

**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-N010-2009-0037-EA

PERMIT/ALLOTMENT NUMBER: #0500115 and #0500201/04318, 04324, 04519, 04522

PROJECT NAME: Ten year renewal and consolidation of grazing permits #0500115 on the Ricegrass (#04318), Seven Mile (#04519) and Thornburgh Gulch (#04522) Allotments and #0500201 for the Piskwik (#04324) Allotment.

LEGAL DESCRIPTION: See allotment map, Attachment 1.

Ricegrass #04318 T12N R94W portions of sections 15, 20-23, 26-29, 33-35

2,489 acres – BLM
1,936 acres - State
497 acres – Private
4,922 acres - Total

Piskwik #04324 T11N R94W portions of sections 2-10, 15-20 and 30
T11N R95W portions of sections 1, 12, 13, 24
T12N R94W portions of sections 29-35
T12N R95W portions of sections 25 and 36

11,792 acres – BLM
1,132 acres – State
1,318 acres – Private
14,242 acres – Total

Seven Mile #04519 T10N R95W portions of section 1
T10N R94W portions of section 6
T11N R95W portions of sections 26-27, 34-36

2,703 acres – BLM
641 acres – State
3,047 acres - Private
6,391 acres – Total

Thornburg Gulch #04522 T11N R92W portions of sections 7-9, 17-20, and 30

T11N R93W portions of sections 12-13, 24-25

5,505 acres – BLM
12 acres – Private
5,517 acres – Total

APPLICANT: Weibel Land, LLC

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

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

Date Approved: April 26, 1989

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

The Proposed Action is located within the Northern Great Divide Management Unit (M.U.6) and M.U. 2, Northern Central. The management objectives for M.U. 6 are to maintain and improve critical habitat for sage grouse, mule deer and pronghorn antelope. Other resource uses/values within this unit will be allowed consistent with the management objectives for this unit. The management objectives for M.U. 2 are to provide for the development of the oil and gas resource. Public lands are open to livestock grazing and management practices or range improvement projects will be permitted and existing range improvements will be maintained consistent with the management objectives for this unit.

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

Other Documents:

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

Rangeland Reform Final Environmental Impact Statement, December, 1994.

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

EA#CO-016-96-060, Implementation of a grazing plan and permit modification for James R. Menge

EA #CO-016-LS-98-011, Ten year renewal of the grazing permit on the Seven Mile, Ricegrass and Thornburgh Gulch Allotments.

NEED FOR PROPOSED ACTION: The ten year BLM grazing permit #0500115, which authorizes livestock grazing on the Ricegrass, Seven Mile and Thornburg Gulch Allotments 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. The ten year grazing permit, #0500201, which authorizes livestock grazing on the Piskwik Allotment was due to expire on February 28, 2006. It has been extended yearly through 2011 under the same terms and conditions as the existing permit, in accordance with the law given above.

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

This Environmental Assessment (EA) will analyze the impacts of livestock grazing on public lands managed by BLM and the impacts of the construction the proposed range improvement projects on public land managed by the BLM. The analysis will recommend terms and conditions to the permit which will improve or maintain public land health. The Proposed Action and alternatives will be assessed for meeting land health standards.

In order to graze livestock on public land, the livestock producer (permittee/lessee) must hold a grazing permit/lease. The grazing permittee/lessee has a preference right to receive the permit/lease if grazing is to continue. The land use plan allows grazing to continue. This EA will be a site specific analysis 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 September of 2005 and 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 2006 and FY2006. A Notice of Public Scoping was posted on the internet, at the Colorado BLM Home Page, asking for public input on permit/lease renewals. Individual letters were sent to the affected permittees/lessees, informing them their permit/lease was up for renewal and requesting any information they wanted included in or taken into consideration during the renewal process. The issuance of a grazing permit for these allotments has been carefully analyzed within the scope of the specific action being taken, resource issues or concerns, and public input received.

BACKGROUND: The Ricegrass Allotment is located one half mile south of the Wyoming border approximately 17 miles southwest of Baggs, WY. The Piskwik Allotment is directly south of the

Ricegrass Allotment and the Seven Mile Allotment is south of the Piskwik Allotment. The three allotments are contiguous. The Thornburg Gulch Allotment lies approximately nine miles east of the three other allotments and is approximately 4½ miles south of the Wyoming border. Moffat County Road (MCR) 4 crosses the Ricegrass and Piskwik Allotments in an east/west direction. MCR 92 crosses the Piskwik Allotment in a north/south direction and MCR 7 crosses the Seven Mile Allotment in an east/west direction. MCR 9 runs through the west side of the Thornburg Allotment and MCR 118 bisects the allotment running in a northwest/southeast direction in the southern part of the allotment.

Elevations within the Ricegrass, Seven Mile and Piskwik Allotments range from 6,800 feet in the southeast corner of the Seven Mile Allotment to 6,000 feet along the Little Snake River in the Ricegrass Allotment. The allotments are characterized by hills and small plateaus with north-south trending gulches or draws which drain into the Little Snake River. The most prominent draws are Bighole Gulch, Rice Draw and Sevenmile Gulch. The most common range sites are rolling loam and sandy 9 – 11 inches. Indian ricegrass, needle-and-thread grass and big sagebrush are key forage species in the allotments. Mean annual precipitation is generally 9 - 13 inches.

Elevations in the Thornburg Gulch Allotment range from 7,000 feet in the southeast corner of the allotment to 6,500 feet along Thornburgh Gulch in the northern part of the allotment. The allotment is characterized by rolling hills and small plateaus. Indian Ricegrass, needle-and-thread grass, western wheatgrass, and crested wheatgrass are key forage species in the allotment. The dominant range sites are rolling loam, sandhills and sandy land.

The Ricegrass and Piskwik Allotments are classified as a category C (custodial) allotments, the Seven Mile Allotment is classified as a category I (improve) allotment, and the Thornburgh Gulch Allotment is classified as a category M (maintain) allotment. The definitions of these categories can be found in the Rangeland Program Summary for the Little Snake Resource Management Plan.

The current authorization is as follows:

<u>Allotment</u>	<u>Livestock #/Kind</u>	<u>Grazing Begin</u>	<u>Grazing End</u>	<u>% PL</u>	<u>AUMs</u>
Ricegrass	71 C	05/01	11/30	52	260
Seven Mile	155 C	05/01	12/02	42	462
Thornburgh Gulch	70 C	05/01	11/30	100	492
Piskwik	211 C	05/01	12/15	88	1,398

In 1996, the Seven Mile Allotment was divided into three smaller allotments and a grazing rotation was developed; the Piskwik Allotment was not included in the 1996 system. In 1998, during the ten year grazing permit renewal process, it was determined that minor modifications were needed to facilitate the grazing plan. The grazing rotation was fully implemented in 1998 as follows:

<u>Allotment Name</u>	<u>Season of use</u>	<u>Numbers</u>	<u>%PL</u>	<u>AUMs</u>	<u>#Days</u>
Year 1					
Seven Mile	5/15-7/15	540	42	462	62
Ricegrass	7/16-7/31	955	52	260	16
Thornburg Gulch	8/01-9/30	245	100	492	61
Year 2					
Thornburg Gulch	5/15-7/15	241	100	492	62
Ricegrass	7/16-7/31	480	52	130	16
Seven Mile	8/01-9/15	410	42	462	46
Ricegrass	9/16-9/30	505	52	130	15
Year 3					
Ricegrass	5/15-6/30	320	52	255	47
Seven Mile	7/01-8/30	309	42	462	61
Ricegrass	8/31-9/01	150	52	5	2
Thornburgh Gulch	9/01-9/30	499	100	492	30
Piskwik (no rotation)	5/01-12/15	211	88	1,398	228

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

PROPOSED ACTION AND ALTERNATIVES

PROPOSED ACTION: Continue to authorize livestock grazing on the Ricegrass, Seven Mile, Thornburgh Gulch and Piskwik Allotments, by combining grazing authorizations #0500115 and #0500201 into one authorization, #0500115, and renewing grazing permit #0500115 for a period of ten years, expiring February 28, 2020.

It is proposed to change the season of use on all four allotments. Under the Proposed Action, the dates on the renewed grazing permit would be 04/01-12/15. These dates would allow flexibility for the livestock operation, but would be subject to several special terms and conditions (see Table 1). There would be no increase or decrease in AUMs; annual adjustments to livestock numbers and grazing duration may be made in the Thornburgh Gulch Allotment in order to more accurately determine a proper stocking rate. Long-term adjustments to the AUMs within the Thornburg Gulch Allotment may be made in the future based on monitoring.

In addition to the consolidation and renewal of the grazing permit, numerous range improvement projects are proposed. These projects would be prioritized and constructed over several years. The projects include: the extension of the existing Lemon Springs water pipeline south into the Seven Mile Allotment and north into the (proposed) northern pastures of the Piskwik Allotment; the drilling of a water well in south pasture of the Ricegrass Allotment and the cross-fencing of the Piskwik, Seven Mile and Thornburg Allotments. See Attachment 2 for a summary of the management considerations, goals and needed range improvements for each allotment.

The permit would be renewed as follows:

From:

John Weibel, #0500115

<u>Allotment</u>	<u>Livestock #/Kind</u>	<u>Grazing Begin</u>	<u>Grazing End</u>	<u>% PL</u>	<u>AUMs</u>
Ricegrass #04318	71 C	05/01	11/30	52	260
Seven Mile #04519	155 C	05/01	12/02	42	462
Thornburgh Gulch #04522	70 C	05/01	11/30	100	492

No Special Terms and Conditions

John Weibel, #0500201

<u>Allotment</u>	<u>Livestock #/Kind</u>	<u>Grazing Begin</u>	<u>Grazing End</u>	<u>% PL</u>	<u>AUMs</u>
Piskwik #04324	211 C	05/01	12/15	88	1,398

Special Terms and Conditions

1. Of the Piskwik Allotment's 1400 AUMs of specified grazing use, 900 may be authorized for cattle use and 500 may be authorized for sheep or cattle.
2. No sheep use may be authorized in December.

