

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-100-2005-063 EA

**PERMIT/LEASE NUMBER:** 0500117 / 04222, 04429; 0501069 / 04209

**PROJECT NAME:** Renewal of the grazing permit for the Grounds (#04222), East Canyon (#04429) and Suttles Basin Allotments (#04209).

**LEGAL DESCRIPTION:**

See allotment map, Attachment #1

Grounds Allotment #04222	T7N, R97W, parts of sections 19-23, 26-33 T6N, R97W, parts of sections 5 & 6 T6N, R98W, parts of sections 1, 2, 11-13 7566 acres public <u>451 acres private</u> 8017 total acres
East Canyon #04429	T6N, R97W, parts of sections 7, 8, 17-20, 30, T6N, R98W, parts of sections 13, 24 2899 acres public <u>330 acres private</u> 3229 total acres
Suttles Basin #04209	T7N, R96W, parts of sections 6, 7, 18 T7N, R97W, parts of sections 1-3, 10-15, 23-25 T8N, R96W, parts of sections 30, 31 T8N, R97W, parts of sections 25, 35 5099 acres public 1927 acres private <u>1160 acres State Land Board</u> 8186 total acres

**APPLICANT:** Hugh S. Turner

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

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

Date Approved: April 26, 1989

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 is located predominantly within Management Unit 3 (Little Snake River). The proposed action is compatible with the management objectives for this unit, which are to improve soil and watershed values, increase forage production and enhance livestock grazing.

A small portion of the proposed action is located within Management Unit 5 (Douglas Mountain). The proposed action is compatible with the management objective for this unit, which is to manage the forest and woodland resources to produce a variety of forest and woodland products on a sustained-yield basis.

A small portion of the proposed action is located within Management Unit 10A (Cross Mountain Wilderness Study Area). The proposed action is compatible with the management objective for this unit, which is to manage for its outstanding wilderness characteristics.

A small portion of the proposed action is located within Management Unit 13D (Cross Mountain Canyon ACEC). The proposed action is compatible with the management objectives for this unit, which are to enhance or protect Colorado BLM sensitive plant species, threatened and endangered species and scenic quality.

A small portion of the proposed action is located within Management Unit 15 (Cross Mountain Foothills). The proposed action is compatible with the management objectives for this unit, which are to maintain and improve the quality of the habitat for bighorn sheep, elk and mule deer.

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

**NEED FOR PROPOSED ACTION:** BLM permit #0500117, which authorizes livestock grazing on the Grounds #04222 and East Canyon #04429 Allotments, licensed to Hugh Turner, expired on 02/28/2004. It was renewed in 2004 for two years and again each year in 2006 and 2007, under Section 325 of Public Law 108-108, under the existing terms and conditions until BLM could complete actions required to process the renewal of the permit.

BLM permit #0501069, which authorizes livestock grazing on the Suttles Basin Allotment #04209, licensed to Bear River Ranch, expired on 02/28/2005. It was renewed under section 325 of Public Law 108-108 for two years, under the existing terms and conditions until the Bureau could complete actions required to process the renewal of the ten-year permit. It was renewed again for a term of one year in 2007 under the same authority.

These permits are 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 permits 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 permits 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.

**PUBLIC SCOPING PROCESS:** BLM Little Snake Field Office sent out a Notice of Public Scoping on September 26, 2002, to determine the level of public interest, concern, and resource conditions on the grazing allotments that were up for renewal in FY 2004. A Notice of Public Scoping was also sent 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. For both years, a Notice of Public Scoping was posted on the Internet, at the Colorado BLM Home Page, asking for public input on permit/lease renewals. Individual letters were sent to the affected permittees/lessees, informing them their permit/lease was up for renewal and requesting any information they wanted included in or taken into consideration during the renewal process. The issuance of grazing permits/leases for these allotments has been carefully analyzed within the scope of the specific action being taken, resource issues or concerns, and public input received.

**BACKGROUND:** The East Canyon Allotment #04429 is located approximately fourteen miles southwest of Maybell, CO. The allotment lies south of the Yampa River and north of US Highway 40. The allotment consists of approximately 3,229 acres with 2,899 acres of BLM land and 330 acres of private. The existing permit is for 34 cattle from 04/30 to 12/14, 100% PL, 256 AUMs. The allotment is not currently divided into pastures.

The East Canyon Allotment is currently used as a heifer breeding pasture, generally from May through mid-July. The heifers move out mid-July to join the main herd in the Grounds Allotment. Reservoirs are used for water early in the season and the cattle water in the Yampa

River as the reservoirs dry up. However, river access is limited by fencing and topographic barriers.

The Grounds Allotment #04222 is located approximately twelve miles west of Maybell, CO. The allotment lies south of Colorado Highway 318. The allotment presently consists of approximately 8,017 acres with 7,566 acres of BLM land and 451 acres of private. The existing permit is for 129 cattle from 04/16 to 12/15, 94% PL, 973 AUMs and for 2 cattle from 04/16 to 11/07, 100% PL, 14 AUMs, for a total of 987 AUMs. There are currently four pastures within the Grounds Allotment: South, Middle, East and Crested Wheatgrass.

Cattle grazed in the Grounds Allotment are a mix of yearlings and cow/calf pairs. Water is a limiting factor in this allotment, as the permittee relies on reservoirs and access to the river. By the end of summer the reservoirs dry up and river access is limited by fencing and mixed ownership when cattle cross fences and move towards the river. Topography, combined with lack of water, results in distribution problems.

The Suttles Basin Allotment #04209 is located approximately ten miles northwest of Maybell, CO. The allotment is split by Colorado Highway 318. The allotment consists of approximately 8,166 acres with 5,099 acres of BLM land, 1,927 acres of private and 1,160 acres State Land Board. The existing permit is for 143 cattle from 04/17 to 10/31, 66% PL, 614 AUMs (1 AUM not scheduled, 615 AUMs total). There are currently six pastures within the allotment: Peck, Peck Crested (aka Triangle), House, Simsberry, Well and Suttles.

Cattle grazed in the Suttles Basin Allotment are a mix of yearlings and cow/calf pairs. They generally begin grazing in the House Pasture first, because if this pasture is used later in the season, the water level in the Yampa River is low enough to allow the cattle to walk the river banks. There are distribution problems in several of the pastures, due primarily to lack of water and incentive to climb hills to utilize remaining forage in steeper areas. In the northern end of the Simsberry Pasture there is an old chaining with abundant grass, however this area is rarely used due to lack of water.

### **MONITORING INFORMATION:**

**Utilization and Trend** (complete summaries for each allotment are shown in Attachment #2, Monitoring Summaries):

East Canyon Allotment #04429: No trend data are available. Distribution patterns can be a problem as some areas have been mapped heavy to severe use in the past while other areas receive very little use (slight). The current stocking rate is 11.7 ac/AUM. Good actual use data is missing, and utilization data are sporadic.

Recommendations: Establish a trend study. Establish a grazing system to provide periodic rest during the growing season. Construct fence and water developments to facilitate rotations and improve distribution, including maintenance of existing reservoirs. Collect actual use and utilization data annually. Conduct use supervision visits regularly.

Grounds Allotment #04222: There is no apparent trend noted on most plots. Several of the plots located in old brush beatings and/or seedings have big sagebrush moving back into the community. Two plots also indicate cheat grass is now present but western wheatgrass is no longer present.

Utilization data indicate periodic heavy use, and some areas show signs of past overuse resulting in decreased production. Distribution can also be a concern within all pastures. There are concerns with the stocking rate, currently rated at 7.7 ac/AUM, being too high. There are not adequate data available at this time to make a recommendation to change it.

Recommendation: Continue to collect trend data. Establish a grazing system to provide periodic rest during the growing season. Construct fence and water developments to facilitate rotations and improve distribution. Collect actual use and utilization data annually. Conduct use supervision visits regularly. Assure moderate (41-60%) utilization limits are not exceeded.

Suttles Basin Allotment #04209: There is no apparent trend on the allotment. Utilization has been consistently heavy (61-80%) in the past. Some areas show signs of past overuse (>50%) resulting in decreased production and community health. Distribution of livestock is also a problem. There are concerns with stocking rate, currently rated at 8.3 ac/AUM. This allotment shows signs of over-utilization (>50%) and inappropriate growing season use, including poor vigor, lack of diversity, lack of key perennial species, reduced reproduction, and low production.

Recommendation: Continue to collect trend data. Establish new plots as necessary. Establish a grazing system to provide periodic rest during the growing season. Construct fences and water developments to facilitate rotations and improve distribution. Collect actual use and utilization data annually to provide data for use in evaluating carrying capacity. Conduct use supervision visits regularly to verify numbers and functionality of range improvements.

**OVERALL RECOMMENDATION:** Due to current levels of use on the pastures, the current carrying capacity needs to be reevaluated. Currently, there is insufficient actual use data to make a determination on the carrying capacity of these allotments. Due to the inadequate actual use data, it is recommended that the permits be renewed for five years instead of ten, to allow the BLM to collect additional monitoring data and establish accurate carrying capacities. Five years would be adequate to allow range improvements to be constructed and grazing systems to be implemented.

### **LAND HEALTH ASSESSMENT:**

East Canyon Allotment #04429: This allotment is located within the Sandhills Landscape (site assessments in 1998 and 2006). The landscape, as a whole, is meeting all the standards and guides. In addition, the write-up states that all indicators were individually meeting standards.

Grounds Allotment #04222: This allotment is also located within the Sandhills Landscape (assessed in 1998 and 2006). The community diversity indicator was not meeting standards in the area of a crested wheatgrass seeding. There is some soil and litter movement, most likely by

wind. Under normal conditions there would be adequate cover to protect the soil from accelerated erosion, but with recent heavy use on perennial grasses the site is at risk if a heavy precipitation event were to occur.

Suttles Basin Allotment #04209: This allotment is located within the Sandhills and Spring Creek Landscapes and the Little Snake Watershed assessment areas which were each determined to be meeting standards (assessed in 1998 and 2006). The stops made within the allotment noted concerns for specific indicators described below. Within the allotment certain areas did not meet standards for community structure, community age/health, wildlife habitat, and cryptogammic crusts.

