

**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: DOI-BLM-CO- N010-2010-0066-EA (amended)

PERMIT/ALLOTMENT NUMBER: #0501077/#04214

PROJECT NAME: Ten year grazing permit renewal on the Powder Wash Allotment, #04214.

LEGAL DESCRIPTION: See Allotment Map, Attachment 1

Powder Wash #04214

T12N R96W, all or part of sections 14–23, 26-35
T11N R96W, all or parts of sections 2, 3, 4
T12N R97W, all or parts of sections 13-17, 19–35
T12N R98W, all or part of sections 23–28, 33–36
T11N R97W, part of section 6
T11N R98W, all or part of sections 1-5, 8-15

24,985 acres - BLM
2,231 acres - Private
221 acres - State Lands
27,437 acres - Total

APPLICANT: Salisbury Livestock Company

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to the *Little Snake Resource Management Plan and Record of Decision*. Date(s) approved: April 26, 1989, amended November 4, 1996.

The No Action Alternative and Preferred Alternative are 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.

24,891 acres or 91% of the Proposed Action is located within the Management Unit 2 (Northern Central). The Proposed Action is compatible with the management objective for this unit, which is to provide for the development of the oil and gas resource. Public lands are open to livestock grazing. Management practices or range improvement projects will be permitted and existing range improvements will be maintained consistent with the management objectives for this unit.

1,849 acres or 9% of the Proposed Action also falls within the Management Unit 3 (Little Snake River). The Proposed Action is consistent with the objectives of this management unit which are to improve soil and watershed values, increase forage production, and enhance livestock grazing.

The Preferred Alternative and No Action Alternatives have been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3).

Other Documents

Applicable NEPA documents and other documents that cover the Proposed Action include the following:

- *The Federal Land Policy and Management Act (FLPMA) of 1976, as amended (43 USC 1752).*
- *Rangeland Reform Final Environmental Impact Statement.* December, 1994.
- *Colorado Public Land Health Standards, Decision Record & Finding of No Significant Impact and Environmental Assessment.* March 1997.
- *EA#CO-100-LS-99-0010 Salisbury 10 year grazing permit renewal for the Powder Wash Allotment.*

NEED FOR PROPOSED ACTION: BLM permit #0501077, which authorizes livestock grazing on the Powder Wash Allotment #04214 was due to expire on February 28, 2008. This permit has been extended yearly through 2011. These extensions were issued under the same terms and conditions as the existing permit, in accordance with Section 325, Title III, H.R. 2691, Department of Interior and related agencies appropriations act, 2004 (P.L. 108-108) while the BLM continues to process the ten year renewal in accordance with all applicable laws and regulations.

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

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: The Little Snake Field Office sent out a Notice of Public Scoping in December of 2006, to determine the level of public interest, concern and resource conditions on the grazing permits and leases that were up for renewal in FY 2008. 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. There were no

comments received specific to the renewal of this grazing permit. The issuance of a grazing permit for this allotment has been carefully analyzed within the scope of the specific action being taken, and resource issues and concerns.

ALLOTMENT DESCRIPTION/BACKGROUND: The Powder Wash Allotment is located in north central Moffat County on the Colorado/Wyoming state line. Livestock grazing has been taking place in the Powder Wash Basin and Powder Wash Allotment since the 1870s. In the early 1900s, historical records indicate that up to 300,000 head of sheep were utilizing the area around Baggs, Wyoming. Numbers of livestock continued to rise steadily until administration by the Grazing Service and Forest Service, and the passage of the Taylor Grazing Act, brought numbers down. A range survey of Moffat County conducted in 1935 indicated that over 70% of the localities in which samples were taken showed “appreciable deterioration of the forage resource and slightly less than 30% show relatively stable conditions. There was no instance recorded where the range appeared to be appreciably improving” (A Survey of Range Economic Conditions and Distribution Problems Yampa River Drainage, Colorado, Region Two 1935-1936).

The family of the current permittee homesteaded in the area in 1880 and has been running sheep, cattle and horses on the public lands, consisting of both BLM and USFS permits, and private lands since that time. The BLM has re-issued grazing permits to the current permittee once every 10 years since 1934.

The Powder Wash Allotment is split into several pastures: Ranch, Chivington, Headquarters, Powder Wash and Lookout. The Chivington and Ranch Pastures consist of mainly private land. The Ranch Pasture is completely fenced, while the Chivington Pasture was to be completely fenced in 2000; this fence construction has not yet occurred but is still planned. These two private pastures are currently used in conjunction with the livestock management system developed in 1999.

Prior to the issuance of a 10 year grazing permit in 1999, evaluations of monitoring data, 1982 Soil-Vegetation Inventory Method (SVIM) data and 1995 Ecological Site Inventory (ESI) data were conducted. It was determined that an adjustment of AUMs was necessary in order to improve resource conditions on the allotment. AUMs were reduced from 4,436 to 3,250. Of the 3,250 AUMs, 2,500 AUMs were placed in active use and 750 AUMs were placed in suspended non-use until such time that an interdisciplinary team determined that the suspended AUMs could be activated and the resource sustained. The season of use for cattle was also changed from 4/01-10/15 to 11/01-3/31, with the exception of the Chivington pasture which was permitted for cattle from 4/01-5/13. The season of use for sheep remained the same, 11/10-5/01.

MONITORING DATA: Range monitoring data (utilization, actual use, precipitation and drought information) has been collected and summarized for the allotment and is on file at the Little Snake Field Office.

A Landscape Health Assessment (LHA) was conducted on the Powder Wash Watershed in 2003. Six of the 39 assessment sites were within the Powder Wash Allotment. Of these 6 sites, 3 were not meeting the standard for native plant community. Native herbaceous species were being

outcompeted by non-native annuals such as cheatgrass and halogeton and this was the reason cited for the non-attainment of the standard. Since the LHA was completed, Moffat County along with the oil and gas companies operating in Powder Wash have been aggressively treating halogeton. This treatment, along with high standards for the reclamation of gas pads in the allotment are resulting in a substantial reduction in non-native species. Another reason given for the non-attainment of the plant standard was past historical grazing. Prior to 1999, the Powder Wash Allotment was grazed yearlong. In 1999, the season of use was changed to occur primarily in the dormant season.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

No Action Alternative (continue previous authorized use)

<u>Allotment</u> <u>Name and Number</u>	<u>Livestock</u> <u>Number & Kind</u>	<u>Period of use</u> <u>Begin & End</u>	<u>%PL</u>	<u>AUMs</u>
Powder Wash #04214				
Headquarters Pasture	250 Sheep	03/01 to 05/01	96	98
	1800 Sheep	04/10 to 05/01	96	250
	3000 Sheep	04/23 to 04/30	96	152
	100 Cattle	11/01 to 01/17	96	246
	250 Sheep	11/15 to 02/28	96	167
Chivington Pasture	100 Cattle	04/01 to 05/13	40	57
Powder Wash Pasture	100 Cattle	03/01 to 03/31	98	100
	100 Cattle	01/18 to 02/28	98	135
	1800 Sheep	11/27 to 02/28	98	1090
Lookout Pasture	1800 Sheep	11/10 to 11/26	98	197
Ranch Pasture	5 Cattle	01/01 to 02/28	100	10
Suspended non-use				<u>750</u>
Total				3,252

Special Terms and Conditions

1) Grazing use will be activated and billed by pasture. Following is the total AUMs which may be activated by pasture:

Ranch Pasture	10 AUMs
Headquarters Pasture	912 AUMs
Powder Wash Pasture	1,323 AUMs
Chivington Pasture	57 AUMs
Lookout Pasture	198 AUMs

Actual use by cattle in the Headquarters, Powder Wash, Lookout and Ranch Pastures will occur within the time period of 11/01 to 03/31. Cattle use in the Chivington Pasture will occur within the time period of 04/01 to 05/13.

Actual use by sheep in the Headquarters, Powder Wash and Lookout Pastures will occur within the time period of 11/10-05/01 with no more than 132 days of grazing use in Colorado.

2) Up to 30% of the cattle AUMs (550) may be authorized as sheep AUMs or 30% of the sheep AUMs (1950) may be authorized as cattle AUMs as long as the amount of specified grazing use is not exceeded and is within the specified grazing season.

3) Herd sheep during the spring grazing season after the start of the growing season so as to periodically defer grazing use during the critical growth period. Avoid use during March and April on the same areas at the same time in consecutive years.

4) Six range improvement projects (Chivington Fence; Lookout Fence; County Road 4 Allotment Boundary Fence; rework of West Dripping Rock Spring; install pipeline; 3-6 new ponds) will be carried out in the timeframes described in the EA. The associated project-specific specifications and general mitigation measures will be carried out as described in the EA.

Preferred Alternative

Continue to authorize livestock grazing on the Powder Wash Allotment by renewing grazing permit #0501077 with modifications. The total grazing preference of 3,252 AUMs would be increased to 3,277 AUMs with the addition of 25 AUMs from the dissolution of the stock driveway. These 25 AUMs would be placed in suspended non-use until water is developed in the northeast portion of the Headquarters Pasture. Additionally, 136 AUMs would be activated from the 750 AUMs currently in suspended non-use; 57 AUMs would be activated to accommodate 10 head of domestic horse grazing in the Headquarters Pasture and 78 AUMs would be activated to accommodate 300 head of sheep from 05/01 to 06/01, also within the Headquarters Pasture. The new total suspended non-use AUMs would be 639. The season of use would be extended to 06/01 in the Headquarters Pasture. This would allow livestock management to adapt to circumstances that sometimes arise due to injuries, disease, late lambing, or seasonal weather variations.

The grazing authorization would be renewed as follows:

<u>Allotment Name and Number</u>	<u>Livestock Number & Kind</u>	<u>Period of use Begin & End</u>	<u>%PL</u>	<u>AUMs</u>
Powder Wash #04214				
Headquarters Pasture	300 Sheep	03/01 to 06/01	96	176
	1800 Sheep	04/10 to 05/01	96	250
	3000 Sheep	04/23 to 04/30	96	152
	100 Cattle	11/01 to 01/17	96	246
	250 Sheep	11/15 to 02/28	96	167
	10 Horses	11/01 to 02/28	96	38
	10 Horses	03/01 to 05/01	96	20
Chivington Pasture	100 Cattle	04/01 to 05/13	40	57
Powder Wash Pasture	100 Cattle	03/01 to 03/31	98	100

	100 Cattle	01/18 to 02/28	98	135
	1800 Sheep	11/27 to 02/28	98	1,090
Lookout Pasture	1800 Sheep	11/10 to 11/26	98	197
Ranch Pasture	5 Cattle	01/01 to 02/28	100	10
			Suspended non-use	<u>639</u>
			Total	3,277

Special Terms and Conditions

1) Grazing use will be activated and billed by pasture. Following is the total AUMs which may be activated by pasture:

Ranch Pasture	10 AUMs
Headquarters Pasture	1,049 AUMs
Powder Wash Pasture	1,325 AUMs
Chivington Pasture	57 AUMs
Lookout Pasture	197 AUMs

Actual use by cattle in the Headquarters, Powder Wash, Lookout and Ranch Pastures will occur within the time period of 11/01 to 03/31. Cattle use in the Chivington Pasture will occur within the time period of 04/01 to 05/13.

Actual use by sheep in the Headquarters, Powder Wash and Lookout Pastures will occur within the time period of 11/10-05/01 with no more than 132 days of grazing use in Colorado.

2) Up to 30% of the cattle AUMs (548) may be authorized as sheep AUMs or 30% of the sheep AUMs (2032) may be authorized as cattle AUMs as long as the amount of specified grazing use is not exceeded and is within the specified grazing season.

3) Herd sheep during the spring grazing season after the start of the growing season so as to periodically defer grazing use during the critical growth period. Avoid use during March and April on the same areas at the same time in consecutive years.

4) Construct range improvements as described in EA DOI-BLM-CO-N010-2010-0066 (amended).

5) 25 AUMs from the inclusion of the stock driveway into the Powder Wash Allotment will be placed into temporary non-use. These AUMs may be activated upon completion of the stock pond to be located in the northeast corner of the Headquarters Pasture.

Range Improvements

New Projects

Three fencing projects are proposed: the Stock Driveway fence, the Stateline (#04215)/Powder Wash Allotment Boundary fence and the Wyoming/Colorado state line fence.

Stock Driveway Fence

The Stock Driveway fence project involves the removal of the obsolete stock driveway that exists at the eastern edge of the Powder Wash Allotment. This stock driveway was established in the late 1930s and its purpose was to allow livestock operators with grazing permits in both Colorado and Wyoming a free-use corridor in which to drive their animals back and forth between the two states. The driveway was fenced in 1957 but is no longer used as most operators choose to truck their animals. The fenced corridor encompasses approximately 494 acres and contains no water, either natural or developed. Because the corridor is obsolete and poses a wildlife hazard it is proposed to remove it and adjust the boundaries of both the Powder Wash and the East Powder Wash Allotments.

The west side of the northern half of the corridor would be removed (1.7 miles) and the east side of the southern half of the corridor would be removed (1.7 miles). Approximately ¼ mile (1,254 feet) of new fence would be built east/west across the corridor to provide an allotment boundary between the Powder Wash and East Powder Wash (#04202) Allotments. 247 acres would be incorporated into the Powder Wash Allotment and 247 acres would be incorporated into the East Powder Wash Allotment. The Horse Draw Allotment (#04204) would not be affected.

Figure 1 below depicts the current allotment boundaries between the Powder Wash, East Powder Wash and Horse Draw Allotments.

