec. 22, 23, 26, 27, & 35; Pitman Allotment (# 08119). See Attached Map

APPLICANT: Grazing Permittee

DESCRIPTION OF PROPOSED ACTION, BACKGROUND AND ALTERNATIVES:

PROPOSED ACTION: The Proposed Action is to renew the grazing permit with a slight change from what was previously authorized. The changes are in response to what the permittee has actually used over the past 13+ years. 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 permit renewal will include the following terms and conditions:

Current Grazing Schedule:

Authorization #	Allotment Name and Number	Livestock Number & Kind	Grazing Period Begin	Grazing Period End	%PL	AUMS
0507620	Pitman #08117	50 Cattle	5/1	6/15	80	60
		20 Cattle	6/16	10/31	80	73
		10 Cattle	11/1	11/30	80	8

Proposed Grazing Schedule:

Authorization #	Allotment Name and Number	Livestock Number & Kind	Grazing Period Begin	Grazing Period End	%PL	AUMS
0507620	Pitman #08117	50 Cattle	5/1	6/15	80	60
		22 Cattle	6/16	10/31	80	80

Grazing Preference (AUMS)

Authorization #	Allotment Name & Number	Total	Suspended	Active
0507620	Pitman #08117	309	169	140

The following terms and conditions will be included on the permit:

Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits. Maintenance shall be completed prior to turnout.

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

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

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 and the guidelines for livestock grazing management in Colorado, this permit will be reissued subject to revised terms and conditions.

BACKGROUND: This permit has been used conservatively over the years. Included below is a table of actual use on the allotment from 1991-2008.

YEAR	PERIOD OF USE	# OF LIVESTOCK	AUMS
1991	5/10 – 6/15	50	49
	6/16 – 10/15	20	64
1992	5/10 – 6/15	50	49
	7/23 – 10/31	17	45
1994	5/9 – 6/15	44	44
	8/1 – 10/16	16	32
1996	5/9 – 6/15	50	50
	7/19 – 10/15	15	35
1997	5/14 – 6/15	50	43
1998	5/15 – 6/19	50	47
	6/20 – 9/22	5	12
	10/10 – 10/15	17	3
1999	5/19 – 6/15	50	37
	8/6 – 10/16	12	23
2000	5/5 – 6/15	48	53
2001	5/12 – 6/15	50	46
	10/26 – 11/10	10	4
2002	5/10 – 6/10	42	35
2003	5/17 – 6/15	44	35

2004	5/18 – 6/6	47	25
2008	6/15 – 9/15	21	51

As can be determined from the above table actual use has never been above 113 AUMs in any of the past 13+ years and has been as low as 25 AUMs in that same time period. Grazing preference on the allotment is 140 AUMs. The permittee wants to continue the flexibility of the permit by having an early spring schedule and a season-long schedule. It is likely that the permittee will lose their Forest Service grazing permit and would need the season-long schedule. The previous schedule for fall use 11/1 to 11/30 is cancelled since it has never been utilized and the AUMs available have been included in the season-long schedule.

The permittee hauls water on the allotment to 3 different portable water troughs. There is also one pond that works during the summer months and one that only works in the spring. By distributing water on the allotment the permittee is able to control which areas of the allotment the livestock use and can therefore rotate livestock use. Rotating livestock use allows for rest and recovery periods during the growing season. A utilization term and condition has been added to the permit to ensure that use levels are not excessive.

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. This alternative would not meet the livestock grazing objective for the Field Office. Livestock grazing is not expected to be an issue in the Land Health Assessment. For this reason, discontinuance of grazing use (No Grazing) will not be considered or assessed.

NEED FOR PROPOSED ACTION:

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,(5) to allow use of native rangeland resource for conversion into protein suitable for human consumption, and (6) to meet the Guidelines for Livestock Grazing Management and the Standards for Land Health.

LAND USE PLAN (LUP) CONFORMANCE REVIEW:

The proposed action is subject to the following plan:

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.

X The Proposed Action is in conformance with the LUP because it is specifically provided for in the following LUP decision(s):

Decision Language: The action is in conformance with Administrative Actions (pg. 5) and Livestock Grazing Management (pg. 20). 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.”

_____ The Proposed Action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decisions (objectives, terms, and conditions):

Standards for Public Land Health:

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

The Pitman allotment lies within the Divide Creek Landscape which is scheduled for a formal land health assessment in 2009. If the land health evaluation determines that the allotment is not meeting one or more of the standards and livestock grazing is a significant factor in failing to meet the standards, appropriate action to make significant progress towards meeting the standards will be taken within one grazing season. Terms and conditions of the permit may be changed at that time.

The environmental analysis must address whether the proposed action or alternatives being analyzed would result in impacts that would maintain, improve, or cause a deterioration in land health conditions relative to these five standards.

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 AND ENVIRONMENTAL CONSEQUENCES

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

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of a proposed action and alternative(s) on certain critical environmental elements. Not all of the critical elements that require inclusion in this EA are present, or if they are present, may not be affected by the proposed action and alternative (Table 2). 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.