To:

John Weibel, #0500115

<u>Allotment</u>	<u>Livestock #/Kind</u>	<u>Grazing Begin</u>	<u>Grazing End</u>	<u>%PL</u>	<u>AUMs</u>
Ricegrass #04318	58 C	04/01	12/15	52	257
				<u>Unscheduled</u>	<u>3</u>
				Total	260
Seven Mile #04519	129 C	04/01	12/15	42	461
				<u>Unscheduled</u>	<u>2</u>
				Total	463
Thornburgh Gulch #04522	57 C	04/01	12/15	100	485
				<u>Unscheduled</u>	<u>7</u>
				Total	492
Piskwik #04324	186 C	04/01	12/15	88	1,394
				<u>Unscheduled</u>	<u>4</u>
				Total	1,398

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

1) 129 AUMs in the Ricegrass (#04318) will be held in voluntary non-use pending completion of range improvement projects as outlined in this EA.

2) 204 AUMs in the Piskwik (#04324) Allotment will be held in voluntary non-use pending completion of range improvement projects as outlined in this EA.

3) 306 AUMs in the Seven Mile (#04519) Allotment will be held in voluntary non-use pending completion of range improvement projects as outlined in this EA.

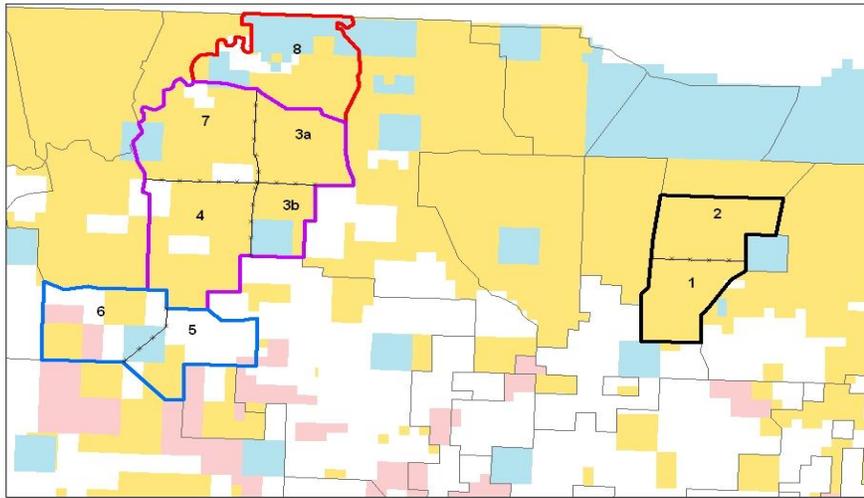
4) Once the allotment infrastructure is in place, the Ricegrass, Seven Mile, Piskwik and Thornburg Gulch (#04522) Allotments will be grazed according to following three year rotational grazing system:

Typical grazing rotation:

Year 1

Allotment/Pasture	Rotation Order	Duration/#	AUMs
Thornburg Gulch/South	1	22 days/320 C	231 AUMs
Thornburg Gulch/North	2	22 days/320 C	231 AUMs
Total			462 AUMs ¹
Ricegrass	8	24 days/320 C	131 AUMs ²
Piskwik/River	7	43 days/320 C	398 AUMs
Piskwik/Bighole North	3(a)	30 days/320 C	398 AUMs
Piskwik/Bighole South	3(b)	15 days/320 C	
Piskwik/South	4	43 days/320 C	398 AUMs
Total			1194 AUMs ³
Seven Mile/East	5	21 days/320 C	93 AUMs
Seven Mile/West	6	21 days/320 C	93 AUMs
Total			186 AUMs ⁴
Totals		239 days	1,973 AUMs ⁵
<small>1 – No change from current authorization 2 – Current authorization is for 260 AUMs. 129 AUMs would be put in voluntary non-use pending project completion 3 – Current authorization is for 1398 AUMs. 204 AUMs would be put in voluntary non-use pending project completion 4 – Current authorization is for 492 AUMs. 306 AUMs would be put in voluntary non-use pending project completion 5 – Current authorization is for 2,612 AUMs. 639 AUMs would be put in voluntary non-use pending project completion.</small>			

Grazing System - Year 1



Year 1

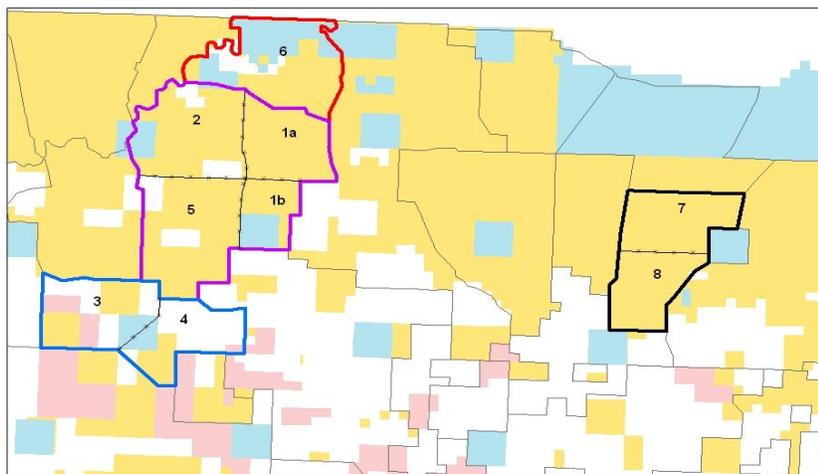
Rotation #	Season	# of Days
1	Early Spring (04/01-04/23)	22
2	Spring (04/24-05/16)	22
3	Early Summer/Summer (05/17-06/29)	43
	a. 30 days	
	b. 15 days	
4	Summer (06/30-08/12)	43
5	Late Summer (08/13-09/03)	21
6	Early Fall (09/04-09/25)	21
7	Fall (09/26-11/08)	43
8	Fall/Early Winter (11/09-12/03)	24

Year 2

Allotment/Pasture	Rotation Order	Duration/#	AUMs
Thornburg Gulch/South	8	22 days/320 C	231 AUMs
Thornburg Gulch/North	7	22 days/320 C	231 AUMs
			Total 462 AUMs ¹
Ricegrass	6	24 days/320 C	131 AUMs ²
Piskwik/River	2	43 days/320 C	398 AUMs
Piskwik/Bighole North	1(a)	30 days/320 C	398 AUMs
Piskwik/Bighole South	1(b)	15 days/320 C	
Piskwik/South	5	43 days/320 C	398 AUMs
			Total 1194 AUMs ³
Seven Mile/East	4	21 days/320 C	93 AUMs
Seven Mile/West	3	21 days/320 C	93 AUMs
			Total 186 AUMs ⁴

Totals		239 days	1,973 AUMs⁵
1 – No change from current authorization 2 – Current authorization is for 260 AUMs. 129 AUMs would be put in voluntary non-use pending project completion 3 – Current authorization is for 1398 AUMs. 204 AUMs would be put in voluntary non-use pending project completion 4 – Current authorization is for 492 AUMs. 306 AUMs would be put in voluntary non-use pending project completion 5 – Current authorization is for 2,612 AUMs. 639 AUMs would be put in voluntary non-use pending project completion.			

Grazing System Year 2



Year 2

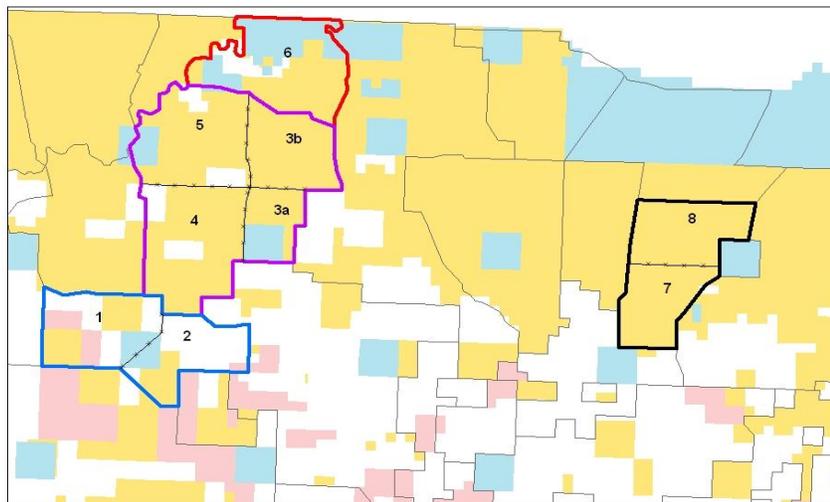
Rotation #	Season	# of Days
1	Early Spring (04/01-05/15)	43
	a. 30 days	
	b. 15 days	
2	Spring/Early Summer (05/16-06/30)	43
3	Summer (07/01-07/22)	21
4	Summer (07/23-08/12)	21
5	Summer/Early Fall (08/13-09/30)	43
6	Early Fall (10/01-10/25)	24
7	Fall (10/26-11/15)	22
8	Fall/Early Winter (11/16-12/07)	22

Year 3

Allotment/Pasture	Rotation Order	Duration/#	AUMs
Thornburg Gulch/South	7	22 days/320 C	231 AUMs
Thornburg Gulch/North	8	22 days/320 C	231 AUMs
		Total	462 AUMs ¹
Ricegrass	6	24 days/320 C	131 AUMs ²
Piskwik/River	5	43 days/320 C	398 AUMs
Piskwik/Bighole North	3(b)	30 days/320 C	398 AUMs

Allotment/Pasture	Rotation Order	Duration/#	AUMs
Piskwik/Bighole South	3(a)	15 days/320 C	
Piskwik/South	4	43 days/320 C	398 AUMs
Total			1194 AUMs ³
Seven Mile/East	2	21 days/320 C	93 AUMs
Seven Mile/West	1	21 days/320 C	93 AUMs
			186 AUMs ⁴
Totals		239 days	1,973 AUMs⁵
<p>1 – No change from current authorization</p> <p>2 – Current authorization is for 260 AUMs. 129 AUMs would be put in voluntary non-use pending project completion</p> <p>3 – Current authorization is for 1398 AUMs. 204 AUMs would be put in voluntary non-use pending project completion</p> <p>4 – Current authorization is for 492 AUMs. 306 AUMs would be put in voluntary non-use pending project completion</p> <p>5 – Current authorization is for 2,612 AUMs. 639 AUMs would be put in voluntary non-use pending project completion.</p>			

Grazing System - Year 3



Year 3

Rotation #	Season	# of Days
1	Early Spring (04/01-04/22)	21
2	Spring (04/23-05/14)	21
3	Spring/Early Summer (05/15-06/30)	43
	a. 15 days	
	b. 30 days	
4	Summer (07/01-08/15)	43
5	Summer (08/16-09/30)	43
6	Early Fall (10/01-10/25)	24
7	Fall (10/26-11/17)	22
8	Fall/Early Winter (11/18-12/10)	22

5.) The grazing system will operate as previously authorized and adjusted accordingly as infrastructure construction is completed.