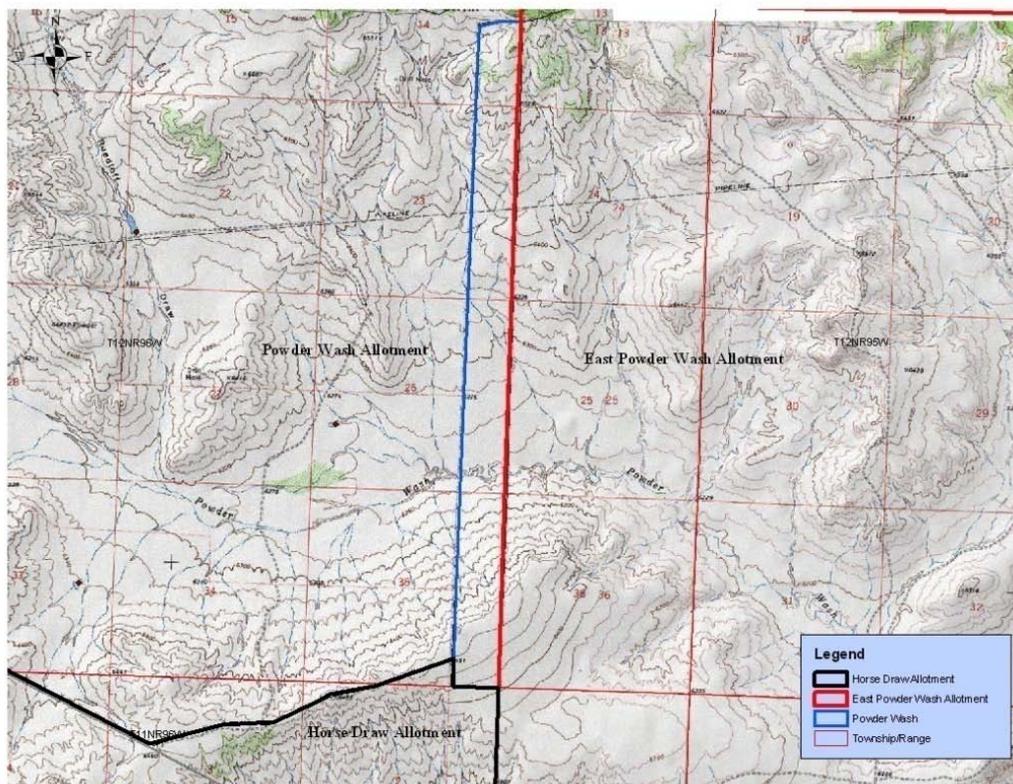


Figure 1.

Figure 2 depicts which portions of the fences would be removed and a short segment of fence to be built in order to absorb the obsolete stock driveway into the Powder Wash and East Powder Wash Allotments:

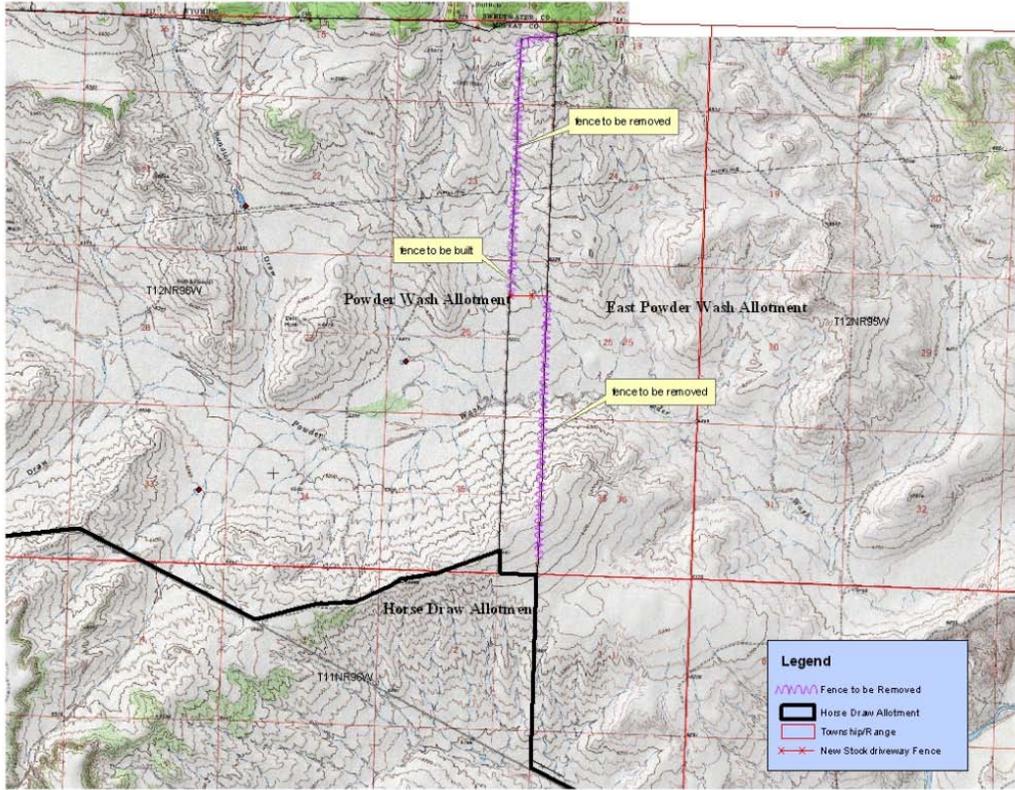


Figure 2.

Figure 3 depicts the new proposed eastern boundary of the Powder Wash Allotment and the new western boundary for the East Powder Wash Allotment:

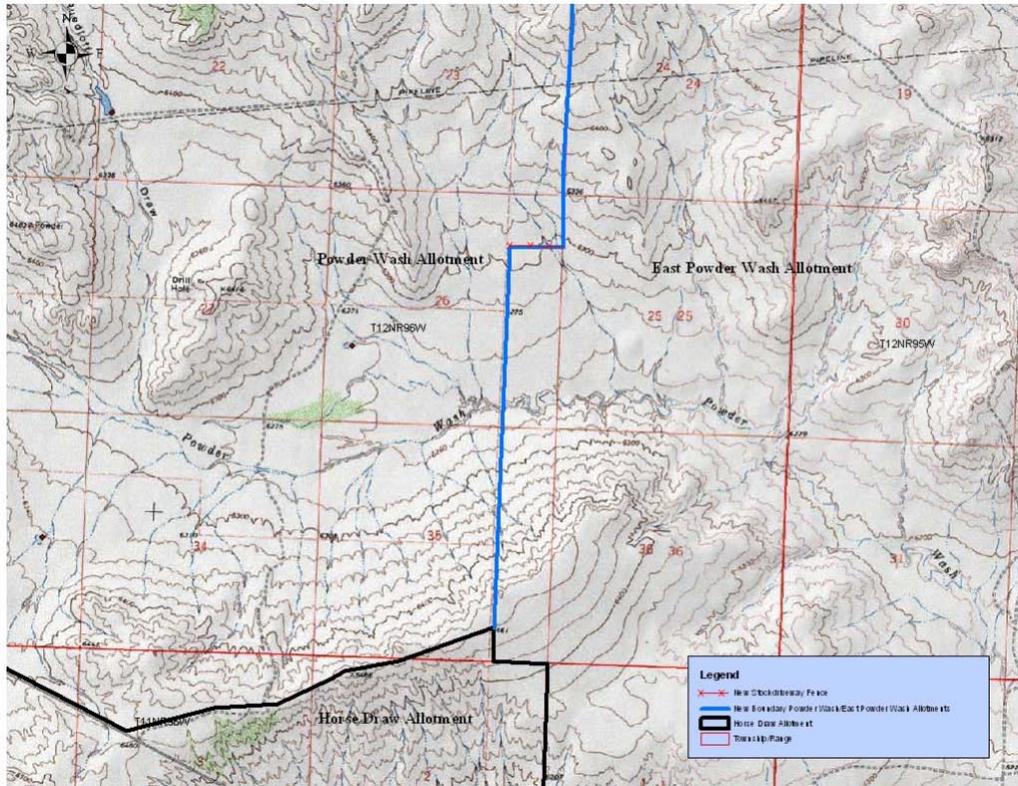


Figure 3.

Stateline/Powder Wash Fence

The Stateline/Powder Wash fence project involves fencing the allotment boundary between the Stateline and Powder Wash Allotments. This fence would be approximately 5.7 miles in length. This fence would provide relief to several ongoing issues including livestock drift and trespass between the two allotments and would prevent wild horses from Wyoming Herd Management Areas (HMAs) from drifting south and occupying public lands not managed for wild horses.

Figure 4 depicts the approximate location of the Powder Wash/Stateline Allotment Boundary Fence:

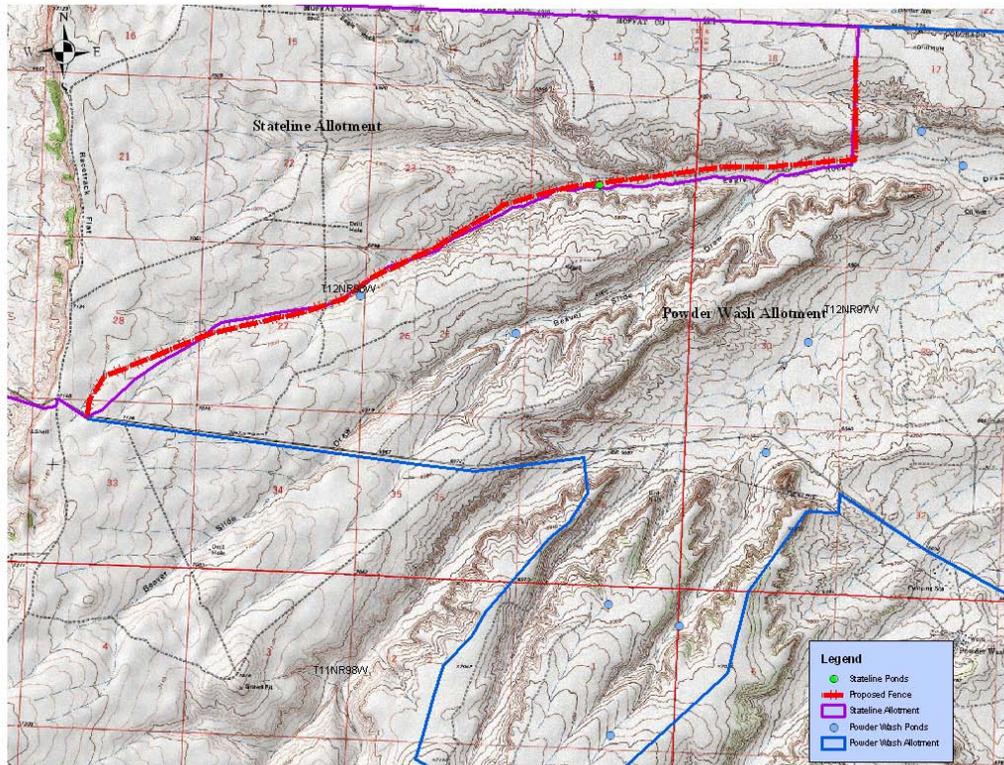


Figure 4.

Wyoming/Colorado Fence

The Wyoming/Colorado fence proposal would complete the boundary fencing between Colorado and Wyoming in T12N R97W and T12N R96W. It would be approximately 3½ miles in length and built to BLM specifications, as shown in Attachment 2. This fence would also provide relief to ongoing problems, the main issue being wild horses from Wyoming herd management areas drifting on the Powder Wash Allotment which is not managed for wild horses. Figure 6 depicts the approximate location of the Wyoming/Colorado state line fence as it crosses through the Powder Wash Allotment:

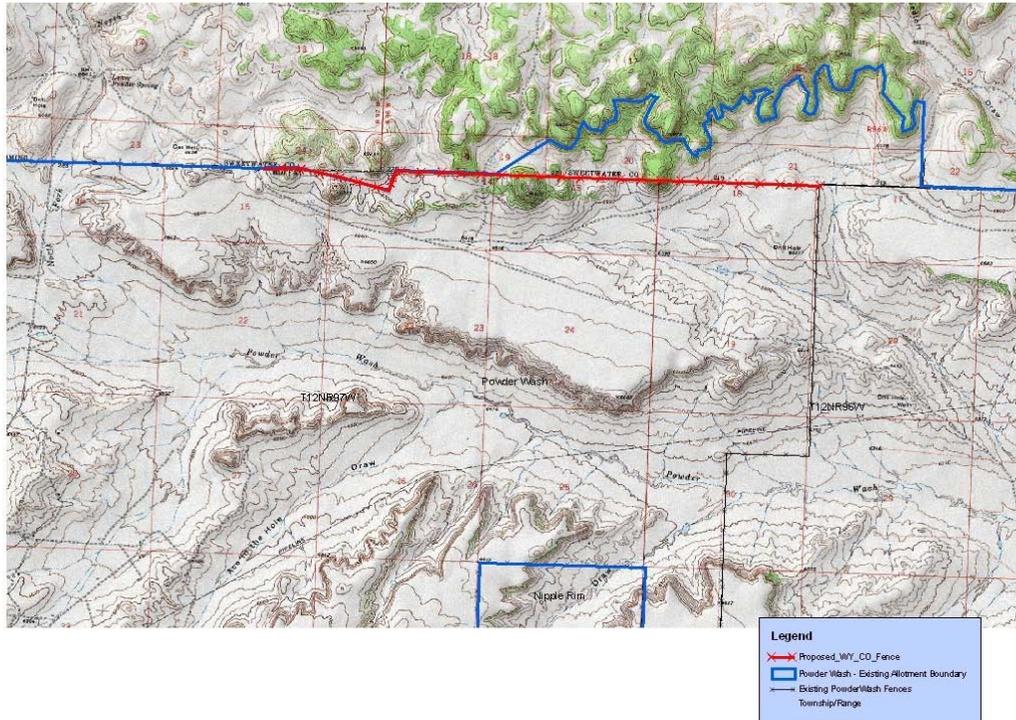


Figure 5.

The construction of this state line fence would result in approximately 682 acres of the Powder Wash Allotment being fenced in with the Powder Mountain Allotment (#10519) administered by the Rawlins Field Office in Wyoming and permitted to Salisbury Livestock. The AUMs associated with these acres were accounted for by the Rawlins Field Office; as such, they were not part of the total preference on Salisbury’s Colorado BLM grazing permit. There would be no change in grazing preference on either grazing permit as a result of this proposed boundary change.

The addition of acres from the stock driveway and the loss of acres to the Powder Mountain Allotment would result in the following new Powder Wash Allotment acreage:

From:

24,985 acres - BLM
 2,231 acres - Private
221 acres – State Lands
 27,437 acres- Total

To:

24,550 acres - BLM
 2,231 acres - Private
221 acres – State Lands
 27,002 acres- Total

Fence Construction

The location of the new fencelines would be flagged by the BLM.

