U.S. Department of the Interior
Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA NUMBER: CO-100-2007-085

CASEFILE/ALLOTMENT NUMBER: 0502945/02824

PROJECT NAME: Issuance of a ten year grazing lease on the Cow Creek Divide Allotment #02824 for Jim and Joanne Stanko.

LEGAL DESCRIPTION: see allotment map, Attachment 1

Cow Creek Divide Allotment #02824	T6N R85W S ½ NE ¼, SE ¼ Sec. 15
	247 acres BLM

APPLICANT: Jim and Joanne Stanko

PLAN CONFORMANCE REVIEW: The Proposed Action and Alternatives are subject to the following plan:

Name of Plan: Little Snake Resource Management Plan and Record of Decision

Date Approved: April 26, 1989

Name of Plan Amendment: Emerald Mountain Land Exchange Environmental Assessment/Plan Amendment (EA CO-100-2006-089) and Record of Decision.

Date Approved: October 4, 2006

Results: The Proposed Action and Alternatives are subject to and are consistent with the Little Snake Resource Management Plan, as amended, Record of Decision, Livestock Grazing Management objective to improve range conditions for both wildlife and livestock through proper utilization of key forage plants and adjusting livestock stocking rates as a result of vegetation studies.

The Proposed Action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3).

NEED FOR PROPOSED ACTION: On February 22, 2007, BLM acquired the 4,139 acre Emerald Mountain parcel from the State Land Board (SLB) through the Emerald Mountain land exchange. Prior to BLM's acquisition of the parcel, the SLB authorized grazing use under SLB grazing leases. Per 43 CFR 4110.1-1, BLM must honor any existing grazing privileges on lands acquired by BLM through exchange. This acquired existing lease is subject to renewal at the discretion of the Secretary of the Interior, who delegated the authority to BLM, for a period of up to ten years. The BLM has the authority to renew the livestock grazing permit/lease consistent with the provisions of the *Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act,* and Little Snake Field Office's *Resource Management Plan/Environmental Impact Statement.* This Plan/EIS has been amended by *Standards for Public Land Health in the State of Colorado.*

The following Environmental Assessment (EA) will analyze the impacts of livestock grazing on public land managed by the BLM. The analysis will recommend terms and conditions to the lease which improve or maintain public land health. The Proposed Action will be assessed for meeting land health standards.

In order to graze livestock on public land, the livestock producer (permittee/lessee) must hold a valid grazing permit/lease. The grazing permittee/lessee has a preference right to receive the permit if grazing is to continue. The land use plan allows grazing to continue. This EA will be a site specific look to determine if grazing should continue as provided for in the land use plan and to identify the conditions under which it can be issued.

PUBLIC SCOPING PROCESS: The land exchange proposal, which included the continuation of livestock grazing on the Emerald Mountain Parcel, was subject to extensive public scoping. BLM informally notified the public of the proposed land exchange on September 17, 2003 with the posting of a website (www.co.blm.gov/lsra/emerald_mtn/em.htm) describing the proposal and providing detailed information and documents, including the approved feasibility study and agreement to initiate the exchange. Formal public notification of the proposed exchange occurred through the publication of legal notices in local newspapers. These public notices invited interested parties to submit comments to the Little Snake Field Office for a period of 45 days. Notification of the proposed exchange was sent to interested parties, including state and local agencies and elected officials. The Notice of Exchange Proposal was published in the following newspapers on the dates indicated:

The Hayden Valley Press	February 9, 16, 23 and March 2, 2005
Craig Daily Press	February 11, 18, 25 and March 4, 2005
Moffat County Morning News	February 13, 20, 27, and March 6, 2005
The Steamboat Pilot	February 13, 20, 27 and March 6, 2005

In addition, BLM held three public open houses to gather public input. These meetings were held as

follows:

March 7, 2005 at Olympian Hall, Steamboat Springs, 3:00-8:00 p.m.
March 8, 2005 at Town Hall, Oak Creek, 3:00-8:00 p.m.
March 9, 2005 at Town Hall, Hayden, 3:00-8:00 p.m.

Seventy-eight members of the public attended the Steamboat Springs meeting, twenty-six attended the Oak Creek meeting, and twenty-four attended the Hayden meeting. BLM received 139 written scoping responses from individuals, non-governmental entities, and other public agencies during the comment period.