This permit would also be subject to the Standard and Common Terms and Conditions found in Attachment 3.

Proposed Range Improvements: (see Attachments)

A number of range improvements are proposed in order to facilitate the proposed livestock rotations and to maintain and improve rangeland health. These improvements consist of fencing and water developments. Maps of the preliminary locations of these proposed improvements are shown in Attachment 4a-d. All improvements would be built to applicable BLM construction standards shown in Attachments 5-9.

None of the proposed improvements would be located in Wilderness Study Areas (WSAs) or Areas of Critical Environmental Concern (ACECs).

The proposed improvements would be built in a phased manner over the course of the ten-year permit. Analysis in this EA will focus on the direct, indirect and cumulative impacts of these improvements to livestock movement, the surrounding plant communities, and riparian and watershed health based on the proposed locations shown on the attached maps. As projects are located on-the-ground, class III cultural surveys would be completed prior to construction. The results of these surveys may require small modifications or movement of planned projects, but the character, approximate location, and purpose of each improvement described herein would remain the same.

Thornburg Gulch Allotment (See Attachment 4a):

-To establish a rotational system within the allotment, a fence would be constructed to create two separate pastures, each of which would receive early spring followed by late fall use. The fence would be constructed as shown in Attachment 7 and would be approximately 2¼ miles in length.

-To facilitate livestock distribution, a water pipeline would be constructed from the existing Menge Well north 1½ miles into the newly created North Pasture. The pipeline would be constructed to BLM standards, see Attachment 6.

-To protect riparian resources and improve livestock distribution, an enclosure would be constructed around Kabota Spring. This enclosure would be constructed using materials and construction methods that are wildlife friendly (e.g., Liberty Pipe, buck and rail, single strand high tensile cable or wire). See Attachment 7b.

Ricegrass Allotment (See Attachment 4b):

-To establish a rotational grazing system within the allotment, a fence would be constructed along MCR 4. The fence would be approximately 3 miles in length. Once the fence is completed, one pasture would receive fall rest every year. The fence would be constructed as shown in Attachment 7.

-To alleviate livestock concentration on state land board land along the Little Snake River and encourage wider distribution of livestock in the southern portion of the allotment, a water well would be drilled in the southeastern portion of the allotment. The well would be drilled according to BLM well construction standards, see Attachment 8.

Seven Mile Allotment (See Attachment 4c):

-To establish a rotational grazing system within the allotment, a fence would be constructed along private and state land. This fence would be approximately 2 miles in length and would be constructed as shown in Attachment 7a.

-To improve livestock distribution, the Lemon Springs Pipeline would be extended south into the Seven Mile Allotment. The pipeline would be constructed to BLM standards, see Attachment 6.

Piskwik Allotment (See Attachment 4d):

-To establish a rotational grazing system within the allotment, fences, both electric and standard barbed-wire, would be constructed to create four new pastures and a fifth in the future. Fences would be constructed as shown in Attachment 7 and 7a.

-To improve livestock distribution and to provide water in the newly created pastures, the Lemon Springs Pipeline would be extended north. The pipeline would be installed according to BLM standards, see Attachment 6

FENCES

New pasture fences are proposed to create new pastures and better facilitate livestock rotation in the Thornburg Gulch, Ricegrass, Seven Mile and Piskwik Allotments. In each of these allotments, one or more new three-strand barbed wire fence, bottom wire smooth, would be built. Wire spacing specifications would be for deer, pronghorn antelope, and elk passage (38 inches, 26 inches, and 16 inches above ground) with metal posts spaced 12 feet apart and wood stays placed at the midpoints between the metal posts (see Attachment 7). Where fences cross two-track or larger vehicle routes, wire gates, metal gates, or cattleguards would be placed at those points. Where fences cross gullies, corral posts or custom-cut sheet metal would be suspended into the gullies to prevent livestock movement under the fence at those points while allowing for water and debris flow.

Where feasible and practical, 3-wire high-tensile fence (with a hot-ground-hot configuration) would be installed (see Attachment 7a). This type of fence allows for easy wildlife passage with minimal maintenance.

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

Fence Construction Stipulations

1. To protect wintering big game, no fence construction (including brushbeating) may occur between December 1 and April 30.
2. Wooden stays will be used for construction to increase visibility of the fence.

3. To protect sage-grouse breeding and nesting activities, no fence construction may occur between March 1 and June 30.
4. The permittee will be responsible for fence construction using BLM supplied materials.
5. The permittee will be responsible for maintenance of the fence.
6. Metal or wire gates will be placed at all intersections with existing roads.
7. Gates will be left open when livestock are not present in the allotments.
8. 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 above stipulations.
9. 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.
10. As directed by a LSFO wildlife biologist, some or all of the new fences may need high visibility flagging (orange or pink) tied to the top wire between every other fence post upon construction to increase visibility to sage grouse. If necessary, metal tags or other methods may be used on the top wire for a more permanent increase in visibility.

WATER DEVELOPMENTS

Pipeline Extension

The Lemon Springs pipeline, constructed in 2005 to provide livestock water on the East Powderwash Allotment #04202, Lemon Springs Pasture and the Piskwik Allotment #04324, (EA#CO-100-2005-014) would be extended north and south. The water source for the system would be the Costal Well (project #206157), an existing diesel pump driven water well, located on the Piskwik Allotment in the NW ¼ Sec. 19, T11N R94W. This well currently serves an adjacent pond. Since its completion, this well has produced a strong and consistent flow of fifteen gallons per minute, adequate to continue providing water at the existing pond as well as to several tanks along the pipeline. At the Piskwik tank, a T-valve was installed to allow for future expansion.

A two inch PVC pipe would be placed in a ditch averaging three feet deep made by a vibratory ripper. Where the line goes through sagebrush, a fifteen foot wide swath would be brushbeat to facilitate ditching. This swath would be roughly half that width where the pipeline would run adjacent to existing roads. After placing the pipe in the ditch, the narrow ditch would fill in on its own. Due to the narrowness of disturbance created by the vibratory ripper, reseeding would not be necessary. Total length of buried pipeline would be approximately 24,753 feet. A 15,000 gallon distribution tank was placed above-ground at the highest point along the pipeline within the existing disturbance surrounding the Bighole Well (project #2064243), a non-functional windmill

driven well. The tank is currently filled with water from the Costal Well and used to maintain and regulate pressure throughout the system. For water delivery, tanks made from nine foot diameter heavy truck tires would be installed along the pipeline; one tank each would be located in the River, Bighole North/South, South, Seven Mile East and the Seven Mile West Pastures. All tanks would include water level regulation devices and bird escape ramps.

The majority of the pipeline would run adjacent to Moffat County Road 92. The pipeline would cross this road in one location and would cross MCR 96 in one location. The applicant would be responsible for coordination with the Moffat County Road and Bridge Department. Written approval from Moffat County for road disturbance for pipeline construction would be necessary prior to project construction. A Cooperative Agreement for Range Improvements (Form 4120-8) must be signed by the applicant and approved by BLM prior to any construction activities. All aspects of the project would be built to BLM standards (see Attachments 5-6).

A second pipeline would be constructed in the Thornburg Gulch Allotment to provide water in the newly created North Pasture and would be approximately 8,415 feet in length. Water delivery would be in two locations near existing pit reservoirs.

Pipeline Construction Stipulations

1. To protect nesting sage grouse, project construction would not occur between March 1 and June 30.
2. 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.
3. 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**.

Water Well/Pond Construction

One water well is proposed on the Ricegrass Allotment. The tentative location is shown in Attachment 4b. Water from the well would flow into a metal trough and overflow would be allowed to flow into a pond constructed adjacent to the well. The well would be drilled with either a cable tool or rotary drilling rig. The drilling of the well would involve the disturbance of no more than 0.25 acres and no blading or removal of vegetation would be required. Water would be drawn from the well by submersible pump powered by either a diesel generator or solar array.

The well would be drilled by a State of Colorado licensed and bonded contractor. The contractor would be responsible to conform to all applicable State standards for the drilling and completion of the well. Specifically, a 10 inch hole would be drilled with a minimum of 40 feet of 8 inch steel surface casing cement-grouted into the hole. PVC casing would be used below the steel surface casing utilizing a mill slot or Johnson screen design with a 20 foot tailpipe. Surface casing would protrude 18 inches above grade and the well platform would be either earthen or concrete. See Attachment 8 for specifications.

For the drilling and completion of the well, no grading or other earthwork would be necessary. Where drilling rig and vehicular access to the site would be off of existing roads, all access would be along pre-identified routes, but no blading or other road construction would be done. This would necessarily result in the formation of a short “two-track” road that would be used for access for routine maintenance. Upon completion of the well, one to two round or rectangular metal or fiberglass troughs would be placed adjacent to the well (see Attachments 5a and 5b). Well water would flow into one trough with overflow being potentially routed to a second trough to provide additional accessible water. All trough overflow would flow into a small pit pond via a buried pipeline. The buried pipeline would be placed in the ground with a vibratory ripper. This method would result in no need for trenching and no surface reclamation of the buried lines would be necessary.