The construction of the fences would be subject to the following stipulations:

1. Wire spacing shall be 38"-30"-22"-15" bottom wire smooth. See Attachment 3.
2. Wooden stays will be used for construction to increase visibility of the fence. To further increase visibility, fence markers (provided by the BLM) will be used.
3. Metal or wire gates will be placed at all intersections with existing roads. Cattle guards will be installed on major roads.
4. To protect wintering big game, no fence construction (including brushbeating) may occur between December 1 and April 30.
5. To protect sage-grouse breeding and nesting activities, no fence construction may occur between March 1 and June 30.
6. To protect nesting migratory bird species, no fence construction may occur between May 15 and July 15.
7. The Stateline/Powder Wash Fence will be required to have perch preventers (metal spikes driven into wooden posts). See Attachment 3a.
8. Construction of range developments within plover breeding habitat shall require clearance of the project site by a BLM biologist once the location is flagged.
9. Fence construction will not occur until a Form 4120-6, Cooperative Agreement for Range Improvements, is signed by the permittee or the authorized representative and the BLM. The Cooperative Agreement will include all of the applicable stipulations.
10. Fence construction will not occur until a Class III cultural resources survey is completed. If sensitive cultural resources are identified during the survey, mitigation may include moving the fence to avoid any identified cultural resources.

Pending Projects Proposed in EA#CO-016-LS-99-10

The following projects were identified and approved for construction during the 1999 grazing permit renewal process but have not been completed:

Chivington Fence

This fence was proposed to enclose 960 acres of deeded land (Chivington Place) within the Powder Wash Pasture to provide another pasture for grazing cattle between April 1, when livestock are to be removed from the allotment, and May 15, when the permittee may move to allotments in Wyoming. The fence would cross approximately 600 feet of BLM managed land. Because the purpose of this fence is to enclose private land, the construction and financing lies

with the permittee. Due to finances and other ranch priorities, this fence has not yet been constructed. This project would be subject to the same stipulations as shown above.

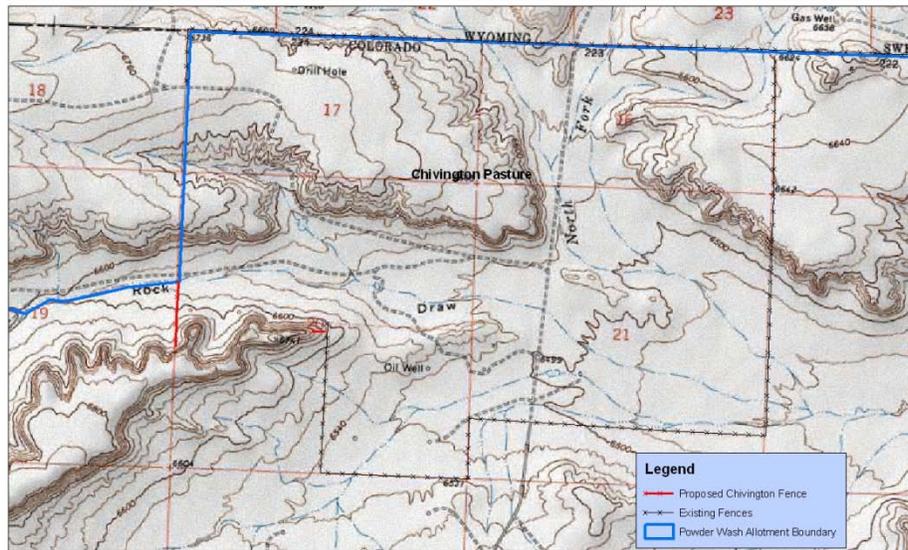


Figure 6.

Construct 3 to 6 new ponds

In 1999, it was proposed to construct up to 6 new stock water ponds. A recent inventory of stock ponds within the Powder Wash Allotment indicates that there are several non-functioning stock ponds in existence throughout the allotment. Rather than construct new ponds, existing ponds will be maintained to return them to working order. One additional pond in the northeast corner of the allotment would be beneficial to improve livestock distribution. Construction of the pond would entail mechanical clearing of brush and construction of a water retention pit by dozer. The pit would be lined with bentonite to improve water retention. For construction of the pond, total direct surface disturbance would be 0.1 acre or less and the pond would have a capacity of less than 1 acre/foot. The pond would be constructed according to BLM water retention pit standards. See Attachment 4.

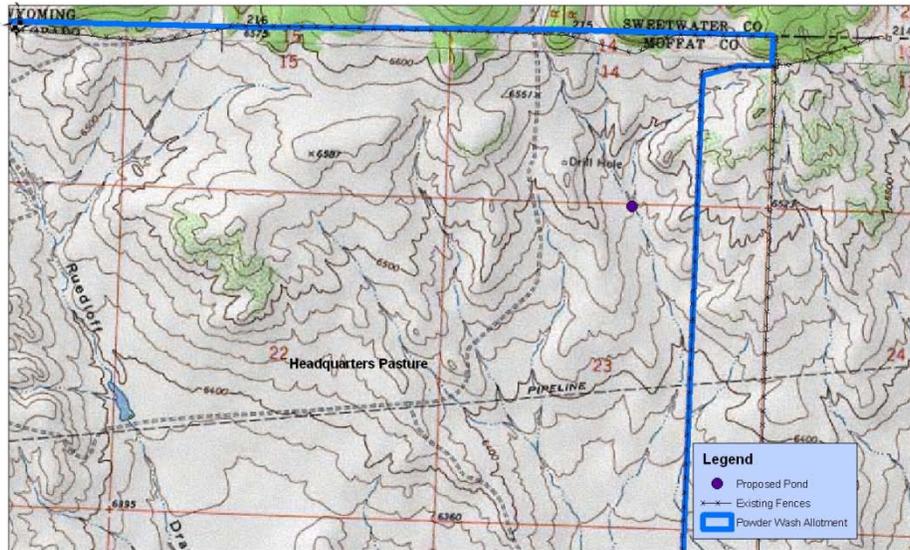


Figure 7.

The construction of the pond would be subject to the following stipulations:

1. Access to and from the site will be on existing roads or trails. Where cross-country travel is mandatory, the same tracks will be used in and out. While traveling, the dozer blade will be kept up.
2. Top soil will be stockpiled and used to cover the disturbed area to the greatest extent possible.
3. Noxious weeds will be controlled by the permittee on any area disturbed as a result of these projects. Any spraying of weeds will need to be cleared through BLM prior to spraying.
4. No hazardous materials/hazardous waste or trash shall be disposed of on public lands. If a release does occur, it shall be reported to the Little Snake Field Office immediately at 970-826-5000.
5. All surface disturbances will be reseeded with native species adapted to the area.
6. No surface disturbing activities between December 1 through July 15 to protect wintering big game, greater sage-grouse, migratory birds and plover habitat.

Rework West Dripping Rock Spring

Background Information: The West Dripping Rock Spring (BLM project #200638) is located within the West Dripping Rock Allotment (#04208) in the SWSE¹/₄ of section 11, T11N R98W. It was originally developed in 1942 and has gone through several project abandonments and reworks. In 1953 a 30 foot diameter, 4 foot deep tank was placed 450 feet below the spring headbox. From this 11,758 gallon storage tank, water was piped into 100 feet of 26 inch diameter troughs so sheep could utilize the water. The sole cooperater on this project was George Salisbury. Beginning in 1961, the spring stopped producing at levels sufficient to maintain the

water level in the large tank. Sometime between 1961 and 1977, a pond and dam were constructed to retain the water and the 11,000 gallon metal tank was abandoned. Also in 1977, a wooden fence consisting of posts and rails was constructed around the spring to keep livestock out of the small riparian area.

In 1999, new work on the earthen dam below the spring was completed. Due to this large earthen dam, water from the spring is completely contained in the West Dripping Rock Allotment, licensed to John and Steve Raftopoulos for 370 sheep from 3/01 to 6/30. Prior to the development of the West Dripping Rock Allotment, the area which contains the West Dripping Rock spring, was part of the Powder Wash Allotment, run in common by Salisbury Livestock and John and Steve Raftopoulos. In 1999, the Powder Wash Allotment became an individual allotment via a fence that divided the Lookout Pasture into two pastures, one of which became the new West Dripping Rock Allotment and the other remained a pasture of the Powder Wash Allotment. It was concurrently proposed with this allotment split to pipe some of the water from West Dripping Rock spring into the Lookout Pasture. In 2004, the old existing fence and other debris were removed from the spring area and a new fence was constructed. This fence consists of buck and pole going down the steep sides of the canyon and across the bottom and traditional barbwire fence was constructed on the bench above the site. This new enclosure is effective in keeping livestock out of the spring site and encourage use of the existing pond below the spring. Access for wildlife is still available via jumping the fence and accessing the spring through a break in the cliffs.



West Dripping Rock Spring Exclosure, October 2010

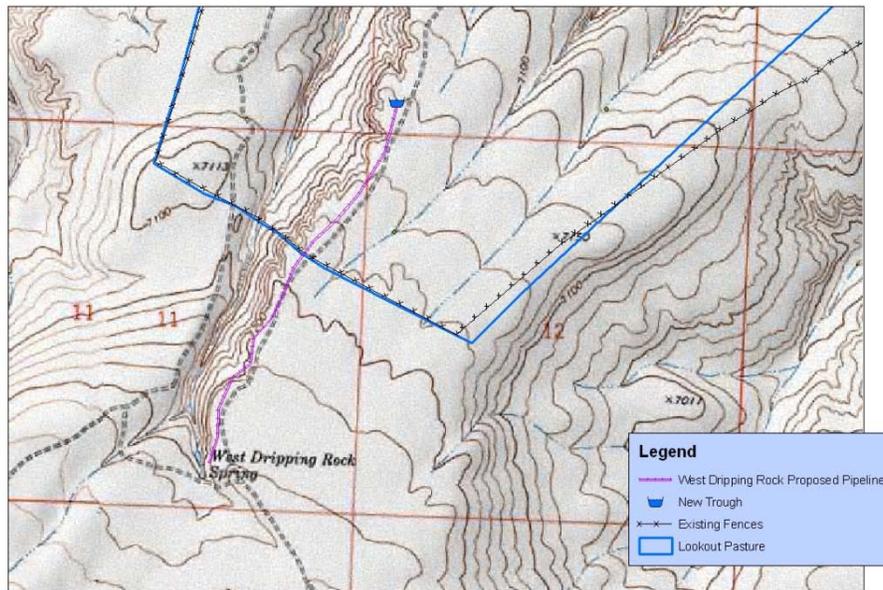


Figure 6.

Project Specifications

No changes are proposed to the enclosure. The spring is producing an estimated 0.78 gallons per minute or 1,124 gallons per day; approximately 500 gallons of water is proposed to be piped to the Lookout Pasture, approximately 5,772 feet to the north. The water would be piped to a 1,000 gallon galvanized steel or polyethylene trough. The pipeline would be constructed with two inch polyethylene plastic pipe. The method of installation would be with a trencher allowing the pipe to be buried a minimum of 18 inches below ground surface with a minimum of surface disturbance. The pipeline system would be a “closed system” having a float valve on the trough. The pipeline would be shut off when livestock are not in the Lookout Pasture (4/01-10/31).

Pipeline Construction Stipulations

Construction work on this pipeline will involve a trencher on the back of a crawler tractor. The trencher will cut an approximately 1-foot wide and 18-inch deep trench and lay the pipeline in one step. Two bulldozer tracks, approximately 2 feet wide each will cause minimal soil disturbance. (Much of the dirt will fall back into the trench as the pipe is laid.) The trencher has packer wheels to push the dirt back into the trench. A wheel tractor may be run over the pipeline following installation, or in the spring, to pack the trench if needed. Small portions of the pipeline which have dense stands of brush will be cleared prior to trenching. Clearing will involve either brush beating the brush or skimming the brush off with a bulldozer blade without blading into the soil surface.

The water pipeline will be built according to BLM specifications (see attached Attachment 5, Pipeline Installation Types) and the following stipulations:

1. No surface disturbing activities between December 1 through July 15 to protect wintering big game, greater sage–grouse, migratory birds and plover habitat.

2. Prior to project construction a Class III, 100 percent pedestrian on the ground survey, will be completed of the flagged project area. All Section 106 Consultation will be completed prior to the project construction work being initiated.

3. The operator is responsible for informing all persons who are associated with the 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 project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO 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 project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and 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.

4. The permittee is responsible for informing all persons in the areas who are associated with this project of the requirements for protecting paleontological resources. Paleontological resources found on the public lands are recognized by the BLM as constituting a fragile and nonrenewable scientific record of the history of life on earth, and so represent an important and critical component of America's natural heritage. These resources are afforded protection under **43 CFR 3802 and 3809**, and penalties possible for the collection of vertebrate fossils are under **43 CFR 8365.1-5**.

5. Pipe used will be high pressure 2 inch diameter.

6. Pipe depth will not be less than 12 inches, nor will it exceed 24 inches.

7. Disturbed areas will be reseeded with a seed mixture approved by the Authorized Officer.

8. Tanks will be provided with bird ladders or alternate escape ramps for small animals. Cleats or traction surfaces on the bottom of the tanks would be installed to furnish large animals a means of escape.

9. Noxious weeds will be controlled on any area disturbed as a result of this project. Any spraying of weeds will have to be cleared through the BLM prior to spraying.

10. Construction activities must stay on the flagged center line and not be more than 30 feet away from the center line.

11. No hazardous materials/hazardous waste/trash will be disposed of on public lands. If a release does occur, it shall be reported immediately to the Little Snake Field Office at (970) 826-5000.

12. Access to and from each site will be on existing roads and trails. If during construction, the BLM, operator, or contractor discovers any fossils or cultural remains, monuments, sites, or objects of antiquity, they shall immediately cease activity and report to the Field Office (970) 826-5000. The BLM will determine the significance of the find and make further recommendations on whether the construction may continue.

No Grazing Alternative

This alternative would cancel all grazing preferences for the allotment. As a result, livestock grazing would not continue. This would be a permanent cancellation.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: The allotment does not lie within any special designation air sheds or non-attainment areas.

Environmental Consequences, No Action and Preferred Alternatives: Activities associated with grazing that may affect air quality, namely dust and exhaust from ranch operation vehicles as well as dust from livestock hoof action, fall below EPA emission standards for the six criteria pollutants of concern (sulfur dioxide, nitrogen oxide, ground-level ozone, carbon monoxide, particulate matter [both PM_{2.5} and PM₁₀], and lead). Furthermore, ranch operation and livestock activities are not a significant source of these pollutant emissions that do occur in Moffat County. Impacts to air quality caused by either alternative are therefore considered negligible.