Table 2. Critical Elements of the Human Environment									
<i>Critical Element</i>	<i>Present</i>		<i>Affected</i>		<i>Critical Element</i>	<i>Present</i>		<i>Affected</i>	
	Yes	No	Yes	No		Yes	No	Yes	No
Air Quality		X		X	Prime or Unique Farmlands		X		X
ACECs		X		X	Threatened, Endangered, and Sensitive 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

CRITICAL ELEMENTS

CULTURAL RESOURCES and NATIVE AMERICAN RELIGIOUS CONCERNS

Affected Environment: Range permit renewals are undertakings under Section 106 of the National Historic Preservation Act. Additional range improvements (e.g., fences, spring improvements) are subject to compliance requirements under Section 106 and will undergo standard cultural resources inventory and evaluation procedures. During Section 106 review, a cultural resource assessment (GSFO #1009-24) was completed for the Pitman Allotment on March 16, 2009 following the procedures and guidance outlined in the 1980 National Programmatic Agreement Regarding the Livestock Grazing and Range Improvement Program, IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, CO-2001-026, and CO-2002-029. The results of the assessment are summarized in the table below. A copy of the cultural resource assessment

is available at the GSFO office.

Allotment Number	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level	Percent (%) Allotment Inventory data Class III level	Number of Cultural Resources known in allotment	High Potential of Historic Properties (yes/no)	Management Recommendations (Additional inventory required and historic properties to be visited)
Pitman	414	1101	27	3	No	No additional acres need to be inventoried to meet the 10% sampling threshold. 17% of the allotment has 30%+ slopes.
Total	414	1101	27	3		

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

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

At present, there are no known areas of Native American concern within this allotment. On November 7, 2008 the Glenwood Springs Field Office mailed an informational letter and maps to the Ute Tribe (Northern Ute Tribe), Southern Ute Tribe, and the Ute Mountain Ute Tribes, identifying the proposed 2009 grazing permit renewals. No response has been received. If new data is disclosed, new terms and conditions may have to be added to the permit to accommodate their concerns. The BLM will take no action that would adversely affect these areas or location without consultation with the appropriate Native Americans.

Environmental Consequences: The direct impacts that occur where livestock concentrate include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art. Indirect impacts include soil erosion, gullyng, and increased potential for unlawful collection and vandalism. Continued grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties.

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

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

ENVIRONMENTAL JUSTICE

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

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

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

INVASIVE, NON-NATIVE SPECIES

Affected Environment: An official survey for the presence of noxious weeds and non-native species has not been conducted on the Pitman Allotment. However, considering the widespread nature of noxious weeds in the GSFO, it can be assumed that some level of noxious weeds exists on the allotment.

Environmental Consequences/Mitigation: Wind, water, vehicles, animals, and people transport weeds. Weeds generally germinate and become established in areas of surface disturbing

^a Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report
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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. Since the proposed action was designed to sustain and/or improve land health, no significant impacts to non-native, invasive species are expected.

MIGRATORY BIRDS

Affected Environment:

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service (USFWS) to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973." *Birds of Conservation Concern 2008* (<http://www.fws.gov/migratorybirds/reports/BCC2008/BCC2008m.pdf>) is the most recent effort to carry out this mandate. The conservation concerns may be the result of population declines, naturally or human-caused small ranges or population sizes, threats to habitat, or other factors. The primary statutory authority for *Birds of Conservation Concern 2008* (BCC 2008) is the Fish and Wildlife Conservation Act of 1980 (FWCA), as amended. Although there are general patterns that can be inferred, there is no single reason why any species was is on the list. The Glenwood Springs Field Office is within the Southern Rockies/Colorado Plateau Bird Conservation Region (BCR). The 2008 list include the following birds: Gunnison Sage Grouse, American Bittern, Bald Eagle, Ferruginous Hawk, Golden Eagle, Peregrine Falcon, Prairie Falcon, Snowy Plover, Mountain Plover, Long-billed Curlew, Yellow-billed Cuckoo, Burrowing Owl, Lewis's Woodpecker, Willow Flycatcher, Gray Vireo, Pinyon Jay, Juniper Titmouse, Veery, Bendire's Thrasher, Grace's Warbler, Brewer's Sparrow, Grasshopper Sparrow, Chestnut-collared Longspur, Black Rosy-Finch, Brown-capped Rosy-Finch, and Cassin's Finch.

Habitat loss due to alteration or destruction continues to be the major reason for the declines of many species (<http://www.fws.gov/migratorybirds/reports/BCC2008/BCC2008m.pdf>). When considering potential impacts to migratory birds the impact on habitat, including: 1) the degree of fragmentation/connectivity expected from the proposed project relative to before the proposed project; and 2) the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats. Continued private land development, surface disturbing actions in key habitats (e.g. riparian areas) and the proliferation of roads, pipelines, powerlines and trails are local factors that reduce habitat quality and quantity.

The GSFO planning area provides both foraging and nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, aspen, pinyon-juniper woodlands, other types of coniferous forests, and riparian and wetland areas support many bird species. The pinyon jay is characteristically found in pinyon/juniper woodlands and the Brewer's sparrow

(*Spizella breweri*) is found within sagebrush habitats. Other Birds of Conservation Concern 2008 may also occur locally. Many species of raptors (red-tailed hawks, golden eagles, northern goshawks, Cooper's hawks, kestrels and owls) not on the Fish & Wildlife Service's Birds of Conservation Concern list also could occur in the area.