In the areas of an old chaining and a burn there are concerns about the absence of sagebrush and potential loss of seed source, structure of habitat for wildlife, and the presence of cheat grass. However, some native grasses are moving into the plant community in this area as well. This area is considered to be 'functioning at risk' due to recent overgrazing by livestock. The site should provide habitat for deer and elk but inadequate forage is available to hold them through the winter.

Other areas of the allotment were assessed to be meeting all standards although some just marginally. The standard for native vegetation and wildlife habitat was just barely met in some areas. The presence of decadent sagebrush with little recruitment of young sage and lack of perennial grass cover contributed to these factors being marginally met. There is evidence of an abundance of wildlife use in the area, including elk, deer and rabbit, as well as cattle sign and some horse sign, presumably from causal riders. If the current trend in overuse (>50%) continues, this community will fail to meet this standard. The site has a good potential for a vegetative treatment, as far as an adequate seed source from grasses and little cheat grass in the community. However, it would need to be rested in order to provide adequate fuel to carry a fire, and of course rest following the treatment.

## **DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

### **PROPOSED ACTION:**

Based on deeded land ownership the permits for Bear River Ranch #0501069 and Hugh S. Turner #0500117 would be combined into Hugh S. Turner #0500117. A Categorical Exclusion for this transfer is being completed concurrent with this EA (CO-100-2008-049 CX). The permit would be renewed for a period of five years, expiring February 28, 2013. During this five year time, BLM would collect monitoring and actual use data to evaluate carrying capacities. The rotations would be implemented, allowing BLM to analyze the effectiveness of the grazing systems to improve distribution. At that time, if adequate supporting data are available, the permit can be renewed.

In addition to a change in dates, a grazing system would be implemented on all three allotments, the goal of which is to manage livestock to defer grazing until seed ripe at least every other year in each pasture. Proposed range improvements will be discussed in each allotment, but also see the Range Improvement section, below, for additional details, as well as Attachment #3 – Proposed Range Improvements.

#### East Canyon Allotment #04429

The East Canyon Allotment would be divided into two pastures (North and South), each one being used early (April 20<sup>th</sup> through mid-July) in alternate years, allowing the other to be deferred until seed ripe. Cattle would be trucked into the allotment in the spring. The heifers would move out in mid-July to join the main herd in the Grounds Allotment. Depending upon the rotation in the Grounds Allotment, these animals would be either trucked out along the county road or trailed out across the Yampa River. The deferred pasture may be used later in the fall if needed and AUMs are still available.

#### Grounds Allotment #04222

The Grounds Allotment would remain as a four pasture allotment (Crested Wheatgrass #1, East #2, Middle #3 and South #4). Grazing would begin in either the South Pasture #4 or the Crested Wheatgrass Pasture #1 in alternate years, and cattle would be moved either north or south through the remaining pastures. There may be some overlap of grazing dates two consecutive years in the middle two pastures, however, the rotation would still allow for each to be used relatively early and relatively late in alternate years, and would still allow for deferment every other year.

#### Suttles Basin Allotment #04209

There would be several pasture adjustments and within the Suttles Basin Allotment. Of the total AUMs a smaller number would be run in a separate rotation on those pastures south of CO 318 to facilitate the deferment.

#### North of CO 318 (“North Suttles”):

The Well Pasture would be combined into the Suttles Pasture. The Suttles Pasture would be divided into an east and west pasture. The Simsberry Pasture would also be divided into an east and west pasture. The two Suttles pastures and the two Simsberry pastures would be grazed in a four pasture rotation, beginning in a different pasture each year.

#### South of CO 318 (“South Suttles”):

There are three pastures south of CO 318 (House, Peck, and Triangle). Livestock would start in a different pasture each year, beginning approximately April 1<sup>st</sup>, and rotate in a clock-wise manner throughout the grazing season.

The permit (#0500117) would be changed from:

<u>Allotment</u> <u>Name and #</u>	<u>Livestock</u> <u># and kind</u>	<u>Dates</u>	<u>%PL</u>	<u>AUMs</u>
Grounds #04222	129 Cattle	04/16 to 12/15	94	973
	2 Cattle	04/16 to 11/07	100	<u>14</u>
			Total	987
East Canyon #04429	34 Cattle	04/30 to 12/14	100	256

The permit (#0501069) would be changed from:

<u>Allotment</u> <u>Name and #</u>	<u>Livestock</u> <u># and kind</u>	<u>Dates</u>	<u>%PL</u>	<u>AUMs</u>
Suttles Basin #04209	143 Cattle	04/17 to 10/31	66	614
			Suspended	166
			Not Scheduled	<u>1</u>
			Total	615

To (#0500117):

<u>Allotment</u> <u>Name and #</u>	<u>Livestock</u> <u># and kind</u>	<u>Dates</u>	<u>%PL</u>	<u>AUMs</u>
Suttles Basin #04209	158 Cattle	04/20 to 10/15	66	614
			Suspended	166
			Not scheduled	<u>1</u>
			Total	615
Grounds #04222	178 Cattle	04/20 to 10/15	94	985
			Not scheduled	<u>2</u>
			Total	987
East Canyon #04429	43 Cattle	04/20 to 10/15	100	253
			Not scheduled	<u>3</u>
			Total	256

The above permit is subject to the following Special Terms and Conditions:

1. The following grazing system will be followed:

<b>East Canyon Allotment</b>	North Pasture	South Pasture
Year 1	4/20 – 7/15	7/16 – 10/15
Year 2	7/16 – 10/15	4/20 – 7/15

<b>Grounds Allotment</b>	Crested Wheatgrass #1	East #2	Middle #3	South #4
Year 1	4/20 - 5/31	6/1 - 7/10	7/11- 8/31	9/1 - 10/15
Year 2	9/1 - 10/15	7/11 - 8/31	6/1 - 7/10	4/20 - 5/31

<b>Suttles Basin North</b>	Suttles West	Simsberry West	Simsberry East	Suttles East
Year 1	4/20 – 5/31	6/1 – 7/10	7/11 – 8/31	9/1 – 10/15
Year 2	9/1 – 10/15	4/20 – 5/31	6/1 – 7/10	7/11 – 8/31
Year 3	7/11 – 8/31	9/1 – 10/15	4/20 – 5/31	6/1 – 7/10
Year 4	6/1 – 7/10	7/11 – 8/31	9/1 – 10/15	4/20 – 5/31

<b>Suttles Basin South</b>	House	Peck	Triangle
Year 1	4/20-5/26	5/27 – 7/2	7/3 – 7/31
Year 2	7/3 – 7/31	4/20-5/26	5/27 – 7/2
Year 3	5/27 – 7/2	7/3 – 7/31	4/20-5/26

2. Cattle will only be in one pasture in each of these systems at one time.
3. Dates are approximate. Cattle will be moved when utilization reaches moderate (41-60%) on identified key species in key areas.
4. The BLM will be notified when cattle are to be placed on each allotment, when they are moved to the next pasture, and when they are removed from the allotment. .

The above permit would also be subject to the Standard and Common Terms and Conditions, see Attachment #4.

Range Improvements:

The following range improvements are proposed to facilitate the grazing rotation and to maintain and improve rangeland health. These improvements consist of fencing and water developments. Preliminary locations are described below and shown in Attachment #3. All improvements would be built to BLM construction standards (Attachment #5a-c). None of the proposed

improvements would be located in the Cross Mountain WSA or the Cross Mountain Area of Critical Environmental Concern.

The following general descriptions are applicable to the proposed range improvements listed below. For these improvements the BLM will provide the materials and the permittee will provide installation labor and maintenance.

**Fences:**

New pasture fences will be three-strand (top two wires barbed, bottom wire smooth) with wires spaced for deer, pronghorn, and elk passage (38 inches, 26 inches, and 16 inches above ground). Metal posts will be spaced 12 – 16 feet apart with wood stays placed midpoint between the metal posts to increase visibility of the fence. Where fences cross two-track or larger vehicle routes wire gates, metal gates or cattleguards would be placed at those points. Where fences cross gullies, corral posts or custom-cut sheet metal would be suspended into the gullies to prevent livestock movement under the fence at those points while allowing for water and debris to flow.

During construction no blading would be allowed. Travel by ATV and four wheel drive vehicle would be permissible along the flagged fence routes during construction. Where necessary, brush beating may be carried out within 15 feet on either side of the flagged line.

**Water Developments:**

Water Haul Locations/Tank sites: Water haul sites and tank sites would be set up on fixed locations under a cooperative agreement. Water haul sites would consist of water troughs placed at locations easily accessible by vehicle (permittee preferred use is a semi truck and trailer). All tanks/troughs would be fitted with escape ramps for birds and small mammals.

Pipelines: Pipeline would be approximately 1 ½ inch poly pipe installed to a minimum depth of 18 inches with a vibratory ripper. Where the line is installed a 15 foot wide swath would be brush beat to facilitate ditching. This swath would be roughly half that width where the pipeline would run adjacent to the existing road. After placing the pipe in the trench the narrow ditch would refill on its own. The narrow disturbance created by the vibratory ripper would not require reseeding.

East Canyon Allotment #04429:

A cross fence would be constructed to facilitate the proposed rotation. One cattleguard would be necessary on the BLM road. Permanent water hauls, one in each pasture, would be established to provide reliable water late in the season when the reservoirs are likely to dry up. The tank in the southern pasture would be located along the road or at an existing (dry) reservoir site.

- Cross fence – ~1.75 miles; T6N, R97W, sec 17, 18, 20;
- Cattleguard – T6N, R97W sec 17 SE ¼ SW ¼;
- Water hauls (2) - T6N, R97W, sec 8 SW ¼ SE ¼ and sec 19 NE ¼.

#### Grounds Allotment #04222:

There would be a relocation of an existing fence between the Middle #3 and East #2 pastures. The southwest portion of the East Pasture #2 would become part of the Middle Pasture #3 to allow better utilization of this area.

- Relocate boundary fence between the Middle and East Pastures - ~0.75 miles in T7N, R97W, sec 28 & 29;

A pipeline would be developed from the well in the Middle Pasture #3, with one spur running to the South Pasture #4 and the other running approximately one and a half miles to the east in the Middle Pasture #3.