Also at a regional scale, atmospheric dust, caused by destabilization of soil as a result of land use changes coupled with drought conditions, is receiving increased attention for its ability to alter alpine environments. Dust covered snow melts faster because it can absorb more solar energy, which affects snowpack conditions and can result in earlier and faster spring runoff events. The Colorado Plateau has been identified as a primary dust source for several recent alpine dust events on the Western Slope of Colorado. Areas of low annual precipitation, little to no vegetation cover, and an available supply of sediment are of primary concern for mitigation of expanding or new sources of dust.

Proper grazing use on the forage resources during the wet period (late fall through early spring) as proposed in all of the allotments would help to protect the surface soils from excessive wind erosion. Vehicular access on existing roads for livestock management activities would result in minimal releases of PM 10 (dust) emissions, but this would be minor and not affect the overall air quality of the area.

Environmental Consequences, No Grazing Alternative: Activities associated with grazing that may affect air quality, namely dust and exhaust from ranch operation vehicles as well as dust from livestock hoof action, would not occur. However, ranch operation and livestock activities are not a significant source of pollutant emissions that do occur in Moffat County and fall below EPA emission standards for the six criteria pollutants of concern (sulfur dioxide, nitrogen oxide, ground-level ozone, carbon monoxide, particulate matter [both PM2.5 and PM10], and lead). Impacts to air quality eliminated by this alternative are considered negligible, thus impacts to air quality as a result of eliminating grazing are also considered negligible.

Mitigative Measures: None.

Name of specialist and date: Emily Spencer, 02/09/11

Source: United States Environmental Protection Agency National Ambient Air Quality Standards:
<http://www.epa.gov/air/criteria.html>

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: There are no federally listed ACECs within the Powder Wash Allotment #04214.

Environmental Consequences, all alternatives: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Gina Robison, 02/01/11

CULTURAL RESOURCES

Affected Environment: Grazing authorization renewals are undertakings under Section 106 of the National Historic Preservation Act. During Section 106 review, a cultural resource assessment was completed for the Powder Wash Allotment by Robyn Watkins Morris, Little Snake Field Office Archaeologist on April 12, 2010. 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 Little Snake 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 General Land Office (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 the 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)
04214	3325	24112	12%	67	728	218
*Estimates of site densities are based on known inventory data. Estimates should be accepted as minimum figures which may be revised upwards based on future inventory findings.						

Ninety-one cultural resource inventories have been previously conducted within the allotment resulting in the complete coverage inventory of 24,112 acres and the recording of 293 cultural resources. Of the existing inventories, 23 have reports pending (surveys conducted by third party contractors), 50 are isolated finds, 73 are prehistoric open camps, 35 are prehistoric open lithic scatters, one historic habitation, one paleontological, four open architectural sites, one rock art site, one historic trash dump, and two historic camps.

The historic General Land Office (GLO) plats show several possible cultural resources. In T12N R96W sections 17, 18, 20-22, there are portions of the Cherokee Trail on the 1881 map. In T12N R96W there is a cabin in the SE¼ NE¼ NW¼ of section 26. On the 1905 GLO plat, there are roads shown in T12N R96W and in the western half of section 12 of T11N R96W. The Cherokee Trail is also shown on the 1905 GLO plat in sections 14, 15, and 24 of T12N R97W. On the 1881 GLO map a cabin in section 18 of T12N R98W is shown. A two track road is shown in section 28 of T12N R98W on the 1936 GLO.

Based on available data, a high potential for historic properties occurs in the Powder Wash Allotment. Numerous sites have recently been identified through ground disturbing activities related to oil and gas development. Several sites were revisited in 1999 as part of a range monitoring program (Collins et. al 2001) and require mitigation or monitoring and numerous sites have been recorded and made eligible since that survey. Subsequent cultural resource inventory will be conducted in areas where livestock concentrate and this subsequent field inventory is to be completed within ten year period of the permit. If historic properties are located during the subsequent field inventory, and BLM determines that grazing activities will

adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO.

The following sites were recommended as needing monitoring in 2001 (Collins et. al 2001:20): 5MF.2836, 5MF23649, 5MF2218, 5MF2218, 5MF2835, 5MF1977, 5MF2836, 5MF2168, 5MF4164, 5MF4317, 5MF4163, 5MF4160. No monitoring has occurred since that recommendation and must be done within the next five years.

Environmental Consequences, No Action and Preferred 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 (Broadhead 2001, Osbourn et al. 1987). Indirect impacts include soil erosion, gullyng, and increased potential for unlawful collection and vandalism. Continued livestock use in these concentration areas may cause substantial ground disturbance and cause irreversible adverse effects to historic properties. Placement of mineral supplements, which can create concentration areas, would potentially impact historic properties if they are in proximity of the placement. Continued livestock management under either alternative is appropriate, as long as new discovery's of cultural resources are property mitigated if grazing impacts are occurring.

Standard Stipulations for cultural resources are included in Standard and Common Terms and Conditions (Attachment 6).

Mitigation Measures: Site 5MF4166-mitigate one hearth and one stain as determined impacted by grazing use in 2000 (Collins et. al 2001). Site 5MF4157-mitigate two hearths as determined impacted by grazing use in 2000 (Collins et. al 2001). Site 5MF4158-mitgate one hearth as determined impacted by grazing use in 2000 (Collins et. al 2001). Site 5MF4166-mitigate one hearth and one stain as determined impacted by grazing use in 2000 (Collins et. al 2001).

Environmental Consequences, No Grazing Alternative: While a no grazing alternative alleviates potential damage from livestock activities, cultural resources are constantly being subjected to site formation processes or events after creation (Binford 1981, Schiffer 1987). These processes can be both cultural and natural and take place in an instant or over thousands of years. Cultural processes include any activities directly or indirectly caused by humans. Natural processes include chemical, physical, and biological processes of the natural environment that impinge and or modify cultural materials. Sites which have been determined eligible for the National Register and are threatened may be mitigated.

Mitigation Measures: Site 5MF4166-mitigate one hearth and one stain as determined impacted by grazing use in 2000 (Collins et. al 2001). Site 5MF4157-mitigate two hearths as determined impacted by grazing use in 2000 (Collins et. al 2001). Site 5MF4158-mitgate one hearth as determined impacted by grazing use in 2000 (Collins et. al 2001). Site 5MF4166-mitigate one hearth and one stain as determined impacted by grazing use in 2000 (Collins et. al 2001).

Name of specialist and date: Ethan Morton, 01/25/11

References

Binford, Lewis R.

1981 Behavioral archaeology and the "Pompeii Premise". *Journal of Anthropological Research* 37(3):195-208.

Broadhead, Wade

2001 *Brief Synopsis of Experiments Concerning Effects of Grazing on Archaeological Sites*. Ms. on file, Bureau of Land Management, Gunnison Field Office, Gunnison, Colorado.

Collins, Gary D., Patrick C. Walker, Sam R. Johnson, and Henry S. Keesling

2001 *Addendum to Cultural Resource Evaluation of Known Eligible and Need Data Sites within Range Allotments for Range Permit Renewal EA's FY98 and FY99*.

Osborn, Alan, Susan Vetter, Ralph Hartley, Laurie Walsh, Jesslyn Brown

1987 *Impacts of Domestic Livestock Grazing in the Archaeological Resources of Capitol Reef National Park, Utah. Occasional Studies in Anthropology No. 20*. Ms. on file, Midwest Archaeological Center, Lincoln, Nebraska.

Schiffer, Michael B.

1987 *Formation Processes of the Archaeological Record* [Formation Processes of the Archaeological Record. Albuquerque: University of New Mexico Press.

ENVIRONMENTAL JUSTICE

Affected Environment: Executive Order 12898 (20) requires federal agencies to assess projects to ensure there is no disproportionately high or adverse environmental, health, or safety effects on minority and low-income populations. Minorities comprise a small proportion of the population residing inside the boundaries of the LSFO.

Environmental Consequences, Preferred Alternative: Minority or low-income populations seeking employment in the ranching industry could be directly affected due to employment opportunity in the project area of the proposed action, but only a small number of people would be affected. Indirect effects could include effects due to overall employment opportunities related to the ranching service support industry in the region.

Environmental Consequences, No Grazing Alternative: The selection of this alternative could have a negative economic impact on minority populations who could lose employment due to the action. The indirect effects could include negative effects due to overall employment opportunities related to the ranching service support industry in the region.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 01/28/11

FLOODPLAINS

Affected Environment: There are no 100-year floodplains identified within the Powder Wash Allotment.

Environmental Consequences, all alternatives: None.

Mitigative Measures: None.

Name of specialist and date: Emily Spencer, 04/13/10

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive and noxious weeds are present in the affected area. Invasive annuals such as cheat grass, halogeton and yellow alyssum occur in or near the allotment. Additionally, white top and Canada thistle are found on nearby land parcels. Invasive annual weeds are typically established in disturbed and high traffic areas, whereas, biennial and perennial weeds are less common in occurrence. Cheat grass and halogeton are on the Colorado List C of noxious weeds while Canada thistle and white top are on List B. The BLM Little Snake Field Office cooperates with Moffat County Pest Management program to employ the principals of Integrated Weed Management (IWM) to control noxious weeds on public lands.

Environmental Consequences, No Action and Preferred Alternatives: The impact of invasive or noxious weed establishment is very similar under either alternative. Vehicular access to public lands for dispersed recreation, hunting, grazing operations, livestock and wildlife movement, as well as wind and water, can cause weeds to spread into new areas. Surface disturbance from livestock concentration and human activities associated with grazing operations can also increase weed presence. The largest concern in the allotment would be for biennial and perennial noxious weeds to establish and not be detected. Once an infestation is detected it could be controlled with various IWM techniques. Land practices and land uses by the livestock operator and their weed control efforts and awareness would largely determine the identification and potential occurrence of weeds within the allotment.

Environmental Consequences, specific to the Preferred Alternative: The inclusion of fencing in the Preferred Alternative provides an opportunity for invasive species to establish or spread. The probability of weed infestation is highest during construction of fencing and then decreases.

Environmental Consequences, No Grazing Alternative: Removal of livestock grazing from the area would provide a benefit for native vegetation competing with invasive weed species for available resources. Existing infestations of noxious weeds would continue to spread or maintain current size. Some reduction in weed spread would be possible by removing livestock grazing from the allotments. However, other uses in the area including wildlife, recreation users and hunting as well as wind and water resources would still provide an avenue for spread of weed seed. Additionally, active management prioritization and early detection and resulting treatments of small infestations would be reduced by this alternative.

Mitigative Measures: None.

Name of specialist and date: Christina Rhyne, 01/24/11

MIGRATORY BIRDS

Affected Environment: The Powder Wash Allotment provides potential nesting habitat for the following birds which are listed on the USFWS 2008 Birds of Conservation Concern List: sage thrasher, sage sparrow, Brewer's sparrow, bald eagle, ferruginous hawk, and mountain plover.

Environmental Consequences, Preferred Alternative: The proposed period of use for livestock and range improvements for the Powder Wash allotment is scheduled to occur outside of the migratory bird nesting season (May 15 –August 15) and any direct impacts by livestock are likely to be avoided. While livestock grazing can directly impact reproductive success of migratory songbirds by trampling of nests, it is more likely that it indirectly influences reproductive success due to changes in vegetation such as species composition, height or cover. Terms and conditions which limit utilization levels to 50% on key grass species and to 40% on key browse species would prevent over-utilization (>60%) in any given area. Due to the above measures, grazing would not alter habitat conditions to the extent that reproduction or foraging would be adversely impacted. Bald eagle and ferruginous hawk nesting and fledgling activities would not be disturbed by livestock grazing. The vegetative community is in good condition, providing suitable habitat for migratory bird species. These conditions would continue under the grazing system described in the Preferred Alternative. Overall, the Preferred Alternative would be compatible with maintaining local migratory bird populations.

Environmental Consequences, No Action Alternative: Under the current grazing system, the allotment is providing suitable habitat for a variety of migratory bird species. Habitat conditions would remain unchanged under this alternative.

Environmental Consequences, No Grazing Alternative: Elimination of grazing would directly and indirectly impact migratory birds and their habitat. Cessation of cattle grazing would eliminate nest loss and potential mortality of migratory birds through grazing and grazing-related activities. The no grazing alternative could have either a beneficial or detrimental effect on individual migratory bird species, depending on the response of range condition and individual species requirements, but affects at the population or species level would not be adverse.

Mitigative Measures: None.

Name of specialist and date: Gail E. Martinez, 02/10/11

NATIVE AMERICAN RELIGIOUS CONCERNS

Letters were sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Utes Tribal Council, Shoshoni Tribal Historic Preservation Officer, and the Colorado Commission of Indian Affairs in the spring of 2010 discussing upcoming projects the BLM would be working on in FY10 and FY11. Letters were followed up with phone calls. No comments were received (Letters on file at the Little Snake Field Office, Craig, Colorado).

Name of specialist and date: Ethan Morton 01/25/11

PRIME & UNIQUE FARMLANDS

Affected Environment: No Prime and/or Unique Farmlands are present on public lands within the Powder Wash Allotment.

Environmental Consequences, all alternatives: None.

Mitigative Measures: None.

Name of specialist and date: Emily Spencer, 03/15/10

T&E SPECIES – SENSITIVE PLANTS

Affected Environment: There are no BLM sensitive plant species present on the Powder Wash Allotment.

Environmental Consequences, all alternatives: None.

Mitigative Measures: None.

Name of specialist and date: Hunter Seim, 03/24/10

T&E AND SENSITIVE ANIMALS

Affected Environment: The Powder Wash Allotment provides habitat for the following BLM sensitive species; greater sage-grouse, mountain plover, Brewer's sparrow, burrowing owl, white-tailed prairie dog, ferruginous hawk and bald eagle. The Powder Wash Allotment lies within the black-footed ferret (listed as an Endangered Species by the USFWS) management area.