Within approximately 75 yards of the well, a small pit pond would be constructed (see Attachment 9). 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 1 acre or less. The pond would capture up to approximately .5 acre foot of water collected as runoff and overflow from the well.

Well Construction 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.
2. All surface disturbances will be reseeded with native species adapted to the area.
3. A bird escape ramp will be installed on each trough.
4. The well will not be drilled, and no construction or surface disturbing activities will occur between December 1st and April 30th to protect wintering big game. Under mild winter conditions,

the last 60 days of the seasonal limitation period may be suspended. Severity of the winter will be determined on the basis of snow depth, snow crusting, daily mean temperatures, and whether animals were concentrated on the crucial winter range during the winter months.

5. The water well, its associated trough and pit pond will be added to the Little Snake Field Offices Water Depletion Log and the appropriate mitigative funds will be paid to the U. S. Fish and Wildlife Service by BLM.

Pond Construction 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. No surface disturbing activities between March 1 and June 30 in order to protect breeding and nesting habitats for greater sage-grouse and Columbian sharp-tailed grouse.

Stipulations Applicable to All Proposed Improvements

1. A ground survey will be conducted to determine if range improvements need to be relocated due to the presence of sensitive plant species/remnant plant communities.

2. All projects will be located on the ground with a wildlife biologist to minimize impacts to existing habitats and wildlife uses, including existing prairie dog town complexes or other known T&E species habitats and aquatic wildlife resources, through construction activities or anticipated access routes. Timing of construction will also be regulated to minimize disturbance during critical periods, such as elk calving season or winter periods.

3. A survey for cultural resources will be conducted prior to construction of all proposed range improvement projects.

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. 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.

6. All surface disturbances will be reseeded with native species adapted to the area.

7. Avoid existing rights-of-way during the project.

8. Utilize the "One Call" system to locate and stake the centerline and limits of all underground facilities in the area prior to project initiation.

9. Provide 48-hour notice to the owner/operator of all facilities prior to performing any work near existing rights-of-way.

NO ACTION ALTERNATIVE: The dates on the expiring permits would remain the same; no new range improvements would be constructed; livestock would continue to graze the allotments as permitted in the expiring permits and as analyzed in EA #CO-016-LS-98-011.

ALTERNATIVES CONSIDERED BUT ELIMINATED:

No Grazing Alternative: This alternative would cancel the permit on the allotment. As a result, livestock grazing would cease on the allotment. This alternative is eliminated from analysis in this EA because it would not conform to the RMP/ROD. The RMP/ROD identified livestock grazing as a suitable and appropriate use on the allotment.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by either alternative.

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

Environmental Consequences, both alternatives: Grazing use that occurs within the utilization limits during the prescribed season use within the allotments would 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.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 03/09/09

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Kathy McKinstry, 03/02/09

CULTURAL RESOURCES

Affected Environment: Grazing permit renewals are undertakings under Section 106 of the National Historic Preservation Act. During Section 106 review, a cultural resource assessment was completed the Piskwik (#04324), Ricegrass (#04318), Seven Mile (#04519), and Thornburgh Gulch (#04522) Allotments by Robyn Watkins Morris, Little Snake Field Office Archaeologist. Heritage Report #10.22.08 is on file at the LSFO and contains a detailed discussion of the cultural resource assessment. The assessment followed the procedures and guidance outlined in the 1980 National Programmatic Agreement Regarding The Livestock Grazing and Range Improvement Program, IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, and IM-CO-01-026. The results of the assessment are summarized in the table below. Copies of the cultural resource assessments are in the field office archaeology files.

Data developed here was taken from the cultural program project report files, site report files, and base maps kept at the Little Snake Field Office as well as from 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 allotments in this EA. The table shows known cultural resources, eligible and need data, and those that are anticipated to be in each allotment.

Allotment Number	Acres Surveyed at a Class III Level	Acres NOT Surveyed at a Class III Level	Percent of Allotment Inventoried at a Class III Level	Eligible or Need Data Sites- Known in Allotment	Estimated Sites for the Allotment *(total number)	Estimated Eligible or Need Data Sites in the Allotment (number)
04318	194	4728	3.92%	7	130	39
04324	352	13890	2.47%	7	378	113
04519	57	6334	.8%	0	169	50
04522	207	5310	3.8%	2	146	43

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

Eighteen cultural resource inventories were conducted within the Piskwik Allotment (#04324) resulting in the complete coverage inventory of 352 acres and the recording of seven eligible or needs data cultural resources. There are five prehistoric isolated finds, one historic isolated find, eight prehistoric open camps, one prehistoric quarry, one open lithic scatter, and one paleontological site. Historic roads were identified in this allotment on the historic GLO plats. Sixteen cultural resource inventories were conducted within the Ricegrass Allotment (#04318) resulting in the complete coverage of 194 acres and the recording of seven eligible or needs data cultural resources. There are thirteen open camps, three isolated finds, and one paleontological site. Historic roads were identified in this allotment on the historic GLO plats.

Two cultural resource inventories were conducted within the Seven Mile Allotment (#04519) and the recording of nine isolated finds. Nothing was identified in this allotment on the historic GLO plats.

Seventeen cultural resource inventories were conducted within the Thornburg Gulch Allotment (#04522) resulting in the recording of two known eligible or needs data cultural resources. There are six isolated finds, four open camps, and one open lithic scatter. One road was noted in this allotment on the 1904 GLO plat.

Based on available data, a medium-high potential for historic properties occurs in all of the allotments. Subsequent cultural resource inventory will be conducted in areas where livestock concentrate. Subsequent field inventory is to be completed within the 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.

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 5, 2008. The letter listed the FY08 and FY09 projects that the BLM would notify them on and projects that would not require notification. A followup phone call was performed on June 16, 2008. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Environmental Consequences, both alternatives: The direct impacts that occur where livestock concentrate during normal livestock grazing activity include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art. Indirect impacts include soil erosion, gullying, and increased potential for unlawful collection and vandalism. Continued livestock use may cause substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties. Although having animals grazing in earlier in the season has the potential to cause effects, it would be mitigated by the reduced duration of grazing in the allotments. The rotational system proposed should improve current vegetation conditions which would in turn stabilize archaeological sites. Areas around proposed fencing, pipelines, and ponds would have a potential for higher impacts from livestock grazing, but those impacts will be mitigated by surveying for cultural resources prior to

building projects. Placing saltblocks along roads or anywhere in the allotment would potentially impact historic properties. Additional monitoring of the historic properties currently known and in the future should continue to determine if livestock impacts are occurring to these properties. Range improvements associated with the renewal of this grazing permit are subject to compliance requirements under Section 106 and will undergo standard cultural resources inventory and evaluation procedures.

Mitigative Measures: None.

Standard Stipulations for cultural resources are included in Standard and Common Terms and Conditions of the grazing permit (Attachment 3).

Allotment Specific Stipulations:

1. Sites 5MF671, 5MF5249, 5MF3423, and 5MF3424 should be monitored and re-evaluated. There are other eligible/need data sites in the area; however they have been heavily impacted by pipeline construction.
2. Historic road in T12N R95W and T11N R95W should be surveyed and recorded.
3. County Road 92, BLM 2184 and BLM 2194 need to be surveyed due to known salt block distribution along these routes.
4. Site monitoring plans and other mitigation plans will be developed and provided to the Colorado State Historic Preservation Officer in accordance with the Protocol (1998) and subsequent programmatic agreements regarding grazing permit renewals.

Conducting Class II and III survey(s), monitoring, and developing site specific mitigation measures will mitigate the adverse effects to an acceptable level (Cultural Matrix Team Meeting 26 January 1999, NHPA Section 106, 36CFR800.9; Archaeological Resource Protection Act 1979; BLM Colorado and Colorado SHPO Protocol 1998; and NEPA/FLPMA requirements).

Name of specialist and date: Robyn Watkins Morris, 03/06/09

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed action is located in an area of isolated dwellings. Ranching, farming and oil/gas development are the primary economic activities.

Environmental Consequences, both alternatives: The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of either alternative. Neither alternative would directly affect the social, cultural or economic well-being and health of Native American, minority or low-income populations.

Mitigative Measures: None.

Name of specialist and date: Mike Andrews, 03/03/09

FLOOD PLAINS

Affected Environment: There are no identified large floodplains in the Seven Mile allotment. A tributary to Dry Gulch in the southwest corner of the Thornburg Gulch allotment rarely floods in any given year. Much of the reach of Bighole Gulch through the Piskwik and Ricegrass allotments may occasionally flood in any given year. Most of the reaches of the Little Snake River on BLM land that form the boundary of the Piskwik and Ricegrass allotments rarely to occasionally flood in any given year. There are no other floodplains identified within any of the allotments.

Source: USDA-NRCS Soil Data Viewer version 5.2.0016: <http://soildataviewer.nrcs.usda.gov/>

Environmental Consequences, both alternatives: Neither alternative includes development that would be installed in the floodplain areas. No threat to human safety, life, welfare and property will result from implementing either of the alternatives.

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 2/16/10

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive and noxious weeds are present in the allotments. Invasive annuals such as downy brome (cheatgrass), halogeton, blue mustard and yellow alyssum commonly occur within the allotments and are occupying disturbed areas caused by oil and gas development and recently disturbed pipeline corridors. Invasive annual weeds are typically established on disturbed and high traffic areas whereas biennial and perennial noxious weeds are less common in occurrence. Downy brome and halogeton are on the Colorado List C of noxious weeds and efforts to control halogeton are intensifying in this area. Colorado List B noxious weeds that are present within the Seven Mile and Thornburgh Gulch Allotments include Russian knapweed, hoary cress (whiteweed), Canada thistle and bull thistle. Other Colorado List B noxious weeds that are present in the vicinity and could potentially become established within these allotments include houndstongue, Dalmatian toadflax and other biennial thistles. The BLM is in cooperation with the Moffat County Cooperative Weed Management program to employ the principals of Integrated Pest Management to control noxious weeds on public lands

Environmental Consequences, both alternatives: The adverse impact of increased invasive and/or noxious weed establishment is very similar under either of the alternatives. Vehicular access to public lands for dispersed recreation and grazing operations, livestock and wildlife movement, as well as wind and water, can cause weeds to spread into new areas. Surface disturbance due to livestock concentration and human activities associated with grazing operations can also increase weed presence. The perennial noxious weeds in the area are less frequently established on the uplands but some potential exists for their establishment in draws and swales with moister soils. The largest concern in the project area would be for biennial and

perennial noxious weed species to become established and not be detected; once they are detected they can be controlled with various integrated pest management techniques. Land practices and land uses by the livestock operator and their weed control efforts would largely determine the identification and potential occurrence of weeds within the allotment.

