

**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-N010-2009-0052-EA

PERMIT/LEASE/ALLOTMENT NUMBER: #0501269/04039, 04036

PROJECT NAME: Ten year renewal of grazing lease #0501269 on the Serviceberry Mountain (#04039) and Upper Putt Creek (#04036) Allotments. This EA will also analyze the incorporation of acquired lands into the Serviceberry Mountain Allotment and will analyze livestock grazing on approximately 3,109 acres of acquired lands.

LEGAL DESCRIPTION: See allotment map, Attachment 1.

Serviceberry Mountain #04039 (existing)	T11N R90W all or portions of sections 4-9 T12N R90W all or portions of sections 29, 31-33
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2,408 acres- BLM
618 acres- Private
3,026 acres- Total

Serviceberry Mountain #04039 (proposed)	T11N R90W all or portions of sections 4-9, 17, 20-21, 29 T12N R90W all or portions of sections 29, 31-33
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4,447 acres – BLM
618 acres - Private
5,065 acres – Total

Upper Putt Creek #04036	T11N R90W all or portions of sections 1-4, 9-11, 15-16 T12N R90W all or portions of sections 21, 26-28, 33-36 T11N R90W all or portions of sections 1-4, 9-12, 15-16
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1,304 acres – BLM
307 acres – State LB
6,847 acres - Private
8,458 acres – Total

APPLICANT: James Bridges

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 Central (M.U. 2), Little Snake River (M.U. 3) and Scattered Sands (M.U. 7) Management Units. 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 management objectives for M.U. 3 are to improve soil and watershed values, increase forage production, and enhance livestock grazing. Other resource uses/values within this unit are allowed consistent with livestock grazing, forage production, soil and watershed resource objectives. The management objectives for M.U. 7 are to provide for the development of locatable minerals and leasable minerals other than coal, oil, gas, and geothermal resources, and to make areas available to supply demand for sand, gravel, and other salable mineral materials. The development of other resource uses/values within this unit is allowed 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-016-94-119, Land Exchange Proposal between James A. Bridges and the United States through the Bureau of Land Management.

NEED FOR PROPOSED ACTION: The ten year BLM grazing lease #0501269, which authorizes livestock grazing on the Serviceberry Mountain and Upper Putt Creek Allotments was due to expire on February 28, 2008. This lease was extended for one year, until February 28, 2009 and was extended for a second time, expiring on February 28, 2010. 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. 110-329, Sections 106 & 180) while the BLM continues to process the ten year renewal in accordance with all applicable laws and regulations.

Grazing leases and 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*.

In 1994, the Serviceberry Mountain and Upper Putt Creek Allotments were part of a land exchange between James A. Bridges and the BLM. Through this exchange, approximately 3,109 acres of formerly private lands became public lands under the management of the BLM. The majority of these lands (2,126 acres) were not previously permitted by the BLM for grazing use prior to the land exchange, although when the lands were under private control they were used for livestock grazing. Approximately 2,126 acres acquired by the BLM are not contained within either allotment and the remaining acres (983 acres) are currently fenced within either the Serviceberry or Upper Putt Creek Allotments and were historically grazed by livestock as part of the BLM grazing allotments. The Proposed Action includes the incorporation of 2,126 acres of the acquired lands into the Serviceberry Allotment and a change to the Serviceberry Allotment boundary, see Map 1. Although the acquired lands potentially have between 265 to 450 AUMs of livestock grazing capacity, ecological site inventory data has not been collected, therefore the carrying capacity of the acquired lands is unknown. The permittee has indicated that an increase in permitted use is not desired at this time, but to continue to activate a total of 680 AUMs of livestock grazing and distribute this use out among the Serviceberry and Upper Putt Creek Allotments with the acquired lands incorporated into the allotment boundaries.

Allotment	BLM Acres	Private Acres	Total Acres
Serviceberry Mountain	2,408	640	3,048
Serviceberry Mountain w/proposed boundary change	4,447	640	5,087

There are no specific prohibitions in the RMP/EIS that would preclude grazing use on the lands acquired by the BLM; this EA will analyze the impacts of livestock grazing on public lands managed by the BLM acquired through the 1994 land exchange. The analysis will review and may recommend changes to the terms and conditions to the lease which would improve or maintain public land health if necessary. 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 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 FY2008. 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 lease 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 Serviceberry Allotment is located approximately 30 miles north of Craig, Colorado, in Moffat County. The allotment can be accessed by taking Colorado Highway 13 to Moffat County Road (MCR) 101 to MCR70. The Upper Putt Creek Allotment can be accessed by Colorado Highway 13 to MCR 2 and using secondary two-tracks south through the allotment. The two allotments are contiguous.

Elevations within the allotments range from 6,600 feet along Willow Creek to approximately 9,400 feet on Bakers Peak and Jim Robertson Mountain. The allotments are characterized by hills and steeper mountains; a small percentage of the allotments consist of slopes over 35%. Approximately 33,237 feet of Willow Creek was acquired through the land exchange; this creek has potential cold water fisheries. Drainages from Serviceberry Mountain join Willow Creek, which runs north to the Little Snake River. The most common range sites are rolling loam, loamy slopes/mountain loam, shallow slopes and aspen. Indian ricegrass, needle-and-thread grass, bluebunch wheatgrass, mountain brome, mountain big sagebrush, serviceberry and snowberry are the most common species in the allotments. Mean annual precipitation is generally 13-15 inches.

Both the Serviceberry Mountain and Upper Putt Creek Allotments are classified as Category I (improve) allotments. The definition of this category can be found in the Rangeland Program Summary for the Little Snake Resource Management Plan.

Historic use within both the Upper Putt Creek and Serviceberry Mountain Allotments was both sheep and cattle from the first of May through the end of June. Cattle continued to graze within the Upper Putt Creek Allotment through the first of October and in some years, through the first of November. When the current lessee acquired the grazing lease from the previous lessee, he began to run cattle only, and currently runs yearlings which he purchases in the spring and sells in the fall. He typically rotates turnout between the north and south pastures of the Serviceberry Allotment and uses the allotment from 5/1 through 7/15. Livestock are moved to the Upper Putt Creek Allotment in mid July where they stay until early October.