- Pipeline, 2 tanks (Middle and South Pastures) - ~1.75 miles of pipeline from the well in T7N, R97W, sec 30 SE ¼ NW ¼ to a tank in sec 29 SW ¼ SE ¼ and a tank in sec 31 SE ¼ NE ¼;

A water haul tank would be installed in the southeast portion of the East Pasture #2 to allow better utilization of this portion of the pasture.

- Water haul tank (1) (East Pasture) in T7N, R97W, sec 27
- New tank at the well #0344 in T7N, R97W, sec 26 SW ¼ NW ¼ (under existing maintenance).

#### Suttles Basin #04209:

The Suttles Pasture would be divided into an east and west pasture by construction of a drift fence across the entire pasture. The new Suttles Pasture fence would begin at the existing Well Pasture fence in the NE corner of Sec. 15 (T7N, R97W) and run north to an existing fence on private land. The west end of the Well Pasture fence is in disrepair and would be removed.

- Fence - ~1.25 miles of pasture fence between West & East Suttles in T7N, R97W, sec 12 & 13
- Remove fence - ~1.25 miles of old pasture fence of Well Pasture in T7N, R97W, sec 11, 12, 13, & 14

The Simsberry Pasture would be divided into an east and west pasture by the construction of two fences. One portion of the new Simsberry Pasture fence would begin on private land and end on public land. The shorter drift fence would be entirely on the State Land Board parcel.

- Fence - ~1.5 miles between East & West Simsberry ( ~.25 miles on BLM) in T7N, R97W, sec 1;

Pipelines would be run from existing wells to facilitate permanent water in the pastures north of the highway. A proposed pipeline would tie into an existing pipeline/tank site located near the center of the Simsberry Pasture. This existing pipeline is serviced by a well on private land in the south end of the Simsberry Pasture. From the point where the proposed pipeline would tie into the existing pipeline it would extend north across BLM and onto the State Land Board parcel terminating at a proposed tank site also to be located on the State Land Board parcel. This would provide water on the northwest end of the Simsberry Pasture. An additional pipeline would be developed from the private land on the southwest side of the Suttles Pasture, along the highway. This pipeline would run north along the BLM road to the existing tanks located on the pasture

boundary fence on the west side of the allotment

- Pipeline - ~.5 miles to tank (located on SLB), ~0.25 miles on BLM in T7N, R97W, sec 1.
- Pipeline – from the well on private in the NE ¼ NE ¼ of sec 15, ~1.5 miles along road to existing tanks on fenceline in T7N, R97W, sec 2 & 11;

A tank would be installed for water hauling on the State Land Board parcel in the southeast portion of the Suttles Allotment.

- Water haul tank (1) – installed in T7N, R96W, SW ¼ NE ¼ Sec. 18.

BLM would remove the catchment structures and fences in T7N, R97W, sections 11 and 12. They are no longer functional and have become a hazard and a visual intrusion.

- Remove pipeline, tanks & catchments in T7N, R97W, sec 11 & 12;

The construction of the range improvement projects is subject to the following stipulations:

1. As projects are located on the ground, Class III cultural surveys would be completed. The results of these surveys may result in modifications or movement of planned projects, but the character approximate location, and purpose of each improvement described would remain the same.
2. Prior to construction of range improvement projects, a BLM form 4120-08 Assignment of Range Improvements will be in place.
3. Range improvements will not be constructed between March 1 and June 30 in order to prevent disturbing greater sage-grouse breeding or nesting activities. Range improvement projects will not be constructed between December 1 and April 30 in order to protect wintering big game animals.
4. The BLM will provide the project materials and the permittee will provide labor and installation.
5. The permittee is responsible for the operation and maintenance of the range improvement projects.

### **ALTERNATIVE ONE:**

Alternative One includes a requirement for two years of complete rest on those pastures north of Highway 318. Although this would result in a loss of monitoring data gathered during this time on those pastures, the rest is highly beneficial to help restore community vigor and protect desirable perennial grasses. The Proposed Action includes a separate rotation for the pastures south of Highway 318, so no changes are necessary to these pastures. Additionally, the Grounds Allotment pastures #2 and #3 would be rested in year 3 and 4 to provide the plant community a break in the consecutive season of use that results from the lateral rotation. During the two years of rest, construction of range improvement infrastructure will begin so that by the third year use can resume with the implementation of the grazing system.

Renew the permits as above with the same range improvements proposed. However, the following changes in special terms and conditions would apply:

1. The following grazing systems will be implemented:

East Canyon Allotment #04429: No change from the Proposed Action.

<b>East Canyon Allotment</b>	North Pasture	South Pasture
Year 1	4/20 – 7/15	7/16 – 10/15
Year 2	7/16 – 10/15	4/20 – 7/15

Grounds Allotment #04222: Pastures East #2 and Middle #3 would each be rested one year in four. Cattle may be trailed through the rested pasture on the way to the next pasture, but trailing would be completed in one day with no overnight use.

<b>Grounds Allotment</b>	Crested Wheatgrass #1	East #2	Middle #3	South #4
Year 1	4/20 - 5/31	6/1 - 7/10	7/11- 8/31	9/1 - 10/15
Year 2	9/1 - 10/15	7/11 - 8/31	6/1 - 7/10	4/20 - 5/31
Year 3	4/20 - 6/15	Rest	6/16- 8/31	9/1 - 10/15
Year 4	9/1 - 10/15	6/16 - 8/31	Rest	4/20 – 6/15

Following the two years of complete rest on pastures north of Highway 318, the following rotation would be implemented. On the Suttles Basin Allotment, in the Suttles North Pastures, one pasture would be rested completely each year. The rested pasture would be the pasture that was used first in the sequence the previous year. There would be no change in the Suttles South Pastures.

<b>Suttles Basin North</b>	Suttles West	Simsberry West	Simsberry East	Suttles East
Year 1	8/22 – 10/15	Rest	4/20 – 6/20	6/21 – 8/21
Year 2	6/21 – 8/21	8/22 – 10/15	Rest	4/20 – 6/20
Year 3	4/20 – 6/20	6/21 – 8/21	8/22 – 10/15	Rest
Year 4	Rest	4/20 – 6/20	6/21 – 8/21	8/22 – 10/15

<b>Suttles Basin South</b>	House	Peck	Triangle
Year 1	4/20-5/26	5/27 – 7/2	7/3 – 7/31
Year 2	7/3 – 7/31	4/20-5/26	5/27 – 7/2
Year 3	5/27 – 7/2	7/3 – 7/31	4/20-5/26

2. Cattle will only be in one pasture in each of these systems at one time.
3. Dates are approximate. Cattle will be moved when utilization reaches moderate (41-60%) on identified key species in key areas.
4. The BLM will be notified when cattle are to be placed on each allotment, when they are moved to the next pasture, and when they are removed from the allotment.

The above permit would also be subject to the Standard and Common Terms and Conditions, see Attachment #4.

**Interim Management Plan:** The following management would be in place until adequate range improvements are constructed so that the final grazing systems can be implemented, whether the Proposed Action or Alternative One is chosen.

East Canyon Allotment #04429: The allotment would continue to be used as a spring heifer pasture until 2013. At the end of the five years, if the pasture fence has not been constructed to implement the rotation, the allotment would be used from 7/15 to 10/15, with entry dates determined by seed ripe of perennial grasses (default to Alternative Two).

The Special Terms and Conditions concerning utilization levels and notifying BLM of livestock movements would still apply.

Suttles Basin #04209: There are currently two existing pastures north of the highway and three south of the highway. The rotation on the pastures south of the highway would be implemented immediately. North of the highway, each existing pasture would be used early in alternate years to allow deferment one year in two. In 2013, if the pasture fences have not been constructed to implement the full rotation, the allotment would be used from 7/15 to 10/15, with entry dates determined by seed ripe of perennial grasses (default to Alternative Two).

**ALTERNATIVE TWO:** Under this alternative, no rotation would be implemented. Deferment would be achieved by moving the turnout date to July 14<sup>th</sup> on all pastures/allotments. July 15<sup>th</sup> is the estimated date of seed ripe for key grass species. This date could be altered based on environmental conditions. Although ending dates are shown, utilization levels (moderate use of 41-60% on key species in key areas) would still determine when livestock would be removed from each pasture and/or allotment.

The permit (#0500117) would be renewed as follows:

<u>Allotment Name and #</u>	<u>Livestock # and kind</u>	<u>Dates</u>	<u>%PL</u>	<u>AUMs</u>
Suttles Basin #04209	305 Cattle	07/15 to 10/15	66	615
			Suspended	<u>166</u>
			Total	781
Grounds #04222	343 Cattle	07/15 to 10/15	94	986
			Not scheduled	<u>1</u>
			Total	987
East Canyon #04429	83 Cattle	07/15 to 10/15	100	254
			Not scheduled	<u>2</u>
			Total	256

The above permit would be subject to the following Special Terms and Conditions:

1. The BLM will be notified when cattle are placed on each allotment, when they are moved to the next pasture, and when they are removed from the allotment.
2. Turnout dates are approximate. Cattle may be turned out onto the allotments when key grass species reach seed ripe.
3. Dates are approximate. Cattle will be moved when utilization reaches moderate (41-60%) on identified key species in key areas.

The above permit would also be subject to the Standard and Common Terms and Conditions, see Attachment #4.

Under this alternative, no additional fencing would be necessary to implement rotations. The proposed water developments under the Proposed Action may be constructed to improve distribution.

**NO ACTION ALTERNATIVE:** The No Action Alternative would be to renew the existing grazing permits without changes (combined into one authorization #0500117 through CO-100-2008-049 CX). No range improvements would be constructed.

Current terms of the permits:

<u>Allotment</u> <u>Name and #</u>	<u>Livestock</u> <u># and kind</u>	<u>Dates</u>	<u>%PL</u>	<u>AUMs</u>		
Suttles Basin #04209	143 Cattle	04/17 to 10/31	66	614		
			Suspended	166		
			Not Scheduled	<u>1</u>		
			Total	781		
Grounds #04222	129 Cattle	04/16 to 12/15	94	973		
			2 Cattle	04/16 to 11/07	100	<u>14</u>
			Total	987		
East Canyon #04429	34 Cattle	04/30 to 12/14	100	256		

The permit is also subject to the Standard and Common Terms and Conditions, See Attachment #4.