BACKGROUND: The Cow Creek Divide Allotment #02824 was created following the completion of the Emerald Mountain Land Exchange. Its boundary encompasses those lands that were leased to Jim and Joanne Stanko for the purpose of livestock grazing by the SLB prior to the exchange. The allotment is approximately 247 BLM acres and is located approximately two miles southwest of Steamboat Springs, Colorado. The topography of the allotment is mountainous, with elevations ranging from over 7,600 feet in the southerly portion of the allotment to approximately 6,800 feet the northwesterly portion of the allotment. The climate is typical of the southern Rocky Mountains, with cold, snowy winters and warm summers. The average high temperature is 28°F in January and 82°F in July. Average annual precipitation is 24 inches and yearly snowfall averages 166 inches.

The Stanko's SLB grazing lease allowed for 41 AUMs of grazing use with no specified season of use or other terms and conditions. This SLB lease had been renewed on an annual basis until December 31, 2006. In the months leading up to the exchange, it was understood by BLM that the SLB grazing lease would be valid at the date of closing, whenever that was to occur. Per 43 CFR 4110.1-1, BLM was to assume the grazing lease with the SLB as it existed at the time of BLM's acquisition of the parcel. Since the SLB lease expired in December, 2006, there was no grazing lease in place for BLM to assume at the time BLM acquired the Emerald Mountain Parcel.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action
Issue a ten year grazing lease to Jim and Joanne Stanko on the Cow Creek Divide Allotment #02824. Grazing use on this allotment would be as follows:

Allotment	Livestock	Dates			
Name & Number	Number & Kind	Begin	End	%PL	AUMs

Cow Creek Divide #02824	13 Cattle	07/15	10/15	100		40
					unscheduled	1
					Total	41

Grazing use by livestock on this allotment would typically be made by cattle drifting across the parcel during herd movements between leased private pasture to the east of the allotment and operator owned private pasture to the west of the allotment. There are no water sources on the allotment.

The above lease would be subject to the Standard and Common Terms and Conditions, see Attachment 2.

No Action Alternative
Grazing use would remain at the level permitted by the SLB, which is as follows:

Allotment Name & Number	Livestock Number & Kind	Dates Begin	End	%PL		AUMs
Cow Creek Divide #02824	3 Cattle	01/01	12/31	100		36
					unscheduled	5
					Total	41

Under this alternative, the lease would be subject to the Standard and Common Terms and Conditions which apply to all grazing permits and leases administered by the Little Snake Field Office, see Attachment 2.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED

No Grazing Alternative
No livestock grazing would take place under this alternative. Eliminating livestock grazing is not analyzed because no new issues or concerns have been identified that would require this action and it would not meet the requirements of the Federal Land Policy and Management Act of 1976. When the RMP was amended through Emerald Mountain Land Exchange Environmental Assessment/Plan Amendment (EA CO-100-2006-089) and Record of Decision, it was determined that livestock grazing was an appropriate use of this land. Additionally, 43 CFR 4110.1-1 requires BLM to honor existing livestock grazing authorizations in effect when lands are acquired through land exchanges.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: The allotment is not located within any specially designated air sheds or non-attainment areas.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 7/2/07

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Rob Schmitzer 7/2/07

CULTURAL RESOURCES

Affected Environment: The issuance of a grazing lease is an undertaking under Section 106 of the National Historic Preservation Act. During Section 106 review, a cultural resource assessment (Heritage #10.28.07) was completed for each allotment on June 27, 2007 by Robyn Watkins Morris, Little Snake Field Office Archaeologist. The assessment followed 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-01-026. The results of the assessment are summarized in the table below. Copies of the cultural resource assessments are in the Field Office archaeology files.

Data developed here were taken from the cultural program project report files, site report files, and base maps kept at the Little Snake Field Office as well as from GLO maps, BLM land patent records, *An Overview of Prehistoric Cultural Resources Little Snake Resource Area, Northwestern Colorado,* Bureau of Land Management Colorado, Cultural Resources Series, Number 20, and *An Isolated Empire, A History of Northwestern Colorado,* Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and Appendix 21 of the *Little Snake Resource Management Plan and Environmental Impact Statement,* Draft February 1986, Bureau of Land Management, Craig, Colorado District, Little Snake Resource Area.

The table below is based on the allotment-specific analysis developed for the allotment in this EA. The table shows known cultural resources, those that are eligible or need data, and those that are anticipated to be in each allotment. Fieldwork for the cultural resources on the table will be carried out in current fiscal year or within the ten year permit renewal.