There are three greater sage-grouse leks within two miles from the perimeter of the allotment. The allotment is mapped as over all greater sage-grouse habitat and greater sage-grouse winter range by the Colorado Division of Wildlife. Greater sage-grouse nest habitat is scattered in patches of heavier sagebrush. Quality nesting habitat has an understory of residual grass cover that provides hiding cover for incubating females. Important brood rearing habitat for sage-grouse is found along drainages and in moister sites near springs and seeps. Sage-grouse broods

require high protein forbs and associated invertebrates. The winter habitat for sage-grouse within the Powder Wash Allotment overlaps with the big game winter range.

Environmental Consequences, Preferred Alternative: Impacts of the proposed action to migratory birds and raptor species are discussed in the “Migratory Birds” section of this environmental document.

Livestock grazing can indirectly impact grouse by altering habitat components such as species composition, height or cover. Heavy utilization of grass can reduce the quality of nest habitat for sage-grouse. The portion of this allotment that is mapped as sage-grouse nesting is proposed for grazing by sheep from 11/10 to 11/26. Typically, sheep will graze on shrubby plants during that time of year, thus avoiding any impacts to residual grass cover necessary for sage-grouse nesting.

Grazing by sheep in the late winter/early spring can be more likely to disturb actively nesting sage-grouse than grazing by cattle because sheep are browsers and utilize sage brush more readily than cattle. This problem can be compounded if sheep are trailed through nesting habitat or are allowed to graze in tightly bunched groups in the early spring when sage-grouse are on their nests. The sage-grouse nesting season in Moffat County, Colorado usually begins the last week of April and is typically completed by the end of June. The Preferred Alternative would allow sheep to use the allotment from 11/10 to 5/1; there is potential for nests to be abandoned or destroyed as a result of livestock grazing during the initial nesting period in late April. Since the sage-grouse nesting habitat within this allotment is proposed for sheep grazing in the late fall, impacts to nesting sage-grouse are expected to be minimal. After their arrival in the Powder Wash Allotment, sheep are herded but not trailed. Sheep are moved within the pastures in order to attain proper utilization of the forage resource. Individuals within the bands are allowed to spread out and graze at their own pace. The Preferred Alternative would permit a relatively low density of sheep within the allotment (approximately 5 sheep per acre) therefore the likelihood of nest trampling is low.

The proposed Stock Driveway Fence removal may provide benefits to greater sage-grouse. The fence posts provide perching platforms for raptors and may increase predation of greater sage-grouse. The removal of this fence would also reduce the fragmentation of habitat created with fences. The new fence construction for the Stock Driveway Fence is located outside of the greater sage-grouse 2 mile lek buffer.

The proposed Stateline (04215)/Powder Wash Allotment Boundary Fence is within the 2 mile greater sage-grouse lek buffer radius and greater sage-grouse production habitat. Fences, corrals, windmills, and other structures related to livestock grazing can cause mortality of grouse from collisions, and provide perches that raptors and ravens may use, which could increase avian predation on grouse or their nests (Call and Maser 1985). Initial fence construction in which an area is cleared of vegetation may create a travel corridor for predators. Minimization of the width of the cleared area along fences may reduce predator effectiveness and may deter predators from utilizing the fence line as a travel corridor. The addition of a high visibility top wire to fences and/or highly visible flagging may prevent bird collisions. The installation of perch preventers on wood fence posts would help to minimize predation on sage-grouse by raptors. To

protect sage-grouse breeding and nesting activities, no fence construction may occur between March 1 and June 30.

Plovers evolved with buffalo on the short-grass prairie. They prefer open grazed sites during the nesting period, and then move along the edges near clumps of native grasses while raising broods of young. Winter grazing by livestock should not affect plover habitat quality. Water developments, although not essential for the survival of the plover, are often preferred sites. Building additional water developments may improve plover habitat. Construction of fences or ponds in plover nesting habitat during breeding could cause nest loss to abandonment; therefore construction activities will not be permitted during plover nesting season, thus reducing the chance for nest abandonment.

Because of the lack of competition between livestock use and prairie dogs in the black-footed ferret management area, livestock grazing is not considered a limiting factor to prairie dog expansion or black-footed ferret management. Burrowing owls typically use burrows created by other animals such as prairie dogs. Since burrowing owls prefer grasslands that have been grazed by livestock or prairie-dogs, the Preferred Alternative would not promote negative impacts to burrowing owl populations. The Preferred Alternative with the implemented stipulations would not cause a significant impact to endangered or sensitive species.

Environmental Consequences, No Action: Under the current grazing system, the allotment is found to be meeting all land health standards and providing suitable habitat for endangered and BLM sensitive species. Habitat conditions would remain unchanged under this alternative.

Environmental Consequences, No Grazing Alternative: The No Grazing Alternative would benefit wildlife by reducing and eventually eliminating direct and indirect effects of livestock to wildlife. Increases in forage and hiding cover amounts, types, and quality for wildlife would be expected with this option and may result in an increase in wildlife populations which use these allotments.

Mitigative Measures: None.

Name of specialist and date: Gail E. Martinez, 02/10/11

References cited: Call, M. W., and C. Maser. 1985. Wildlife habitats in managed rangelands—the Great Basin of southeastern Oregon. Sage-grouse. General Technical Report PNW 187. U.S., Department of Agriculture, Forest Service, Portland, Oregon, USA.

T&E SPECIES – PLANTS

Affected Environment: There are no federally listed threatened or endangered plant species present on the Powder Wash Allotment.

Environmental Consequences, all alternatives: None.

Mitigative Measures: None.

Name of specialist and date: Hunter Seim, 03/24/10

WASTES, HAZARDOUS OR SOLID

Affected Environment: The Powder Wash Allotment currently contains over 120 operating natural gas wells and exploratory drilling is ongoing. Hazardous materials associated with the oil and gas industry exist on the allotment. Occasionally various materials are illicitly dumped in this area—generally either trash no longer accepted at the County landfills (e.g., appliances, couches, tires), or waste oils (many of which are managed as hazardous substances). Periodic cleanups can be scheduled to address the trash dumping, and waste oils are disposed of in a timely manner when discovered, after site evaluation. There have been no documented occasions of livestock grazing being the source of or interfering with the management of these wastes.

Environmental Consequences, all alternatives: No hazardous or solid wastes would be generated under any of the alternatives.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 01/24/11

WATER QUALITY - GROUND

Affected Environment: There can be water flowing through near-surface and over surface exposures of the Wasatch formation.

Environmental Consequences, all alternatives: Surface disturbance such as livestock grazing and associated activities would have no affect to ground water quality.

Mitigative Measures: None.

Name of specialist and date: Marty O'Mara, 03/19/10

WATER QUALITY – SURFACE

Affected Environment: Runoff drainage from the Powder Wash Allotment would flow to Powder Wash, an ephemeral tributary to the Little Snake River. The Powder Wash allotment is over six miles upstream of the confluence of Powder Wash and the Little Snake River. All tributaries to the Little Snake River (including Powder Wash) from a point immediately below the confluence with Fourmile Creek to the confluence with the Yampa River are use protected and need to have water quality that supports Aquatic Life Warm 2, Recreation N and Agriculture. There are no naturally occurring water bodies on the allotment. While there are no identified water quality impairments or other issues for Powder Wash, as of 2010 the Little Snake River downstream of Powder Wash (from Powder Wash to the Yampa River) is on the

Colorado Department of Public Health and Environment's Monitoring and Evaluation List for a suspected water quality problem regarding sediment load (CDPHE 2010).

Environmental Consequences, Preferred Alternative: Water quality in grazing lands is primarily influenced by the duration, amount, and intensity of precipitation and livestock use, and landscape characteristics (topography, soils, vegetative cover). Perennial waters influenced downstream of the allotment are suspected of having sediment load issues, the source of which is unknown. However, soils and landscape morphology within Powder Wash Basin are erosional in nature and thus a certain amount of sediment contribution to perennial waters is expected downstream under even the best land health conditions, particularly following precipitation runoff or wind events. Turbidity levels in the Little Snake and Yampa River drainages are some of the highest in the state due to extensive, cohesive sediment sources. Even prior to modern land uses, these soils naturally provided a large suspended sediment load to perennial, regional watercourses.

Implementation of the proposed revised terms and conditions would maintain or improve overall rangeland health, including vegetative cover, where needed to prevent excessive and accelerated erosion that would contribute to suspected sediment issues further downstream.

Environmental Consequences, No Action: Not implementing the proposed range improvement projects would exacerbate poor rangeland health conditions in some locations, which could eventually lead to increased soil loss and sedimentation further downstream through wind and water erosion.

Environmental Consequences, No Grazing Alternative: Although there are no identified water quality issues that known to result from livestock use within the affected area, potential direct and indirect impacts to water quality caused by livestock use, such as deposition and concentration of waste directly into the water body or trampling, trailing, overgrazing of streamside vegetation that may lead to increased sedimentation, would be eliminated under this alternative. This alternative has the potential to benefit overall water quality both within and downstream of the allotments.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 02/10/11

Reference: Colorado Department of Public Health and Environment Water Quality Control Commission. 2010. Regulations #33, 37, and 93. <http://www.cdphe.state.co.us/regulations/wqccregs/index.html>

Kansas State University Research and Extension. 2002. Kansas Grazing Land Water Quality Program: Understanding Grazing Land and Water Quality (pamphlet). www.kdheks.gov/nps/resources/grazing/attach2.pdf

WETLANDS & RIPARIAN ZONES

Affected Environment: Powder Wash and associated tributaries that run through the allotment are ephemeral and have little to no active riparian zones. There are no identified naturally occurring wetlands, seeps, or springs within the allotment. There are many developed

and actively maintained livestock ponds that may contain wetland plant species. Because these features are not naturally occurring they are not assessed, monitored, or restored as natural riparian and wetland resources would be. West Dripping Rock Spring is not within the allotment; however the proposed development of the spring would pipe water into Powder Wash for livestock watering during the winter.

Environmental Consequences, Preferred Alternative: The rework of West Dripping Rock Spring in the adjacent West Dripping Rock Allotment (#04208) and piping of approximately 500 gallons/day of water from the pond below the spring enclosure into Powder Wash Allotment would likely have little to no effect on the form and function of the spring itself or negatively impact riparian vegetation the spring supports within the enclosure. Water would be drawn from a point below the spring and existing pond, which was constructed as part of a previous development project and has dammed any runoff the spring produced for so long that no riparian community exists anymore below the pond. Furthermore, water would be piped to the Lookout Pasture from late fall to early spring (November 1 through March 31), during which time vegetation would be dormant. The pipe would be turned off and water would remain on site or collect in the pond below during the rest of the year. The only impact this project might have is to draw down the pond to a point that available water may not be sufficient to support the authorized sheep use within the West Dripping Rock Allotment during the month of March. However, sheep are not entirely dependent on this water source during this time, as other water developments provide for livestock needs within this allotment. Also, March is often a wet month and the pond may also be recharged by groundwater or subsurface runoff.

Environmental Consequences, No Action: Livestock would continue to be managed as outlined in EA #CO-100-LS-99-010; the environmental consequences would be the same. West Dripping Rock Spring would not be reworked. No further modification below the spring would occur.

Environmental Consequences, No Grazing Alternative: Eliminating grazing would have little to no effect on riparian resources, since there are no active riparian zones within the allotment. Livestock are already excluded from West Dripping Rock Spring, located within the adjacent allotment.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 02/09/11

WILD & SCENIC RIVERS

Affected Environment: There are no federally listed Wild and Scenic Rivers within the Powder Wash Allotment #04214.

Environmental Consequences, all alternatives: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Gina Robison, 02/01/11

WILDERNESS, WSAs

Affected Environment: There are no federally listed WSAs within the Powder Wash Allotment #04214.

Environmental Consequences, all alternatives: Not applicable.

Environmental Consequences, No Grazing Alternative: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Gina Robison, 02/01/11

NON-CRITICAL ELEMENTS

RANGE MANAGEMENT

Affected Environment: The season of use is currently 11/01 through 03/31 for cattle and 11/10 through 05/01 for sheep. The allotment is authorized at between 96% -100% public land, (with the exception of the Chivington Pasture, which is authorized at 40% public land) for a total of 2,500 AUMs of active use and 750 AUMs in suspended non-use. The Preferred Alternative includes a change to the season of use within the Headquarters Pasture and the activation of 136 AUMS of suspended AUMs. The use is currently rotated through five pastures.

Ongoing issues include the drift of wild horses from two herd management areas (HMAs) managed by the Rock Springs and Rawlins BLM Wyoming field offices and the drift of cattle both into and out of the allotment in the northwest portion of the allotment. Both of these issues could be resolved with the construction of the Powder Wash/Stateline Allotment Fence.

Environmental Consequences, Preferred Alternative: The construction of the Powder Wash/Stateline Allotment fence would help prevent wild horses from Wyoming from entering the Powder Wash Allotment and would help prevent livestock drift both into and out of the Powder Wash Allotment. The removal of the stock driveway and the equitable split of the acres formerly within the driveway would resolve a long standing point of contention between neighboring ranchers.

Allowing a small "hospital" band of sheep to remain in the Headquarters Pasture until 06/01 (when necessary) would allow the permittee options to manage animals that are injured or ill. An additional 30 days in the pasture would allow for the animals to become healthy before being shipped long distances.

Environmental Consequences, No Action: Livestock drift and trespass situations would continue between the Powder Wash and Stateline Allotments without the construction of the

allotment boundary fence. The obsolete stock driveway would remain in place with no equitable outcome. Livestock would continue to be managed as described in EA #CO-100-LS-99-010.

Environmental Consequences, No Grazing Alternative: Upon cancellation of the grazing permit, all range improvement projects that are beneficial to other resources (such as water developments for wildlife) would have to be maintained by the BLM. They are currently maintained by the permittee. The permittee would be eligible for compensation for his lost investment in these projects. Range improvements that are not beneficial to other resources would be removed at the expense of the BLM.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 01/20/11

SOCIAL AND ECONOMIC VALUES

Affected Environment: Cattle and sheep ranching are among the most traditional and important economic activities in the Little Snake region. Based on the most recent agricultural census (2002), Moffat County had approximately 443 farms and ranches on more than 1 million acres of private land. This land supported approximately 32 thousand cattle and calves on 184 ranches (173 per operation) and 86 thousand sheep on 51 ranches (1,692 per operation) based on January 1, 2005 inventories. Moreover, about 45,000 acres of hay was produced in 2004. Moffat County's sales of sheep, beef cattle and calves reached more than \$19 million in 2002 (CASS, 2005).⁷ A majority of the potentially affected private lands are held in ranching. In this region, ranching and public land management are strongly linked through grazing permits.