**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 grazing is not analyzed because no new issues or concerns have been identified that may require this action.

## **AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES**

### **CRITICAL RESOURCES**

#### **AIR QUALITY**

Affected Environment: Air quality would not be affected by any of the alternatives.

Environmental Consequences, all alternatives: Short term, local impacts to air quality resulting from diesel engine exhaust, other combustible engines and dust from surface disturbing operations would result from activities proposed. Emissions required to construct the fenceline corridor, install a fence, install the pipeline and install water sources would be very minimal. Use of combustible and diesel engines would be required to complete these range improvements. The emissions from these activities consist of both gaseous and particulate fractions. Gaseous constituents from diesel engine exhaust include carbon dioxide, carbon monoxide, nitric oxide, nitric dioxide, oxides of sulfur and hydrocarbons. Fine particulates of soot from diesel exhaust and fugitive dust from soils would be localized to the project area. The health effects of these emissions are largely from long-term and occupational exposure in confined areas. Construction of the proposed range improvements and implementation of the proposed action would not adversely affect the regional air quality.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 9/22/06

#### **AREA OF CRITICAL ENVIRONMENTAL CONCERN**

Affected Environment: A small portion of the Grounds Allotment occurs within the Cross Mountain Area of Critical Environmental Concern (ACEC).

Environmental Consequences, all alternatives: None of the proposed fences or water projects are located within the ACEC. Livestock grazing would not adversely affect the objectives of the ACEC which are to enhance or protect Colorado BLM sensitive plant species, threatened and endangered species, and scenic quality.

Mitigative Measures: None

Name of specialist and date: Jim McBrayer 8/7/06

## CULTURAL RESOURCES

Affected Environment: Grazing permit renewals are undertakings under Section 106 of the National Historic Preservation Act. During Section 106 review, a cultural resource assessment was completed for allotments #4209, #4222 and #4429 by Robyn Watkins Morris, Little Snake Field Office Archaeologist, on February 25, 2008. 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 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 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, eligible and need data, and those that are anticipated to be in each allotment.

Allotment Number	Acres Surveyed at a Class III Level	Acres NOT Surveyed at a Class III Level	Percent of Allotment Inventoried at a Class III Level	Eligible or Need Data Sites- Known in Allotment	Estimated Sites for the Allotment *(total number)	Estimated Eligible or Need Data Sites in the Allotment (number)
04209	270	7916	3.4%	0	217	65
04222	1247	6768	18%	10	217	65
04429	445	2784	15%	15	85	25

(Note: \*Estimates of site densities are based on LaPoint 1987. Estimates should be accepted as minimum figures which may be revised upwards based on future inventory findings.)

Eight cultural resource inventories have been previously conducted for stock pond construction, range projects, land exchanges, seismic lines and proposed reservoir sites within allotment #4209, resulting in the complete coverage inventory of 270 acres and the recording of no cultural resources. Nine cultural resource inventories have been previously conducted for roads, ponds, prospecting, seismic lines and proposed reservoirs within allotment #4222. These surveys provided complete coverage inventory of 1,247 acres and the recording of 10 cultural resources that need data or are eligible to the National Register of Historic Places. Five cultural resource inventories have been previously conducted in allotment #4429 for stock ponds and construction of the Yampa Valley trail. These surveys provided complete coverage inventory of 445 acres and the recording of fifteen cultural resources that need data or are eligible to the National Register of Historic Places. Various historic roads are noted on the 1905-1908 General Land Office Plats within all three allotments. Many of these roads are still in use today.

Based on available data, a high potential for historic properties occurs in the allotments due to the historic roads, historical homesteading use, proximity to year round water (Yampa River), and known significant sites. Subsequent cultural resource inventory would be conducted in areas where livestock concentrate and where range improvement projects would occur. Subsequent field inventory would be completed within the five year period of the permit and/or prior to range improvements being built.

If historic properties are located during the subsequent field inventories, and BLM determines that grazing activities would 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, during normal livestock grazing activity, include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art. Indirect impacts include soil erosion, gulying, and increased potential for unlawful collection and vandalism. Continued livestock use may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties. Although the number of AUM's remains the same for this permit renewal, the timing for livestock use varies as does the rotation of pastures. The rotation of pastures is proposed to improve range conditions and may lessen direct, indirect, and cumulative impacts to cultural resources. Although fencing pastures would intensify use of an area, rotation would allow vegetation to recover lessening the potential soil erosion associated with grazing. Placing saltblocks along roads or anywhere in the allotment would potentially impact historic properties. Additional monitoring of the historic properties currently known and in the future should continue to determine if livestock impacts are occurring to these properties.

**Mitigation Measures:** Range improvement projects associated with the allotment (e.g., fences, pipelines, tanks) are subject to compliance requirements under Section 106 and would undergo standard cultural resources inventory and evaluation procedures.

Standard Stipulations for cultural resources are included in Standard Terms and Conditions for the Range Renewal Permit (Attachment 2).

*Allotment Specific Stipulations for this EA:*

1. Since the permit is for five years to determine the impact of a new grazing system, survey of high grazing activity and high archaeological potential should be determined after five years.
2. Until then, in allotment #4209, historic roads in T7N R97W section 1 and 12 should be surveyed and recorded.
3. In Allotment 4429, BLM roads 1551 and 1551b used by permittee must be surveyed to ensure salt blocks are being placed off of eligible sites.

4. In Allotment 4222, BLM roads 1686.1, 1687 (after it drops off Peck Mesa), 1688.1, 1689 used by permittee must be surveyed to ensure salt blocks are being placed off of eligible sites
5. In Allotment 4209, BLM roads 2122, 2123.1, 2125 used by permittee must be surveyed to ensure salt blocks are being placed off of eligible sites.
6. Site monitoring plans, other mitigation plans, would 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 II and III survey(s), monitoring, and developing site specific mitigation measures would mitigate the adverse effects to an acceptable level (Cultural Matrix Team Meeting 26 January 1999, NHPA Section 106, 36CFR800.9; Archaeological Resource Protection Act 1979; BLM Colorado and Colorado SHPO Protocol 1998; and NEPA/FLPMA requirements).

Name of Specialist and date: Robyn Watkins Morris 3/13/08

## **ENVIRONMENTAL JUSTICE**

Affected Environment: 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, all alternatives: 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 7/31/06

## **FLOOD PLAINS**

Affected Environment: The Yampa River provides unfenced boundaries along a portion of the East Canyon Allotment and the Grounds Allotment. Only that segment of the Yampa River along the edge of the East Canyon Allotment is on public lands. The floodplain on the allotment side of the river (south side) generally consists of a moderately sloping streambank, and the higher bank is predominately upland vegetation. The other side of the river generally has more point-bar and floodplain development. The remainder of the streams within the allotments have too high a gradient for stable active floodplains.

The Yampa River begins to access its floodplains at the beginning of the grazing period and would be expected to be at peak flows near the end of May and the beginning of June. Prior to flooding some spring growth on floodplain plants will occur, but most growth on these plants will occur after the high spring flows recede.

Environmental Consequences, Proposed Action and Alternative One: Livestock grazing and trampling on active floodplains when the river level begins to recede in late spring comprises the greatest concern for floodplain resources. Later in the season the floodplain soils would have dried out and would not be as sensitive to trampling. The limited and occasional livestock grazing pressure would be on grasses and sedges during the early season and willows in late summer and fall. This would occur at varying intensities under all alternatives. Due to the proposed rotation in the Proposed Action and Alternative One, some re-growth would occur after livestock are removed.

The proposed fence in the East Canyon Allotment would place this segment of the Yampa River in the North Pasture. Once the fence is installed, early spring use (beginning April 20th) would be rotated between the North and South Pastures. Permitted livestock use during the high spring flows would occur every other year, and this would allow more recruitment of desirable floodplain vegetation. The proposed water developments would help to pull livestock away from the river.

Environmental Consequences, Alternative Two: This alternative would defer grazing until about the middle of July. This would allow floodplain soil and vegetation to respond to high flows on the Yampa River each season with no livestock present. Recently deposited sediments would have a chance to stabilize with new vegetation. Overuse of the floodplain vegetation may occur when livestock are turned out. The potential for this to happen is greatest if an upland water source is not developed.

Environmental Consequences, No Action Alternative: Under the No Action Alternative the Yampa River floodplain would be permitted for cattle from early spring through the fall. Cattle would concentrate on the uplands adjacent to the river for much of this period. The operator currently is not using this allotment for the entire permitted period. Instead, the allotment is used every year from early spring to early summer. Although this grazing practice may favor the riparian vegetation along the river at lower flows, it is not enhancing the condition of the higher streambank vegetation which would not receive as much benefit from plant re-growth following the grazing period. By not developing additional waters in the uplands, cattle may still concentrate on the river for water.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 9/27/06

## **INVASIVE, NONNATIVE SPECIES**

Affected Environment: The Yampa River and Colorado Highway 318 traverse these allotments and provide a vector for noxious and invasive weeds. Numerous roads on the public lands are used heavily in the fall by hunters and are used for other dispersed recreation activities throughout the year. Wildlife and cattle grazing in areas of weed infestations can also provide a vector for introducing weed species to new areas. Leafy spurge, Canada thistle, musk thistle, Scotch thistle, plumeless thistle, hoary cress, tall whitetop, black henbane, Russian knapweed,

spotted knapweed, oxeye daisy, tamarisk and Russian olive are present along the Yampa River. These noxious or invasive weeds could be present anywhere in the river corridor adjacent to these allotments. Additionally, cheatgrass is present in the upland sites within the allotments.