Mitigative Measures: None.

Name of specialist and date: Ole Olsen, 07/23/09

MIGRATORY BIRDS

Affected Environment: Swainson's hawk, ferruginous hawk and golden eagle are all known to nest within the four allotments. All three of these species are listed on the USFWS 2002 Birds of Conservation Concern List.

Environmental Consequences, both alternatives: Neither alternative would have a negative impact on any of these species' nesting habitats. Neither alternative would have a negative impact on the animals themselves, nor is it likely that either alternative would result in a take.

Mitigative Measures: None.

Name of specialist and date: Timothy Novotny, 1/21/10

NATIVE AMERICAN CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 5, 2008. The letter listed the FY08 and FY09 projects that the BLM would notify them on and projects that would not require notification. A followup phone call was performed on June 16, 2008. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris, 03/06/09

PRIME & UNIQUE FARMLANDS

Affected Environment: There are no prime and unique farmlands within any of the allotments.

Environmental Consequences, both alternatives: None.

Mitigative Measures: None.

Name of specialist and date: Emily Spencer, 2/2/10

T&E AND SENSITIVE ANIMALS

Affected Environment: There are no threatened or endangered species or habitat for such species within these allotments. The allotments do contain habitat for greater sage-grouse, a BLM sensitive species and a candidate for listing under the Endangered Species Act. The Ricegrass, Piskwik, and Seven Mile Allotments contain winter range habitat for sage-grouse. The Piskwik Allotment contains three active greater sage-grouse leks. The Seven Mile and Thornburgh Gulch Allotments each contain one active sage-grouse lek. The Piskwik Allotment provides good to excellent nesting habitat. This habitat is more important now due to the Mayberry fire which burned habitat just south of the Piskwik Allotment during the summer of 2008.

Environmental Consequences, Proposed Action: The proposed grazing system would allow livestock to graze allotments during the breeding and early nesting season. Stocking rates would be lower under this proposed system. The proposed grazing system would better utilize cheat grass and crested wheatgrass within these allotments when used during early April when these plants are more palatable to livestock. The increased use of cheatgrass and crested wheatgrass would decrease utilization of native plants which are more beneficial to greater sage-grouse. Grazing during the breeding season could lead to lek disturbance. This would likely be one time disturbance that might impact breeding activities for a particular day but it is unlikely that it would have any impacts on reproductive success for a given year.

New fencing can be detrimental to greater sage-grouse by increasing mortality due to collisions with new fence. The proposed fences would be designed to increase visibility either through flagging or by inclusion of shaved wooden stays. The proposed interior pasture fences would be constructed of high-tensile electric wire, which, when white poly-coated wire is used, is highly visible to wildlife.

Fences may also have a negative impact by providing perches for raptors. In most cases, there are natural perches and man-made perches that already exist within these allotments. New perching sites are not likely to have a measurable impact to greater sage-grouse.

Fencing of Kobata spring within the Thornburg Gulch Allotment would improve brood rearing habitat for greater sage-grouse and would likely improve cover in this area. Because it's a small area, the fence could be constructed using buck and pole type fencing or "Liberty Pipe" fencing which would not pose a collision hazard to sage-grouse

Construction of water pipelines may displace birds for less than one week while pipelines are being installed. The benefits of improved livestock distribution that would result from the pipelines would outweigh the negative impacts of displacement resulting from the installation activities.

Environmental Consequences, No Action: The No Action alternative would not allow for improved livestock distribution; it would allow for maintenance of nesting habitat but is unlikely to improve habitat. Because no new fences would be constructed under this alternative, no new mortality factors to the sage-grouse population would be introduced. The No Action alternative would continue the implementation of the same grazing system that has been in place for the last

ten years within the allotments. Greater sage-grouse numbers within the allotments have remained relatively stable during this time period. Slight fluctuations in male lek attendance have been seen during this time period both up and down. This would indicate that the current grazing system is compatible with greater sage-grouse breeding and nesting.

Mitigative Measures: None.

Name of specialist and date: Timothy Novotny, 1/21/10

T&E AND SENSITIVE PLANTS

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

Environmental Consequences, both alternatives: None.

Mitigative Measures: None.

Name of specialist and date: Hunter Seim, 03/02/09

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no hazardous materials present on any of the allotments.

Environmental Consequences, both alternatives: Potential releases of hazardous materials could occur during vehicular access for livestock management operations. Coolant, oil, and fuel are materials that could potentially be released. Due to the limited amount of vehicular activity that would be required, the potential for releases of any of these materials is low and if a release were to occur, it would be minimal and highly localized and not result in an adverse impact to the allotment.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 03/02/09

WATER QUALITY - GROUND

Affected Environment: The geology of the area affected by the Proposed Action suggests that there is potential for ground water aquifers. The ground water quality in the area ranges from useable to poor.

Environmental Consequences, both alternatives: Due to the limited amount of livestock grazing, there would be no impacts to ground water quality under either alternative. Both alternatives would be conducted in accordance with existing Colorado laws for water quality. Specifically, all permit activities would comply with the applicable water quality regulations in

The Colorado Water Quality Control Act, and they would be in conformance with the classifications and numeric standards for water quality established by the Colorado Water Quality Control Commission.

Mitigative Measures: None.

Name of specialist and date: Marilyn D. Wegweiser, 03/23/09

WATER QUALITY - SURFACE

Affected Environment: Runoff drainage from the Thornburgh Gulch Allotment would flow to Thornburgh Gulch which is an intermittent tributary to the Little Snake River. Thornburgh Gulch, downstream of the Thornburgh Gulch Allotment, has a fairly continuous riparian system that would help retain sediments and nutrients from runoff drainage. Runoff drainage from approximately 1,200 acres in the southern portion of the allotment flows into Dry Gulch, which is an ephemeral tributary of the Little Snake River. The majority of runoff drainage from the Seven Mile Allotment collects in an unnamed ephemeral tributary of the Little Snake River within a segment of the river further downstream having different classified uses. Drainage from an 80-acre tract of BLM land in the southeastern portion of the Seven Mile Allotment and private lands along the eastern edge flows to Bighole Gulch. Bighole Gulch is an intermittent tributary of the upstream segment of the Little Snake River. The upstream segment of the Little Snake River (from its first crossing into Colorado to a point immediately above the confluence with Powder Wash) needs to have water quality that would support Aquatic Life Cold 1, Recreation E, Agriculture and Water Supply. The downstream segment of the Little Snake River (from a point immediately above the confluence with Powder Wash to the confluence with the Yampa River) needs to have water quality that would support Aquatic Life Warm 2, Recreation E and Agriculture. Tributaries to both segments of the Little Snake River need to have water quality that would support Aquatic Life Warm 2, Recreation N and Agriculture; tributaries are designated use protected.

As of 2008, the Little Snake River segment in this area (from Powder Wash to the Yampa River) is on the Colorado Department of Public Health and Environment's (CDPHE) Section 303(d) list of Water Quality Limited Segments because of a low priority iron impairment (CDPHE 2008). This segment is also on CDPHE's Monitoring and Evaluation List for a suspected water quality problem regarding sediment load (CDPHE 2008). All tributaries to the Little Snake River are on the Monitoring and Evaluation List for suspected *E. coli* and iron issues.

Environmental Consequences, Proposed Action: Permitting livestock grazing as proposed is consistent with land uses throughout the watershed and would not exacerbate existing or suspected water quality issues. The proposed grazing system, including the addition of pasture and spring enclosure fencing and the construction of reliable water sources away from some perennial waters, provides for better livestock distribution within allotments and would improve soil stability and vegetation community health that might otherwise contribute to the suspected sediment and *E. coli* issues of nearby surface waters. Grazing would not further exacerbate elevated levels of iron.

Environmental Consequences, No Action: Because no new fences would be constructed under this alternative, this alternative would not allow for improved livestock distribution and the same grazing system that has been in place for the last ten years would continue. The current grazing system would not further exacerbate elevated levels of iron. However, the current pasture configuration and rotation may contribute to the sediment and *E. coli* issues over the long term.

Reference: Colorado Department of Public Health and Environment Water Quality Control Commission. 2008. Regulations #33, 37, 93 and 94. <http://www.cdphe.state.co.us/regulations/wqccregs/index.html>

Mitigative Measures: None.

Name of specialist and date: Emily Spencer, 2/16/10

WETLANDS/RIPARIAN ZONES

Affected Environment:

Seven Mile Allotment: No riparian or wetland systems are present on BLM lands within the Seven Mile Allotment.

Thornburg Gulch Allotment: In the northwest portion of the allotment, Kobata Spring (BLM Spring # 011-06) originates at a headcut in Thornburgh Gulch. A picture from the fall of 1989 of the spring source shows a 30 foot headcut across the drainage, ponding water and numerous tracks in the mud with an apparent lack of vegetation. In 1999 it was assessed as functioning at risk with an upward trend because wetland vegetation was starting to become established. Recent observations of this riparian system when compared to the photos taken in 1989 and 1999 confirm that the spring is in an upward trend. Thornburg Gulch (Reach 3) is 0.7 miles and is associated with Kobata Spring. It was also last assessed in 1999 and found to be functioning at risk with an upward trend. There are no assessments for BLM Springs #011-10 (Menge Well) and #011-11, which are also within the allotment.