The current authorization is as follows:

Allotment Name & Number	Livestock Number & Kind	Period		%PL	AUMs
		Begin	End		
Upper Putt Creek #04036	32 Cattle	05/15	10/04	100	150
Serviceberry Mtn. #04039	237 Cattle	05/01	07/07	100	530

No Special Terms and Conditions

The lessee currently turns out into the Serviceberry Allotment first for two months, alternating the early use between the north and south pastures of the allotment. Livestock are then moved into the Upper Putt Creek Allotment; the BLM lands are mainly used last in the fall prior to leaving the allotment.

MONITORING DATA/ASSESSMENT DATA: Both of the allotments fall into the Slater Creek Watershed and were assessed during the 2000 Slater Landscape Health Assessment. Each of the assessment locations within the allotments was found to be meeting all standards. In May of 2009, an interdisciplinary team revisited the allotments. The ID team returned to the same sites as those visited in 2000. Both sites were found to be meeting land health standards.

Ecological Site Inventory data were collected on the BLM lands in the Upper Putt Creek Allotment in 1984. These data indicate that the allotment have been adjudicated at or slightly below the carrying capacity.

PROPOSED ACTION AND ALTERNATIVES

PROPOSED ACTION: Continue to authorize livestock grazing on the Serviceberry Mountain and Upper Putt Creek Allotments. The Serviceberry Allotment boundary would be changed to incorporate approximately 2,126 acres of acquired lands into the Serviceberry Mountain Allotment. The grazing lease would be changed to reflect a change in percent public land, however federal AUMs would not be changed. Grazing lease #0501269 would be renewed for a period of ten years, expiring February 28, 2019.

The lease would be renewed as follows:

From:

James Bridges, #0501269

Allotment Name & Number	Livestock Number & Kind	Period		%PL	AUMs
		Begin	End		
Upper Putt Creek #04036	32 Cattle	05/15	10/04	100	150

Serviceberry
Mtn. #04039 237 Cattle 05/01 07/07 100 530

No Special Terms and Conditions

To:

James Bridges, #0501269

Allotment	Livestock #/Kind	Grazing Begin	Grazing End	% PL	AUMs
Upper Putt Creek #04036	212 C	05/15	10/04	15	150
Serviceberry Mtn. #04039	269 C	05/01	07/07	88	529
				<u>Unscheduled</u>	<u>1</u>
				TOTAL	530

The following Special Terms and Conditions would apply:

1. The lessee will alternate turnout between the north and south pastures of the Serviceberry Allotment.

NO ACTION ALTERNATIVE: The dates on the expiring lease would remain the same; livestock would continue to graze the allotments as permitted in the expiring lease. The allotment boundary of the Serviceberry Allotment would not be formally changed and livestock grazing would not be authorized on approximately 2,126 acres of land that was acquired in the 1994 land exchange. These lands would be considered “unallotted” but potentially available for livestock grazing to qualified applicants at the discretion of the authorized officer (43 CFR §4110.4-1).

The 370 acres of private lands acquired by the BLM in the 1994 land exchange that are fenced in with the Serviceberry Allotment and the 632 acres of private lands acquired in the Upper Putt Creek Allotment are within designated grazing allotments, and would continue to be managed for grazing of livestock.

ALTERNATIVES CONSIDERED BUT ELIMINATED:

No Grazing Alternative: This alternative would cancel the lease on the allotments. As a result, livestock grazing would cease on the public lands within the allotments. 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 allotments. In addition, this alternative would not be consistent with EA #CO-016-94-119 which analyzed the land exchange proposal between James Bridges and the BLM. This EA stated that “new livestock grazing leases could be issued and livestock grazing allocated in accordance with the regulations on the remaining acreage outside the allotments”.

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, both alternatives: Renewing the lease to graze cattle on the Serviceberry and Upper Putt Creek Allotments would not cause regional air quality impairment under either of the alternatives. Some localized dust may result from driving on unpaved roads and moving cattle along trails, but this would be negligible compared to dust generated from all vehicle uses in the vicinity. Proper grazing use on the forage resources during the grazing period in all of the allotments would protect the surface soils from excessive wind erosion.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 05/27/09

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences, both alternatives: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Kathy McKinstry, 05/27/09

CULTURAL RESOURCES

Affected Environment: Grazing authorization renewals are undertakings under Section 106 of the National Historic Preservation Act. During Section 106 review, a cultural resource assessment was completed for each allotment by Robyn Watkins Morris, Little Snake Field Office Archaeologist, on June 8, 2009. 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 ¹ (total number)	Estimated Eligible or Need Data Sites in the Allotment (number)
4036	1082	1944 (3,026 acres- Total)	35%	1	80	24
4039 (existing)	294	4771 (5,065 acres – Total)	6%	1	135	40
4039 (proposed)	18	8,440 (8,458 acres – Total)	<1%	0	224	67

¹ Estimates of site densities are based on known inventory data. Estimates should be accepted as minimum figures which may be revised upwards based on future inventory findings.

Seven cultural resource inventories were conducted within the Upper Putt Creek Allotment (#04036) resulting in the complete coverage of 1082 acres and 11 cultural resources recorded. Of these 11 resources, three are prehistoric isolated finds, two are historic isolated finds, one is a prehistoric open camp, three are historic habitations, one historic trash dump and one is an historic camp. The General Land Office (GLO) plat maps were consulted. Nothing was found except on the T12N R90W 1912 GLOs which shows that there are historic roads in sections 26 and 35.

Two cultural resource inventories were conducted within the existing boundary of the Serviceberry Allotment (#04039) and one cultural resource was recorded. That one resource is an eligible open camp. The General Land Office (GLO) plat maps were consulted and nothing was identified within the allotment.