Environmental Consequences, Proposed Action and Alternative One: Nonnative invasive and noxious weeds could become established on favorable upland sites or along the river corridor within the allotments. Grazing within the proper utilization guidelines (50% use) generally protects a plant community from widespread infestations of noxious and invasive weeds. However, ignoring the grazing utilization guidelines can result in lowered vigor on plants and reduced plant biomass, including roots. The overall effects of these processes result in less competition between plants and opportunities in the plant community interspaces for invasive and noxious weeds to become established.

The Proposed Action and Alternative One would help to moderate forage utilization and alleviate grazing distribution problems, as well as increase plant vigor and production. Some minor surface disturbance would result from installing the pasture fencing and pipelines, and some new areas of livestock concentration would surround the areas where water is hauled. The new disturbances would quickly revegetate. Although cheat grass and other annual weeds may colonize these disturbances initially, growth of native grasses and forbs should follow within a couple of years. Alternative One is designed to accelerate the recovery of plant vigor, production and recruitment in the Grounds and Suttles Basin Allotments. Plant colonization on the disturbances from installing fences and pipelines would be accelerated under Alternative One. The overall benefits of the Proposed Action and Alternative One would be to strengthen the plant communities against weed invasion and persistence.

Environmental Consequences, Alternative Two: This alternative would not resolve grazing distribution problems unless additional livestock water is developed. However, the grazing distribution problems would mostly occur outside the growing season of rangeland vegetation. Livestock would be pulled when moderate utilization limits are reached where cows are grazing. Consequently, the less used portions of the allotment would receive even lighter utilization. Native vegetation would become more vigorous under the deferred grazing treatments and allowed to mature to seed ripe. This grazing strategy would favor native vegetation, providing less opportunity for invasive and noxious weeds to become established within the allotments.

Environmental Consequences, No Action Alternative: Continued use under this alternative would result in desirable perennial grasses dying out, resulting in an increase of weeds and less desirable plants in the community.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 9/27/06

## **MIGRATORY BIRDS**

Affected Environment: All three allotments provide habitat for golden eagle, Brewer's

sparrow, sage sparrow and pinyon jay. The East Canyon Allotment and the Grounds Allotment also provide nesting and foraging habitat for peregrine falcon.

Environmental Consequences, all alternatives: Livestock grazing under the Proposed Action and Alternatives One and Two would not negatively affect Brewer's sparrow or sage sparrow because both species respond favorably to moderate livestock grazing. Livestock grazing under the No Action Alternative would impact both of these species if habitat quality degrades. Chance of take is low, but reproductive success would be low under this alternative.

Livestock grazing under all four alternatives would not have a direct impact on golden eagle or peregrine falcon. There is no chance of take resulting from these alternatives. Nesting and foraging habitat for peregrine falcon and golden eagle would be degraded as a result of degraded prey species habitat.

Pinyon jay would not be affected by any alternative and there is little chance of take to occur.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 9/12/06

#### **NATIVE AMERICAN RELIGIOUS CONCERNS**

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council, and the Eastern Shoshone on July 11, 2007. The letter listed the grazing allotments up for renewal in FY07 and included a map of the areas. A follow up phone call was performed on August 14, 2007. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris 3/13/08

#### **PRIME & UNIQUE FARMLANDS**

Affected Environment: There are no Prime and Unique Farmlands present within these allotments.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 9/27/06

#### **T&E SPECIES - SENSITIVE PLANTS**

Affected Environment: There are no BLM sensitive plant species on any of the three allotments.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 7/31/06

## **T&E SPECIES – ANIMALS**

Affected Environment: The East Canyon Allotment and the Grounds Allotment have habitat for the Colorado pikeminnow, a federally endangered species. The Yampa River and its 100 year flood plain have been designated as critical habitat for this species. Livestock have very limited access to this habitat on public lands due to topographic barriers and fencing.

The East Canyon Allotment contains breeding and nesting habitat for greater sage-grouse, a BLM special status species. There are three historic lek sites within the East Canyon Allotment. Livestock use during the 2006 grazing season within the East Canyon Allotment, along with a severe drought, has resulted in degradation of greater sage-grouse nesting habitat, making much of this area unlikely to support greater sage-grouse nesting efforts for future breeding seasons.

Environmental Consequences, Proposed Action and Alternative One: The reach of the Yampa River managed by the BLM within or adjacent to these allotments contains fencing and topographic barriers that minimize livestock access to the river. This reach of the Yampa River was assessed by an interdisciplinary team in 2006 and was determined to be functioning at risk with an upward trend. Evidence of heavy browsing by wildlife was seen on the south bank of the river. The north bank of the river, which is privately owned land, has high terrace banks and was the reason this reach was rated as functional at risk. The trend was rated as upward due to signs of riparian vegetation being reestablished along the banks that had previously been disturbed.

It is expected that sage grouse nesting efforts within this allotment would have poor success relative to other nesting habitats within this resource area in the near term due to vegetative conditions and current grazing practices. Both the Proposed Action and Alternative One would alleviate this grazing pressure and improve greater sage grouse nesting habitat. Requiring livestock to be removed when utilization reaches moderate levels would help grasses recover and should improve nesting security for greater sage grouse.

Environmental Consequences, Alternative Two: This alternative would benefit greater sage-grouse because livestock would not be using the allotments until greater sage-grouse have completed their breeding and nesting activities. Chance for nesting success would increase with this alternative.

Environmental Consequences, No Action Alternative: The No Action Alternative does not incorporate any deferment or rest of pastures and would result in a continued decline in greater sage-grouse habitat. This alternative does not incorporate range improvement projects to improve livestock distribution. Under this alternative current utilization would continue causing habitat

conditions to degrade to the point that these allotments would not be capable of supporting healthy, productive populations of sage grouse.

Environmental Consequences, all alternatives: None of the alternatives would have an impact on the Colorado pikeminnow.

Range improvement projects proposed for all alternatives would improve livestock distribution that would reduce pressure on some portions of the allotment. This would benefit nesting greater sage-grouse as well.

Mitigative Measures, all alternatives: None

Name of specialist and date: Timothy Novotny 9/12/06

### **T&E SPECIES – PLANTS**

Affected Environment: There are no federally listed threatened or endangered plant species on any of the three allotments.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 7/31/06

### **WASTES, HAZARDOUS OR SOLID**

Affected Environment: There are no hazardous or solid wastes present on any of the allotments.

Environmental Consequences: Access to the allotments for livestock management and range improvement construction and maintenance 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.

Mitigative Measures: None

Name of specialist and date: D. Johnson 8/1/06

## **WATER QUALITY - GROUND**

Affected Environment: All three allotments have some ground water aquifers containing meteoric water. The ground water quality in these areas ranges from potable to useable in aquifers within porous and fractured formations (mostly sandstone).

Environmental Consequences, all alternatives: There would be no impacts to ground water quality within the three allotments. The Proposed Action and other alternatives would 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 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: Robert Ernst 8/7/06

## **WATER QUALITY - SURFACE**

Affected Environment: All of the lands within the East Canyon Allotment and most of the lands within the Grounds Allotment drain towards the Yampa River. Several short ephemeral river break tributaries drain these allotments. Runoff drainage from the southern edge and southeastern portion of the Suttles Basin Allotment flow to the Yampa River along the river break slopes. A longer unnamed tributary of the Yampa collects runoff from the eastern edge of the Suttles Basin Allotment. The remainder of the allotment, primarily north of Colorado Highway 318 and the western edge south of the highway, flow towards the Little Snake River. Simsberry Draw, north of the highway, and Three C Wash, south of the highway, flow westerly beyond the Suttles Basin Allotment. These are ephemeral tributaries that carry allotment runoff waters to the Little Snake River.

The Yampa River segment that flows through the affected area needs to have water quality sufficient to support Aquatic Life Warm 1, Recreation 1a, Water Supply and Agriculture. Tributary water to the Yampa River within this segment needs to have water quality sufficient to support Aquatic Life Warm 2, Recreation 2 and Agriculture; these tributary waters are designated Use Protected. The Yampa River and its tributaries within this segment were fully supporting these classified uses when assessed in 2001 and 2002.

The Little Snake River segment which receives runoff water from the affected area needs to have water quality sufficient to support Aquatic Life Warm 2, Recreation 1a and Agriculture. Tributary water to the Little Snake River within this segment needs to have water quality sufficient to support Aquatic Life Cold 2, Recreation 2, and Agriculture; these tributary waters are designated Use Protected. The Little Snake River was also assessed in 2001 and 2002 and was fully supporting Agriculture and Aquatic Life Warm Water–Class 2 uses. Recreation Primary Contact was not assessed. The Little Snake River tributaries have not been assessed for supporting the classified uses.

Environmental Consequences, Proposed Action and Alternative One: Some benefits to water quality are expected to occur from the implementation of the Proposed Action or Alternative One, which would continue livestock grazing with better opportunities to control livestock use in all of the allotments with fencing and the establishment of additional pastures. Benefits to water quality could be expected from improving the forage and soil resources on the uplands and along the Yampa River floodplains and riparian areas by rotating livestock use between pastures. Alternative One includes a rest provision for several pastures, and this would accelerate the process of improving plant and upland soil health. Subsequently, improved water quality of runoff waters from these allotments is expected to follow improving upland conditions.

The fences installed to create pastures and the additional water developments needed within the pastures, including installing pipelines, would cause some soil disturbance. However, these disturbances are small, and runoff from these areas would be minimal, except where cattle are concentrated near the new upland water sources. These range improvements are considered to be Best Management Practices and are necessary to implement the grazing management systems proposed.

Environmental Consequences, Alternative Two: This alternative would benefit the water quality of runoff from these allotments. No early spring use would occur in any of the allotments, allowing the forage resources to mature, or nearly so, prior to livestock use. More livestock use could occur along the Yampa River, and some overuse of floodplain and riparian vegetation may result. However, this is not a large area, and the overall effect of the deferred grazing schedule on the upland resources within the allotments would offset this negative impact. In addition, if the riparian and floodplain vegetation begins to deteriorate, the riparian standard will not be met because of a declining trend in the condition of the riparian system.