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**	**Eligible or Need Data Sites – Known in Allotment (Site Numbers)**	**Estimated Sites for the Allotment** (Total Number)**	**Management Recommendations (Add'l inventory required and historic properties to be visited)**
0	247	0	0	unknown	0	Unknown	No historic sites were noted on the GLOs, however, search through patent records identified patentees Albert Bourquin (1898), Frank Hawley (1891), George Herwig (1895), and Robert Jones (1895) and should be researched further.

(Note: *Acres are derived from GIS allotment maps and include BLM only acres. **Estimates of site densities are based on known inventory data. Estimates represent a minimum figure which may be revised upwards based on future inventory findings.)

No cultural resource inventories have been previously conducted within the allotment resulting in the complete coverage inventory of 0 acres and the recording of 0 cultural resources.

If historic properties are located during the subsequent field inventory, and BLM determines that grazing activities will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO.

Environmental Consequences, all alternatives: 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, gullying, and increased potential for unlawful collection and vandalism.

Cultural Review Process

Monitoring of the previous years grazing permit renewal environmental documentation for FY2002, FY2003, and FY2005 has been carried out. These reports represent three field seasons of evaluation work on the eligible and need data sites. The fieldwork conducted in 2002, 2003, and 2005 identified impacts to some of the cultural resources being evaluated. This information is covered in the following reports:

Collins, Gary D. and Ryan J. Nordstrom, Henry S. Keesling
2002 **The Second Addendum** to The Cultural and Need Data Sites Within Range Allotments for Range Permit Renewal EA's FY98, FY99, FY00. FY01, and FY02. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office.

Collins, Gary D. and Henry S. Keesling
2003 **The Third Addendum** to The Cultural and Need Data Sites Within Range Allotments for Range Permit Renewals EA's FY98, FY99. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office

Collins, Gary D. and Henry S. Keesling
2005 T**he Fourth Addendum** Range Permit Renewal FY04 and FY05 to The Cultural Resource Evaluation of Known Eligible and need Data Sites Within Range Allotments for Range Permit Renewal EA's FY00, FY01, FY02, FY03. BLM 10.27.05. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy of file at that office.

BLM has committed to a ten year phased evaluation being conducted for cultural resources that takes into account identified livestock concentration areas and the cultural resources that are either eligible and/or need data and to carrying out mitigation on cultural resources that require this action. The phased monitor and mitigation approach will mitigate identified adverse effects, significant impacts and data loss, (NHPA Section 106, 36CFR800.9; Archaeological Resource Protection Act 1979; BLM/Colorado SHPO Protocol 1998; NEPA/FLPMA requirements) to an acceptable level.

The GIS mapping and evaluation effort will establish areas that have potential conflicts between livestock and prehistoric cultural resources. The GIS maps will provide a computer generated visual departure point for the proposed cultural fieldwork. GIS maps using USGS and BLM best available data will be created showing springs, stream course features, riparian areas, and slopes that are greater than 30% slope within the allotment. Current understanding of prehistoric settlement and subsistence patterns will be applied to the GIS map review and used to establish prehistoric cultural areas. These potential livestock concentration areas will be evaluated in the field.

The phased identification and evaluation fieldwork will identify mitigation measures that will reduce livestock impacts (NHPA Section 106; 36CFR800.9; Archaeological Resource Protection Act 1979; BLM/Colorado SHPO Protocol 1998; NEPA/FLPMA requirements), to an acceptable level.

Other project-specific Class III surveys initiated by the BLM, industry, or ranching will identify previously unrecorded cultural resources within these allotments. Newly identified cultural resources will need to be mitigated in relationship to the proposed project(s). Further, these cultural resources will be incorporated into current and future grazing review efforts to be evaluated and monitored as necessary.

Mitigative Measures: Standard Stipulations for cultural resources are included in Standard Terms and Conditions, see Attachment 2.

Allotment Specific Stipulations:

1. Current archaeological understanding of settlement and subsistence patterns for prehistoric cultural resources will be applied to these maps. Identified livestock concentration areas will be field evaluated. Those areas with no livestock impacts but with potential for cultural resources will under go the same Class III survey discussed below. This survey will be conducted documenting archaeological resources which may be impacted if grazing practices change in the future. Identified concentration areas that exhibit livestock impacts will have the following cultural surveys:

2. GIS maps showing slope potential, 30% or greater, where rock art and rock shelters are predicted to occur, will be used to initially establish evaluation areas for Class III survey. These areas will be evaluated for livestock concentrations. Identified concentration areas will have the following cultural surveys performed:

Potential rock shelters, rock art areas will be evaluated to see if cultural materials are present. When cultural resources are identified the site will be recorded and appropriate mitigation will be developed.