Three cultural resource inventories were conducted within the proposed boundary of the Serviceberry Allotment and 18 acres have been surveyed and no cultural resources were recorded. The General Land Office (GLO) plat maps were consulted. In T11N R90W 1881 GLO map there was a cabin in section 7 and in section 21. In T11N R90W 1917 GLO map there was a cabin in sections 6 and 7 and numerous historic roads and ditches.

Based on available data, a high potential for historic properties occurs in the proposed Serviceberry Allotment and a lower potential exists for historic properties within the current boundary of the Serviceberry Allotment. This difference is probably related to slope and elevation. Subsequent field inventory is to be completed within ten year period of the lease:

1. 5MF3852 will be revisited to determine if impacts from concentrated livestock use are occurring.

2. In the proposed Serviceberry Allotment, approximately 380 acres must be surveyed around the Willow Creek drainage. Some of the acreage will be reduced during field inventory due to vegetation and slope constraints. Acreage number is an estimate based on GIS analysis.
3. Historic cabins are targets for animal rubbing. Therefore, historic cabins in T11N R90W sections 7 and 21 should be located if possible.

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

Environmental Consequences, Proposed Alternative: The direct impacts that occur where livestock concentrate, during normal livestock grazing activity, include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art. Indirect impacts include soil erosion, gulying, and increased potential for unlawful collection and vandalism. Continued livestock use in these concentration areas may cause substantial ground disturbance and cause irreversible adverse effects to historic properties.

Standard Stipulations for cultural resources are included in Standard and Common Terms and Conditions (Attachment 2).

Environmental Consequences, No Action: The Landscape Health Assessment found that both allotments were currently meeting standards. Healthy vegetation and riparian areas naturally protect cultural resources. Saltblock placement, which can create concentration areas, could potentially impact historic properties if the saltblocks are in proximity to the historic properties. Under the No Action Alternative, approximately 2,126 acres would not be authorized for livestock grazing; therefore any adverse impacts to historic properties caused by livestock grazing would not occur on these lands.

Mitigative Measures: Site 5MF527 must be fenced to prevent further damage from animal rubbing.

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

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: Louise McMinn, 5/4/09

FLOOD PLAINS

Affected Environment: There are no floodplains on public lands within the Upper Putt Creek Allotment. The Serviceberry Allotment, with the boundary changed as proposed, contains approximately 10.13 miles of the perennial stream Willow Creek and its floodplains. The floodplains are comprised of alluvial materials from mixed sources.

Environmental Consequences, Proposed Action: The Proposed Action would not impair the ability of the floodplain along Willow Creek to play its natural role in preventing catastrophic flooding to areas downstream. This floodplain is of sufficient size and stability and located within an area confined by steeper slopes to allow flood waters to spread out, dissipate energy, and minimize the impact of potential flooding to areas downstream.

Environmental Consequences, No Action: Livestock grazing would not be authorized on approximately 2,126 acres of BLM managed lands; much of this area includes Willow Creek and its floodplain. Any impacts to the floodplains as a result of livestock grazing would not occur.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 08/12/09

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive and noxious weeds are present in the affected area. Invasive annuals such as downy brome (cheatgrass), yellow alyssum and bur buttercup commonly occur in the allotments, but not in large amounts. These invasive species can become established on disturbed areas. Invasive annual weeds are typically established on disturbed and concentrated use areas, whereas, biennial and perennial noxious weeds are less common in occurrence. Downy brome is on the Colorado List C of noxious weeds. The BLM cooperates 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, Proposed Action: Vehicular access and livestock movements on public lands due to grazing operations 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. Proper grazing use by livestock is necessary to maintain a resilient native plant community that can occupy bare soils and resist invasive and noxious weed establishment. 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.

Environmental Consequences, No Action: Livestock grazing would not be authorized on approximately 2,126 acres of BLM managed lands, therefore the impacts associated with livestock grazing would not occur. However, wind, water, wildlife movements as well as human actions are other ways that noxious weeds can be introduced and spread into public lands. Lands under management by the BLM are monitored for the presence of noxious weeds; once they are detected they can be controlled with various integrated pest management techniques.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 05/27/09

MIGRATORY BIRDS

Affected Environment: The vegetation within these allotments consists of perennial grass, sagebrush communities and upland shrub communities. These ecosystems typically provide nesting habitat for a large array of migratory birds during the breeding season. Priority species on the USFWS Birds of Conservation Concern List that may nest in the area include sage sparrow and Brewer's sparrow.

The allotments are meeting all land health standards. Sagebrush, upland shrub and grass communities were in good condition, providing suitable and productive habitat for a variety of migratory bird species.

Environmental Consequences, Proposed Action: While livestock grazing can directly impact reproductive success of migratory songbirds by trampling of nests, it is more likely that it indirectly influences reproductive success due to changes in vegetation such as species composition, height or cover. The Proposed Action would be compatible with maintaining local migratory bird populations.

Environmental Consequences, No Action: Livestock grazing would not be authorized on the acquired lands outside the Serviceberry Allotment. None of the impacts associated with livestock grazing would occur on these lands.

Mitigative Measures: None.

Name of specialist and date: Gail Martinez, 05/29/09

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 follow-up 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, 06/09/09

PRIME & UNIQUE FARMLANDS

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

Environmental Consequences, both alternatives: None.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 05/27/09

T&E AND SENSITIVE ANIMALS

Affected Environment: There are no threatened or endangered species or habitat for such species within these allotments. This allotment does contain habitat for greater sage-grouse, a BLM special status species. The northern portion of both allotments is mapped by the Colorado Division of Wildlife (CDOW) as greater sage grouse winter range and greater sage grouse overall range.

Environmental Consequences, Proposed Action: The Proposed Action would not have any adverse impacts on any threatened or endangered species or habitats for such species.