Environmental Consequences, No Action Alternative: This alternative would not provide additional range improvements and grazing systems that are considered to be Best Management Practices for helping to control the duration and distribution of livestock grazing for the benefit of the forage resource. As the vegetation community declines under this alternative the water quality will also decline.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 9/27/06

## **WETLANDS/RIPARIAN ZONES**

Affected Environment: The Yampa River provides the only riverine riparian system within these allotments on public lands and is located in the East Canyon Allotment. There are a few springs on the higher eastern slopes of Cross Mountain within the South Pasture of the Grounds Allotment, but due to their location, livestock use, if any, is very limited.

The riparian system associated with the Yampa River segment bordering the East Canyon Allotment (Reach 3) is rated as Functioning at Risk with an upward trend. The weedy plant community that was previously present has been replaced with an early seral stage riparian plant community. Spikerush is growing along the September low flow of the river, along with infrequent sprigs of Baltic rush and coyote and peachleaf willows. Moving up the streambank from the waters edge to the higher banks, the vegetation is dominated by saltgrass, coyote willow and poverty sumpweed. This side of the river mainly consists of high streambanks, as it is on the outside bend (cutbank) of the river. A few cottonwood seedlings are present along with tamarisk seedlings.

Environmental Consequences, Proposed Action and Alternative One: The Yampa River riparian resources would be located in the North Pasture. Upward trends along the Yampa River would continue. The grazing rotation between the North and South Pastures would favor the herbaceous riparian species (grasses, sedges and rushes) that are submerged until the high spring flows recede and are less palatable towards the late season. Increases in the diversity, cover and age class distribution of these species would occur. Woody species (willows and cottonwoods) would start receiving more late season livestock pressure with implementation of the Proposed Action or Alternative One in alternate years. The woody species provide more nutrition to cattle later in the summer and towards fall when the upland grasses are curing and losing protein content. The upland water haul site proposed in the North Pasture would reduce livestock watering at the river and the incidental grazing pressure on the riparian vegetation that occurs when lingering near water.

Environmental Consequences, Alternative Two: This alternative would result in more livestock late season pressure on the riparian vegetation along the Yampa River. The potential for this to occur is greatest if no upland water source is developed in the East Canyon Allotment to alleviate livestock watering on the Yampa River. Herbaceous riparian vegetation would remain green throughout most of the grazing period, and woody riparian vegetation would offer more nutrition later in the season. Due to these factors and because of the incidental use of vegetation near water, it is expected that the riparian vegetation would be overused (>50% utilization). Riparian vegetation and streambank soils would be trampled as livestock move to water. If these impacts occur, Alternative 2 would reverse the upward trend in the condition of the riparian system. In this event, the installation of the additional water improvements listed in the Proposed Action would be necessary for the riparian standard to continue to be met.

Environmental Consequences, No Action Alternative: Under this alternative there would be the possibility that use by livestock would occur from April 30 to December 14. Willows and cottonwoods would continue to be suppressed, if not grazed out entirely, especially with late season use each year. Trampling and trailing effects over this extended period would suppress the rushes and sedges. If grazing continued for the entire permitted period a declining trend would result and the riparian standard would not be met.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 9/28/06

## **WILD & SCENIC RIVERS**

Affected Environment: There are no Wild and Scenic Rivers within any of the three allotments.

Wild and Scenic River Eligible Segments: Portions of the Yampa River are eligible for inclusion in the National Wild and Scenic River System. The Cross Mountain Canyon segment of the Yampa River in the East Canyon Allotment is an eligible segment. The Little Snake Resource Management Plan ROD requires that the proposed action would not affect outstandingly remarkable values or free flowing characteristics of these river segments.

Environmental Consequences, all alternatives: None of the alternatives would adversely affect the eligible Wild and Scenic segment of the Yampa River.

Mitigative Measures: None

Name of specialist and date: Jim McBrayer 8/7/06

## **WILDERNESS, WSAs**

Affected Environment: There are no Wilderness Areas within the three allotments.

Wilderness Study Areas: Portions of the East Canyon Allotment #04429 and Grounds Allotment #04222 occur within the Cross Mountain Wilderness Study Area (WSA). BLM Interim Management Policy for Lands Under Wilderness Review requires WSAs be managed so as not to impair their suitability for designation as wilderness and that project actions result in no unnecessary or undue degradation of wilderness values.

Environmental Consequences, all alternatives: The proposed fences and water projects are located outside the WSA boundary. The Proposed Action and Alternatives One and Two would not affect the wilderness values in the WSA.

Mitigative Measures: None

Name of specialist and date: Jim McBrayer 08/7/06

## **NON-CRITICAL ELEMENTS**

### **SOILS**

Affected Environment: Soils within these three allotments primarily developed from residuum, colluvium, alluvium and loess deposits derived from sandstone. In the Suttles Basin Allotment a small area of soils below Godiva Rim developed from residuum derived from shale. Some alluvium deposits downstream in Simsberry Draw were derived from mixed sedimentary

rocks.

Much of the surface soil textures are sandy loams and loamy sands, except where the small areas of soils derived from shales exhibit silty clay loam textures. Generally, the sandy loam and loamy sand soils have moderate soil properties relating to runoff, percolation, and water holding capacities. Some of the soil types are moderately deep (40-inch depth) or shallow (20-inch depth) and provide low to very low soil water holding capacities.

Environmental Consequences, Proposed Action and Alternative One: The upland soils within the allotments are suited for livestock grazing and can remain stable and productive provided that cover by a desirable perennial plant community is maintained. If the shrub or grass component of a plant community is diminishing, the hazard for wind or water erosion increases. Maintaining fertility, aggregate stability, infiltration rates and water holding capacity properties of soils requires a stable plant community. When grazed by livestock, proper forage utilization on key species is essential for maintaining soil cover by the plant community. Overgrazing (>50% utilization) can reduce forage cover, resulting in accelerated erosion of soils. The improved utilization and grazing systems of the Proposed Action or Alternative One would result in more residual forage and consequently less soil erosion.

The Proposed Action and Alternative One would implement a rotation grazing within several pastures of the Grounds and Suttles Basin Allotment, which should accelerate the response of the plant community to provide better vegetation cover overall and increase herbaceous plant density and diversity, especially in the interspaces. More recruitment of plants would be expected if Alternative One is selected.

Environmental Consequences, Alternative Two: This alternative would also implement a grazing management strategy that would benefit the upland forage and soil resource. The deferred grazing treatment would provide the same benefits that could be achieved under the Proposed Action Alternative and Alternative One. Moderate grazing use (40-60% utilization) would be required where cattle are grazing and other areas within the allotments where livestock water is not available would have lighter livestock use. Vigorous mature forage plants would be present when livestock are turned into the allotment and upland soils would be protected from wind and water erosion. Seedlings would have a good chance of becoming established in the absence of livestock during the growing season providing more vegetative biomass to maintain soil health.

Environmental Consequences, No Action Alternative: The No Action Alternative would continue similar use and result in a further decrease in the production of forage for both livestock and wildlife and an increase in soil loss.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 9/28/06

## VEGETATION

**Affected Environment:** The majority of vegetation on the allotments is comprised of big sagebrush-perennial grass communities. These native perennial grasses are primarily needle-and-thread, Indian ricegrass, bluebunch wheatgrass and western wheatgrass. Some of these sagebrush communities have been converted in the past to crested wheatgrass, which are in various stages of being reestablished by native species. There are also areas of juniper, with various degrees of sage and grass understory. Some of these communities were also chained in the past and now support some level of crested wheatgrass.

**Environmental Consequences, Proposed Action:** The implementation of a rotation system would ensure that the vegetation in nearly all pastures would receive growing season rest at least in alternate years. Some pastures would be deferred until seed ripe. This allows the perennial grasses to build adequate carbohydrate reserves before being grazed, rather than relying on photosynthesis when root reserves are at their lowest. Requiring the permittee to notify the BLM when livestock are moved provides the BLM with good actual use data on which to base future adjustments in carrying capacity. Requiring livestock to be moved when utilization reaches moderate use (41-60% of current year's growth) also provides data, as well as protects perennial grasses from over-utilization (50%). This residual forage provides forage for wintering wildlife, as well as watershed and soil protection.

**Environmental Consequences, Alternative One:** On the East Canyon Allotment, the Proposed Action is the same as Alternative One, so there are no differences in the environmental consequences. On the Grounds Allotment, there is a requirement within the rotation system to rest each of the middle pastures (North #2 and Middle #3) one year in four. This would provide a year of growing season rest, since it is not feasible to defer either of these pastures until seed ripe within the proposed rotation.

On the Suttles Basin Allotment, the pastures north of the highway would receive two years of complete rest. In addition a rest pasture is included in the rotation on the pastures north of the highway. This additional rest would allow the perennial grass communities to recover from past use more quickly. There is no difference on the pastures south of the highway, so environmental consequences would be the same.

**Environmental Consequences, Alternative Two:** Under this alternative, all allotments would receive deferment until seed ripe by delaying the turnout date. This would also allow perennial grasses to build adequate carbohydrate reserves before being grazed. Rotations may still occur to achieve better distribution, and vegetation utilization limits would also be in effect.

**Environmental Consequences, Range Improvements:** Construction of the range improvements would allow the rotation system to be implemented on the Suttles Basin and East Canyon Allotments. The system on the Grounds Allotment can be implemented with current improvements, but the additional water sources would allow better distribution and control of livestock. The new pasture boundaries would allow more efficient use of the current pastures.

There would be short term disturbance to the vegetation from construction of pipelines and fences. These would eventually revegetate. In some cases, the pipelines would follow existing roads, so no new disturbance would be created. There would continue to be disturbance at new and existing water sites, due to continued use by livestock and wildlife. Some of these water troughs presently exist, so no new disturbance would be created at these sites.

Environmental Consequences, No Action Alternative: Without the implementation of the range improvements, the grazing systems would not be implemented on the East Canyon and Suttles Basin Allotments. The vegetation would not realize the benefits of rest and/or deferment on these allotments. Distribution would not be improved on any of the allotments, including the Grounds Allotment. Certain areas would continue to receive heavy to severe use. Current stocking rates are resulting in overuse (>50%) of the perennial grasses.