3. Previously identified sites, table above, and new sites recorded and evaluated as eligible and/or need data during other project specific Class III survey will need to be evaluated as well. Initial recording of new sites and re-evaluation of the known sites will establish current condition of the resource and help in developing a monitoring plan for all sites. Some sites will have to be monitored more often than others. Sites that are impacted by grazing activities will need further monitoring, physical protection or other mitigative measures developed.

4. Site monitoring plans and mitigation plans will be developed and provided to the Colorado State Historic Preservation Officer in accordance with the Protocol (1998) and subsequent programmatic agreements regarding grazing permit renewals.

Conducting Class III survey(s), monitoring, and developing site specific mitigation measures will mitigate the adverse effects, data loss, and significant impacts (NHPA Section 106, 36CFR800.9; Archaeological Resource Protection Act 1979; BLM Colorado and Colorado SHPO Protocol 1998; and NEPA/FLPMA requirements) to an acceptable level.

The Colorado State Historic Preservation Officer (SHPO) agreed with the Bureau of Land Management, Colorado, (BLM) that the BLM could issue its Range Renewal Permits with the proposed Cultural Resource Management actions, monitoring known eligible and need data sites and conducting Class III and/or modified Class III surveys on selected areas of BLM lands within a ten year time frame (Cultural Matrix Team Meeting 26 January 1999, Colorado BLM State Office).

Name of specialist and date: Robyn Watkins Morris 6/27/07

ENVIRONMENTAL JUSTICE

Affected Environment: The allotment is devoid of year-round populations.

Environmental Consequences, all alternatives: No populations would be affected by physical or socioeconomic impacts from the project. The project would not directly affect the social, cultural, or economic well being and health of Native American, minority, or low-income populations.

Mitigative Measures: None

Name of specialist and date: Louise McMinn 6/27/07

FLOOD PLAINS

Affected Environment: Lands in this allotment are comprised of ridges and slopes. No floodplains are present.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 7/2/07

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive and noxious weeds are present in the allotment. Hoary

cress, houndstongue, Canada thistle, musk thistle, bull thistle, and other biennial thistles are present on, or in the vicinity, of the allotment. There is potential for leafy spurge and yellow and dalmatian toadflax to become established within the allotment. The BLM and Routt County are in cooperation to treat problem areas in the allotment.

Environmental Consequences, all alternatives: The adverse impact of increased invasive and/or noxious weed establishment is very similar under either of the alternatives. Vehicular access to public land for grazing operations, livestock and wildlife movement, and wind and water can cause weeds to spread into new areas. Surface disturbance due to livestock concentration and human activities associated with grazing operations can also increase weed presence. Land practices and land uses by the livestock operator and their weed control efforts would largely determine the identification and potential occurrence of weeds within the allotment.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 7/11/07

MIGRATORY BIRDS

Affected Environment: The Cow Creek Divide Allotment contains potential nesting, foraging, and/or roosting habitat for the following USFWS 2002 Birds of Conservation Concern: flammulated owl, Lewis's woodpecker, pygmy nuthatch, red-naped sapsucker, Virginia's warbler, Williamson's sapsucker, and Swainson's hawk. No nests have been recorded for any of these species on this allotment.

Environmental Consequences, all alternatives: Livestock grazing can alter vegetation structure, composition, and function. Effects on migratory birds are dependent on the species of interest and may be adverse or beneficial depending on grazing timing, frequency, and intensity. Virginia's warbler, a ground nester, could be negatively impacted by biomass removal and trampling, and take could occur. The remaining migratory birds listed above are tree nesters; thus, impacts on these species would be limited to habitat modification and individual displacement resulting from grazing operations. Grazing could occur during breeding season for most of these species. However, it is unlikely that the Proposed Action would influence migratory bird populations on a landscape level.

Mitigative Measures: None

Name of specialist and date: Charlie Sharp 6/28/07

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Utes Tribal Council, and the Colorado Commission of Indian Affairs on January 15, 2004. The letter discussed the Emerald Mountain Land Exchange where obtained the portion of land that is part of this grazing lease. Comments received from the Southern Ute Tribal Council did not foresee any impacts. No other comments were received (Letters on file at the Little Snake Field Office, Craig, Colorado).

