

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

ENVIRONMENTAL ASSESSMENT RECORD

EA NUMBER: CO-100-2006-027 EA

CASE FILE/ALLOTMENT NUMBERS: 0501972/04191

PROJECT NAME: Transfer and renewal of the ten-year grazing lease for the **Meadowbrook Creek Allotment #04191**, expiring May 31, 2006.

LEGAL DESCRIPTION:

See allotment map, Attachment 1

Meadowbrook Creek	T. 2N, R. 85W, Sec. 4, Lots 1, 2, S½NE¼
Allotment #04191	T. 3N, R. 85W, Sec. 33, Lot 12
	203 BLM Acres
	<u>904</u> Private Acres
	1107 Total Acres

APPLICANT: Cloverleaf Ranch #0501972

PLAN CONFORMANCE REVIEW: The proposed action is subject to the following plan:

Name of Plan: Little Snake Resource Area, Resource Management Plan and Record of Decision (RMP/ROD)

Date Approved: April 26, 1989

Other Documents:

Federal Land Policy and Management Act of 1976, as amended (FLPMA) (43 USC 1752)

Rangeland Reform Final Environmental Impact Statement. December, 1994.

Standards for Public Land Health and Guidelines for Livestock Grazing in Colorado. February 12, 1997.

Results: The proposed action is consistent with the Little Snake Resource Management Plan, 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 on this allotment is located in the Little Snake River Management Unit 4 (MU4). The proposed action is compatible with the management objectives for MU4, which are to provide for the development of oil, gas, and geothermal resources, because it will not interfere with the development of oil and gas resources. All of MU4 is open to livestock grazing.

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

NEED FOR PROPOSED ACTION: BLM lease #0501236 which authorizes livestock grazing on the Meadowbrook Creek Allotment #04191, licensed to Francis Moore, expired on 5/31/06. It was renewed for one year under Section 325, P.L. 108-108 with the same terms and conditions as the existing lease, expiring 5/31/06. Pursuant to Section 325, P.L. 108-108, grazing permits and leases expiring during fiscal year 2005 were renewed under the existing terms and conditions provided the BLM continue processing the renewal in compliance with all applicable laws and regulations. In 2006 Cloverleaf Ranch applied for a transfer of this grazing lease, with a change in type of livestock from sheep to cattle. It was not renewed after 2006 because of the request to run cattle instead of sheep

This lease is subject to renewal at the discretion of the Secretary of the Interior for a period of up to ten years. The Bureau of Land Management has the authority to renew livestock grazing permits and leases consistent with the provisions of the *Taylor Grazing Act*, *Public Rangelands Improvement Act*, *Federal Lands Policy and Management Act*, and the Little Snake Field Office's *Resource Management Plan/Environmental Impact Statement (RMP/EIS)*. The RMP/EIS has been amended by the *Standards for Public Land Health in the State of Colorado*.

This Environmental Assessment (EA) will analyze the impacts of livestock grazing on public lands managed by BLM and the change in type of livestock from sheep to cattle. 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) must hold a grazing permit. The grazing permittee 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 renewed.

The transfer action is Categorically Excluded from NEPA and will not be subject to analysis.

PUBLIC SCOPING: BLM Little Snake Field Office sent out a Notice of Public Scoping on September 22, 2003 to determine the level of public interest, concern, and resource conditions on the grazing allotments that were up for renewal in FY 2005. A Notice of Public Scoping was posted on the Internet, at the Colorado BLM Home Page, asking for public input on permit renewals. The issuance of a grazing permit for this allotment has been carefully analyzed within

the scope of the specific action being taken, resource issues or concerns, and public input received.

BACKGROUND: The Meadowbrook Creek Allotment #04191 is located approximately two miles northwest of Yampa, Colorado. The allotment is located west of Routt County Road 21 where it intersects Colorado Highway 131. Elevation ranges from 7,800 feet to over 8,240 feet. BLM lands within the allotment are located on top of a steep hill and are difficult to access by livestock due to the high degree of slope. Livestock water is limited to sections of private land within the allotment.