Environmental Consequences, No Action: The No Action Alternative would not have adverse impacts on any threatened or endangered species or habitats for such species.

Mitigative Measures: None.

Name of specialist and date: Gail Martinez, 05/29/09

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, 4/14/09

WASTES, HAZARDOUS OR SOLID

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

Environmental Consequences, both alternatives: Potential releases of hazardous materials could occur during vehicular access for livestock management operations and recreational uses such as hunting and camping. 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 either allotment.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 08/18/09

WATER QUALITY – GROUND

Affected Environment: The allotment is underlain mostly by Quaternary alluvium, Tertiary Browns Park, Tertiary Wasatch, Tertiary Fort Union and Cretaceous Laramie formations. The Browns Park Formation consists of fluvial sandstone, claystone, conglomerate, loosely consolidated eolian sandstone, and volcanic ash. This formation is likely to contain fresh water. The Wasatch and Fort Union are characterized by interbedded sandstone, siltstone, shale, lignite and coal. These formations are likely to contain fresh water.

Environmental Consequences: Renewing the grazing lease and incorporating additional lands into the allotment will have no adverse impacts to potential ground water aquifers or recharge zones (hydrology) within the proposed action area.

Mitigative Measures: None

Name of specialist and date: Jennifer Maiolo 9/8/09

WATER QUALITY - SURFACE

Affected Environment: All of the lands within the Serviceberry Mountain Allotment drain towards Willow Creek. Willow Creek is a perennial tributary of the Little Snake River. Within the Upper Putt Creek Allotment, the lands on the southern side of Bakers Peak drain into Spring Creek which is a tributary to Willow Creek. On the north side of Bakers Peak, there are small, unnamed, intermittent streams and Putt Creek. Putt Creek is a tributary of Slater Creek which flows north to the Little Snake River.

The water quality of Willow Creek and its tributaries needs to support Aquatic Life Cold 1, Recreation E, Water Supply, and Agriculture. The water quality of the Little Snake River needs to support Aquatic Life Cold 1, Recreation 1a, Water Supply, and Agriculture.

Environmental Consequences, Proposed Action: Grazing use along the riparian area of Willow Creek could be a source of nonpoint pollution. The impacts of livestock grazing riparian areas include manure and urine deposited directly into or near surface waters where leaching and runoff can transport nutrients and pathogens into the water. Unmanaged grazing may accelerate erosion and sedimentation into surface water, change stream flow, and destroy aquatic habitats.

Improper grazing can reduce the capacity of riparian areas to filter contaminants, shade aquatic habitats, and stabilize streambanks (Hoorman, James and McCutcheon, Jeff. "Best management Practices to Control the Effects of Livestock Grazing Riparian Areas." Ohio State University Extension Fact Sheet).

Impacts can be reduced by controlling the duration and intensity of livestock use in the riparian area. Livestock turnout is alternated between the north and south pastures of the Serviceberry Allotment each year, and livestock use typically occurs for no more than 2 ½ months within the allotment. Several pit reservoirs have been constructed in the Serviceberry Allotment which help to draw cattle off of Willow Creek and into upland areas of the allotment. Additionally, mineral and salt supplements are required to be placed at least ¼ mile away from water sources; this also helps to draw cattle into upland areas. Limiting use to no more than 50% of current year's production helps to maintain a healthy cover of riparian vegetation. A healthy riparian area would help reduce soil erosion, stabilize the banks of the creek, trap water-borne sediment, trap manure, trap bacteria and other pathogens, help prevent flooding, all of which would ensure adequate surface water quality.

Water quality would continue to support the present classified uses under the Proposed Action.

Environmental Consequences, No Action: Livestock grazing would not be authorized on the lands acquired by the BLM in the 1994 land exchange. They would be considered unallotted lands, potentially available for livestock grazing in the future. None of the impacts to water quality in Willow Creek associated with livestock grazing would occur under this alternative.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 08/13/09

WETLANDS/RIPARIAN ZONES

Affected Environment: Lotic and lentic riparian resources occur within the Serviceberry and Upper Putt Creek Allotments, however these resources are extremely limited to non-existent on the BLM managed lands in the Upper Putt Creek Allotment. The largest riparian system is Willow Creek which would be located in the Serviceberry Allotment with the proposed boundary changes. Approximately 10.9 miles of Willow Creek were acquired by the BLM as part of the land exchange in 1994. The public portions of Willow Creek that are contained within the proposed boundary of the Serviceberry Allotment have been stratified into stream reaches. These reaches are based on observable differences in landform, geology, geomorphology, fluvial processes, major soil and/or vegetation changes, and hydrologic changes. Non-ecological factors, such as management or ownership boundaries, may have also been used to stratify the reaches. Reaches 4 through 11 of Willow Creek would be contained within the Serviceberry Allotment with the proposed boundary changes, with reach 11 beginning on the southeastern portion of the allotment and reach 4 ending where Willow Creek exits the Serviceberry Allotment at the northern boundary.

This creek is used to supply water for irrigation and some of the runoff fills a storage reservoir far upstream of the public land. One water diversion to claim junior water rights also occurs upstream of the public land. Two other water diversions occur within reaches 5 and 7; the senior water right is claimed at the upstream end of reach 7 (approximately at the midpoint of the creek as it flows through the allotment). These water diversions have reduced the capability of Willow Creek to achieve proper functioning condition starting at reach 7 and continuing downstream through Reach 4.

The following table summarizes the proper functioning condition status of Willow Creek within the proposed Serviceberry Allotment:

Reach Number	PFC ¹	FAR [↑] ¹	FAR [↔] ¹	FAR [↓] ¹	NF ¹
#4				2.81 mi.	
#5			2.51 mi.		
#6			0.89 mi		
#7			0.27 mi		
#8			2.06 mi		
#9	0.48 mi				
#10			0.69 mi		
#11			1.24 mi		
Total Miles	0.48 mi	0.0 mi	7.66 mi	2.81 mi	0.0 mi
Percent of Total Stream Miles	4%	0	70%	25%	0
¹ PFC = Proper Functioning Condition, FAR [↑] = Functional-At-Risk with Upward Trend, FAR [↔] = Functional-At-Risk with Static Trend, FAR [↓] = Functional-At-Risk with Downward Trend, NF = Non-Functional.					