Environmental Consequences/Mitigation:

Limited bird count or species data exists for the area; however the greater concern is the continued fragmentation of habitat and losses of large blocks of contiguous habitat required by many bird species. No intentional take of native bird species is anticipated under the proposed action. Grazing by cattle could result in the accidental destruction of ground nests through trampling. This impact is expected to be minimal and isolated and would not influence populations of migratory birds on a landscape level. Given current overall existing habitat condition, livestock grazing, as proposed, will not negatively affect the degree of fragmentation/connectivity expected relative to the existing condition of the allotment and the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats would also likely not change.

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

Affected Environment:

Listed, Proposed, Candidate Species:

According to the latest species list from the U. S. Fish and Wildlife Service (<http://mountain-prairie.fws.gov/endspp/CountyLists/COLORADO.htm>), the following Federally listed, proposed, or candidate plant and animal species may occur within or be impacted by actions occurring in Garfield County: Colorado hookless cactus (*Sclerocactus glaucus*), Ute Ladies' Tresses orchid (*Spiranthes diluvialis*), Parachute beardtongue (*Penstemon debilis*), DeBeque phacelia (*Phacelia submutica*), Canada lynx (*Lynx canadensis*), Mexican spotted owl (*Strix occidentalis*), yellow-billed cuckoo (*Coccyzus americanus*), Greenback cutthroat trout (*Oncorhynchus clarkia stomias*), razorback sucker (*Xyrauchen texanus*), Colorado pikeminnow (*Ptychocheilus lucius*), bonytail chub (*Gila elegans*), and humpback chub (*Gila cypha*). The U. S. Fish and Wildlife Service announced the delisting of the bald eagle in June, 2007 with an effective date of August 8, 2007. The BLM now considers the bald eagle a sensitive species.

Plants:

No suitable habitat is found on the Pitman allotment for any of the four federally-listed, proposed or candidate plant species that occur in Garfield County. No occupied habitat is present within the vicinity that could be indirectly impacted by the proposed action.

Fish:

The Colorado River located downstream approximately 20 miles is Designated Critical Habitat for the Colorado pikeminnow and razorback sucker. Neither species is known to reside in the area but suitable habitat is present.

BLM Sensitive Species:

Plants:

BLM sensitive plant species with habitat and/or occurrence records in Garfield County include adobe thistle (*Cirsium perplexans*), DeBeque milkvetch (*Astragalus debequaeus*), Naturita milkvetch (*Astragalus naturitensis*), Roan Cliffs blazing star (*Mentzelia rhizomata*), Piceance bladderpod (*Lesquerella parviflora*), and Harrington's penstemon (*Penstemon harringtonii*). No BLM sensitive plant species are known to occur on the Pitman allotment. The majority of the allotment was surveyed for special status species in 2005 and none were found.

Fish:

West Mamm Creek is located within 0.1 miles of the allotments northern boundary. This stream has been documented as containing suckers. Although species was not identified, it is likely that these suckers are native flannelmouth and/or bluehead suckers both of which are BLM sensitive species.

Environmental Consequences/Mitigation:

Listed, Proposed, Candidate Species:

Plants:

Due to the absence of any occupied or suitable habitat within or immediately adjacent to the Pitman allotment, the proposed action would have “**No Effect**” to any of the four listed, proposed or candidate plant species.

Fish:

No direct impacts would occur from the action as West Mamm Creek is outside of the allotment boundary. Indirect impacts are unlikely as these native fish are both sediment tolerant and are well adapted to the high sediment loads traditionally carried by the Colorado River and its larger tributaries. In general, periodic to frequent influxes of sediment are important in the creation and maintenance of important microhabitats for these species. Movement and redistribution of sediments helps to create and maintain backwater habitats important to many life stages of these fish. Periodic inundation of floodplain areas with water/sediment provides optimal seedbed areas for native cottonwood regeneration to occur. Any increased sediment loading resulting from proposed grazing activities would be small and site specific and would have “**No Effect**” to either of these species or their habitats.

BLM Sensitive Species:

Plants:

Due to the absence of any known occupied or suitable habitat for BLM sensitive plant species, the proposed action would have no impact on these species.

Fish:

Flannelmouth sucker, Bluehead Sucker

No direct impacts would occur from the action as West Mamm Creek is outside of the allotment boundary. Indirect impacts are unlikely as these native suckers are both sediment tolerant and

are well adapted to the high sediment loads traditionally carried by the Colorado River and its larger tributaries. In general, periodic to frequent influxes of sediment are important in the creation and maintenance of important microhabitats for these species. Movement and redistribution of sediments helps to create and maintain backwater habitats important to many life stages of these fish. Periodic inundation of floodplain areas with water/sediment provides optimal seedbed areas for native cottonwood regeneration to occur. Any increased sediment loading resulting from proposed grazing activities would be small and site specific and should have no negative impacts to either of these species or their habitats.