Mitigative Measures: None

Name of specialist and date: Andrea Minor 07/18/07

## **WILDLIFE, AQUATIC**

Affected Environment: The Yampa River provides habitat for a variety of aquatic and amphibian wildlife species. Among species expected to occur in this reach of the Yampa River are: Colorado pikeminnow, largemouth bass, catfish, northern pike and other non-game fish species. Salamanders, crawfish, and the northern leopard frog are also likely to be found within this reach of the Yampa River.

Environmental Consequences, all alternatives: The limited livestock grazing on public lands would not negatively impact aquatic wildlife habitats along this reach of the Yampa River. None of the alternatives presented would harm aquatic wildlife.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 9/12/06

## **WILDLIFE, TERRESTRIAL**

Affected Environment: The East Canyon Allotment, the Grounds Allotment and the Suttles Basin Allotment provide year round habitat for elk, mule deer and pronghorn antelope, including severe winter range. A variety of small mammals, song birds, and reptiles can be found throughout these allotments as well. A chaining treatment and a wildfire have eliminated sagebrush and juniper from the Suttles West pasture. The loss of woody species has diminished the quality of habitat for many species due to a loss of cover. Habitat quality has been further reduced at the site of the chaining and subsequent burn by over utilization (>50% use) from elk and livestock.

Environmental Consequences, Proposed Action, Alternatives One and Two: Severe

drought and over utilization (>50% use) of these allotments has degraded habitats for many species of wildlife. Both the Proposed Action and Alternative One have potential to improve wildlife habitats within these allotments. The deferred grazing in the Proposed Action would help improve grass production in all three allotments and benefit many wildlife species. The rest rotation grazing system in Alternative One would be the most beneficial alternative to wildlife. Alternative Two would also benefit wildlife by allowing all pastures to be deferred until seed ripe each year. Proper utilization levels would result in more forage left for wintering livestock. Range improvements proposed under both of these alternatives would improve livestock distribution, which would improve habitat conditions.

Environmental Consequences, No Action Alternative: This alternative does not present the opportunity to improve livestock distribution, decrease over utilization from livestock or rest any of the grazing pastures. Under this alternative, wildlife habitat quality would not have the opportunity to recover. Eventually, these allotments would not be capable of supporting diverse productive wildlife populations.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 9/12/06

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

Non Critical Element	Applicable & Present		
	NA or Not Present	Applicable or Present, No Impact	Brought Forward for Analysis
Fluid Minerals		RE 8/7/06	
Forest Management		AJM 9/14/06	
Hydrology/Ground		RE 8/7/06	
Hydrology/Surface		00 9/22/06	
Paleontology		RE 8/7/06	
Range Management		AJM 9/15/06	
Realty Authorizations		LM 08/03/06	
Recreation/Travel Mgmt		RS 08/07/06	
Socio-Economics		LM 07/31/06	
Solid Minerals		RE 8/7/06	
Visual Resources		JM 8/7/06	
Wild Horse & Burro Mgmt	AJM 9/14/06		

**CUMULATIVE IMPACTS SUMMARY:** All three allotments and adjacent areas have historically been grazed by cattle. Numerous roads, both maintained and causal, exist in the area. These roads are used by local residents, as well as by recreational visitors, primarily hunters. Wildlife use is high, especially for wintering elk, which compete with livestock for forage. The primary impacts from these uses are from roads, leading to soil disturbance and the presence of weeds. All alternatives are compatible with other uses in the area and would not contribute additional impacts.

## **STANDARDS**

**PLANT AND ANIMAL COMMUNITY (animal) STANDARD:** All three allotments have habitat characteristics capable of supporting diverse wildlife populations. Current utilization levels combined with severe drought have decreased habitat quality for many wildlife species. One site in the Simsberry pasture is not meeting the standard for productive wildlife communities due to heavy utilization, and disturbances from a historic chaining treatment and a wildland fire that removed sagebrush and juniper from the site. Both the Proposed Action and Alternative One are capable of reducing over utilization from livestock and improving habitat conditions. Deferment until seed ripe proposed under Alternative Two would help vegetative conditions within these allotments recover. This would benefit many wildlife species by improving habitat conditions. The No Action Alternative does not provide for range improvements to improve livestock distribution. This alternative does not allow for deferment or rest of grazing pastures. Heavy utilization that is currently experienced within this allotment would continue under this alternative. Without rest, habitat components within these allotments would eventually be lost, and would no longer be able to meet this standard.

The Proposed Action and Alternatives One and Two would improve livestock distribution and allow for rest and recovery of grazed pastures. This would improve habitat conditions and allow this standard to continue to be met.

Name of specialist and date: Timothy Novotny 9/12/06

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD:** Threatened and endangered species would not be impacted by livestock grazing in any alternative due to a lack of access to the Yampa River by livestock. The Colorado pikeminnow would not be impacted by this proposal.

Greater sage-grouse nesting habitat is currently being threatened by over utilization (>50% use) by livestock. The No Action Alternative would not relieve this pressure and would lead to degraded habitat that is not capable of supporting greater sage-grouse. This standard would not be met by the No Action Alternative.

Greater sage-grouse nesting habitat would benefit from range improvements and the new grazing systems proposed under both the Proposed Action and Alternative One. Alternative One offers stronger protection for sage grouse habitat and would be most beneficial. Alternative Two would also provide protection for sage-grouse habitat. This standard would be met under the

Proposed Action or Alternatives One and Two.

Name of specialist and date: Timothy Novotny 9/12/06

**PLANT AND ANIMAL COMMUNITY (plant) STANDARD:** All standards are presently being met on the Grounds and East Canyon Allotment. Both the Proposed Action and Alternative One, with grazing systems, and Alternative Two with delayed turnout dates, would allow this standard to be met in the future. However, if heavy use (60-80% utilization) experienced recently under the No Action Alternative is continued, it would cause vegetation conditions to deteriorate to the point that this standard would no longer be met. On Suttles Basin Allotment this standard was just marginally met for native vegetation. If current management under the No Action Alternative continues, this standard would not be met in the future. Changes proposed under the Proposed Action and Alternatives One and Two, in terms of livestock rotations, deferment and proposed range projects would allow vegetation conditions to improve. The minimum of two years rest in Alternative One and Two would allow the Suttles Basin Allotment to improve faster.

Name of specialist and date: Andrea Minor 10/30/06

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant) STANDARD:** There are no federally listed threatened or endangered or BLM sensitive plant species present on any of the three allotments. This standard does not apply.

Name of specialist and date: Hunter Seim 7/31/06

**RIPARIAN SYSTEMS STANDARD:** The riparian standard for healthy rangelands would be met with the Proposed Action and Alternative One. The riparian vegetation growing along the Yampa River is currently improving in cover, diversity and age class distribution. Livestock grazing has been limited to early use each year under current management, which has allowed the vegetative component to improve. Improved utilization, along with rotated use in the early spring, would occur under the Proposed Action and Alternative One.

The riparian standard for healthy rangelands would not be met with the selection of Alternative Two. The deferred grazing schedule that favors the upland vegetation may put more pressure on the riparian vegetation along the Yampa River. If no upland water source is developed in the East Canyon Allotment, as the ponds dry up, additional effort will be made by livestock to access the river through steeper topography and pressure on fences. As a result, riparian vegetation would be incidentally grazed and trampled as livestock move to water. Alternative Two would reverse the current trend of the improving condition of the riparian system.

If cattle were present in the allotment for the entire grazing period without alternating or rotating use, it is doubtful if this reach of the Yampa River would be in an upward trend. This No Action Alternative would not meet this standard.

Name of specialist and date: Ole Olsen 9/28/06

**WATER QUALITY STANDARD:** The water quality standard for healthy rangelands would be met with selection of any of the alternatives analyzed. This standard is met because the water quality of the Yampa and the Little Snake Rivers are fully supporting the classified uses designated for these stream segments.

Although this standard is currently met, the water quality of runoff waters from these allotments could be improved with the selection of the Proposed Action or Alternative One or Two. Each of these are expected to improve the overall condition of the plant communities and upland soils in the allotments. The rest provision included in Alternative One provides another incremental step in the grazing rotation designed to promote the health of these resources, and consequently improve water quality

Name of specialist and date: Ole Olsen 9/30/06

**UPLAND SOILS STANDARD:** The upland soil standard for healthy rangelands would be met with the selection of the Proposed Action and Alternatives One and Two. Improved grazing practices as prescribed in the Proposed Action, Alternative One, and Alternative Two would achieve better soil stability by improving the present plant communities.

All alternatives, except the No Action Alternative, would address concerns with potential forage utilization problems and improving the herbaceous composition of existing plant communities within the allotments. Rotating livestock use between pastures is expected to increase plant vigor, diversity and production in all of the allotments. Improved upland soil health would be achieved with better soil cover and increased, varied root biomass. Alternative One is designed to accelerate the recovery of the plant communities with a complete rest scheduled. Not only would the benefits noted for the Proposed Action be expected, but Alternative One would increase the recruitment of new plants over what could be gained with only the Proposed Action implemented. Alternative Two does not provide for livestock rotation, but grazing would not occur until after the growing season.

Under the No Action Alternative there would be a continued decrease in the production of forage and an increase in soil loss resulting in the standard not being met.

Name of specialist and date: Ole Olsen 9/29/06

**PERSONS/AGENCIES CONSULTED:**

Colorado State Land Board (SLB), Lane Osborn; Uinta and Ouray Tribal Council; Colorado Native American Commission; Colorado State Historic Preservation Office; Hugh Turner, Jr.; Hugh S. Turner, Sr.; Todd Graham (Bear River Ranch Range Consultant)

## **MITIGATION MEASURES:**

### **BLM commitments:**

#### Cultural Resources:

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 and 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.

5. Projects that are proposed in this EA, before proceeding with implementation, will go through the Section 106 processes, as described in the current Protocol (1998). Projects proposed in this EA are defined in the Proposed Action and Alternatives Section above.

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 Map
- Attachment 2: Monitoring Summaries
- Attachment 3. Proposed Range Improvement Locations
- Attachment 4: Standard and Common Terms and Conditions
- Attachment 5a: BLM Construction Standards for Fences
- Attachment 5b: BLM Construction Standards for Pipelines
- Attachment 5c: BLM Construction Standards for Tanks

## FONSI

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 #4**  
**CO-100-2005-063 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**

- 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 re-growth, 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 may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.