The main reason for the FAR rating along much of the creek is due to the incised nature of the creek which limits its access to the floodplain. Also, low flows resulting from water depletions upstream during irrigation season may not support greenline riparian species high enough up the streambanks to protect them from 25 year flood events.

Environmental Consequences, Proposed Action: The environmental consequences are similar to those listed under surface water quality as surface water quality is closely linked to the health of the riparian vegetation. The livestock operation changed from both sheep and cattle grazing to strictly cattle use with yearlings over a decade ago. Yearling cattle make better use of rugged terrain than do cows with calves and they do not tend to congregate in riparian areas as much as a cow/calf pair. This change in kind of livestock has enhanced distribution. Additional pasture fencing and upland ponds have also helped to promote distribution and implement rotational grazing practices. The permittee alternates turnout between the north and south pastures of the Serviceberry Allotment. The rotational grazing system in the Serviceberry Allotment along with the growing season deferment in the Upper Putt Creek Allotment have helped to alleviate some of the impacts that were causing compacted soils on valley terrace positions and livestock trampling in riparian/watering areas. Some areas which are prone to high runoff have had grazing pressure reduced or are grazed at different times during the grazing schedule, allowing hydrologic processes to interact with “rested soils” to retain water on upland soils and within ephemeral floodplains for plant growth and to replenish local groundwater. The Serviceberry Allotment would continue to receive late summer and fall rest from livestock

grazing which would allow late season vegetation re-growth to occur without defoliation, producing more protective standing and litter cover for soils prior to the fall/winter wet season.

Environmental Consequences, No Action: Livestock grazing would not be authorized on the acquired lands outside the current Serviceberry Allotment boundary. There would be no impacts associated with livestock grazing on the riparian areas of Willow Creek.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 08/19/09

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences, both alternatives: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Gina Robison, 05/19/09

WILDERNESS, WSAs

Affected Environment: Not present.

Environmental Consequences, both alternatives: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Gina Robison, 05/19/09

NON-CRITICAL ELEMENTS

RANGE MANAGEMENT

Affected Environment: The season of use authorized on the Serviceberry Mountain Allotment is currently 5/01 through 7/07 for 237 cattle at 100% PL for a total of 530 AUMs. The Upper Putt Creek Allotment is permitted for 32 cattle from 5/015 through 10/04 at 100% PL for a total of 150 AUMs. The permittee voluntarily rotates spring turnout between the southern portion and northern portion of the Serviceberry Mountain Allotment.

Environmental Consequences, Proposed Action: Changing the percent public land on the grazing lease to more accurately reflect the on the ground situation would result in less confusion in regards to numbers of cattle that can be grazed on the Upper Putt and Serviceberry Allotments. On the ground cattle numbers would match the numbers on the grazing permit.

Incorporating approximately 2,124 acres of lands acquired by the BLM in the 1994 land exchange into the Serviceberry Allotment would facilitate the management of livestock operations currently in place. This acreage was formerly owned and grazed by the current livestock lessee. After the completion of the 1994 land exchange, these lands were never incorporated into the Serviceberry Allotment, but grazing may have continued without the oversight or management by the BLM. By incorporating this land into the Serviceberry Allotment, they would be managed and administered by the BLM and subject to grazing regulations found at 43 CFR §4100.

As stated in the EA for the 1994 exchange: “New grazing permits could be issued and livestock grazing allocated in accordance with the regulations...on the remaining acreage outside the allotments. It is expected that livestock grazing on the offered lands would be similar in both the short-term and long-term...” It is clear that it was not the intent of the 1994 exchange to eliminate livestock grazing from the acquired lands. The lessee has not requested an increase in permitted use commensurate with the increase in acreage. Rather, the lessee would like to keep the permitted use at the current level (530 for the Serviceberry Allotment) and keep his herd size at the same number. The lack of ecological site data for the acquired acreage makes increasing AUMs inadvisable at this time.

Environmental Consequences, No Action: If the 2,126 acres outside the Serviceberry Allotment were to remain unallotted, there is the potential for another qualified applicant to apply for grazing use on these lands.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 08/19/09

SOILS

Affected Environment: The Serviceberry and Upper Putt Creek Allotments contain the following soils:

Soil Mapping Unit¹	Map Unit Setting	Descriptions	Ecological Site
10—Battlement fine sandy loam, 0 to 3 percent slopes 290 Acres	<i>Major Land Resource</i> <i>Area:</i> 34 <i>Elevation:</i> 6,000 to 6,800’ <i>Mean annual precip:</i> 11 to 15” <i>Mean annual air temp:</i> 42 to 45°F <i>Freeze-free period:</i> 75 to 95 days	<i>Landform:</i> Stream terraces, flood plains <i>Drainage Class:</i> Well drained <i>Slowest Permeability:</i> Moderately slow <i>Available Water Capacity:</i> 11.1” (high) <i>Runoff Class:</i> Low	Foothill swale
17—Binco gravelly clay loam, 15 to 45 percent slopes, very stony 389 Acres	<i>Major Land Resource</i> <i>Area:</i> 34 <i>Elevation:</i> 7,200 to 8,200’ <i>Mean annual precip:</i> 16 to 18” <i>Mean Annual Air Temp:</i>	<i>Landform:</i> Hillslopes <i>Drainage Class:</i> Well drained <i>Slowest permeability:</i> .001 to .06 in./hr. (very slow) <i>Available water capacity:</i>	Claypan