Analysis on the Public Land Health Standard for Threatened, Endangered, and Sensitive Species: A formal Land Health Assessment has not been completed for this area but is planned for the summer of 2009. The proposed action should have little bearing on the areas ability to meet Standard 4 for Special Status Species.

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

Affected Environment: The Pitman Allotment is located south of the City of Rifle, south of I-70 and the Colorado River, and south of the perennial West Mamm Creek. The allotment is within the 9,762 acre West Mamm Creek 6th field watershed and contains several unnamed ephemeral tributaries to West Mamm Creek to the north including the ephemeral Gant Gulch.

West Mamm Creek and Gant Gulch are not currently listed 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) that identifies stream segments that are not currently meeting water quality standards with technology based controls alone, or the *Monitoring and Evaluation List* (CDPHE, Water Quality Control Commission, Regulation No. 94) that identifies water bodies suspected to have water quality problems. In addition, no current water quality data are available for these two drainages.

Environmental Consequences/Mitigation: Grazing activities would result in soil compaction and displacement that increase the likelihood of erosional processes, especially on steep slopes and areas devoid of vegetation. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. In addition, the number of livestock in the area would increase the amount of feces present in close proximity to nearby drainages. The introduction of livestock feces to water bodies often leads to water quality degradation by increasing fecal coliform bacteria levels. Due to the proximity of the proposed activities to area drainages, there is potential that additional sediment associated with grazing practices as well as fecal coliform bacteria from livestock feces could reach Gant Gulch and West Mamm Creek. However, based on scheduled amount of cattle and period of use and the distance from major perennial drainages; the likelihood of measureable water quality degradation is minimal and thus no mitigation is being proposed at this time.

Analysis on the Public Land Health Standard 5 for Water Quality: The BLM Glenwood Springs Field Office is scheduled to conduct the Divide Creek Land Health Assessment in summer 2009 that would include area drainages such as West Mamm Creek. Based on the distance of grazing

activities from major perennial drainages and the scheduled amount of cattle and period of use; the proposed activities would not likely prevent Standard 5 for Water Quality from being met.

NON-CRITICAL ELEMENTS

SOILS (includes an analysis on Standard 1)

Affected Environment: According to the *Soil Survey of Rifle Area, Colorado: Parts of Garfield and Mesa Counties* (USDA 1985), the Pitman Allotment contains five different soil map units that can be identified by the numerical code assigned by the soil survey (e.g. Badland=9). These soil map units are scattered throughout the allotment and have been identified as having moderate to very severe erosion hazards. In addition, areas within the allotment are mapped as CSU 4 (Controlled Surface Use) for erosive soils on slopes greater than 30%. Following is a brief description of the five different soil map units found within the Pitman Allotment.

- Badland (9) – This soil map unit consists of steep, barren land that has been dissected by intermittent drainages. This unit occurs in soft shale, sandstone, and siltstone of the Green River, Wasatch, Mancos, and Mesa Verde Formations. This soil map is approximately 85 percent unvegetated, has very severe erosion hazard, and frequent active erosion.
- Bucklon-Inchau loams (12) – These soils occur on ridges and mountainsides at elevations ranging from 7,000 to 9,500 feet and on slopes of 25 to 50 percent. About 55 percent of this soil map unit is Bucklon soil and 35 percent Inchau soil. The remaining 10 percent of the soil map unit are made up of varying amounts of Cochetopa, Cimarron, and Jerry soils. The Bucklon soil is found on steep, convex areas while the Inchau soil is found on more concave areas. The Bucklon soil is shallow, well drained and has medium surface runoff with severe erosion hazard. The Inchau soil is moderately deep, well drained and has medium surface runoff with severe erosion hazard. Primary uses for these soils include wildlife habitat and limited grazing.
- Morval-Tridell complex (45) – This soil map unit is found on alluvial fans and the sides of mesas at elevations ranging from 6,500 to 8,000 feet and on slopes of 6 to 25 percent. The Morval soil makes up about 55 percent of the unit and is found on lower slopes while the Tridell soil makes up about 30 percent of the unit and is found on the sides of mesas. Both soils are deep, well drained and have medium surface runoff and moderate erosion hazard. The primary uses for this soil map unit include grazing and wildlife habitat.
- Torriorthents-Camborthids-Rock outcrop complex, steep (66) – This soil map unit consists of sandstone and shale bedrock and soils of variable depth occurring on slopes of 15 to 70 percent. About 45 percent of this complex is Torriorthents, 20 percent is Camborthids, and 15 percent is Rock outcrop. The Camborthids occur on the lower toe slopes on foothills and mountainsides while the Torriorthents are found on the foothills and mountainsides below the Rock outcrop. The Torriorthents are shallow to moderately deep, and clayey to loamy with gravel, cobbles, and stones. The Camborthids are shallow to deep and clayey to loamy. Rock outcrop primarily

consists of Mesa Verde sandstones and Wasatch shales with occasional basaltic boulders and stones. This complex is characterized by moderate to severe erosion hazard. Primary uses for this complex include grazing, wildlife habitat, and recreation.