Piskwik Allotment: The Little Snake River (Reach 30) and Bighole Gulch (Reach 1) were found to be functioning at risk (no trend) during the last assessments in 2004 and 1995, respectively. There is no record of an assessment for Reach 2 of Bighole Gulch. Thirsty Artesian Well (Spring #10-06) and associated wetlands below the spring in the northwest corner of the allotment were found to be functioning at risk with an upward trend in 2005. The presence of heavy hoof action around the spring was noted in the assessment, as it was a watering source for cattle. Lemon Spring (BLM Spring #10-03) was further developed for livestock use in 2005 (see CO-100-2005-014 EA) and so is not considered to be a naturally functioning riparian area.

Ricegrass Allotment: The Little Snake River Reaches 31-33 were last assessed in 2008 and found to be functioning at risk with an upward trend. Reach 34, also assessed in 2008, was found to be in proper functioning condition. There is no record of an assessment for Reach 35. A portion of Bighole Gulch (Reach 1) is also in this allotment and was found to be functioning at

risk (no trend) during the last assessments in 1995. There are no springs identified in this allotment. A 14 acre wet meadow complex along County Road 4 was assessed in 2008 and found to be in proper functioning condition, as was a 5 acre wetland in an oxbow of the Little Snake River.

Environmental Consequences, Proposed Action: Any riparian vegetation along the Little Snake River and in Bighole and Thornburg Gulches would have the opportunity for regrowth during the proposed rotational grazing system. Residual growth would be present to hold soils in place and help dissipate energy of any flows that may occur. The potential for soil compaction in riparian areas is greatest with spring livestock use (as is proposed in the Piskwik Allotment in Year 2 and in the Thornburg Allotment in Year 1), as palatability is preferable at that time, and some additional trailing and grazing may occur in the floodplain area. However, one year of spring use is allowable provided that the same area it is not grazed during the same period in consecutive years.

Proposed upland water development and expansion projects (Lemon Spring pipeline extension, Menge Well pipeline development) as well as pasture cross-fencing is expected to further improve riparian and wetland resources by either excluding cattle, such as fencing Kobata Spring, or by more evenly distributing livestock and facilitating rotation and varying season of use. No riparian habitat is present anywhere along the proposed Lemon Springs or Menge Well pipeline routes. Benefit to offsite riparian habitat associated with the Little Snake River and Bighole Gulch would occur as a result of this additional development of livestock water in upland areas.

Environmental Consequences, No Action: Implementation of this alternative would require rotating use throughout the authorized grazing period from 5/15 to 9/30 in all of the allotments as analyzed in the Proposed Action of EA #CO-100-LS-98-011. Because no new fences would be constructed under this alternative, there would be less flexibility in livestock rotation and distribution. Without additional upland water sources provided by the Proposed Action, there would continue to be over-reliance on the Little Snake River as a water source and livestock impacts (forage utilization and trampling) to riparian areas along the river and identified spring sites would continue.

Mitigative Measures: None.

Name of specialist and date: Emily Spencer, 2/17/10

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Gina Robison, 03/02/09

WILDERNESS, WSAs

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Gina Robison, 03/02/09

NON-CRITICAL ELEMENTS

RANGE MANAGEMENT

Affected Environment: Weibel Land LLC is the permittee for the four grazing allotments; Ricegrass, Piskwik, Seven Mile and Thornburg Gulch. They acquired the allotments in 2003 (Ricegrass, Seven Mile and Thornburg Gulch) and 2005 (Piskwik) through purchase of the associated base property. Under ownership of Weibel Land, LLC, the management of the ranch has changed considerably from the previous owners. Weibel Land LLC operates the Rockin' J Cattle Company, which raises grass fed/grass finished beef. The cattle are not sent to a feed lot for finishing, but rather spend their entire lives on private meadows and BLM managed native range. The permittee calves later in the year (May/June versus February/March) and breeds much later (August versus May) than is typical for cow/calf operations in NW Colorado. Additionally, calves are weaned later and kept until they are 14 months of age, versus a typical operation which weans calves at approximately 8 months and sells them immediately. This type of schedule is more common among grass fed operators.

Environmental Consequences, Proposed Action: The implementation of the proposed grazing plan is important to the grazing permittee as it affords increased flexibility to manage the non-traditional livestock operation. The proposed plan provides clear direction for management and authorized use of the public lands. It also provides for ease of administration resulting in reduced cost in regards to allotment(s) administration. Finally, it provides the best management practice that is both holistic and adaptive for the public land users and the livestock operator.

Environmental Consequences, No Action: The livestock operator would continue to rotate his livestock between the allotments. The environmental consequences would be the same as those analyzed in the Proposed Action of EA #CO-100-LS-98-011. Less flexibility would be afforded to the permittee in the operation of his non-traditional livestock operation.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 02/02/10

REALTY AUTHORIZATIONS

Affected Environment: The proposed project area contains a buried natural gas pipeline right-of-way, COC 52705 – Colorado Interstate Gas, that would be crossed by the proposed Lemon Springs pipeline.

Environmental Consequences, Proposed Action: Existing buried pipelines or other facilities could be accidentally damaged during project activities; however measures would be taken to avoid any damage. Impacts would be temporary until any damage is repaired.

Environmental Consequences, No Action: None.

Mitigative Measures, Proposed Action: None.

Name of specialist and date: Mike Andrews, 03/03/09

SOILS

Affected Environment: The table below describes the major soil groups (>500 acres) included within the Ricegrass, Seven Mile, Thornburgh Gulch and Piskwik Allotments. Surface soil characteristics are stable with good plant density and production to help protect from erosion. There is little to no evidence of erosion in the form of gullies, pedestals, flow patterns, or compaction in the Piskwik and Seven Mile Allotments. There is some evidence of soil movement in the Thornburgh Gulch allotment, but is appropriate for the site. Biological soil crusts are present where appropriate and intact. The main risk to most of these soils is erosion unless close-growing plant cover is maintained. All soil types are suitable for grazing, forestland, and/or wildlife habitat.

Soil Summary for the Ricegrass (#04318), Seven Mile (#04519), Thornburgh Gulch (#04522) and Piskwik (#04324) Allotments

Soil Map Unit (MU) & Soil Name (Acres in Allot.)	Map Unit Setting	Description
MU 199 Torriorthents-Torripsamments complex, 12 to 40 % slopes 5176 acres	<u>Elevation:</u> 6,000 – 7,200 feet <u>Mean annual precipitation:</u> 9-13 inches <u>Ecological Site:</u> not given	These hillslope soils are well to excessively drained with moderately slow to rapid permeability and high runoff potential. Available water capacity is low and the soil profile is typically 19-30 inches deep.
MU 174 Ryark-Maybell complex, 1 to 12% slopes 3800 acres	<u>Elevation:</u> 6,100 – 6,700 feet <u>Mean annual precipitation:</u> 11-13 inches <u>Ecological Site:</u> Rolling loam and Sandhills	These soils are somewhat excessively drained with moderately rapid to rapid permeability and low to very low runoff potential. Available water capacity is low and the soil profile is typically 60 inches deep.
MU 173	<u>Elevation:</u> 6,100 - 6,800 feet	These soils are well to somewhat

Soil Map Unit (MU) & Soil Name (Acres in Allot.)	Map Unit Setting	Description
Ryark-Powderwash complex, 2 to 15% slopes 2941 acres	<u>Mean annual precipitation:</u> 11-13 inches <u>Ecological Site:</u> Rolling loam	excessively drained with very slow to moderately rapid permeability and low to high runoff potential. Available water capacity is low and the soil profile is typically 42-60 inches deep.
MU 130 Maysprings coarse sandy loam, 3 to 12% slopes 2507 acres	<u>Elevation:</u> 6,200 – 7,300 feet <u>Mean annual precipitation:</u> 11-13 inches <u>Ecological Site:</u> Rolling loam	These soils are well drained with moderate permeability and medium runoff potential. Available water capacity is low and the soil profile is typically 60 inches deep. The main limitation in these soils is very dry climate.
MU 75 Fonce sandy loam, 1 to 8% Slopes 2408 acres	<u>Elevation:</u> 6,000 – 6,600 feet <u>Mean annual precipitation:</u> 10-12 inches <u>Ecological Site:</u> Loamy 7-10" PPT	These soils are well drained with moderate permeability and medium runoff potential. Available water capacity is low and the soil profile is typically 60 inches deep. The main limitation in these soils is very dry climate.
MU 162 Rock River sandy loam, 3 to 12% slopes 2126 acres	<u>Elevation:</u> 6,200 to 7,200 feet <u>Mean annual precipitation:</u> 11-13 inches <u>Ecological Site:</u> Rolling loam	These soils are well drained with moderate permeability and medium runoff potential. Available water capacity is moderate and the soil profile is typically 60 inches deep.
MU 178 Simanni-Ruedloff complex, 1 to 10% slopes 1912 acres	<u>Elevation:</u> 6,000 – 6,500 feet <u>Mean annual precipitation:</u> 9-11 inches <u>Ecological Site:</u> Sandy/Sandy 9-11" PPT	These soils are well to somewhat excessively drained with moderate to moderately rapid permeability and low to medium runoff potential. Available water capacity is low and the soil profile is typically 60 inches deep. The main limitation in these soils is very dry climate.
MU168 Ruedloff sandy loam, 1 to 8% slopes 1610 acres	<u>Elevation:</u> 6,000 to 6,300 feet <u>Mean annual precipitation:</u> 9 to 11 inches <u>Ecological Site:</u> Sandy	These soils are somewhat excessively drained with moderately rapid permeability and low runoff potential. Available water capacity is low and the soil profile is typically 60 inches deep.
MU 131 Maysprings-Gretdivid complex, 10 to 20% slopes 1276 acres	<u>Elevation:</u> 6,200 to 7,200 feet <u>Mean annual precipitation:</u> 11 to 13 inches <u>Ecological Site:</u> Sandyland	These soils are well to somewhat excessively drained with moderate permeability and medium runoff potential. Available water capacity is low and the soil profile is typically 60 inches deep.
MU 128 Maybell sand, 3 to 12% slopes 964 acres	<u>Elevation:</u> 6,000 to 6,800 feet <u>Mean annual precipitation:</u> 11-13 inches <u>Ecological Site:</u> Sandhills	These soils are excessively drained with rapid permeability and very low runoff potential. Available water capacity is low and the soil profile is typically 60 inches deep.
MU 204	<u>Elevation:</u> 5,300 to 6,000 feet	These soils are found in alluvial fans