Name of specialist and date: Robyn Watkins Morris 6/27/07

PRIME & UNIQUE FARMLANDS

Affected Environment: Not present.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 7/2/07

T&E SPECIES - SENSITIVE PLANTS

Affected Environment: There are no BLM sensitive plant species on the Cow Creek Divide Allotment.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 6/25/07

T&E SPECIES – ANIMALS

Affected Environment: The Cow Creek Divide Allotment is within the general winter range for the bald eagle. The bald eagle was delisted from its threatened status by the U. S. Fish and Wildlife Service (USFWS) on June 29, 2007, but it remains protected under other laws and continues to be considered a BLM sensitive species. There is no record of site-specific observation of bald eagles or bald eagle nests on the allotment. No bald eagle crucial habitat such as nesting, roosting, foraging, or concentration areas are present. Potential habitat for the federally threatened Canada lynx also occurs within this allotment.

Environmental Consequences, all alternatives: Bald eagle use of upland habitats is limited primarily to foraging during the winter for vehicle-killed animals along roadways. Individuals would only be in the allotment if they were opportunistically feeding or were en-route to other areas. Neither alternative would impede the bald eagle's ability to forage in this area.

Lynx habitat in this area is marginal and largely noncontiguous. However, individuals may utilize the area during dispersal or as a movement corridor. A biological assessment for the Emerald Mountain Land Exchange (May 2005) determined that the exchange and associated actions (including grazing lease transfers as a result of the exchange) would have a "may affect not likely to adversely affect" Canada lynx. The USFWS concurred with this determination on July 29, 2005.

Mitigative Measures: None

Name of specialist and date: Charlie Sharp 6/29/07

T&E SPECIES – PLANTS

Affected Environment: There are no federally listed threatened or endangered plant species on the Cow Creek Divide Allotment.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 6/25/07

WASTES, HAZARDOUS OR SOLID

Affected Environment: There is no solid or hazardous waste present on the allotment.

Environmental Consequences, all alternatives: Access to the grazing allotment for livestock management purposes could result in releases of motorized vehicle fluids such as oil and coolant. This type of release is unlikely and would be extremely limited in nature.

Mitigative Measures: None

Name of specialist and date: Hunter Seim 6/28/07

WATER QUALITY - GROUND

Affected Environment: The allotment may have some recharge zones for groundwater aquifers.

Environmental Consequences, all alternatives: Due to the limited number of livestock grazing, there would be no adverse impacts to ground water quality under either alternative. Both alternatives would be conducted in accordance with existing Colorado laws for water

quality. Specifically, all permit activities would comply with the applicable water quality regulations in The Colorado Water Quality Control Act, and they would be in conformance with the classifications and numeric standards for water quality established by the Colorado Water Quality Control Commission.

Mitigative Measures: None

Name of specialist and date: Marilyn D. Wegweiser 7/9/07

WATER QUALITY - SURFACE

Affected Environment: The Cow Creek Divide Allotment is comprised of a ridge and northwesterly to northerly facing slopes. Surface water drainage flows westerly and northwesterly to Cow Creek and flows northerly to a smaller unnamed drainage. Cow Creek is an intermittent tributary to the Yampa River and the unnamed drainage is an ephemeral to intermittent tributary to the Yampa River. The Yampa River and its tributaries along this segment of the Yampa River need to have water quality that supports Aquatic Life Cold 1, Recreation 1a, Water Supply and Agriculture.

Environmental Consequences, all alternatives: Water quality would not be impacted for the Yampa River and its tributaries regardless of the alternative selected. Livestock use on this allotment is expected to be a short duration period with trailing from one side of the allotment to the other twice in each season.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 7/11/07

WETLANDS/RIPARIAN ZONES

Affected Environment: No riparian systems are present within this allotment.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 7/2/07

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Rob Schmitzer 7/2/07

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Not present.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Rob Schmitzer 7/2/07

NON-CRITICAL ELEMENTS

SOILS

Affected Environment: Preliminary soil mapping and mapping unit descriptions of various soil types has been completed for Routt County, but these data are still in draft form and are subject to change when the soil survey is finalized. The Routt loam, warm, 25 to 65 % slopes and the Lintim loam, 12 to 25 % slopes occupy more than half of the upland soil area within the allotment. In descending order of occurrence, the following soils are also present: Cryoborolls-Cryorthents clays, fine, 6 to 25 % slopes; Foidel loam, 30 to 65 % slopes; and Routt loam, 25 to 65 % slopes. With one exception all of these soils have a high available water capacity and support mountain loam, brushy loam, and aspen woodland ecological sites. The Cryoborolls-Cryorthents clays, fine, 6 to 25 % slopes have a low to very low available water capacity due to depths of soil ranging from 4 to 20-inches. These soils occur in the northwestern portion of the allotment and support sagebrush-grass.