- Torriorthents-Rock outcrop complex, steep (67) – This complex consists of stony soils and exposed outcrops of Mesa Verde sandstone and Wasatch shale that occur on slopes of 15 to 70 percent. Approximately 60 percent of this complex is Torriorthents and 25 percent is Rock outcrop. The Torriorthents are clayey to loamy and contain gravel, cobbles, and stones; many of which are basaltic in origin. They are found on mountainsides below the Rock outcrop. Erosion hazard for this complex varies from moderate to severe. Primary uses for this complex include limited grazing, wildlife habitat, and recreation.

Environmental Consequences/Mitigation: As mentioned above, areas within the Pitman Allotment occur on soils with moderate to very severe erosion hazards and on slopes greater than 30% (17°). Grazing activities would result in soil compaction and displacement that increase the likelihood of erosional processes, especially on steep slopes and areas devoid of vegetation. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. Due to the proximity of the proposed activities to area drainages, there is potential that additional sediment associated with grazing practices could reach Gant Gulch and West Mamm Creek. However, based on existing topography and soil conditions along with the scheduled amount of cattle and period of use; the likelihood of measureable negative soil impacts is minimal and thus no mitigation is being proposed at this time.

Analysis on the Public Land Health Standard 1 for Upland Soils: The BLM Glenwood Springs Field Office is scheduled to conduct the Divide Creek Land Health Assessment in summer 2009 that would include the Pitman Allotment. Based on the existing topography and soil conditions, the amount of cattle scheduled and the period of use; it is not likely that the proposed activities would prevent Standard 1 for Upland Soils from being met.

VEGETATION (includes an analysis on Standard 3)

Affected Environment: The Pitman allotment lies between West and Middle Mamm Creeks. The east side of the allotment is rough, broken terrain dissected by raw drainages composed of highly erosive soils. This area supports a light canopy of pinyon-juniper, with a sparsely vegetated understory. Big sagebrush/mixed mountain shrublands are found on flatter benches and ridges. On the west side of the allotment, Gambel oakbrush becomes a more dominant component of the mixed mountain shrub community.

Environmental Consequences/Mitigation:

The proposed season of use for this allotment is from 5/1 to 10/31. The proposed permit would allow for 50 cattle from 5/1 to 6/15 and 22 cattle from 6/16 to 10/31 which encompasses the entire growing season. The Colorado Guidelines for Livestock Grazing state that proper grazing management should allow for “periodic rest or deferment from grazing during critical growth periods, allow adequate recovery and regrowth periods, and opportunities for seed dissemination

and seedling establishment, Season-long grazing could potentially cause adverse impacts to vegetative condition because it does not allow for this recovery period.

Although the level of stocking reduces from 50 cattle to 22 cattle after June 15, the fewer number of cattle remain on the allotment throughout the rest of the growing season. Overall average utilization may not exceed allowable levels at this grazing intensity, but when animals are allowed to graze in an area for the entire growing season they will tend to selectively and repeatedly graze the most preferred/palatable plant species and avoid the less preferred/palatable species. This situation may cause a decline in abundance of the most palatable species by not providing for sufficient residual vegetation to maintain carbohydrate reserves, and by not allowing adequate recovery time to sustain plant vigor and allow for seed formation and dissemination.

There is one pond on the allotment which holds water through the summer and the current permittee also hauls water to three portable water troughs dispersed throughout the allotment. The portable water troughs provide the permittee with the flexibility to implement an informal rotational grazing system. If livestock are rotated throughout different portions of the allotment and are not allowed to congregate in one area for most of the growing season, the proposed grazing plan could provide adequate growing season rest.

Recent grazing use in the Pitman allotment has not been in accordance with the authorized (and proposed) grazing permit. Although the previously authorized grazing period extended from May 1 to Nov 30, the permittee has submitted Actual Use reports indicating that from 2002-2004 cattle were in the allotment for approximately one month from mid-May to mid-June. The only recent monitoring data (from 2008) showed non-use in the area of the utilization study. Therefore, there is no data with which to evaluate the impact of the permitted grazing use on vegetative conditions within the allotment.

Mitigation:

Monitor utilization on key upland species in key areas of the allotment after the more-intensive, spring- grazing period (mid-June) annually, and after the end of the growing season (approximately August 30), in any year in which cattle remain on the allotment for the entire growing season. Acceptable utilization limits will not exceed the levels in the permit terms and conditions. If after three years of collecting data on season-long use, the utilization levels remain under the threshold in the terms and conditions of the permit and if land health conditions are not declining, utilization may be conducted only once every three to five years thereafter.

Trend monitoring on key upland species at key areas on the allotment would be conducted according to the allotment categorization and the schedule in the GSFO Monitoring Plan. If monitoring data determines a downward trend in vegetative conditions, the permit would be revised with new terms to provide adequate growing season rest.

Implementation of this mitigation, and the other terms and conditions on the permit, including utilization limits, would tend to offset most of the negative impacts from cattle grazing.