Soil Map Unit (MU) & Soil Name (Acres in Allot.)	Map Unit Setting	Description
Typic Natrargids, 0 to 5% slopes 890 acres	<u>Mean annual precipitation:</u> 9-11 inches <u>Ecological Site:</u> not given	and stream terraces, are well drained with very slow permeability and very high runoff potential. Available water capacity is moderate and the soil profile is typically 60 inches deep. These soils are shallow, droughty, or stony.
MU198 Torriorthents-Rock outcrop, shale complex, 30 to 75% slopes 736 acres	<u>Elevation:</u> 6,000 to 7,200 feet <u>Mean annual precipitation:</u> 9-11 inches <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 0 to 13 inches deep. Land capability classification states these soils also suitable to recreational purposes, watershed, and esthetic purposes.
MU 11 Battlement silt loam, saline, 0 to 3% slopes 542 acres	<u>Elevation:</u> 6,000 – 7,200 feet <u>Mean annual precipitation:</u> 11 – 15 inches <u>Ecological Site:</u> Salt Meadow	These soils are found in floodplains and stream terraces, are moderately well drained with moderately slow permeability and medium runoff potential. Available water capacity is moderate and the soil profile is typically 60 inches deep. Soils are shallow, droughty, or stony.

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

Environmental Consequences, Proposed Action: Although these soils have properties that are fairly favorable or moderate regarding runoff and permeability rates, soil compaction could alter these properties and reduce available soil moisture in subsequent years. The proposed grazing plan allows for livestock use during the spring, a time that soils would generally have optimal moisture levels to induce compaction. However, cross fencing and annual variation in rotation schedules should reduce effects to soil in a given pasture over the permit period. Soils are also prone to erosion unless plant cover is maintained. Assessments in several locations within the allotments in 2003 indicate adequate vegetation coverage and this is likely to improve under the proposed grazing system. Plant regrowth would be dependent on soil moisture remaining after the grazing period or on additional precipitation that is received. The soils in the Seven Mile Allotment have a low water holding capacity, but could receive additional spring moisture in May and June that would supplement moisture levels. Minimal disturbance of the soil surface would occur from brush beating and ripping in the buried pipe and would parallel existing roads where possible. Compaction would occur around troughs due to livestock concentration, but these areas would be localized.

Environmental Consequences, No Action: Grazing within acceptable utilization standards as outlined in the standard and common terms and conditions would provide for healthy upland soils and continuation of a positive upward trend. The environmental consequences would be the same as those analyzed in the Proposed Action of EA #CO-100-LS-98-011.

Mitigative Measures: None.

Name of Specialist and date: Emily Spencer, 2/17/10

UPLAND VEGETATION

Affected Environment: The dominant range sites within the allotments are rolling loam and sandy land. These range sites typically support mixed sagebrush-antelope bitterbrush and grass communities. Shrubs within the allotments consist of Wyoming big sagebrush, bitterbrush, low rabbitbrush, and green rabbitbrush. Forbs include arrowleaf balsamroot, wild onion, sego lily, lupine, and yarrow. Perennial grasses consist of Indian ricegrass, western wheatgrass, needle-and-thread, Nevada bluegrass, bluebunch wheatgrass, streambank wheatgrass, and bottlebrush squirreltail.

Environmental Consequences, Proposed Action: Grazing which may begin in April rather than May within the allotments would not damage forage plants if the grazing intensity is light. 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.). In addition, there needs to be ample grass left over from the previous year. Cattle grazing in April would be utilizing a combination of the desiccated grass from the previous growing season, along with any new, current year's growth.

The proposed grazing system limits use of native uplands during the critical growing season by allowing growing season deferment every other year (Thornburg Gulch and Seven Mile), annually (Ricegrass) or deferment within pastures (Piskwik). This growing season deferment is expected to have the following impacts on the vegetative communities within the allotments: the early spring rest would decrease the grazing pressure on plant species during the most active growth period. The full growing season deferment in the Thornburg Gulch, Seven Mile and Ricegrass Allotments would benefit vegetation health and vigor and allow a full growing season and seed drop to occur across the allotments over the three year grazing cycle. Grazing during the fall would not decrease plant vigor or vegetation health because it would occur after a full season of deferment for many plant species. The number of AUMs available for use in each allotment would not change under the Proposed Action.

The proposed fencelines would be brush beat; very little existing vegetation would be disturbed.

The proposed water projects would improve livestock distribution across the allotments. The improved distribution and utilization would allow a more vigorous and healthy plant community to develop in pastures that are currently receiving little or no use due to seasonal lack of water. The water projects would also decrease use in the northwest corner of the Thornburg Gulch Allotment that is currently showing signs of heavy utilization near the only late season water source in the area. The proposed water projects would also enhance riparian conditions along the Little Snake River corridor and improve the critical antelope winter range associated with this corridor.

Environmental Consequences, No Action: The continued implementation of the grazing plan proposed in 1996 and 1999 would improve the vegetative resource as the plants have more

opportunity to grow during their critical growing seasons without excess livestock grazing pressure. The deferred grazing rotation system benefits all of the allotments by providing periodic deferment from grazing during critical growth periods. The limitation of hot season grazing to one in four years benefits riparian woody species in the Ricegrass allotment. These impacts are more fully described in EA CO-016-96-060 and EA CO-016-LS-98-011.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 03/05/09

WILDLIFE, AQUATIC

Affected Environment: The Piskwik and Ricegrass Allotments border the Little Snake River. This river contains habitat for a variety of non-game fish species and may contain habitat for crawfish and various amphibian species.

Environmental Consequences, Proposed Action: Under this alternative, livestock grazing within the Ricegrass Allotment would occur during low flow periods. It is likely that livestock would be drawn to the river during this time period due to lack of water elsewhere on the allotment. They would utilize the riparian area adjacent to the river but the critical growing season would be over and the plants should be entering dormancy. The light stocking rate and short duration of use would help to limit utilization of riparian vegetation. The development of additional water in the Ricegrass Allotment would help keep cattle off the river.

Livestock grazing in the Piskwik Allotment in the proposed River Pasture would occur during the spring, summer and fall depending on the year. This rotational use would allow for growing season deferment and has the following advantages: grazing when soils are drier, which reduces the probability of compaction and bank trampling; most plants have completed their growth cycle, and grazing would not adversely affect plant development; and generally, there would be less impact on wildlife habitat (Successful Strategies for Grazing Cattle in Riparian Zones, Montana BLM Riparian Technical Bulletin No. 4, January 1998). It is unlikely that livestock would have negative impacts to aquatic wildlife during this time of year.

Environmental Consequences, No Action: Under the No Action Alternative, livestock would use this allotment the same as the use for the previous ten years. It is unlikely that this would negatively impact aquatic habitat in either allotment.

Mitigative Measures: None.

Name of Specialist and Date: Tim Novotny 1/21/10

WILDLIFE, TERRESTRIAL

Affected Environment: The four allotments provide year round habitat for mule deer and pronghorn antelope including severe winter range for pronghorn along the Little Snake River. A variety of small mammals, reptiles and song birds can be found within these allotments at various times of the year.

Environmental Consequences, Proposed Action: The Proposed Action would allow for livestock use earlier during the spring. This would likely result in better utilization of cheat grass and crested wheatgrass and reduce pressure on key winter forage species for mule deer, elk and pronghorn antelope. This alternative would also allow for better grazing rotations and improved livestock distribution, which would help ensure areas are not over utilized.

Environmental Consequences, No Action: Under this alternative, the same grazing system that has been in use for the past ten years would remain in place. This system has not had a negative impact to wildlife habitats. Wildlife habitats within these allotments are currently meeting standards for rangeland health. It is expected that this would continue.

Mitigative Measures: None.

Name of specialist and date: Timothy Novotny 1/21/10

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

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Fluid Minerals	MDW 03/06/09		
Forest Management			
Hydrology/Ground		MDW 03/23/09	
Hydrology/Surface		ELS 2/17/10	
Paleontology		MDW, 03/23/09	
Range Management			KLM 02/02/10
Realty Authorizations			MAA 03/03/09
Recreation/Travel Mgmt		GMR 03/02/09	
Socio-Economics		MAA 03/03/09	
Solid Minerals		JAM 03/06/09	
Visual Resources		GMR 03/02/09	
Wild Horse & Burro Mgmt	KLM 03/06/09		

CUMULATIVE IMPACTS SUMMARY: The allotments 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. Oil and gas development has increased in the area. The primary impacts from all of these activities are most immediately seen in the presence of roads, increased vehicular traffic, cultivation on private lands, and weed presence. The Proposed Action to continue grazing on this allotment is compatible with other uses, both historic and present, and would not add any new or detrimental impacts to those that are already present.

STANDARDS

All of the allotments fall into the Powder Wash Watershed. The Piskwik and Seven Mile Allotments were assessed during the 2003 Powder Wash Landscape Health Assessment. No assessment stops were made in the Thornburgh Gulch or Ricegrass Allotments.

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The four allotments currently provide habitat that is capable of supporting healthy, diverse populations of wildlife. The allotments are currently meeting this standard. The Proposed Action has potential to improve habitat conditions within these allotments however; both the Proposed Action and the No Action Alternative would ensure that this standard continues to be met in the future.