	37 to 40°F <i>Freeze-Free Period: 50 to 75 days</i>	9.0" (high) <i>Runoff class: Very high</i>	
21—Bulkley stony loam, 15 to 30 percent slopes, very stony 2810 Acres	<i>Major Land Resource</i> <i>Area: 34</i> <i>Elevation: 6,700 to 7,200'</i> <i>Mean annual precip: 13 to 15"</i> <i>Mean annual air temp: 42 to 45°F</i> <i>Freeze-free period: 75 to 95 days</i>	<i>Landform: Hillslopes</i> <i>Drainage class: Well drained</i> <i>Slowest permeability: 0.06 to .2 in./hr. (slow)</i> <i>Available water capacity: 8.8" (moderate)</i> <i>Runoff class: Very high</i>	Clayey footslopes
34—Clayburn-Foidel complex, 25 to 55 percent slopes, very boulder 743 Acres	<i>Major Land Resource</i> <i>Area: 48A</i> <i>Elevation: 7100 to 9,000'</i> <i>Mean annual precip: 12 to 14"</i> <i>Mean annual air temp: 42 to 45°F</i> <i>Freeze-free period: 75 to 95 days</i>	<i>Landform: Benches, alluvial fans</i> <i>Drainage class: Well drained</i> <i>Slowest permeability: .06 to 0.2 in./hr. (slow)</i> <i>Available water capacity: 9.4" (high)</i> <i>Runoff class: Very high</i>	Clayey Foothills
Soil Mapping Unit	Map Unit Setting	Descriptions	Ecological Site
41—Cochetopa-Gothic complex, 25 to 45 percent slopes, extremely stony 143 Acres	<i>Major Land Resource</i> <i>Area: 48A</i> <i>Elevation: 7,200 to 8,200'</i> <i>Mean annual precip: 16 to 18"</i> <i>Mean annual air temp: 37 to 40°F</i> <i>Freeze-free period: 50 to 75 days</i>	<i>Landform: Mountainsides,</i> <i>Available water capacity: 8.9" (moderate) to 10.2" (high)</i> <i>Drainage class: Well drained</i> <i>Slowest permeability: 0.06 to .2 in./hr. (slow)</i> <i>Runoff class: High to Very high</i>	Brushy loam
42—Cochetopa-Jerry complex, 3 to 15 percent slopes, extremely stony 920 Acres	<i>Major Land Resource</i> <i>Area: 48A</i> <i>Elevation: 7,000 to 8,100'</i> <i>Mean annual precip: 16 to 20"</i> <i>Mean annual air temp: 37 to 40°F</i> <i>Freeze-free period: 50 to 75 days</i>	<i>Landform: Concave positions on plateaus and Convex positions on plateaus</i> <i>Drainage class: Well drained</i> <i>Slowest permeability: 0.06 to .2 in./hr. (slow)</i> <i>Available water capacity: 8.9" (moderate) to 10.8" (high)</i> <i>Runoff class: Very high</i>	Stoney loam & Mountain Loam
77—Forelle loam, 3 to 12 percent slopes 279 Acres	<i>Major Land Resource</i> <i>Area: 34</i> <i>Elevation: 6,200 to 7,200'</i> <i>Mean annual precip: 11 to 13"</i> <i>Mean annual air temp: 42 to 45°F</i> <i>Freeze-free period: 75 to 95 days</i>	<i>Landform: Benches</i> <i>Drainage class: Well drained</i> <i>Slowest permeability: 0.6 to 2.0 in./hr. (moderate)</i> <i>Available water capacity: 9.8" (high)</i> <i>Runoff class: Medium</i>	Rolling loam
79—Forelle-Evanot complex, 1 to 12	<i>Major Land Resource</i> <i>Area: 34</i>	<i>Landform: Hillslopes, benches</i>	Rolling loam

percent slopes 132 Acres	<i>Elevation:</i> 6,200 to 7,200' <i>Mean annual precip:</i> 13 to 15" <i>Mean annual air temp:</i> 42 to 45°F <i>Freeze-free period:</i> 75 to 95 days	<i>Drainage class:</i> Well drained <i>Slowest permeability:</i> 0.6 to 2.0 in./hr. (moderate) <i>Available water capacity:</i> 9.8" (high) <i>Runoff class:</i> Medium	
84—Gebson, moist-Youga complex, 5 to 25 percent slopes, extremely stony 331 Acres	<i>Major Land Resource Area:</i> 48A <i>Elevation:</i> 7,000 to 8,600' <i>Mean annual precip:</i> 16 to 18" <i>Mean annual air temp:</i> 37 to 40°F <i>Freeze-free period:</i> 50 to 75 days	<i>Landform:</i> Mountain sides <i>Drainage class:</i> Well drained <i>Slowest permeability:</i> 0.6 to 2.0 in./hr. (moderate) <i>Available water capacity:</i> 7.8" to 8.7" (moderate) <i>Runoff class:</i> Medium	Stoney loam & Mountain Loam
98—Herm-Fughes complex, 10 to 20 percent slopes, extremely boulder 610 Acres	<i>Major Land Resource Area:</i> 34 <i>Elevation:</i> 6,800 to 7,700' <i>Mean annual precip:</i> 16 to 18" <i>Mean annual air temp:</i> 42 to 45°F <i>Freeze-free period:</i> 75 to 95 days	<i>Landform:</i> Hillslopes <i>Drainage class:</i> Well drained <i>Slowest permeability:</i> 0.06 to .2 in./hr. (slow) <i>Available water capacity:</i> 7.7" to 8.4" (moderate) <i>Runoff class:</i> Very high	Deep clay loam & Mountain Loam
121 - Leaps clay loam, 3 to 15 percent slopes, very stony 787 Acres	<i>Major Land Resource Area:</i> 48A <i>Elevation:</i> 7,600 to 8,600' <i>Mean annual precip:</i> 20 to 22" <i>Mean annual air temp:</i> 37 to 40°F <i>Freeze-free period:</i> 50 to 75 days	<i>Landform:</i> Mountainsides <i>Drainage class:</i> Well drained <i>Slowest permeability:</i> 0.001 to .062 in./hr. (very slow) <i>Available water capacity:</i> 9.7" (high) <i>Runoff class:</i> Very high	Aspen woodland
Soil Mapping Unit	Map Unit Setting	Descriptions	Ecological Site
134—Morapos loam, 3 to 12 percent slopes 182 Acres	<i>Major Land Resource Area:</i> 48A <i>Elevation:</i> 6,400 to 7,600' <i>Mean annual precip:</i> 16 to 18" <i>Mean annual air temp:</i> 40 to 43°F <i>Freeze-free period:</i> 65 to 85 days	<i>Landform:</i> Plateaus <i>Drainage class:</i> Well drained <i>Slowest permeability:</i> 0.06 to .2 in./hr. (slow) <i>Available water capacity:</i> 9.1" (high) <i>Runoff class:</i> Very high	Mountain Loam
135—Morapos loam, 12 to 25 percent Slopes 165 Acres	<i>Major Land Resource Area:</i> 48A <i>Elevation:</i> 6,400 to 7,600' <i>Mean annual precip:</i> 16 to 18" <i>Mean annual air temp:</i> 40 to 43°F <i>Freeze-free period:</i> 65 to 85 days	<i>Landform:</i> Mountainsides <i>Drainage class:</i> Well drained <i>Slowest permeability:</i> 0.06 to .2 in./hr. (slow) <i>Available water capacity:</i> 9.1" (high) <i>Runoff class:</i> Very high	Mountain Loam
136—Morapos-Pagoda complex, 2 to 12	<i>Major Land Resource Area:</i> 48A	<i>Landform:</i> convex and concave slopes on hills	Mountain Loam & Deep clay loam