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 but is planned for the summer of 2009. With a lack of monitoring data, it is difficult to determine if the allotment is meeting Standard 3 for Plant Communities under the proposed grazing schedule. Furthermore, the allotment has not been grazed according to the current schedule for at least 7 years. The land health assessment is likely to reflect the effects of years of grazing non-use and short-duration use. If the allotment were to be grazed according to the proposed season-long grazing schedule, it is likely that the preferred forage species would decline in abundance and cover. The allotment would likely trend away from meeting Standard 3 as no growing season rest or plant recovery periods are incorporated into the grazing schedule.

WILDLIFE AQUATIC (includes an analysis on Standard 3)

Affected Environment:

The Pitman Allotment contains no perennial waters and is drained via small ephemeral washes, the largest being Grant Gulch. West Mamm Creek is perennial and is located along the allotments northern boundary within 0.1 miles. In addition to the two sucker species addressed in the TES section above, West Mamm Creek contains speckled dace and a variety of aquatic invertebrates.

Environmental Consequences/Mitigation:

Continued grazing activities on these allotments would result in some soil compaction and displacement and increase the likelihood of erosional processes, especially on steep slopes, areas devoid of vegetation, and at livestock concentration areas such as stock waters, salting sites, and drainage bottoms. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. Due to the close proximity of the proposed activities to area drainages and perennial West Mamm Creek there is potential that indirect impacts associated with increased sediment loading associated with grazing practices could occur in West Mamm Creek.

Sediment is not a big a concern with regard to productivity of resident speckled dace. These fish are relatively sediment tolerant. The Pitman allotment allows grazing use for a 6 month period from spring through late fall (05/01 – 10/31). This is the entire growing season. However, livestock are rotated by use of portable water tanks that are placed within different portions of the allotment throughout the grazing season. This helps to rotate cattle and limit use in any one portion of the allotment for too long. Monitoring data in the allotment file from one site looked at in 2008 showed no livestock use. The next data set from 1989 showed heavy use and low plant productivity associated with apparent drought conditions. Data from prior to 1989 showed varying levels of forage utilization generally in the 40+ % range on key species. The allotment is moderately stocked which would help to minimize use on the allotment.

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 conducted on this allotment but is planned for the summer of 2009. Based on existing range data, it is difficult to say if the allotment is

meeting Standard 3 for Aquatic Wildlife. The proposed action which calls for a reduction in fall use coupled with rotational grazing using portable water sources should help to minimize impacts from grazing and should have minimal bearing on the allotments ability to meet Standard 3 for aquatic wildlife.

WILDLIFE TERRESTRIAL (includes an analysis on Standard 3)

Affected Environment:

The allotment provides important habitat for a variety of obligate species of birds, and are particularly important as food and cover for wintering big game. Pinyon-juniper woodlands provide important foraging and nesting habitat for some raptor species and many migratory song birds, and provide security, foraging, and thermal cover for a variety of small game, big game, and nongame wildlife. Mixed mountain shrub and oak habitats are important to turkey, black bear, and lion among others.

Terrestrial habitats have been altered by roads, fences, public recreation use, residential and commercial development, vegetative treatments and livestock and wild ungulate grazing. These human uses contribute to degradation of habitat quality, fragmentation of habitat for several species and the expansion of areas supporting noxious and exotic vegetative species.

Species of High Public Interest. Mule deer and elk usually occupy the area yearround however the sagebrush-dominant ridges and south-facing slopes are important big game winter habitat. BLM lands within this allotment provide a large portion of the less-developed winter range for elk and summer range available to mule deer. The allotment overlaps with CDOW mapped elk winter concentration area and severe winter range. The higher elevations in the allotment overlaps with CDOW mapped mule deer summer range. Elk winter concentration areas are that part of the winter range where densities are at least 200% greater than the surrounding winter range density during the same period used to define winter range in the average five winters out of ten. Elk severe winter range is considered that part of the overall range where 90% of the individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten. Mule Deer Summer Range is that part of the overall range where 90% of the individuals are located between spring green-up and the first heavy snowfall. Summer range is not necessarily exclusive of winter range; in some areas winter range and summer range may overlap.

Public surveys, land management agency input, and HPP committee participation all indicate a general agreement that the elk herd is at or near desirable and sustainable levels. The current population size of approximately 11,500 animals is just above the objective of 10,500 animals for DAU E-14 (game management units 41, 42, 52, 411, 421, 521) (<http://wildlife.state.co.us/NR/rdonlyres/3B3FB96B-A5DA-4835-BD8D-C71723E66379/0/E14DAUPlanFinal.pdf>). Public surveys, land management agency input, and HPP committee participation all indicate a general agreement that the deer herd is at or near desirable and sustainable levels. The current population size of approximately 30,500 animals is just above the DAU D-12 objective (GMUs: 41, 42, 421) of 29,500 animals that was set through the DAU planning process (<http://wildlife.state.co.us/NR/rdonlyres/057CB0C3-C4E9-46E2-8570-996BF0D5FCE7/0/D12DAUPlanFinal.pdf>).