The existing permit is for 66 sheep from 5/1 to 9/30. There are a total of 66 AUMs associated with the current permit. The applicant has requested to change the type of livestock to cattle. Season of use will remain the same.

MONITORING DATA:

No monitoring data is available for this allotment.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

PROPOSED ACTION:

The Proposed Action is to issue the lease to Clover Leaf Ranch for a term of 10 years, expiring February 28, 2017. This new terms would include a change in type of livestock from sheep to cattle. Season of use, AUMs, and all other terms and conditions would remain the same. The lease would be changed:

From:

<u>Allotment Name and #</u>	<u>Livestock # and kind</u>	<u>Grazing Period</u>		<u>%PL</u>	<u>AUMs</u>
		<u>Begin</u>	<u>End</u>		
Meadowbrook Cr. #04191	66 Sheep	05/01	09/30	100	66

To:

<u>Allotment Name and #</u>	<u>Livestock # and kind</u>	<u>Grazing Period</u>		<u>%PL</u>	<u>AUMs</u>
		<u>Begin</u>	<u>End</u>		
Meadowbrook Cr. #04191	13 Cattle	05/01	09/30	100	65
				Not Scheduled	<u>1</u>
					66

No special terms and conditions would apply.

This lease would be subject to the Standard and Common Terms and Conditions shown in Attachment 2.

NO ACTION ALTERNATIVE:

This alternative would renew the existing lease under the same terms and conditions as exist currently. The class of livestock would continue to be sheep.

ALTERNATIVES CONSIDERED BUT ELIMINATED:

No Grazing Alternative:

No livestock grazing would take place under this alternative. This alternative was eliminated from detailed study because it was not a realistic, implementable alternative, nor did it meet the requirements of the Federal Land Policy and Management Act of 1976. When the RMP was approved, it was determined that livestock grazing was an appropriate use of this land. Eliminating livestock grazing is not analyzed because no new issues or concerns have been identified that would require this action.

AFFECTED ENVIRONMENT/ ENVIRONMENTAL IMPACTS/MITIGATION MEASURES/RESIDUAL IMPACTS

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: Air quality will not be affected by either of the alternatives.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 3/30/06

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 5/10/07

CULTURAL RESOURCES

Affected Environment: The final E.I.S. for Rangeland Reform '94 notice published in the Federal Register, December 30, 1994 and guidance from the BLM Washington and BLM Colorado State Office's established requirements for permit renewal analyses.

Data developed here, as well as in the allotment specific analysis, was 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 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. Other data sets may be used for the GIS maps developed from the Little Snake Field Office Geographic Information System (GIS) as that data is developed in future studies.

The GIS maps will be developed using USGS and BLM data that show the springs, creeks and rivers, intermittent drainage, riparian areas, and slopes greater than 30 percent. The BLM data that reflects water features potentially present in the project areas is incomplete at this time. This data represents the “best available data” that the BLM office currently has developed at this time. These maps, as well as the cultural programs current understanding of prehistoric settlement and subsistence patterns, as reflected in the archaeological record, will be used to guide initial survey efforts to locate past human activity areas in each allotment. These areas will be evaluated for potential livestock concentration impacts. The effort to identify and evaluate cultural resources in association with livestock concentration areas will take place during upcoming field seasons.

The table below is based on the allotment specific analysis developed for the allotment in this environmental assessment. Copies of the allotment specific analysis are on file at the Little Snake Field Office. The table shows cultural resources, eligible and need data, and those that are anticipated to be in each allotment. Fieldwork will be carried out in FY06 or in subsequent years.

Allotment Number	Acres Surveyed at a Class III Level ^{1 2}	Acres <u>NOT</u> Surveyed at a Class III Level	Percent -%-Of Allotment Inventoried at a Class III Level	Eligible or Need Data Sites – Known in Allotment (Site Numbers)	Estimated Sites for the Allotment** (Total Number)	Estimated Eligible or Need Data Sites in the Allotment (Number)
04191	none ¹	203	None	None	5.39	1.61

(Note: *Acres are derived from GIS allotment maps. 1. BLM only acres or 2. BLM and other acres in the allotment. See allotment specific analysis form. **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.)