Environmental Consequences, No Action and Preferred Alternative: Under the Preferred Alternative, grazing would continue, generally at current stocking rates and operating costs on public land within the Powder Wash Allotment that has been in use for the last 10 years. This grazing operation would continue to supply substantial personal income to this operator and his employees, but would have a nominal influence on the regional, Colorado, and national economy. The way of life practiced by this rancher would be essentially unchanged. This may be a positive or negative impact to other public land users and nearby residents, but in either case, the impact is not considered substantial at this time due to the other activities in the area and the intermittent nature of the presence of sheep and cattle.

Environmental Consequences, No Grazing Alternative: Under this alternative, the Powder Wash sheep and cattle allotment would be eliminated as a small source of food and fiber for the region and the nation. Without a grazing permit on the Powder Wash Allotment, the permittee would be forced to feed cattle and sheep with grown or purchased hay, presumably at a higher cost to the ranching operation. As a result, a loss of the grazing permit on the allotment would reduce the profitability of the ranch and may make it unprofitable, inducing a decision to sell the base property. If sold, it is likely that the land will be used to grow hay or leased as pasture to the remaining ranchers. It is less likely, but possible, that it would be sold for rural residential use or rural recreational use (e.g., ATV/OMV).

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 01/25/11

Source: Colorado State University Extension, Economic Development Report, April 2007 EDR 07-10, Department of Agricultural and Resource Economics, Fort Collins, CO. <http://dare.colostate.edu/pubs>

SOILS

Affected Environment: The table below (Table 1) describes the major soil groups (over 800 acres) included within the Powder Wash Allotment. All soil types are suitable for grazing. The main hazard for all soils is erosion unless close-growing plant cover is maintained and/or that soils are very dry.

Table 1. Soil Summary for the Powder Wash Allotment (#04214)

Soil Map Unit (MU) & Soil Name (Acres in Allot.)	Map Unit Setting	Description
MU 201 Tresano-Hiatha-Kandaly association, 2 to 20% slopes 5,121 acres	<u>Elevation:</u> 6,000 – 6,800 feet <u>Mean annual precipitation:</u> 9-11” <u>Ecological Site:</u> Clayey 9-11" P.Z./ Alkali Upland/Dry Sandy	Soil characteristics vary widely. Soils are well to excessively drained with very slow to rapid permeability and very low to very high runoff potential. Available water capacity ranges from very low to very high & the soil profile is typically from 18 to 60 inches deep.
MU 178 Simanni-Ruedloff complex, 1 to 10% slopes 4,405 acres	<u>Elevation:</u> 6,000 – 6,500 feet <u>Mean annual precipitation:</u> 9-11” <u>Ecological Site:</u> Sandy	These toeslope soils are well to somewhat excessively drained with moderate to moderately rapid permeability & low to medium runoff potential. Available water capacity is low & the soil profile is typically up to 60 inches deep.
MU 198 Torriorthents-Rock outcrop, shale complex, 30 to 75% slopes 2,874 acres	<u>Elevation:</u> 6,000 – 7,200 feet <u>Mean annual precipitation:</u> 9-11” <u>Ecological Site:</u> not given	These soils are well drained with slow permeability and very high runoff potential. Available water capacity is very low and the soil profile is typically 0 to 12 inches deep.
MU 188 Talamantes loam, saline, 0 to 8 % slopes 2,727 acres	<u>Elevation:</u> 6,000 – 7,200 feet <u>Mean annual precipitation:</u> 9-11” <u>Ecological Site:</u> Alkali Upland	These toeslope soils are well drained with moderately slow permeability and medium runoff potential. Available water capacity is moderate and the soil profile can be up to 60 inches deep.
MU 207 Vermillion-Langspring complex, 3 to 25% slopes 2,346 acres	<u>Elevation:</u> 6,000 – 6,800 feet <u>Mean annual precipitation:</u> 9-11” <u>Ecological Site:</u> Loamy 7-10" PPT	These soils are well drained with moderate permeability and medium to high runoff potential. Available water capacity is low to moderate and the soil profile is typically from 32 to 60 inches deep.
MU 169 Ruedloff-Dunul complex, 5 to 25 %	<u>Elevation:</u> 6,200 – 6,500 feet <u>Mean annual precipitation:</u> 9-11”	These backslope soils are somewhat excessively to excessively drained with moderately rapid permeability and very

slopes 1,648 acres	<i>Ecological Site: Sandy & Dry Sandy</i>	low runoff potential. Available water capacity is low and the soil profile is typically up to 60 inches deep.
MU 186 Talamantes loam, 0 to 6% Slopes 1,248 acres	<i>Elevation: 6,200 – 7,200 feet</i> <i>Mean annual precipitation: 9-11”</i> <i>Ecological Site: Silty Swale</i>	These alluvial fan soils are well drained with moderately slow permeability and low runoff potential. Available water capacity is high and the soil profile is typically up to 60 inches deep.
MU 200 Tresano sandy loam, 3 to 12% slopes 1,128 acres	<i>Elevation: 6,000 – 7,000 feet</i> <i>Mean annual precipitation: 9-11”</i> <i>Ecological Site: Loamy 7-10” PPT</i>	These plateau soils are well drained with moderate permeability and medium runoff potential. Available water capacity is moderate and the soil profile is typically up to 60 inches deep.
MU 199 Torriorthents-Torripsamments complex, 12 to 40% slopes 981 acres	<i>Elevation: 6,000 – 7,200 feet</i> <i>Mean annual precipitation: 9-13”</i> <i>Ecological Site: none given</i>	These hillslope soils are well to excessively drained with moderately slow to rapid permeability and high runoff potential. Available water capacity is very low and the soil profile is typically 19-30 inches deep.

Data taken from *Soil Survey of Moffat County Area, Colorado (2004)*.

Based on the 2003 Powder Wash LHA, overall surface soil characteristics are relatively stable throughout the allotment, however, non-native annual vegetation (particularly halogeton) dominates in several locations and vegetation composition, quality, and quantity is not sufficient to protect from soil loss through wind or water erosion. There is evidence of slight to moderate soil and litter movement in the western and eastern part of the allotment. Some terracing, pedestalling, and fragmented soil crusts were also observed in various locations, several near well pads.

Oil and gas production is also a concurrent use and there are around 120 producing wells within the allotment. Each well pad occupies two to three acres of scraped, bare ground, plus additional disturbed acreage from pipelines amounting to between four and six acres of disturbance per well. In total, there is approximately 600-720 acres of bare ground in the Powder Wash Allotment. This does not include the disturbance and dust generation from the network of service roads needed to maintain the producing wells. Weedy annuals with shallow root systems often move in following the disturbance and are difficult to contain and control. Although reclamation work is conducted at all of the wells, it can take several decades for the vegetation to reestablish due to the aridity of the area and chemical composition of soils. Even though these soils may be erodible in nature, the combination of oil and gas production and livestock grazing in such arid, sandy soils presents a challenge in maintaining the vegetative communities necessary to help prevent erosion.

Environmental Consequences, Preferred Alternative: The proposed range improvement fencing projects would facilitate livestock distribution use as well as prevent animal trespass that cause additional pressure on vegetation and soils communities. Soils of all types are least vulnerable to disturbance when frozen or snow covered. Sandy soils, which make up much of the allotment, are less susceptible to disturbance and erosion when wet or moist (late fall/early

spring). Maintaining mostly winter livestock use of pastures also helps to relieve pressure on native plants that then have part of the spring, summer and fall to recover. Oil and gas activities will continue to be a disturbance in the area and a source for erosion, which makes it all the more important that native vegetation, particularly perennial species, be maintained and improved as much as possible and where possible in the allotment. Additional coordination with the Moffat County weed program and BLM minerals staff for focused weed management in conjunction with post-treatment and fencing monitoring will indicate effectiveness of range improvement projects in improving vegetation and soil community towards meeting range standards throughout the allotment. Finally, incorporating BLM weed management BMPs during project construction will help to prevent the introduction of new weeds and the spread of existing weeds.

Environmental Consequences, No Action: Trespass livestock and wild horses would continue to be a problem without the proposed range improvement fence projects. Without increased coordination and strategy development with the Moffat County weed program and BLM minerals staff, the likelihood of halogeton and other non-native annual plants spreading would increase, leading to excessive and accelerated soil erosion.

Environmental Consequences, No Grazing Alternative: Removal of livestock from public lands would lead to decreased hoof compaction of soil surfaces. Over time the lack of compaction, combined with the annual freeze-thaw cycle, may lead to a decrease in soil bulk density and improved soil moisture conditions, which facilitates vegetation germination and root development. Removing livestock would also result in an increase of both plant litter and live vegetative ground cover that would provide more protection from wind and water erosion. Livestock trails and the resulting erosion would heal over time.

However, the effects described above may not be entirely mitigated by the removal of domestic livestock, given the presence of wild horses and wildlife (particularly large ungulates) within the allotment. Also, if grazing were to continue on adjacent private or other non-federal lands in the allotment, fences would have to be built by the landowner(s) to prevent trespass onto federally-managed lands. Given the natural tendency of cattle to congregate and trail along fence lines, it is likely that paths and forage depletion would occur along the fences. The resulting decrease in canopy cover would fail to decrease the impact of raindrops on the soil surface, while the expected increase in compaction would increase runoff from both rain and snowmelt. These factors would combine to increase the likelihood of both wind and water erosion in the areas adjacent to fences. This may result in blowouts and gullies which could indirectly impact federal lands through deposition or by the eroded area actually spreading onto federal lands.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 02/10/11

UPLAND VEGETATION

Affected Environment: The climate within the Powder Wash Allotment is temperate and semi-arid to arid. Precipitation comes as both rain and snow and, although highly variable from year to year, is more or less evenly distributed throughout the year. Winters are cold with mean

temperatures around 4°F. Summers are mild to warm with a mean temperature of 85°F. The area experiences approximately 94 frost free days per year. Mean precipitation is approximately 13 inches per year with a portion of that being an average of 85 inches of snow. Vegetative communities in this area include sagebrush-grasslands, saltbush communities, greasewood flats and juniper woodlands.

There are 17 different soil types making up the majority of the acreage in the Powder Wash Allotment. These soils support 7 different range sites including clayey 9-11", alkali upland, loamy 7-10", sandy, silty swale, loamy 10-14" and sandy foothills. The largest range sites by acres are the clayey 9-11", the alkali upland and the loamy 7-10".

Within the clayey 9-11" the annual precipitation is approximately 10"; most of this occurs during the late fall, winter and early spring (October through April). Thickspike wheatgrass, western wheatgrass, streambank wheatgrass, Sandberg bluegrass, and Nevada bluegrass make up most of the annual production in the potential plant community of this site. Other grasses are bottlebrush squirreltail, Indian ricegrass, and prairie junegrass. The major forbs are foothills deathcamas, Hoods phlox, scarlet globemallow, western yarrow, white aster, and tapertip hawksbeard. Birdfoot sagebrush, Gardner saltbush, winterfat, and Wyoming big sagebrush are the main shrubs.

Within the alkali upland range site, the annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April). Western wheatgrass, Indian ricegrass, thickspike wheatgrass, streambank wheatgrass, Nevada bluegrass, Gardner saltbush, and winterfat make up most of the annual production in the potential plant community of this site. Other grasses in the survey area include Sandberg bluegrass, needleandthread, bluebunch wheatgrass, and bottlebrush squirreltail. The major forbs are fernleaf biscuitroot, Hoods phlox, stemless spring parsley, rose pussytoes, and tapertip onion. Greenmolly summercypress, shadscale, mat saltbush, birdfoot sagebrush, bud sagebrush, fringed sagebrush, Nuttall horsebrush, plains pricklypear, slenderbush eriogonum, woody aster, and Wyoming big sagebrush are the main shrubs in the community.

Within the loamy 7-10" range site, the annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April). Indian ricegrass, needleandthread, and streambank wheatgrass make up most of the annual production in the potential plant community of this site. Other grasses are thickspike wheatgrass, western wheatgrass, bottlebrush squirreltail, Sandberg bluegrass, and Nevada bluegrass. The major forbs are sulphur buckwheat and scarlet globemallow. Wyoming big sagebrush, shadscale, and Gardner saltbush are the main shrubs.

Natural gas was discovered in the Powder Wash Basin in the late 1920s; natural gas exploration and development continues within the Powder Wash Allotment to this day. There are currently over 121 producing wells contained within the boundary of the allotment. A typical well site is initially leveled and cleared of all vegetation to make room for the drilling equipment. Access roads, pipelines and other service disturbing activities associated with the well usually result in a total surface disturbance of four to six acres per well. The Powder Wash Allotment has therefore had the native vegetation removed from at least 600 to 700 acres. Vegetation has also been

removed from a network of service roads, pipelines, pumpstations, metering stations and other oil and gas field activities, resulting in approximately 1,200 acres of disturbance within the allotment. Although reclamation work is conducted at all of the wells, it can take several decades for the vegetation to reestablish due to the aridity of the area and the alkaline nature of the soils. The clearing of well pads of native vegetation also opens an avenue for non-native, invasive plant species to get established and spread via vehicles, equipment, wind and animals.

Wild horses exist within the Powder Wash Allotment although it is not part of a designated HMA. A dozen or so wild horses can often be seen grazing within the allotment and are believed to have come from either the Adobe Town HMA, managed by the Rock Springs BLM Field Office or the Salt Wells Creek HMA, managed by the Rawlins BLM Field Office. Other large ungulates, such as deer, elk and pronghorn antelope also utilize the vegetation within the allotment.

The vegetation within the Powder Wash Allotment has been subjected to several types of disturbances for over 100 years. Over-utilization of key forage plants was common place up until the 1940s and gas development has disturbed thousands of acres of native vegetation within the allotment. The last permit renewal in 1999 reduced livestock AUMs by 1,184 and changed the season of use for cattle from 4/01 through 10/15 to 11/01 through 03/31. The season of use for sheep remained the same, 11/10 through 05/01. The general trend of vegetative resource conditions in the allotment is upward; there has been marked improvement since the implementation of the rotation and growing season deferment grazing system.