Environmental Consequences/Mitigation:

The magnitude of competitive interactions between big game and livestock is complex and difficult to analyze at the allotment level. Livestock and wild ungulate carrying capacities should be evaluated holistically and be used to guide stocking rate decisions and wild ungulate population objectives. Since the allotment is part of elk winter range and deer summer range, season-long grazing - *grazing the allotment for an entire growing season* - may eliminate residual vegetation that is important to wintering elk or summering deer. Big game population levels are at or near desirable and sustainable levels. Over the long term the allotment's potential to support the currently desired levels of big game could be jeopardized by: 1) reduced residual vegetation, 2) reduced plant growth and seedling production, 3) reduced palatability or 4) selective grazing of key plant species.

Reduced Residual Vegetation. Annual season-long grazing makes no attempt to leave a portion of the range ungrazed by livestock for at least part of the growing season.

Reduced Plant Growth and Seedling Production. A rest-rotation schedule allows vegetation rest periods that are long and ensure the growth and seedling production requirements of a variety of vegetation species on any given site.

Reduced Palatability. In addition some studies report that regrowth areas previously used by cattle in the spring may even be favored by big game because of the resultant increase in forage palatability. Season-long grazing will lower the palatability of the available winter forage.

Selective Grazing of Key Plant Species.

Annual season-long grazing will eventually lead to selective grazing by livestock. Annual, season-long selective grazing has been noted as a prime cause of range deterioration. Selective grazing cannot be prevented, but its harmful effects can be overcome by resting the allotment from grazing (<http://www.lib.montana.edu/digital/objects/coll2451/pdf/B18F025.pdf>).

Analysis on the Public Land Health Standard 3 or plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial):

A formal Land Health Assessment has not been conducted on this allotment but is planned for the summer of 2009. Based on limited range data, it is problematic to judge if the allotment is currently meeting Standard 3 for terrestrial wildlife or the trends. However unless the season-long grazing stocking rates are very light (very low AUMs), it can be concluded that the lack of growing season rest or plant recovery periods will eventually - singularly or in combination with other factors - lead to reduce wildlife habitat potential.

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
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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:

MITIGATION:

Monitor utilization on key upland species in key areas of the allotment after the more-intensive, spring- grazing period (mid-June) annually, and after the end of the growing season (approximately August 30), in any year in which cattle remain on the allotment for the entire growing season. Acceptable utilization limits will not exceed the levels in the permit terms and conditions. If after three years of collecting data on season-long use, the utilization levels remain under the threshold in the terms and conditions of the permit and if land health conditions are not declining, utilization may be conducted only once every three to five years thereafter.

Trend monitoring on key upland species at key areas on the allotment would be conducted according to the allotment categorization and the schedule in the GSFO Monitoring Plan. If monitoring data determines a downward trend in vegetative conditions, the permit would be revised with new terms to provide adequate growing season rest.

PERSONS/AGENCIES CONSULTED:

Grazing Permittees
Southern Ute Tribe
Northern Ute Tribe
Ute Mtn. Ute Tribe

INTERDISCIPLINARY REVIEW:

<u>Name</u>	<u>Title</u>	<u>Area of Responsibility</u>
Isaac Pittman	Rangeland Management Specialist	Range, NEPA Lead
Mike Kinser	Rangeland Management Specialist	Riparian Zones
Jeff O'Connell	Hydrologist/Geologist	Soil, Air, Water, Geology
Kay Hopkins	Outdoor Recreation Planner	Wilderness, VRM, WSR, Recreation,
Carla DeYoung	Ecologist	ACEC, T/E/S Plants, Vegetation,