Environmental Consequences: Monitoring of the previous years range permit renewal environmental documents, FY98, FY99, FY2000, FY01, FY02, FY03, and FY05 has been carried out for some of the known eligible and need data sites identified in the cultural records review. These reports represent three field seasons of evaluation work on the eligible and need data sites. The fieldwork conducted during 2000, 2001, 2002, 2003, and 2005 identified impacts to some of the cultural resources being evaluated. This information is covered in the following reports:

Keesling, Henry S. and Gary D. Collins, Patrick C. Walker
2000 Cultural Resource Evaluation of Known Eligible and Need Data Sites within Range Allotments for Range Permit Renewal EA's FY98 and FY99. Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office.

Collins, Gary D., and Patrick C. Walker, Sam R. Johnson, Henry S. Keesling
2001 **Addendum to Cultural Resource Evaluation of Known Eligible and Need Data Sites within Range Allotments for Range Permit Renewal EAs FY98 and FY99, Range Permit Renewal EA's FY2000 and FY2001.** Bureau of Land Management, Little Snake Field Office, Craig, Colorado. Copy on file at that office.

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 **The 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 RA'2 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 for known eligible and need data cultural resources.

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.

Livestock impacts may cause cumulative effects, some of which will be significant, and will cause long-term, irreversible, potentially irretrievable adverse impacts and data loss. However, the phased identification and evaluation fieldwork will identify mitigation measures that will reduce these 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. These cultural resources will be incorporated into current and/or future range permit renewal Section 106 review efforts.

Mitigative Measures: Standard Stipulations for cultural resources are included in Standard Terms and Conditions for the grazing permit (Attachment 2).

Allotment Specific Stipulations for this EA:

1. GIS maps based upon stream course features and springs from the 7.5 minute USGS maps and BLM best available riparian/spring data in this office will be used to initially establish evaluation areas for livestock concentrations. 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:

Springs, riparian areas, streams or creeks, and intermittent drainage will have a Class III survey in the area of concentration that includes an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.

Springs will have a Class III survey in the area of concentration and include an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.

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 and

monitored too. 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, other 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 in a ten year time frame (Cultural Matrix Team Meeting 26 January 1999, Colorado BLM State Office).

The Little Snake Field Office will initiate the monitoring of known eligible and need data sites the first field season following the issuing of the permit if possible. This survey will be based upon an accepted, BLM and SHPO, research design that will establish criteria for evaluation of the sites for livestock impacts and any needed mitigation and future monitoring needs.

Name of Specialist and date: Henry S. Keesling Date: 1/4/06

ENVIRONMENTAL JUSTICE

Affected Environment: The project would not directly affect the social, cultural, or economic well being and health of Native American, minority or low-income populations. The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts from the project.

Environmental Consequences: None

Mitigative Measures: None

Name of Specialist and Date: Louise McMinn 3/31/06

FLOOD PLAINS

Affected Environment: No floodplains are present on public lands.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 3/30/06

INVASIVE, NONNATIVE SPECIES

Affected Environment: Houndstongue, cheat grass and yellow allysum are known to occur in this region. Whitetop, black henbane, Canada thistle, and other biennial thistles are known to occur in this area as well. There is the potential for noxious weeds, such as Dalmatian toadflax, knapweeds, and others, to exist and spread in these areas.

Environmental Consequences: Vehicular access to public land for grazing operations, livestock and wildlife movement, as well as wind and water can cause invasive species to spread into new areas. Surface disturbance activities associated with livestock concentration can increase weed presence. However, the majority of BLM lands are located on a steep hill and would not be expected to attract heavy livestock concentration. Land practices and land uses by the livestock operator and their weed control efforts will largely determine the identification and potential occurrence of weeds within the allotment. The change in class of livestock should result in an increased use of grass species. Early growing season use may help to decrease the abundance of any cheat grass within the allotment. The use of best management practices and mitigation of livestock disturbance can facilitate control of invasive species and reduce the potential of long term infestation of annual and noxious weed species. All principles of Integrated Pest Management would be employed to control noxious weeds on public lands.