Environmental Consequences, all alternatives: Under either alternative, cattle would use the allotment as a trail/pass through pasture between private grazing lands to the east and west. There is no water on the allotment to hold livestock, so most grazing use would be brief as livestock are moved between private pastures in mid-summer and early fall. A much larger number of animals would be allowed to trail through the allotment within this brief period compared to the number of animals permitted between the middle of July through September.

Adverse impacts to upland soils would occur if soils are muddy or wet when cattle are present within the allotment. Physical damage to the soil surface and herbaceous plants could occur under these conditions which could lead to accelerated erosion and lower soil productivity. The Cryoborolls-Cryorthents clays, fine, 6 to 25 % slopes would be most affected by use under wet soil conditions. However, since livestock grazing would be mostly transient use between surrounding private pasture and there are no water sources to concentrate cattle, grazing use on the Cryoborolls-Cryorthents clay soils would be light and dispersed enough to avoid damage.

The other soils are much deeper with greater water holding capacity, support more plant biomass and would have better infiltration and percolation rates. These soil attributes would help to alleviate wet soil conditions over most of the allotment in the event that precipitation events are extended during the permitted period.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 7/10/07

UPLAND VEGETATION

Affected Environment: The plant communities on the Cow Creek Divide Allotment include sagebrush shrubland and oak shrubland. These communities are described below.

Sagebrush Shrublands. The allotment has two sagebrush shrubland types: silver sagebrush *(Artemisia cana)* and big sagebrush *(Artemisia tridentata)*.

Silver Sagebrush (Artemisia cana) Shrubland. The silver sagebrush shrublands generally occur along the major ephemeral drainages within the allotment. The density of silver sagebrush varies with grazing intensity, and this vegetation type supports a variety of graminoids and forbs. Some of the most common include Kentucky bluegrass, timothy, and smooth brome, which are agricultural in origin and are indicative of heavy livestock use. Common native forbs include goldenglow, yarrow, yampa, aspen fleabane, and beautiful cinquefoil. Rubber rabbitbrush, shrubby cinquefoil, and chokecherry are often present as well. Weeds such as Canada thistle, tarweed, and houndstongue are present within this community. Snowberry is a common co-dominant in this community.

Big Sagebrush (Artemesia tridentata) Shrubland. Big sagebrush shrublands also occur along the drainages or on higher south-facing ridges and are primarily composed of mountain big sagebrush. The big sagebrush shrublands generally occur in higher topographic positions above the silver sagebrush shrublands where soil moisture is reduced. Snowberry commonly occurs in this community, however green rabbitbrush and rubber rabbitbrush may also be present. Chokecherry, serviceberry and Gambel oak are occasional or occur in transitional areas.

Common forbs and graminoids include tapertip onion, nettleleaf giant hyssop, American vetch, Indian paintbrush, tailcup lupine, yampa, white sage, yarrow, harebell, Oregon grape, and letterman needlegrass. Western wheatgrass is prevalent in drainage swales. Some areas include agricultural species such as Kentucky bluegrass, crested wheatgrass, timothy, and smooth brome. Weeds include Canada thistle, tarweed, and houndstongue.

Oak *(Quercus gambelii)* Shrubland. Oak shrublands occur on most of the steep south-facing slopes of Emerald Mountain. They are dominated by Gambel oak which forms moderately dense to dense stands up to 10 to 15 feet high. The stands range from dense thickets with little understory to relatively mesic mixed-shrublands with a rich understory of shrubs, grasses, and

forbs. These clonal stands often have a patchy distribution and include species such as serviceberry, big sagebrush, snowberry, chokecherry, and Woods' rose.

Common graminoids in the understory may include blue wildrye, fringed brome, prairie junegrass, letterman needlegrass, and elk sedge. The forbs Oregon grape, horsemint, yampa, Eaton's thistle, tapertip onion, nettleleaf giant hyssop, Fendler meadow rue, yarrow, western sweet cicely, tailcup lupine, aspen daisy, and little sunflower are also common.