Environmental Consequences, Preferred Alternative: The grazing system implemented in 1999 changed the season of use from season long grazing by both cattle and sheep to a winter use period by sheep and has resulted in an upward trend on the allotment. The continued implementation of the grazing system implemented in 1999 limits use of native uplands during the critical growing season, as the majority of the livestock are removed from the allotment by 4/30 and there is no grazing during the most active growth period. Growing season rest allows for seed ripe and drop to occur across the allotment. This system would result in a steady improvement in plant vigor and overall vegetation health.

Construction of the fences between Colorado and Wyoming and between the Powder Wash and Stateline Allotment would prevent cattle from trespassing both on to the Powder Wash Allotment and out of the Powder Wash Allotment. Reducing the amount of use that occurs outside of the permitted season of use would help improve vegetation conditions within the allotment. Construction of the fence along the Colorado/Wyoming border would also reduce use by wild horses which would help to ensure that utilization objectives are not exceeded during the growing season, when permitted livestock are not in the allotment.

Construction of an additional water reservoir in the furthest northeastern corner of the allotment would improve livestock distribution and result in a more even pattern of utilization in the long term. In the short term, the construction of the pit reservoir would result in the removal of less than one acre of vegetation. Livestock may congregate around the new water source and vegetation would be trampled in the immediate vicinity of the new pond. There is a potential for non-native, invasive species to become established on the disturbed area within the first year or

two after the construction of the reservoir. Weeds would be treated on an as needed basis. In the long term it is expected that the native vegetation would be able to outcompete the weedy species. In addition, surrounding vegetation, up to a ¼ mile around the pond, would experience an increase in utilization. Under proper stocking levels, however, utilization throughout the pasture would be 50% or less.

Allowing a small group of sheep (the hospital band) to remain in the Headquarters Pasture until 06/01 would increase authorized use in the pasture by 78 AUMs. Authorizing 10 head of domestic horse grazing would add an additional 57 AUMs for a total increase of 136 AUMs in the Headquarters Pasture. The hospital band of sheep may stay in the pasture until June 1 which is during the growing season (typically April 1 through July 15). The plants would have an opportunity to re-grow for 45 days following the removal of sheep. Research has shown that range plants are not damaged by early grazing but rather by grazing intensity. The key is to keep the grazing period short and removing grazing while there is still enough soil moisture left for grass plants to complete the reproduction cycle (Bawtree A. H. 1989. Recognizing Range Readiness. *Rangelands* 11:67–69.).

Two stops were made in the Headquarters Pasture during the 2003 Powder Wash Landscape Health Standards Assessment. One site was meeting all of the standards, while the other site was not meeting the standard for the native plant community. The reason for the non-attainment of this standard was attributed to the proximity of a pit reservoir containing ample water. This water source was drawing wild life and wild horses, and earlier in the grazing season had been a watering source for sheep. Because the majority of use within this pasture occurs during the dormant season, authorizing an additional 136 AUMs (which would not occur every year) would not prevent the attainment of standards, or prevent progress from being made towards the attainment of the native plant community standard.

Environmental Consequences, No Action: The livestock would continue to be managed as outlined in EA #CO-100-LS-99-010; the environmental consequences would be the same, however, impacts to vegetation from yearlong grazing by wild horses and trespass livestock would continue without the implementation of the proposed range improvement projects.

Environmental Consequences, No Grazing Alternative: The removal of livestock from the area of the Preferred Alternative would provide the most benefit to herbaceous vegetation although it would also have the potential to reduce active management prioritization on federal lands within the areas of proposed action, thus, reducing the potential for vegetation management that would be beneficial to ecosystem health. It is possible that the buildup of fine fuels from lack of grazing would increase the fire potential and the chance of a destructive wildland fire would increase. If the BLM administered public land is adjacent to a developed area, the threat of a wildland fire carrying into the developed area would increase.

Under this alternative, grazing by permitted livestock would cease on the Powder Wash Allotment, however grazing by unauthorized cattle and sheep and wild horses would still continue. It is possible that unauthorized use may increase due to the decreased presence of both the permittee and the BLM. A fence between the Stateline Allotment and the Powder Wash Allotment would decrease the

potential for unauthorized use and would prevent Wyoming wild horses from accessing the allotment.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 01/20/11

WILDLIFE, AQUATIC

Affected Environment: The Powder Wash Allotment contains several small, man-made, stockwater ponds on public lands which may provide suitable habitat for aquatic wildlife species.

Environmental Consequences, No Action and Preferred Alternatives: Both winter grazing and short season grazing would allow moist sites to retain a good canopy cover of desired, native vegetation. Forbs, moist soils and associated invertebrates are a good source of food and cover for many species of wildlife. The Preferred Alternative and No Action Alternative would not cause a significant impact to aquatic habitats. Under both of these alternatives, pit reservoirs that have filled in and ceased to hold water would be repaired and maintained. This would add additional habitat for aquatic wildlife species.

Environmental Consequences, No Grazing Alternative: Elimination of livestock grazing would result in improved riparian conditions and may improve ecological condition. As conditions improve, the health, vigor and abundance of forage species would increase. The probable increase in grass and forb availability would enhance habitat quality for aquatic wildlife. However, under this alternative, the permittee would no longer maintain range improvement projects on the allotment. Those pit reservoirs that have filled in would not be repaired or maintained in the future, therefore, the amount of aquatic wildlife habitat would decrease under this alternative.

Mitigative Measures: None.

Name of specialist and date: Gail Martinez, 02/10/11

WILDLIFE – TERRESTRIAL

Affected Environment: The Powder Wash Allotment provides year round habitat for pronghorn antelope, mountain lion and mule deer, including limited habitat for elk. This allotment also provides winter range habitat for pronghorn antelope and mule deer. A variety of small mammals, songbirds and reptiles may be found within this allotment at various times of the year as well. The rocky outcroppings and cliffs throughout the allotment provide suitable nesting habitat for raptors. There are over twenty recorded raptor nests throughout the allotment.

Environmental Consequences, No Action and Preferred Alternatives: Cattle and sheep grazing during the winter can reduce residual grass cover. The Preferred Alternative includes a rotational pasture system that would distribute grazing use. Rest from grazing during the growing season would allow reproduction of native vegetation and maintain habitat for wildlife. There

would be no adverse impacts on big game winter range habitats in the Powder Wash Allotment. Overall, the proposed grazing regimes would be compatible with maintaining suitable habitat for a variety of wildlife species. Livestock grazing would not have any impact on the raptor nests along the cliffs in the Powder Wash Allotment.

The construction of the fence projects within the Powder Wash Allotment would occur outside of the big game timing restrictions (December 1 – April 30). This timing restriction would prevent impacts to big game winter range habitats in the Powder Wash Allotment.

The rework for the West Dripping Rock Spring project will collect water from an existing manmade pond below the spring itself and pipe it 1/2 mile away. Water will still be available for wildlife at the spring source and the integrity of the spring will not be compromised by livestock by keeping the existing livestock enclosure fencing in place. Water will also be available to wildlife at existing man-made pond below the spring as well as the new trough ½ mile away.

Environmental Consequences, No Grazing Alternative: Under the No-Grazing Alternative, there would no longer be direct competition between livestock and wildlife for forage, browse and cover. Wildlife habitat would moderately improve. The limitation for improvement would continue to be the inability to control livestock use of the parcels because of the expense of segregating the lands with fencing, and legal access to administer isolated parcels of public land. Since livestock grazing would not be permitted, range improvement projects that benefit wildlife, such as water developments, would be abandoned. New range improvement projects that would also benefit wildlife habitat, such as brush control, may not be implemented because these projects are primarily driven and funded through range improvement efforts.

Mitigative Measures: None.

Name of specialist and date: Gail Martinez, 02/10/11

WILD HORSES

Affected Environment: The Powder Wash Allotment is located directly south of two wild horse herd management areas (HMAs) located north of the Wyoming/Colorado state line. Because there are some sections of the Colorado/Wyoming state line that are not fenced, wild horses occasionally drift south from Wyoming into Colorado and take up residence on the Powder Wash Allotment. The number varies from 6 to sometimes over 50 head. Several gathers have taken place, both in Colorado and Wyoming, and the horses are removed from the Powder Wash Allotment, only to return again. As the number of horses within the HMAs increase over the appropriate management level (AML), the number of horses drifting south into Colorado increases.

Environmental Consequences, Preferred Alternative: The construction of a fence between the Stateline and Powder Wash Allotments would help prevent wild horses from entering and taking up residence in the Powder Wash Allotment as would the completion of a fence along the Wyoming/Colorado state line in the northern part of the Powder Wash Allotment. Sections of the Wyoming/Colorado state line would remain unfenced (i.e. the northern boundary of the

Stateline Allotment) and until the state line is completely fenced, Wyoming wild horses would be expected to continue to drift south and occupy other allotments in Colorado. Through coordination and planning between the BLM in Colorado and Wyoming, a gather of wild horses would take place after the allotment boundary fence is constructed so that wild horses would not remain in the Powder Wash Allotment. The new fence may pose as a hazard to the horses for 2 to 5 years, until the horses become accustomed to its presence. Horses may still enter the Powder Wash Allotment through gates that are left open and some horses could become separated from their bands due to this. Cattleguards could be placed on major roads bisected by the fence to lessen this possibility.

Environmental Consequences, No Action and No Grazing Alternative: Wild horses from Wyoming would continue to periodically inhabit the Powder Wash Allotment. Every five years or so, a gather would be conducted and the horses would be removed from the allotment, but without a fence, horses would be expected to return.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 03/26/10 and 01/20/11

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

Other Non-Critical Elements

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Fluid Minerals		EMO 3/19/2010	
Forest Management	KLM 3/23/2010		
Hydrology/Ground		EMO 03/19/10	
Hydrology/Surface		ELS 4/16/10	
Paleontology		EMO 3/19/2010	
Range Management			KLM 03/26/10
Realty Authorizations		LM 4/2/2010	
Recreation/Travel Mgmt		GMR 3/19/2010	
Socio-Economics			KLM 01/25/11
Solid Minerals		JAM 3/23/2010	
Visual Resources		GMR 3/19/2010	
Wild Horse & Burro Mgmt			KLM 03/26/10

CUMULATIVE IMPACTS

Cumulative effects are those that result from adding the anticipated direct and indirect effects of the proposed action, to impacts from other past, present and reasonably foreseeable future actions. These additional impacts are considered regardless of what agency or person undertakes such actions. The cumulative impacts area (planning area) for this EA is defined as the Powder

Wash Allotment, along with private lands within the allotment. The surrounding area is comprised of several grazing allotments; the Stateline Allotment lies to the northwest, the Nipple Rim Allotment lies to the south, the West Dripping Rock Allotment lies to the southwest and grazing allotments administered by the BLM in the state of Wyoming lie to the north.

Past Activities

This allotment and surrounding areas have historically been grazed by both sheep and cattle. Numerous maintained and un-maintained roads exist throughout the area, including on the allotment. These roads are used regularly by local residents and ranchers as well as by hunters, the primary recreation users in the area. Wildlife populations in the area are high, especially for deer and elk that compete with livestock for available forage throughout the area.

The Powder Wash area has been extensively explored and developed for oil and natural gas. There are approximately 120 producing wells within the allotment; each well pad occupies approximately four to six acres of bare ground (prior to reclamation), amounting to 600 to 720 acres of bare ground. This does not include the disturbance and dust generation from the network of service roads needed to maintain the producing wells.

The primary impacts from all of these activities are most immediately seen in the presence of roads, fences, structures associated with gas production/livestock management and weed presence.

Range Improvement Projects

Project Name/number	Year Built	Type	Size (length/acres)	Location
Macargar Sec 4 Well/200279	1963	Water well	1 ac	Sec 20 T12NR96W
Wastach reservoir/200848	1956	Water reservoir	1 ac	Sec 19 T12NR96W
Oil Well reservoir/200850	1956	Water reservoir	1 ac	Sec17 T12NR96W
E-S-1 Rentension dam/200950	1959	Water reservoir	1 ac	
Rocky Knoll Reservoir/200136		Water reservoir	1 ac	Sec 33 T12NR96W
Powder Wash Protection Fence/200859	1957	Fence	3.2 miles	Sec 14, 23, 26, 35 T12NR96W
Powder Wash Fence/201026	1957	Fence	1.25 miles	Sec 30, 31 T12NR96W
Cap Rock Fence/201110	1967	Fence	~4 miles	Sec 32, 33,34,35 T12NR96W
G-S-C Stateline Fence/203620	1962	Fence	~1.5 miles	Sec 13, 14 T12NR96W
Cap Rock Dam/200126/1941	1941	Water reservoir	1 ac	Sec 6 T11NR96W
Chivington Reservoir/200080	1942	Water reservoir	1 ac	Sec 25 T12NR97W
Red Flats Reservoir/200087	1942	Water reservoir	1 ac	Sec 29 T12NR97W
Sandstone Reservoir/200844	1956	Water reservoir	1 ac	Sec 35

				T12NR97W
E-S-2 Retention Dam/200953	1959	Water reservoir	1 ac	Sec 20 T12NR97W
E-S-3 retention Dam/200956	1959	Water reservoir	1 ac	Sec 19 T12NR97W
E-S-6 retention dam/200963	1959	Water reservoir	1 ac	Sec 31 T12NR97W
S. Powder Wash Sec 4 Corral/201088	1961	Livestock handling facilities	1 ac	Sec 34 T12NR97W
Red Flats Barn and Corrals/201090	1961	Livestock handling facilities	2 ac	Sec 32 T12NR97W
Upper Powder Wash Drift Fence/201101	1964	Fence	.25 miles	Sec 20 T12NR97W
Lookout Draw Fence/204260	2001	Fence	2 miles	Sec 31 T12NR97W
Powder Wash Stateline Fence/206319	1998	Fence	~5 miles	Sec 19, 18, 17, 16, 15, 14, 13 T12NR97W
Powder Wash Allotment Boundary Fence/206478	2005	fence	~7 miles	Sec 36, 35, 34, 33, 32 T12NR97W
E-S-4 Retention Dam/200958	1959	Water reservoir	1 ac	Sec 24 T12NR98W
E-S-1 pit reservoir/200967	1959	Water reservoir	1 ac	Sec26 T12NR98W
E-S-5 retention dam/200960	1959	Water reservoir	1 ac	Sec 27 T12NR98W
Lookout Pasture Pond/206425	1999	Water reservoir	1 ac	Sec 34 T12NR98W
E-S-3 pit pond/200973	1959	Water reservoir	1 ac	Sec 34 T12NR98W
Lookout Draw Corral/201086	1966	Livestock handling facility	1 ac	Sec 36, T12NR98W
Lookout Draw Fence/204260	2001	Fence	~3.5 miles	Sec 33, 34, 35, 36 T12NR96W
Lookout Allotment Fence/206455	2001	Fence	~3.5 miles	Sec 2,11,12 T11NR98N

Anticipated Future Actions

Exploration and development of the oil and gas resources in the area will continue. The industry has begun drilling 5 to 7 wells on a single pad, which has reduced the number of well pads, but has resulted in larger well pads.