Mitigative Measures: None

Name of specialist and date: Curtis Bryan 3/10/06

MIGRATORY BIRDS

Affected Environment: Golden eagles are known to nest on nearby lands outside of this grazing allotment. Public lands within this allotment do contain potential nesting habitat for golden eagles although there are no known nests on these lands at this time. Public lands within the Meadowbrook Creek Allotment may be capable of supporting sage sparrow but would not be their optimum habitat.

Environmental Consequences: The proposed renewal of the ten year grazing lease for this allotment, with a change of livestock class from sheep to cattle, should not have an impact on either golden eagle or sage sparrow. The allotment currently provides suitable habitat for these species and is not likely to change under the No Action Alternative. There is little potential for take of either species to occur.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 3/28/06

NATIVE AMERICAN RELIGIOUS CONCERNS

Native American 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 17 November 2004. The letter discussed the range permits that the BLM would be working on in FY05/FY06. Comments received from the Tribal Council's 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: Henry S. Keesling Date: 1/4/06

PRIME & UNIQUE FARMLANDS

Affected Environment: No prime or unique farmlands are present within the allotment.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 3/30/06

T&E SPECIES - SENSITIVE PLANTS

Affected Environment: There are no BLM sensitive plant species within the Meadowbrook Creek Allotment #04191.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 4/4/06

THREATENED AND ENDANGERED ANIMAL SPECIES

Affected Environment: There are no threatened or endangered species or habitat for such species in or near the proposed project area. The public lands within this allotment do contain suitable nesting habitat for greater sage-grouse and Columbian sharp-tailed grouse, both are BLM special status species. The nearest lek for greater sage-grouse is located 1 ½ miles from public lands within this allotment. The nearest Columbian sharp-tailed grouse lek is located 1 ¾ miles from public lands within this allotment. Both lek sites are located outside of this allotment's boundaries.

Environmental Consequences: Lek sites for both greater sage-grouse and Columbian sharp-tailed grouse are located outside of the allotment and will not be impacted by the proposed action. A site visit was conducted in September of 2005 by a BLM wildlife biologist. The determination was made that this allotment was meeting the standard for special status species. Habitat for both species was in good condition, and was capable of supporting healthy productive populations for both species. This is not expected to change under the No Action Alternative. Season of use, AUMs and all terms and conditions associated with the current grazing lease will remain the same in either alternative. The proposed action does contain a change in class of livestock from sheep to cattle. The change of livestock class could have an impact on both species. It is expected that a change from sheep use to cattle would have a positive impact on shrub species used by both species for nesting. The proposed action does not contain any new range improvements and should not impact these species.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 3/28/06

T&E SPECIES – PLANTS

Affected Environment: There are no federally listed threatened or endangered plant species within the Meadow Brook Creek Allotment #04191.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 4/4/06

WASTES, HAZARDOUS OR SOLID

Affected Environment: None

Environmental Consequences: Access to the allotments for livestock management could result in releases of motor vehicle fluids, such as oil and coolant. This type of release is unlikely and would be extremely limited in nature. Hazardous or Solid waste will not be impacted by changing class of livestock.

Mitigative Measures: None

Name of specialist and date: D. Johnson 4/4/06

WATER QUALITY - GROUND

Affected Environment: The area affected by the proposed action may have some recharge zones for groundwater aquifers. The ground water quality in the areas should mostly be fresh in both the Browns Park and the Frontier Sandstone, but not the Mowry Shale.