Cheryl Harrison
Tom Fresques
Brian Hopkins
Dereck Wilson

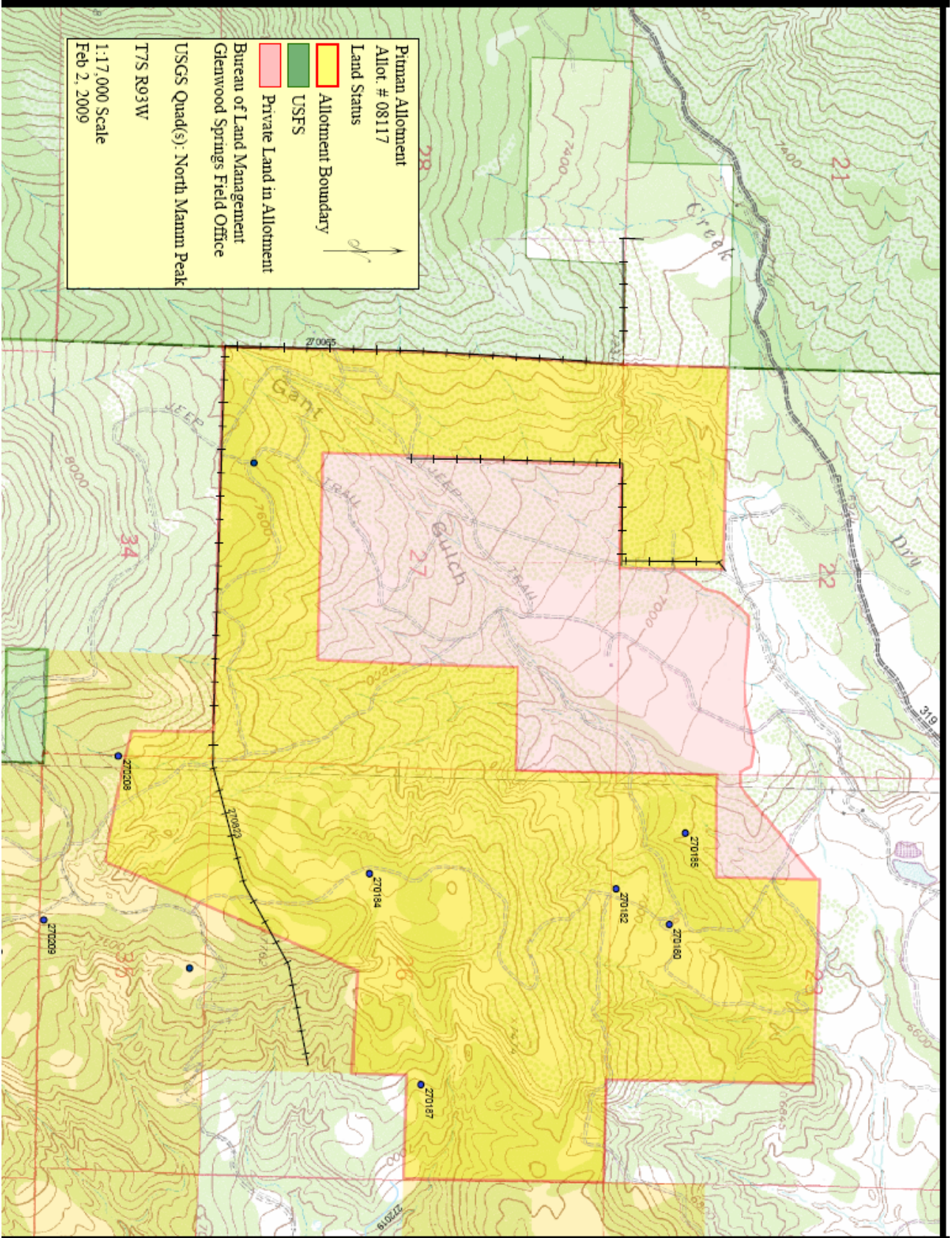
Archaeologist
Fisheries Biologist
Wildlife Biologist
Range Management Specialist

Land Health Assessments
Cultural & Native American Concerns
Wildlife Aquatic, T&E (Fish)
Wildlife Terrestrial, T&E
Invasive, Non-native Species

SIGNATURE OF PREPARER:

DATE SIGNED:

ATTACHMENTS: Allotment Map



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
GLENWOOD SPRINGS FIELD OFFICE

FINDING OF NO SIGNIFICANT IMPACT

Grazing Permit Renewal with Changes on the Pitman Allotment

DOI-BLM-CO140-2009-0053-EA

Finding of No Significant Impact

I have reviewed the direct, indirect and cumulative effects of the proposed action documented in the EA for the grazing permit renewal on the Pitman Allotment. The effects of the proposed action are disclosed in the Alternatives and Environmental Impacts sections of the EA. Implementing regulations for NEPA (40 CFR 1508.27) provide criteria for determining the significance of the effects. Significant, as used in NEPA, requires consideration of both *context* and *intensity* as follows:

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

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

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

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

Impacts associated with the livestock grazing permit renewal are identified and discussed in the Environmental Impacts section of the EA. The proposed action will not have any significant beneficial or adverse impacts on the resources identified and described in the EA.

2. The degree to which the proposed action affects health or safety.

The proposed activities will not significantly affect public health or safety. The purpose of the proposed action is to allow for multiple uses while maintaining or improving resource conditions to meet standards for rangeland health in the allotment. Similar actions have not significantly affected public health or safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

There are no unique characteristics for this allotment identified in the EA.

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

The analysis did not identify any effects that are highly controversial.

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

The possible effects of issuing a grazing permit for season-long grazing on the Pittman allotment may be highly uncertain or involve unique or uncertain risks. The technical analyses conducted in this EA indicated that this type of use may have adverse effects on critical wildlife habitat. Although the previous permit was for a 7-month term, and this permit was reduced to a 6-month term, the longest period of use actually used in the past 13+ years has only been 5 months. To understand use levels better utilization monitoring on key upland species in key areas of the allotment will be conducted after the more-intensive, spring- grazing period (mid-June) annually, and after the end of the growing season (approximately August 30), in any year in which cattle remain on the allotment for the entire growing season. Acceptable utilization limits will not exceed the levels in the permit terms and conditions. If after three years of collecting data on season-long use, the utilization levels remain under the threshold in the terms and conditions of the permit and if land health conditions are not declining, utilization may be conducted only once every three to five years thereafter.

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

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

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

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

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

No districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places have been identified.

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

There is no designated critical habitat for any listed Threatened or Endangered species within the project area. The EA discloses that the proposed action is not likely to adversely affect any species listed as threatened or endangered.

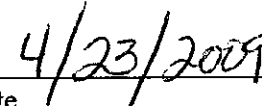
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

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

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



Authorized Official
Glenwood Springs Field Office



Date