Just west of the Powder Wash Allotment is another area of oil and gas development. This area is known as the Hiawatha Field and encompasses 157, 361 acres of mixed federal, state and private lands in Sweetwater County, Wyoming and Moffat County, Colorado. Questar Exploration and Production Company and Wexpro Company have proposed to expand existing natural gas

drilling and development operations in the Hiawatha Field. The Operators' proposed project is referred to as the Hiawatha Regional Energy Development Project. The Operators propose to drill as many as 4,208 new wells within the Project Area, which represents a full development scenario. The Operators estimate that approximately two-thirds (2,805) of the potential wells would be located within the Wyoming portion of the Project Area, and the remaining one-third (1,403) would be located within the Colorado portion of the Project Area. In response to this proposal and in compliance with the National Environmental Policy Act of 1969 (NEPA) and the Council on Environmental Quality (CEQ) regulations implementing NEPA, the BLM has prepared a Draft Environmental Impact Statement (DEIS) to analyze the potential effects of the proposed infill drilling and field development on the natural and human environment within, and in the vicinity of, the Project Area.

The current grazing permittee has expressed an interest in using his sheep for well pad reclamation and successfully contributed to the reclamation of 12 well pads in 2009. During 2009, the sheep were not grazed in a traditional manner, but rather trailed from one well pad to another where they were contained and fed. It is reasonable to anticipate more of this type of grazing on the Powder Wash and Nipple Rim Allotments in the future.

The ongoing issue of wild horses moving from herd management areas managed by the Rock Springs and Rawlins BLM onto public lands not managed for wild horses in Colorado will continue until the Colorado/Wyoming state line is fenced. At a minimum, it is anticipated that this fence will be built in the future.

Small adjustments in season of use, thresholds on use of specific species, and overall increased forage thresholds prior to turn-out are anticipated to result in nominal effects in the Powder Wash Allotment and minor effects to sheep grazing in the Little Snake Resource Area.

Cumulative Impacts Specific to the Preferred Alternative

Livestock grazing on the allotment, when considering livestock grazing on the adjacent allotments and private lands, would not add to the impacts already described for this Proposed Action. Over time, the Powder Wash Allotment would make significant progress towards meeting standards for rangeland health. The authorization of livestock grazing on the powder Wash Allotment, considered with other existing grazing activities in the adjoining private and BLM lands, would be within appropriate levels of intensity and duration for the continual productivity of the native rangelands in this area. It is expected that native grass forage condition and quality would improve as the result of the grazing use as authorized.

Cultural resources have not been totally inventoried within the allotment. This makes the total direct and indirect cumulative impacts difficult to assess. Based on available data, a high potential for cultural resources occurs in the Powder Wash Allotment. Continued grazing may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to cultural resources. Cultural resource inventory will be conducted in areas where livestock concentrate within a ten year period of the issuance of a permit. Mitigation proposals presented in the cultural resource section and subsequent studies are adequate for addressing the cumulative impacts to known or newly discovered resources.

Native American groups are contacted on an annual basis concerning grazing permit renewals. In the past the consulted Tribes have not had any concerns with grazing permit renewals. It is not anticipated that any new issues or concerns will arise. However if new data is disclosed or discovered, new terms and conditions may have to be added to the permit to accommodate Native American concerns. The BLM will take no action that would adversely affect these areas or location without consultation with the appropriate Native Americans.

Numerous maintained and unmaintained roads exist throughout the area and the Powder Wash Allotment. These roads are used regularly by local residents and ranchers as well by as the primary recreation users in the area, hunters. In association with the expected signing and implementation of the Final Little Snake Resource Management Plan (RMP), a Travel Management Plan (TMP) would be completed within five years. This TMP will provide greater restrictions to off highway vehicle (OHV) use compared to what is currently allowed. These restrictions would mitigate impacts in many areas, thus benefiting natural resources.

Recreational opportunities are available throughout the area, including on the allotment. Recreational opportunities include, but are not limited to, OHV use and hunting. As population demographics in the surrounding area and the push to get people outdoors continue to evolve, more people are utilizing public lands. An increase in visitors to public lands could provide the potential for conflicts between people and livestock protection dogs that are a primary and traditional means of protecting sheep from predators. The allotment has dates that allow for normal grazing and herding; however, trailing, which occurs primarily in the fall and spring, could occur anytime on the allotment in these areas, particularly along the more major county roads, and the potential to interact with livestock protection dogs could occur during recreational use. A national effort is currently underway to provide information to the public on the potential dangers associated with sheep dogs and are aimed at better educating the public on how to act when in the vicinity of these dogs.

Cumulative impacts to soils and watersheds associated with livestock grazing accrue over time and are additive on a landscape scale. The Little Snake River, influenced downstream by the allotment, is listed on the Colorado Department of Public Health and Environment's Monitoring and Evaluation List for a suspected water quality problem regarding sediment load. The source of the sediment issues is unknown; however, many geographic basins within the Little Snake Field Office, including the Powder Wash Basin, are erosional in nature, regardless of past, current, and future land use. With this known, the proposed modifications to livestock distribution and management may help improve riparian areas and limit water quality degradation to the extent possible. However, the major causes of landscape modifications in the greater Yampa River Watershed are disturbances from development, industry, roads, non-renewable energy development, and some recreational activities. Dispersed grazing with the limited numbers and season of use for livestock in these allotments would likely have an inconsequential contribution to sedimentation or contamination compared to the more significant landscape modifications occurring or planned in the area.

Summary: No significant individual or cumulative impacts would be anticipated as a result of these actions.

Cumulative Impacts Specific to the No Action Alternative

Cumulative impacts of livestock grazing on the allotment in addition to livestock grazing on the adjacent allotments and private lands, would not add to the impacts already described for this alternative. The allotment would continue to make progress towards meeting standards for rangeland health.

Summary: No significant individual or cumulative impacts would be anticipated as a result of these actions.

Cumulative Impacts Specific to the No Grazing Alternative

Moffat County, like many communities with strong agricultural traditions, is increasingly concerned about maintaining an agricultural base that is sufficiently large to justify the existence of local agricultural service providers. As the overall size of the regional agricultural economy decreases and the average size of working ranches increases, there are fewer and fewer jobs tied to each dollar of agricultural sales, less incentive for agricultural service providers to operate in the region, and, potentially, fewer opportunities for off farm income for farm households or opportunities for younger generations to continue to make a living in agriculture, locally, should they be inclined to do so.

Summary: The no grazing alternative for the Powder Wash Allotment would have a small negative present and reasonable foreseeable future cumulative impact on the livestock industry in Moffat and Routt Counties by adding to the current trend of reduced ranching presence on a regional basis. The overall cumulative effect of this trend is substantial within the sheep and livestock industry in Colorado. Reasonably foreseeable future limits to the industry based on resource protection on both public and private lands, future urban development, and other potential factors limiting available livestock grazing land in western Colorado and surrounding areas.

STANDARDS

The Powder Wash Allotment was included in the Powder Wash Landscape Health Assessment conducted in 2003. Six stops were made within the allotment (#2, 4, 6, 9 10 and 15). Site 6, 9 and 15 failed to meet the native plant community standard due to the presence of noxious weeds and high levels of disturbance from human activities.

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The Powder Wash Allotment provides habitat for a variety of wildlife species. Pronghorn antelope and mule deer utilize this area for winter habitat. Several raptor nests, including golden eagle, exist in the vicinity of the allotment. Overall, vegetative communities within the allotment are in good condition, providing suitable habitat for terrestrial wildlife species. Shrub cover is adequate to provide winter habitat for browsing species. This standard is met and habitat conditions would remain unchanged under any alternative.

Name of specialist and date: Gail E. Martinez, 02/10/11

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal)

STANDARD: The Powder Wash Allotment provides habitat for the following BLM sensitive

species; greater sage-grouse, mountain plover, Brewer's sparrow, burrowing owl, white-tailed prairie dog, ferruginous hawk and bald eagle. The Powder Wash Allotment lies within the black-footed ferret (listed as an Endangered Species by the USFWS) management area. Sagebrush and grass communities on the allotment are in good condition, providing suitable habitat for the aforementioned species. Overall, native vegetation on the allotment is appropriate and healthy and the allotment is meeting this standard. Any alternative would meet this standard.

Name of specialist and date: Gail E. Martinez, 02/10/11

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: This standard is not met at 50% of the sites assessed for rangeland health standards. Each site is failing the standard due to high levels of invasive annual species and low species diversity, plant density and production. There are several factors contributing to the non-attainment of this standard and these include: a high level of natural gas production activity, yearlong grazing by cattle and sheep prior to 1999, unauthorized use by both livestock and wild horses and drought conditions between 2001 and 2006.

The season of use has since been changed to mainly winter use, with livestock being removed from the allotment by May 1. This removes grazing pressure during the critical growing season. The drought in the region ended in the winter of 2007 and precipitation has been at or near normal for the region.

Continued implementation of the grazing system developed in 1999 and construction of two sections of fence would result in the continuation of an upward trend on this allotment.

Name of specialist and date: Kathy McKinstry, 01/27/11

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

Name of specialist and date: Hunter Seim, 03/24/10

RIPARIAN SYSTEMS STANDARD: There are no riparian or wetland resources identified within the allotment. The proposed rework of West Dripping Rock Spring in the adjacent West Dripping Rock Allotment would have little to no effect on the form and function of the spring itself or negatively impact riparian vegetation the spring supports within the enclosure, as water would be drawn from a point below the spring. This standard would continue to be met under either alternative.

Name of specialist and date: Emily Spencer, 11/10/10

WATER QUALITY STANDARD: This standard is currently being met. There are no perennial naturally occurring water bodies within the allotment - Powder Wash and its tributaries are ephemeral. This allotment is erosional in nature and would therefore contribute sediment

downstream following precipitation or wind events under even the best land health conditions. Implementation of BMPs and range improvement projects would maintain or improve overall rangeland health where needed to prevent erosion that would contribute to suspected sediment issues further downstream.

Name of specialist and date: Emily Spencer, 11/9/10

UPLAND SOILS STANDARD: This standard is currently met for most of the allotment. All but two locations contain adequate cover and diversity of vegetation to maintain and protect soil quality. These two sites are at risk for accelerated erosion because of the dominance of non-native annual plants and surface disturbance caused by oil and gas-related activity that is concurrent in the allotment. Implementation of BMPs and the proposed range improvement project, in addition to and site-specific monitoring of these areas, would move these locations towards meeting the upland soil standard in the future.

Name of specialist and date: Emily Spencer, 4/16/10

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

ATTACHMENTS:

- Attachment 1 - Allotment Map
- Attachment 2 – BLM Fence Construction Standards
- Attachment 3 – BLM Wire Spacing Standards
- Attachment 4 – BLM Water Retention Pit Standards
- Attachment 5 – BLM Pipeline Installation Standards
- Attachment 6 – Standard Terms and Conditions

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Based on the analysis of potential environmental impacts contained in DOI-BLM-CO-N010-2010-0066, as amended, and all other available information, I have determined that the proposal and the alternatives analyzed do not constitute a major Federal action that would adversely impact the quality of the human environment. Therefore, an EIS is unnecessary and will not be prepared. This determination is based on the following factors:

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 Field Office jurisdiction 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 6
DOI-BLM-CO-N010-2010-0066 (amended)
Standard Terms and Conditions

- 1) Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with 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. Non compliance by the permittee/lessee with rules and regulations;
 - b. Loss of control by the permittee/lessee of all or 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 allotments(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 of 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 due 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 the Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App. 1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statute (41 U.S.C. 22), 18 U.S.C. Sections 431-433, and 43 CFR Part 7, enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

Common Terms and Conditions

- A) Grazing use will not be authorized in excess of the amount of specified grazing use (AUM number) for each allotment. Numbers of livestock annually authorized in the allotment(s) may be more or less than the number listed on the permit/lease within the grazing use periods as long as the amount of specified grazing use is not exceeded.
- B) Unless there is a specific term and condition addressing utilization, the intensity of grazing use will insure that no more than 50% of the key grass species and 40% of the key browse species current years growth, by weight, is utilized at the end of the grazing season for winter allotments and the end of the growing season for allotments used during the growing season. Application of this term needs to recognize recurring livestock management that includes opportunity for regrowth, opportunity for spring growth prior to grazing, or growing season deferment.
- C) Failure to maintain range improvements to BLM standards in accordance with signed cooperative agreements and/or range improvement permits may result in the suspension of the annual grazing authorization, cancellation of the cooperative agreement or range improvement permit, and/or the eventual cancellation of this permit/lease.
- D) Storing or feeding supplemental forage on public lands other than salt or minerals must have prior approval. Forage to be fed or stored on public lands must be certified noxious weed free. Salt and/or other mineral supplements shall be placed at least one-quarter mile from water sources or in such a manner as to promote even livestock distribution in the allotment or pasture.
- E) Pursuant to 43 CFR 10.4(g), the holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the

discovery and protect it for 30 days or until notified to proceed by the authorized officer. The operator is responsible for informing all persons who are associated with the allotment operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any allotment activities or grazing activities, the operator is to immediately stop activities in the immediate vicinity and immediately contact the authorized officer. Within five working days, the authorized officer will inform the operator as to:

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

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

- F) No hazardous materials/hazardous or solid waste/trash shall be disposed of on public lands. If a release does occur, it shall immediately be reported to this office at (970) 826-5000.
- G) The permittee/lessee shall provide reasonable administrative access across private and leased lands to the BLM and its agents for the orderly management and protection of public lands.
- H) Application of a chemical or release of pathogens or insects on public lands must be approved by the authorized officer.
- I) The terms and conditions of this permit may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.