Environmental Consequences: Neither the No Action nor changing the allotment from sheep to cows will have any adverse impacts to ground water quality within the proposed action area. Both the Proposed Action and No Action Alternative will be conducted in accordance with existing Colorado laws for water quality. Specifically, all permit activities must comply with the applicable water quality regulations in The Colorado Water Quality Control Act, and they will 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: Fred Conrath 04/06/06

WATER QUALITY - SURFACE

Affected Environment: The public land tract within this allotment encompasses a small mountain with moderate to steep hill slopes. The western and northern slopes will drain towards Meadowbrook Creek (intermittent) and the southern and eastern slopes will drain towards Watson Creek (perennial). Meadowbrook Creek and Watson Creek are tributary to the Yampa River. The water quality of this Yampa River segment and its tributaries fully supports the classified uses designated for these streams.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 3/30/06

WETLANDS/RIPARIAN ZONES

Affected Environment: None

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Curtis Bryan 3/22/06

WILDERNESS, WSA, AND WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 3/25/06

NON-CRITICAL ELEMENTS

GROUND WATER HYDROLOGY

Affected Environment: The allotment is underlain mostly by the Tertiary Browns Park with some possible Cretaceous Frontier Sandstone or Mowry Shale. The Browns Park Formation consists of fluvial sandstone, claystone, conglomerate, loosely consolidated eolian sandstone, and volcanic ash. This formation is likely to contain fresh water. Depending on whether the Frontier or Mowry is present as the subcrop, fresh water aquifers may or may not exist on this part of the allotment

Environmental Consequences: Neither the Propose Action nor the No Action Alternative will have any adverse impacts to potential ground water aquifers or recharge zones (hydrology) within the proposed action area.

Mitigative Measures: None

Name of specialist and date: Fred Conrath 04/06/06

PALEONTOLOGY

Affected Environment: The geologic formations at the surface for these two sections are the Cretaceous Age Frontier Sandstone (Kfm), Mancos Shale (Km) and the Tertiary Age Browns Park Formation (Tbp). The Km and Kfm formations are classified as Class II formations and the Tbp is classified as Ia for the potential for occurrence of scientifically significant fossils. Scientifically significant fossils are occasionally found within these formations (Armstrong & Wolney, 1989). The potential for discovery of significant fossils on this location is considered to be moderate to high. The higher classified Ia Tbp formation classification will be applied to this proposed action.

Environmental Consequences: Scientifically significant fossils are found abundantly within the Tbp formation (Armstrong & Wolney, 1989). The potential for discovery of significant fossils within this formation is considered to be high; however, potential for discovery of fossils through a surface survey on this location is considered low because of the specific facies of the Browns Park Formation. Potential for buried fossils is considered moderate to low. If any such fossils are located here, construction activities could damage the fossils and the information that could have been gained from them would be lost. The significance of this impact would depend upon the significance of the fossil. The proposed action could also constitute a beneficial impact to Paleontological resources by increasing the chances for discovery of scientifically significant fossils.

Mitigative Measures: None

References

Armstrong, Harley J. and Wolney, David G., 1989, Paleontological Resources of Northwest Colorado: A Regional Analysis, Museum of Western Colorado, Grand Junction, CO, prepared for Bur. Land Management, Vol. I of V.

Miller, A.E., 1977, Geology of Moffat County, Colorado, Colo. Geol. Surv. Map Series 3, 1:126,720.

Name of specialist and date: Robert Ernst 4/10/06

SOILS

Affected Environment: The soil resource on the public lands occupy moderate to steep slopes and are derived from geologic strata from the Browns Park Formation. Soils are moderately covered by mountain shrub and sagebrush plant communities with a diverse understory of forbs and grasses. Soils were determined to be stable based on the soil surface characteristics observed on the allotment. Little to no visual evidence of soil or litter movement caused by rain or surface water flows was apparent, but slight plant pedestalling was observed in flow patterns; no rills or gullies were present. The pedestalling that was observed was appropriate for the slope and a characteristic of the site. The plant communities provide adequate cover over the soils, as well as, good plant diversity to provide a mixture of root types for holding upland soils in-place.

Environmental Consequences, Proposed Action: The proposed change in class of livestock from sheep to cattle will have little effect on the upland soils on public lands. Water sources on the private lands and the moderate to steep slopes will limit the grazing that will occur on public lands, especially latter in the grazing period.