percent slopes 135 Acres	<i>Elevation: 6,600 to 7,200'</i> <i>Mean annual precip: 16 to 18"</i> <i>Mean annual air temp: 40 to 43°F</i> <i>Freeze-free period: 65 to 85 days</i>	<i>Drainage class: Well drained</i> <i>Slowest permeability: 0.06 to .2 in./hr. (slow)</i> <i>Available water capacity: 8.9" (moderate) to 10.2" (high)</i> <i>Runoff class: Very high</i>	
147—Peeler stony fine sandy loam, 5 to 25 percent slopes, very stony 109 Acres	<i>Major Land Resource Area: 48A</i> <i>Elevation: 8,000 to 9,000'</i> <i>Mean annual precip: 20 to 22"</i> <i>Mean annual air temp: 37 to 40°F</i> <i>Freeze-free period: 50 to 75 days</i>	<i>Landform: Alluvial fans, mountainsides</i> <i>Drainage class: Well drained</i> <i>Slowest permeability: 0.6 to 2.0 in./hr. (moderate)</i> <i>Available water capacity: 7.7" (moderate)</i> <i>Runoff class: Medium</i>	Subalpine fir
149—Pinelli loam, 3 to 12 percent slopes 455 Acres	<i>Major Land Resource Area: 34</i> <i>Elevation: 6,200 to 7,000'</i> <i>Mean annual precip: 12 to 14"</i> <i>Mean annual air temp: 42 to 45°F</i> <i>Freeze-free period: 75 to 95 days</i>	<i>Landform: Benches, alluvial fans</i> <i>Drainage class: Well drained</i> <i>Slowest permeability: 0.06 to .2 in./hr. (slow)</i> <i>Available water capacity: 9.4" (high)</i> <i>Runoff class: Very high</i>	Clayey foothills
Soil Mapping Unit	Map Unit Setting	Descriptions	Ecological Site
167—Routt-Cochetopa-Binco complex, 10 to 30 percent slopes, extremely stony 194 Acres	<i>Major Land Resource Area: 34</i> <i>Elevation: 7,200 to 8,200'</i> <i>Mean annual precip: 16 to 18"</i> <i>Mean annual air temp: 37 to 40°F</i> <i>Freeze-free period: 50 to 75 days</i>	<i>Landform: Hills</i> <i>Drainage class: Well drained</i> <i>Slowest permeability: 0.001 to 2.0 in./hr. (very slow to moderate)</i> <i>Available water capacity: 4.28" (low) to 9.2 (high)</i> <i>Runoff class: High to very high</i>	Brushy loam, mountain loam & deep clay loam
184—Styers-Pinelli-Taffom complex, 10 to 25 percent slopes 307 Acres	<i>Major Land Resource Area: 34</i> <i>Elevation: 6,200 to 7,300'</i> <i>Mean annual precip: 11 to 13"</i> <i>Mean annual air temp: 42 to 45°F</i> <i>Freeze-free period: 75 to 95 days</i>	<i>Landform: Hills</i> <i>Drainage class: Well drained</i> <i>Slowest permeability: 0.001 to .2 in./hr. (very slow to slow)</i> <i>Available water capacity: 9.8" to 11.1 (high)</i> <i>Runoff class: moderate to very high</i>	Claypan, clayey foothills & rolling loam
199—Torriorthents-Torripsammets complex, 12 to 40 percent slopes 207 Acres	<i>Major Land Resource Area: 34</i> <i>Elevation: 6,000 to 7,200'</i> <i>Mean annual precip: 9 to 13"</i> <i>Mean annual air temp: 42 to 45°F</i> <i>Freeze-free period: 75 to 95</i>	<i>Landform: Hillslopes</i> <i>Drainage class: Well drained to excessively drained</i> <i>Slowest permeability: 0.2 to .6 in./hr. (moderately slow) to 6.0 to 20.0 in./hr. (rapid)</i>	n/a

	days	<i>Available water capacity:</i> 1.4" to 2.1"(very low) <i>Runoff class:</i> high	
¹ Soils with combined acreages less than 100 acres were not included in the affected environment.			