Environmental Consequences, all alternatives: Under either alternative, cattle would use the allotment as a trail/pass through pasture between private grazing lands to the east and west. There is no water on the allotment to "hold" livestock, so most grazing use would be brief as livestock are moved between private pastures in mid-summer and early fall. Domestic cattle would graze and trample forage plants, particularly grasses and forbs. Long term damage to this component of plant communities occurs when these impacts occur repeatedly on individual plants in the same season. The transient nature of livestock use on this allotment would ensure that cattle do not excessively graze forage plants.

Mitigative Measures: None

Name of specialist and date: Hunter Seim 6/28/07

WILDLIFE, AQUATIC

Affected Environment: No aquatic habitat occurs in this allotment.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Charlie Sharp 6/28/07

WILDLIFE, TERRESTRIAL

Affected Environment: The area provides habitat for a variety of species including mule deer, elk, small mammals, birds, and reptiles. Elk severe winter habitat and production areas occur within the allotment. Columbian sharp-tailed grouse nesting and lek habitat is present, with several known leks one to two miles west of the allotment. Turkey, black bear, and moose habitat also occurs here.

Environmental consequences, all alternatives: Livestock grazing can alter vegetation structure, composition, and function. Effects on wildlife are dependent on the species of interest and may be adverse or beneficial depending on grazing timing, frequency, and intensity. Livestock may compete for forage with wild ungulates, particularly elk. Overutilization or uneven grazing distribution may degrade elk breeding and calving habitat. Potential impacts for other species include habitat degradation, fragmentation and loss, individual displacement, and

reduced fitness. Such impacts are more significant during critical seasons, such as winter or reproduction. Given that use would not occur during critical winter or reproductive seasons, neither alternative would have measurable impacts on wildlife populations.

Mitigative Measures: None

Name of specialist and date: Charlie Sharp 6/28/07

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
Fluid Minerals	MDW 7/2/07		
Forest Management		JHS 6/28/07	
Hydrology/Ground		MDW 7/2/07	
Hydrology/Surface		OO 7/2/07	
Paleontology	MDW 7/2/07		
Range Management		JHS 6/28/07	
Realty Authorizations		LM 6/26/07	
Recreation/Travel Mgmt		RS 7/2/07	
Socio-Economics		LM 6/26/07	
Solid Minerals		JAM 7/2/2007	
Visual Resources		RS 7/2/07	
Wild Horse & Burro Mgmt	KM 7/3/07		

CUMULATIVE IMPACTS SUMMARY: Until 2007, the lands comprising the allotment were administered by the Colorado State Land Board and not open to the public. Under BLM management, the allotment is open to non-motorized recreation which includes hiking, mountain biking, snowshoeing, and skiing. Cumulative impacts to public lands within the Cow Creek Divide Allotment both related and unrelated to livestock grazing under the Proposed Action and No Action Alternative include recreational access for hunting and wildlife viewing and perimeter fencing. This fencing also impacts wildlife as it presents impediments to the movements of elk and deer.

STANDARDS

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The Proposed Action would not result in diminished animal production, diversity, or resilience. The Proposed Action would

meet this standard.

Current management has not resulted in diminished animal production, diversity, or resilience. This standard would continue to be met under the No Action Alternative.

Name of specialist and date: Charlie Sharp 6/28/07

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: The Proposed Action would not appreciably impact the stability or growth of special status species' populations. Therefore, the Proposed Action would meet this standard.

Current management has not had a measurable impact on the stability or growth of special status species' populations for this landscape. This standard would continue to be met under the No Action Alternative.

Name of specialist and date: Charlie Sharp 6/28/07

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: The plant communities on the Cow Creek Divide Allotment are meeting this standard. Species composition and diversity are sufficient to meet this standard. There are some localized areas that contain significant amounts of undesirable plant species. Although some of these species are not native and/or perennial, they do provide canopy and litter cover that aid in the prevention of soil erosion. The transient use by cattle that is proposed would maintain vigor, diversity, and reproductive capability of plants. Even with the proposed change in the grazing window, the allotment would be used the same under either alternative, therefore both alternatives would meet this standard on the Cow Creek Divide Allotment.

Name of specialist and date: Hunter Seim 6/28/07

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant) STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species on the Cow Creek Divide Allotment. This standard does not apply.

Name of specialist and date: Hunter Seim 6/25/07

RIPARIAN SYSTEMS STANDARD: No riparian systems occur in the Cow Creek Divide Allotment. This standard does not apply.

Name of specialist and date: Ole Olsen 7/2/07

WATER QUALITY STANDARD: This standard would be met with implementation of either the Proposed Action or No Action alternatives. Runoff from snowmelt and summer storms drains from the Cow Creek Divide Allotment into stream segments that are presently supporting classified uses. No stream segments are listed as impaired.