Environmental Consequences, No Action: Under the No Action Alternative sheep would likely be herded onto the steeper slopes of the public lands. It is unlikely that heavy grazing and harmful use of the plant community would occur with herded sheep. Changes to plant community cover and composition are not anticipated and the soil resource would remain stable.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 3/31/06

VEGETATION

Affected Environment: Dominant plant communities within the allotment include mixed mountain shrub grass communities on ridge tops and steep slopes. Species include Wyoming big sagebrush, antelope bitterbrush, green rabbitbrush, mountain mahogany, serviceberry, oakbrush, arrowleaf balsamroot, Oregon grape, pussytoes, hoods phlox, buckwheat, Sandberg bluegrass, slender wheatgrass, bluebunch wheatgrass, Indian ricegrass, and prairie Junegrass. This allotment is currently classified as a C category allotment.

Environmental Consequences, Proposed Action: The new grazing lease will allow season-long grazing to continue on this allotment. The conversion of sheep to cattle will result in an increased utilization of the grass component of the plant community. Over the long-term, this can result in an increase in the shrub component of the plant community, but the light use that is expected as a result of the steep slopes and lack of water would result in negligible increases in shrubs. Better distribution to BLM lands may be facilitated with mineral supplements; however, the impacts would remain minimal. This change in class of livestock from sheep to cattle would not adversely impact the plant community.

Environmental Consequences, No Action: By allowing the continuation of sheep use on this allotment, no negative impacts to the plant communities are expected. Sheep typically favor shrubs and forbs over grasses throughout much of the grazing season, but grasses are utilized as well. Sheep are more likely to utilize the steep slopes where BLM lands are located.

Mitigative Measures: None

Name of specialist and date: Curtis Bryan 3/10/06

AQUATIC WILDLIFE

Affected Environment: There is no aquatic wildlife habitat on public lands within this allotment.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 3/28/06

TERRESTRIAL WILDLIFE

Affected Environment: The Meadowbrook Creek Allotment provides year round habitat for mule deer and elk and pronghorn antelope including severe winter range for mule deer. A variety of small mammal species may be found on public lands within this allotment. A site visit was conducted in September of 2005 by a BLM wildlife biologist. The determination was made that this allotment was meeting the standard for native animal communities. Wildlife habitats were determined to have an appropriate seral stage, good structure with adequate patch size.

Environmental Consequences: The proposed action to renew the ten year grazing lease for this allotment is not likely to have a negative impact on wildlife species using public lands within this allotment. The proposed change of livestock class from sheep to cattle may have a positive impact on mule deer winter habitat, particularly severe winter range habitat. Season of use, AUMs and all terms and conditions associated with the current grazing lease will remain the same and should not have an impact to wildlife habitat. There is no anticipated impact from the No Action Alternative as well.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 3/28/06

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		FWC 04/06/06	
Forest Management	CJB 3/10/06		
Hydrology/Ground			FWC 04/06/06
Hydrology/Surface		OO 3/31/06	
Paleontology			RE 4/10/06
Range Management		CJB 3/10/06	
Realty Authorizations		LM 03/31/06	
Recreation/Travel Mgmt		RS 04/03/06	
Socio-Economics		LM 03/31/06	
Solid Minerals		RE 4/10/06	
Visual Resources		JM 4/3/06	
Wild Horse & Burro Mgmt	CJB 3/10/06		

CUMULATIVE IMPACTS SUMMARY: This allotment and areas surrounding have historically been grazed by sheep. Numerous maintained and unmaintained roads exist throughout the area, including on the allotment. Wildlife populations in the area are high, especially for deer and elk that compete with livestock for available forage throughout the area. The primary impacts from all of these activities are most immediately seen in the presence of roads, cultivated land on private lands, and weed presence. The Proposed Action to continue grazing on this allotment and change class of livestock from sheep to cattle is compatible with other uses, both historic and present, and would not add any new or detrimental impacts to those that are already present.