Name of specialist and date: Timothy Novotny 1/21/10

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: There are no ESA listed or proposed species that inhabit or derive important benefit from the project area. The general area provides habitat for greater sage-grouse, a BLM sensitive species and a candidate for ESA listing. The Proposed Action allows for improved livestock distribution and utilization. This would likely improve habitats for greater sage-grouse. This alternative does allow for new range improvements that could provide new sources of mortality to greater sage-grouse through collisions with the new fence. The No Action Alternative would not impact greater sage-grouse or their habitats in a negative way. This standard is currently being met and would continue to be met under the Proposed Action or the No Action Alternative.

Name of specialist and date: Timothy Novotny 1/21/10

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: This standard is being met within these allotments. The allotments consist of diverse plant communities. Although noxious weeds and undesirable species may be present, there is a diverse and vigorous community of desirable native plant species in the area to propagate and maintain healthy plant communities. As long as the grazing rotations and distributions are maintained, the No Action and Proposed Action would continue to meet this standard for these allotments.

Name of specialist and date: Kathy McKinstry, 02/02/10

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant)

STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species present on any of the allotments. This standard does not apply.

Name of specialist and date: Hunter Seim 3/2/09

RIPARIAN SYSTEMS STANDARD: This standard is met within the allotments. Riparian assessments within the last ten years indicate that most areas are, at a minimum, functioning at risk with improving trends. The Proposed Action provides for cross fencing, enclosure construction, and upland water developments that are expected to improve livestock distribution and access to water that would further alleviate livestock reliance on riparian resources as water sources. Both the Proposed Action and No Action Alternatives would continue to meet this standard for these allotments.

Name of specialist and date: Emily Spencer, 2/17/10

WATER QUALITY STANDARD: This standard is met within the allotments. As of 2008, the Little Snake River segment along the Ricegrass and Piskwik allotments (from Powder Wash to the Yampa River) is on the Colorado Department of Public Health and Environment's Section 303(d) list of Water Quality Limited Segments because of a low priority iron impairment. This segment is also on CDPHE's Monitoring and Evaluation List for a suspected water quality problem regarding sediment load. All tributaries to the Little Snake River are on the Monitoring and Evaluation List for suspected *E. coli* and iron issues. Both the Proposed Action and No Action Alternatives would continue to meet this standard.

Name of specialist and date: Emily Spencer, 2/17/10

UPLAND SOILS STANDARD: This standard is being met within these allotments. No exceptional accelerated erosion was noted within the allotments. Any evidence of soil movement was either highly restricted to a small area or is expected for the topography and soil type. The plant communities within the allotments are relatively intact and appear to provide adequate cover and species to maintain and protect soil integrity. As long as the grazing rotations and distributions are maintained, the No Action and Proposed Action would continue to meet this standard for these allotments.

Name of specialist and date: Emily Spencer, 2/17/10

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office, John Weibel and Colby Wells of Rockin' J Cattle.

ATTACHMENTS:

Attachment 1- Ricegrass, Piskwik, Seven Mile and Thornburg Gulch Allotment Map

Attachment 2 – Management Considerations and Needed Range Improvements

Attachment 3 – Standard and Common Terms and Conditions

Attachment 4 – Map of Existing and Proposed Project Locations

4a Thornburg Gulch Allotment, Proposed Projects

4b Ricegrass Allotment, Proposed Projects

4c Seven Mile Allotment, Proposed Projects

4d Piskwik Allotment, Proposed Projects

Attachment 5a - Steel Water Trough

Attachment 5b - Round Water Trough Installation

Attachment 6 - Pipeline Installation Types

Attachment 7 - BLM Fence Standards

7a BLM Electric Fence Standards

7b BLM Buck and Pole Fence Standards

Attachment 8 - Well Construction Details

Attachment 9 - Typical Water Retention Pit

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 EA CO-100-2009-0037 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 2

The following table lists the key range management issues found in each allotment, the desired grazing management strategy as well as the needed range improvements. Also listed are the proposed monitoring objectives and goals.

Table 1.

Allotment	AUMs	Key Issues	Desired Grazing Management Strategy	Management Considerations and Goals; Needed Range Improvements																											
Ricegrass #04318	260	<p>Cheatgrass is the dominate grass species north of MCR4.</p> <p>Livestock water in allotment is limited to the Little Snake River, north of MCR4, resulting in poor distribution throughout allotment.</p> <p>Little Snake River is the allotment boundary on west side; at low water, cattle from adjacent allotments are able to enter allotment.</p> <p>Critical habitat and severe winter range for antelope occurs along river corridor.</p>	<p>Grazing: 20-25 days use generally in the fall (October or November). Trailing would be authorized in the spring every other year when cattle are turned out first in Piskwik.</p>	<p>Fall use would be authorized annually with utilization restrictions of 50% of the current year's growth on key perennial grass species.</p> <p>Improvements: Evaluate potential for water development south of MCR4. Evaluate potential for improving water gap fencing along the Little Snake River. Long term (5-7 years after renewal), construct a fence along MCR 4 to create two pastures within the allotment.</p>																											
Piskwik #04324	1,398	<p>Sage grouse habitat: there are several leks within the allotment and the allotment currently provides good to excellent nesting habitat. This habitat is more important now due to the Mayberry fire which burned habitat just south of the Piskwik Allotment during the summer of 2008</p> <p>The allotment lacks reliable water. There are 10 pit reservoirs scattered throughout the allotment, but many have failed to hold water.</p> <p>Bitterbrush concerns</p>	<p>Grazing: Initially, the Piskwik Allotment would be divided into three pastures and eventually four pastures via electric fencing. Livestock would use each pasture for approximately 43 days at varying times of the year.</p> <p>The Bighole and South Pastures would receive growing season use every other year. The River Pasture would be used after the growing season each year. Once the allotment infrastructure is in place, one pasture will receive complete deferment each year. The pasture that is used last in the fall would never be used first in the spring.</p>	<p>Grazing:</p> <table border="1" data-bbox="1057 1213 1409 1486"> <thead> <tr> <th></th> <th>Pasture</th> <th>Use Period</th> </tr> </thead> <tbody> <tr> <td rowspan="3"><u>Year 1</u></td> <td>Bighole</td> <td>3</td> </tr> <tr> <td>South</td> <td>4</td> </tr> <tr> <td>River</td> <td>7</td> </tr> <tr> <td rowspan="3"><u>Year 2</u></td> <td>Bighole</td> <td>1</td> </tr> <tr> <td>South</td> <td>2</td> </tr> <tr> <td>River</td> <td>5</td> </tr> <tr> <td rowspan="3"><u>Year 3</u></td> <td>Bighole</td> <td>3</td> </tr> <tr> <td>South</td> <td>4</td> </tr> <tr> <td>River</td> <td>5</td> </tr> <tr> <td><u>Year 4</u></td> <td>Repeat</td> <td></td> </tr> </tbody> </table> <p>Each pasture would be monitored at the end of the grazing season to ensure that no more than 50% of the current year's growth has been utilized.</p> <p>Utilization of the current year's growth of bitterbrush will not exceed 40% (20% use by livestock during 5/1 to 10/14 and 20% use by big game during 10/15 to 5/1)</p> <p>Sage grouse nesting habitat: provide for a minimum of seven inches of lateral perennial grass herbaceous cover on an annual basis as measured at key areas during the May to early June nesting period. Herbaceous cover includes residual cover from prior year (s) and any new current year's growth.</p>		Pasture	Use Period	<u>Year 1</u>	Bighole	3	South	4	River	7	<u>Year 2</u>	Bighole	1	South	2	River	5	<u>Year 3</u>	Bighole	3	South	4	River	5	<u>Year 4</u>	Repeat	
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Allotment	AUMs	Key Issues	Desired Grazing Management Strategy	Management Considerations and Goals; Needed Range Improvements
				<p>Improvements: <u>Fencing</u> - Approximately 6.5 miles of new fencing would be necessary to divide the allotment into three and eventually four pastures. Careful consideration would be given to the fence location in order to avoid critical sage grouse habitat. Electric fence design would be used to the maximum extent possible. <u>Water developments</u> – the existing Lemon Springs pipeline would be extended by 4.0 miles to provide water in the newly created River and Bighole Pastures. Existing ponds would be cleaned and repaired.</p>
Seven Mile #04519	462	<p>Approximately 362 acres of BLM managed lands were burned in the Mayberry Fire in 2008. Burned areas are closed to livestock grazing for up to two years.</p>	<p>Grazing: Use would rotate with the allotment receiving spring, summer and fall use during the three year rotation system. The allotment would be split into two pastures with each pasture receiving 21 days of use.</p>	<p>The allotment would receive growing season deferment two out of three years.</p> <p>Improvements: <u>Fencing</u> – approximately 1.5 miles of new fence would be constructed across state and private lands. <u>Water developments</u> – the existing Lemon Springs pipeline would be extended to the south in to the Seven Mile Allotment.</p>
Thornburg Gulch #04522	492	<p>Approximately 476 acres of BLM managed lands have been seeded to crested wheatgrass.</p> <p>The utilization on perennial grass species within the allotment has been well below the objective level since the rotation system was implemented in the late 1990's.</p> <p>Poor distribution/lack of water</p> <p>Kobata Spring was rated as “functioning at risk” with a static trend.</p>	<p>Grazing: The allotment would be split into two pastures. Each pasture would be used consecutively in the spring one of three years and during the fall two of three years. TNR use may be authorized over the next two years in order to collect data to make stocking rate adjustments.</p>	<p>Manage livestock grazing to ensure utilization does not exceed 50% of current year's growth on grasses at the end of the grazing season on native perennial grass species and does not exceed 65% use on crested wheatgrass.</p> <p>Improvements: <u>Fencing</u> – in the short term, approximately 2 miles of fence would be constructed to split the allotment into two pastures. Over the longer term (5 to 10 years) additional fencing may be added to create additional pastures if necessary. Electric fence design would be used to the maximum extent possible.</p> <p><u>Water developments</u> – A pipeline would be constructed from the existing Menge Well north for 1 mile to provide water in proposed new pastures. Kobata spring would be fenced to protect the riparian area.</p>

Attachment 3
DOI-BLM-CO-N010-2009-0037
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.