Name of specialist and date: Ole Olsen 7/10/07

UPLAND SOILS STANDARD: The upland soil standard for healthy rangelands would be met with the implementation of either the Proposed Action or No Action Alternatives. Soils are well covered by mountain shrub, aspen and sagebrush communities with a diverse understory of forbs and grasses. The plant communities provide good cover, diversity, density, and composition of plant species to provide for a mixture of root types for holding upland soils in place. The dominant soil types within this allotment are characterized as having a 1-inch duff layer providing additional cover and good nutrient cycling capability.

Name of specialist and date: Ole Olsen 7/10/07

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office, Jim and Jo Stanko.

ATTACHMENTS: Attachment 1, Allotment Map
Attachment 2, Standard and Common Terms and Conditions

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

Finding of No Significant Impact

The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. With the implementation of the attached mitigation measures there is a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.

2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.

3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern.

4. There are no highly controversial effects on the environment.

5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.

6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State or local natural resource related plans, policies or programs.

7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.

8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED:

ATTACHMENT #2
CO-100-2007-085 EA
TERMS AND CONDITIONS

Standard Terms and Conditions

1) Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.

2) They are subject to cancellation, in whole or in part, at any time because of:
   a. Noncompliance by the permittee/lessee with rules and regulations;
   b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based;
   c. A transfer of grazing preference by the permittee/lessee to another party;
   d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described;
   e. Repeated willful unauthorized grazing use;
   f. Loss of qualifications to hold a permit or lease.

3) They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits and leases when completed.

4) Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.

5) The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.

6) The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.

7) Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.

8) Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.

9) Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.

10) Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of $25 or 10 percent of the amount owed but not more than $250) will be assessed.

11) No member of, or Delegate to, Congress or Resident Commissioner, after his/her election of appointment, or either before or after he/she has qualified, and during his/her continuance in office, and no officer, agent, or employee of the Department of Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App. 1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statute (41 U.S.C. 22), 18 U.S.C. Sections 431-433, and 43 CFR Part 7, enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

Common Terms and Conditions

A) Grazing use will not be authorized in excess of the amount of specified grazing use (AUM number) for each allotment. Numbers of livestock annually authorized in the allotment(s) may be more or less than the number listed on the permit/lease within the grazing use periods as long as the amount of specified grazing use is not exceeded.

B) Unless there is a specific term and condition addressing utilization, the intensity of grazing use will insure that no more than 50% of the key grass species and 40% of the key browse species current years growth, by weight, is utilized at the end of the grazing season for winter allotments and the end of the growing season for allotments used during the growing season. Application of this term needs to recognize recurring livestock management that includes opportunity for regrowth, opportunity for spring growth prior to grazing, or growing season deferment.

C) Failure to maintain range improvements to BLM standards in accordance with signed cooperative agreements and/or range improvement permits may result in the suspension of the annual grazing authorization, cancellation of the cooperative agreement or range improvement permit, and/or the eventual cancellation of this permit/lease.

D) Storing or feeding supplemental forage on public lands other than salt or minerals must have prior approval. Forage to be fed or stored on public lands must be certified noxious weed-free. Salt and/or other mineral supplements shall be placed at least one-quarter mile from water sources or in such a manner as to promote even livestock distribution in the allotment or pasture.

E) 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.

The operator is responsible for informing all persons who are associated with the allotment operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any allotment activities or grazing activities, the operator is to immediately stop activities in the immediate vicinity and immediately contact the authorized officer. Within five working days the authorized officer will inform the operator as to:

-whether the materials appear eligible for the National Register of Historic Places;
-the mitigation measures the operator will likely have to undertake before the identified area can be used for grazing activities again.

If paleontological materials (fossils) are uncovered during allotment activities, the operator is to immediately stop activities that might further disturb such materials and contact the authorized officer. The operator and the authorized officer will consult and determine the best options for avoiding or mitigating paleontological site damage.

F) No hazardous materials/hazardous or solid waste/trash shall be disposed of on public lands. If a release does occur, it shall immediately be reported to this office at (970) 826-5000.

G) The permittee/lessee shall provide reasonable administrative access across private and leased lands to the BLM and its agents for the orderly management and protection of public lands.

H) Application of a chemical or release of pathogens or insects on public lands must be approved by the authorized officer.

I) The terms and conditions of this lease may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.