STANDARDS

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The Meadowbrook Creek Allotment currently provides healthy productive wildlife habitat which had an appropriate seral stage, good structure with adequate patch size. The proposed change in livestock class from sheep to cattle is not likely to have any major impacts to these habitats but may result in a slight improvement for mule deer severe winter range habitat by reducing use of important shrub species used by mule deer during the winter. This standard is currently being met and will continue to be met in the future under the Proposed Action.

The No Action Alternative would also meet this standard, as this standard is currently being met under permitted sheep grazing.

Name of specialist and date: Timothy Novotny 3/28/06

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal)

STANDARD: There are no threatened or endangered species or habitat for such species in or near this allotment. The Meadowbrook Creek Allotment does contain nesting habitat for greater sage-grouse and Columbian sharp-tailed grouse. Public lands within this allotment were determined to be in good condition and capable of supporting healthy productive populations for both species. This standard is currently being met and will continue to be met in the future.

Name of specialist and date: Timothy Novotny 3/28/06

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: Utilization of this allotment by cattle will increase the use of the grass component within the existing herbaceous community. As a result of this increased use there is the potential for an increase in the shrub component of this community over time. However, due to the slope, it is unlikely much cattle use will occur on the public lands. It is expected that cattle use of this allotment would maintain species diversity. The Proposed Action would meet this standard.

The No Action Alternative would also meet this standard, as this standard is currently being met under permitted sheep grazing.

Name of specialist and date: Curtis Bryan 3/22/06

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant)

STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species within the Meadowbrook Creek Allotment #04191. This standard does not apply.

Name of specialist and date: Hunter Seim 4/4/06

RIPARIAN SYSTEMS STANDARD: There are no wetlands or riparian systems within this allotment, therefore this standard does not apply.

Name of specialist and date: Curtis Bryan 3/22/06

WATER QUALITY STANDARD: The water quality standard for healthy rangelands will be met with implementation of either the Proposed Action or No Action Alternatives. Runoff from snowmelt and summer storms will drain from the Meadowbrook Creek Allotment into stream segments that are presently supporting classified uses. No stream segments or tributaries are currently listed as having impaired water quality.

Name of specialist and date: Ole Olsen 3/31/06

UPLAND SOILS STANDARD: The upland soil standard for healthy rangelands will be met with implementation of either the Proposed Action or No Action Alternatives. Cattle use on public lands would be light, and little to no effect to the upland soil resource would occur. Continued sheep use on the allotment would likely not affect the present plant community and the present condition and stability of the soil resource.

Name of specialist and date: Ole Olsen 3/31/06

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

MITIGATIVE MEASURES:

BLM Commitments:

1. GIS maps based upon stream course features and springs from the 7.5 minute USGS maps and BLM best available riparian/spring data in this office will be used to initially establish evaluation areas for livestock concentrations. 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:

Springs, riparian areas, streams or creeks, and intermittent drainage will have a Class III survey in the area of concentration that includes an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.

Springs will have a Class III survey in the area of concentration and include an additional 50 feet around the impacted area. Identified cultural resources will be recorded to include the total site area and mitigation developed.

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 and monitored too. 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, other 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 in a ten year time frame (Cultural Matrix Team Meeting 26 January 1999, Colorado BLM State Office).

The Little Snake Field Office will initiate the monitoring of known eligible and need data sites the first field season following the issuing of the permit if possible. This survey will be based upon an accepted, BLM and SHPO, research design that will establish criteria for evaluation of the sites for livestock impacts and any needed mitigation and future monitoring needs.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

ATTACHMENTS:

Attachment 1: Allotment Maps

Attachment 2: Standard and Common Terms and Conditions

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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

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

- 1) Grazing use will not be authorized in excess of the amount of specified use 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.
- 2) Unless otherwise specified, 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 these terms needs to recognize recurring livestock management that includes opportunity for regrowth, opportunity for spring growth prior to grazing, or growing season deferment.
- 3) 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.
- 4) 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.
- 5) 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.

- 6) 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.
- 7) 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.
- 8) Application of a chemical or release of pathogens or insects on public lands must be approved by the authorized officer.
- 9) The terms and conditions of this permit/lease may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.