**Attachment #2  
CO-100-2005-063 EA  
Monitoring Summaries**

**East Canyon (#04429) Monitoring Summary**

**Trend**

No trend data is available. Ranchers Management may have established some plots on the allotment, but this data is not available.

**Utilization and Actual use**

Hugh Turner acquired the allotment in 2004. Permitted use on the allotment is 256 AUMs, with use from 4/30 to 12/14.

*Actual use:*

1994	140 AUMs
1995	256 (no response on application, so billed full numbers)
2007	139 AUMs

*Utilization:*

1991 - There was heavy use on crested wheatgrass by elk on the east side

1993 - The west side was mapped as “unsuitable”; the lower slopes had light use, the east side moderate use and the north end along the river received heavy to severe use.

1996 and 1997 - There was heavy to severe use on browse.

2005 - There was slight use on the west side, light use on the east side, with moderate use at the north end. No cattle were seen in the allotment at the time.

2006 - Spring use by heifers on the east side appeared heavier than in past years. West side use was pretty light to none.

2007 - Use was once again slight to light on the west side of the allotment but generally within acceptable limits on the east side. Cattle left the allotment early and spent too much time on the river.

**Conclusions and Recommendations:**

Establish trend plots.

An undated allotment evaluation (circa mid 90s) recommended an increase in stocking rates, but recommended a grazing system be developed to provide periodic rest. The range specialist at that time recommended water developments as well.

Professional judgments of observed conditions indicate that the permitted use may be appropriate, but at this time there is not sufficient data to substantiate these judgments.

Recommendation: collect utilization data and actual use information, including allotment checks for locations and numbers.

The allotment needs periodic growing-season rest and improved distribution.

## **Grounds (#04222) Monitoring Summary**

### **Trend**

There were 12 trend plots on the allotment. All were established in either 1965 or 1969. One is on private land, one was not re-found, and it was recommended to abandon both of these. There are also several that are duplicates of plots in the same location & are no longer read. There are remaining plots in all four pastures (South, Middle, East and Crested).

Most were read through the early late 70's and early 80's and then not photographed again until 1995. Several were read in 2005.

Crested pasture:

Agcr #1 – the index data summary is inconclusive, but the photos indicate that Artr is moving back into the seeding (which is predominantly Stco and Agcr).

(Agcr #2 could not be found, recommended to abandon; #26 is the same plot as Agcr #1.)

East pasture:

East #1 – index summary is similar across the years for species composition, but the photos indicate that Artr is moving back into the old brush beating.

East #25 – the most recent photos were taken in 1995, these look similar to earlier photos. No measurements were taken. No trend apparent.

Middle pasture:

Middle #1 and #2 - Data indicates that there is more Artr present (the plot is an old sprayed area), and Brte is present now and no Agsm.

Middle #23 – photographed last in 1995, but is located on private land and was recommended to be abandoned.

Middle #24 – No measurements were taken in 1995, but the plot was photographed at that time. Photos look similar to earlier photos. No trend apparent.

South pasture:

South 3-1, 3-2 – Last read in 2005. No trend apparent.

South #21 - Last read in 2005. No trend apparent.

### **Utilization and Actual use**

Hugh Turner acquired the allotment in 2004. Preference on the allotment is 987 AUMs, with use from 4/16 to 12/15.

#### *Actual Use:*

2004	486 AUMs
2005	Full preference was run (no response on application, so billed full numbers)
2006	Same as 2005, no response so billed full use
2007	367 AUMs

#### *Utilization:*

Utilization was read sporadically. In 1990, overall use was light to moderate, but the Middle pasture received all heavy use, as did along the river.

1992 - Overall use was light to moderate with areas of heavy use in the East and Middle pastures (approximately half of the East pasture had heavy use).

1993 - Overall use was also light to moderate, with heavy use along the river.

1999 - Utilization was read in December, with only about 2/3 of the AUMs having been used. Use was slight to light.

2005 - Utilization was read in all pastures during July and November. Overall use on both dates was slight to light, with moderate to severe use near waters. No cattle were seen in the allotment on either date.

2006 - Utilization was read at the end of August. The South pasture had received heavy to severe use, the Middle pasture heavy use, and the East pasture had less use with one site being heavy and one being moderate. The Crested pasture was moderate to heavy showing the least amount of use but with cattle still in the pasture.

2007 - Overall utilization levels were within acceptable limits in the South and Middle Pastures, but distribution could be improved. In the North and Crested Pastures, distribution issues caused some areas to be used beyond the moderate range.

### **Conclusions and Recommendations:**

Overall trend is not apparent, however in some seeded areas, sagebrush is beginning to move back in. Recommendation: continue to collect trend data.

The Allotment Monitoring Evaluation (undated, circa mid90s) recommended that 826 was the

more appropriate permitted use if no grazing system was implemented to provide periodic rest.

Professional judgments of observed conditions indicate that the permitted use may be appropriate, but at this time there is not sufficient data to substantiate these judgments. Distribution within pastures needs to improve. Recommendation: collect utilization data and actual use information, including allotment checks for locations and numbers.

### **Suttles Basin (#4209) Monitoring Summary**

#### **Trend:**

There were 9 plots on the allotment. Four of these are on state land & have been abandoned. Another one (2-1) was also abandoned, reason unknown.

Most were established in the 1969 era and were read sporadically until 1981. The ones that are not abandoned were read & photographed again in 2005.

None of the remaining four plots are located in the Simsberry pasture.

Peck Crested pasture: South AGCR plots 1 and 2 show an increase in big sagebrush in the photos. No apparent trend is seen in the data.

Well pasture: The North Agcr plot also shows an increase in big sagebrush in the landscape photo but not in the plot itself.

Suttles pasture: Plots 2-1 and 2-2 show no apparent trend in either the photos or the data.

#### **Utilization & Actual Use:**

Bear River Ranch acquired the permit in 1995. Preference on the allotment is 614 AUMs.

#### *Actual use:*

1995	230 AUMs
1996	375 AUMs
1997	392 AUMs
1998	614 AUMs
1999, 2000	601 AUMs
2001 - 03	614 AUMs
2004	428 AUMs
2005	614 (based on billed preference, application not returned)
2006	614 (billed full use, no response to application)
2007	321 AUMs

#### *Utilization:*

Utilization was read from 1986 to 1992 every year. These studies show a long term pattern of

heavy, and often severe, use across most of the allotment. (This was prior to Bear River Ranch acquiring the allotment in 1995.) The exception was 1988, when the allotment received light use but had not been used by livestock.

It was noted in a July 1998 LHA site visit that utilization on the Suttles Basin allotment was heavy to severe.

Utilization was not read again until 2000, and was read fairly consistently through 2005. In 2000 and 2001 fall utilization was heavy to severe. In 2002, utilization hit 50% in July and the permittee was decisioned off the allotment in the fall.

In fall of 2004 use was heavy where read in the Suttles and House pastures; moderate to heavy in the Peck Crested pasture; heavy to severe in the Peck pasture; and Simsberry was heavy on the SE side, moderate on the NE side, slight on the NW side, and severe in the SW corner.

In 2005 the Simsberry pasture received slight use; Suttles received light use with moderate along the highway; moderate to heavy in the Well and Peck Crested pastures; and the House pasture received areas of light use and areas of moderate to heavy use. Notes indicate that very little cattle sign was seen on the allotment, even though it was billed at full use.

In 2006 6 transects were read within the allotment. All transects were at least in the heavy (61-80% use) category and several were severe (81-100% use). There was evidence of trampling of the vegetation which was accounted for in the actual use determination. In most cases it was difficult to distinguish individual species so "perennial grasses" were lumped together, and species present noted under the notes section. Besides the heavy to severe use, the only seed stalks still standing were in the middle of prickly pear clumps or growing up through shrubs. There were one or two transects that typically receive only slight use in a given year but this year had heavy to severe use. The allotment was pretty well searched over and hit hard. The only area that had less than moderate use was at the north end of the old chaining. This area is steep and difficult to maneuver because of downed trees. It would be difficult to keep cattle in this area.

In 2007 use varied considerably by pasture. The permittee was unable to keep cattle in the Triangle Pasture, so use was well below acceptable limits on crested wheatgrass. In the House and Peck Pastures, use was above the moderate range, including severe in some areas. In the Simsberry Pasture, distribution was again a concern, as was heavy to severe use. In the Suttles Pasture, most areas received high levels of use (>60%). In general, observations in this allotment show that native perennials tend to receive heavier use than crested wheatgrass if both are available in the same community or general vicinity.

**Other notes:**

Ranchers Management completed some monitoring on the allotment in 2000. They analyzed and evaluated several criteria. Noteworthy findings include that the allotment is producing below its potential. The studies were conducted in a dry year, so this would be expected. However, their calculations indicate that the West Suttles Basin pasture #2 was producing at 15% of potential, the Simsberry Draw area was producing at 47% of potential and the 1993 burn was producing at 41%. Trend appeared to be stable at all sites monitored.

Recommendations for Bear River Ranch included developing an allotment management plan, minimizing overgrazing (defined by Ranchers Management as repeated bites from the same plant), calving elsewhere, summering the herd elsewhere due to low quality forage on the allotment in summer, and utilizing the allotment in fall after it had been rested all season.

**Conclusions and Recommendations:**

If it is assumed that the prior operator ran full preference and it resulted in heavy to severe use, then the likely conclusion is that full preference constitutes too many AUMs. The allotment has an overall appearance of poor vigor. The shrubs are large and decadent, perennial grasses are absent in some areas and palatable shrubs are heavily used and lacking vigor.

Poor livestock distribution in recent years has resulted in uneven utilization patterns. In addition, those areas receiving this use are generally grazed every spring with no deferment or rotation.

Establish a rest rotation system where each pasture receives spring rest at least every third year. This will require construction of additional water sources and possibly more fencing.

Utilization should not exceed 50% use. Actual use must be provided, and the stocking rate should be adjusted.

Trend photos should be established in each new pasture created under the grazing system, if none is already present.