Environmental Consequences, Proposed Action: Soil compaction and depleted soil cover are the most obvious impacts incurred as a result of livestock grazing. Soil compaction may occur in areas where livestock concentrate and during times when the soils are wet. The stocking rate of cattle within the allotments since 1994 has been low at approximately 8 acres/AUM. This light stocking rate together with the 50% utilization objective would ensure that the residual cover and litter remaining at the end of the grazing season is adequate to enhance on-site nutrient cycling and enhance the ability of the sites to resist erosion.

The Serviceberry Allotment would receive late summer and fall rest from livestock grazing which would allow late season vegetation re-growth to occur without defoliation, producing more protective standing and litter cover for soils prior to the fall/winter wet season. The Upper Putt Creek Allotment typically receives spring and early summer rest, then is utilized by cattle in the late summer and fall. Cattle use at this time of the year when soils are typically dry causes less impact than use during the spring when soils have a higher moisture content.

Environmental Consequences, No Action: There would be no livestock grazing on approximately 2,126 acres currently outside the Serviceberry Allotment, therefore there would be no impacts to soils from livestock grazing. Impacts to soils within the current allotment boundaries would be the same as those listed above.

Mitigative Measures: None.

Name of Specialist and date: Kathy McKinstry, 05/28/09

SURFACE WATER HYDROLOGY

Affected Environment: Willow Creek and Putt Creek along with their respective tributaries receive runoff water from the ridges and hill slopes within these allotments. Both Willow Creek and Putt Creek are tributaries to the Little Snake River.

Environmental Consequences, Proposed Action: Livestock grazing impacts on surface hydrology would be directly associated with livestock use on the soils, vegetation, floodplain and riparian resources. These resources were found to be meeting land health standards when assessed in 1999. Both of the sites (#1 and #3) visited in these allotments during the Slater Landscape Health Assessment in September and October 1999 and when visited again by an ID team in 2009 were found to be meeting standards. With soils, vegetation, floodplain and riparian resources meeting standards, there would be no impacts to surface water hydrology from the Proposed Action.

Environmental Consequences, No Action: The environmental consequences would be the same as those listed under the Proposed Action, however 2,126 acres of BLM managed lands would not be incorporated into the Serviceberry Allotment and therefore would have no

livestock grazing and no of the impacts associated with livestock grazing would occur on these acres. Rotational grazing practices would continue to be practiced and other Best Management Practices, such as riding, herding and salting while maintaining existing pasture fences and existing water developments, are in place to support this level of grazing management.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 08/19/09

UPLAND VEGETATION

Affected Environment: The allotments contain a variety of range sites. In the southern portions of the allotments, clayey footslopes, rolling loam, and clayey foothills are the dominant range sites. These range sites typically support Wyoming big sagebrush, western serviceberry, mountain snowberry, yellow rabbitbrush, western wheatgrass, Nevada bluegrass, bluebunch wheatgrass, Sandberg's bluegrass, needleandthread grass, Indian ricegrass, bottlebrush squirreltail and a wide variety of forbs. At the northern end of the allotments, range sites typical of higher elevations exist, including mountain loam and brushy loam sites. These sites typically support Gambel's oak, serviceberry, snowberry, mountain brome, Letterman's needlegrass, elk sedge, nodding brome and slender wheatgrass. Although the majority of the uplands appear in good to excellent range condition, there are some locations where livestock and elk concentrate causing localized spots of overuse. Both allotments have had periods in the past where they received heavy use by both livestock and wildlife. Prior to 1989, cattle and sheep were run on the Serviceberry Mountain Allotment from 5/1 to 6/30. Cattle were run on the Upper Putt Creek Allotment from 5/15 through 10/02 and in some years through 11/02. When the current permittee acquired the allotments, he began running yearling cattle which are purchased in the spring and sold in the fall. The current system is to use the Serviceberry Allotment for two months, May through the end of June, alternating the turnout between the north and south pastures, then move into the Upper Putt Creek Allotment from July through early fall. The permittee then moves his cattle to his private lands.

Environmental Consequences, Proposed Action: The stocking rate would be decreased under the Proposed Action from approximately 4.5 acres per AUM to approximately 9.5 acres per AUM within the Serviceberry Allotment and would remain at approximately 8 acres per AUM in the Upper Putt Creek Allotment. The lighter stocking rate within the Serviceberry Allotment would decrease grazing pressure on several key forage species, and would decrease grazing pressure across the pastures. The Putt Creek Allotment typically receives full growing season deferment which benefits vegetation health and vigor and allows a full growing season and seed drop to occur across the entire allotment. 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. Both allotments are currently meeting land health standards under current grazing management and this use is maintaining desirable vegetative communities.

Environmental Consequences, No Action: This alternative would allow for continued grazing by cattle during the existing season of use within the current allotment boundaries. There

would be no grazing on 2,126 acres which would not be incorporated into the Serviceberry Allotment boundary. Grazing can have both positive and negative effects on vegetation depending on the intensity of grazing. Overgrazing reduces root growth and replacement, decreasing the ability of plants to harvest solar energy and soil moisture needed for maintenance and growth. Continued overgrazing can lead to plant mortality and the replacement of the native plant community to one made up of non-native, noxious weed species. Conversely, light to moderate grazing causes little reduction in root growth or plant vigor. Light grazing may stimulate grass growth, and lead to a higher biomass but if grazing is too light or non-existent, a significant amount of dry, dying material may remain at the end of the season, causing the grasses to shade themselves.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 08/13/09

WILDLIFE, AQUATIC

Affected Environment: In the Serviceberry Allotment, Willow Creek supports aquatic invertebrates, amphibians, and reptiles. A stream survey has been conducted by BLM fisheries biologists along Willow Creek. While the survey was located just upstream from the Serviceberry Mountain Allotment, results of this survey are applicable to the reach within this allotment. The following fish species inhabit Willow Creek: speckled dace, minnow spp., mottled sculpin, white sucker, and creek chub. The most common fish was the mottled sculpin. All fish were determined to be robust although two white suckers had lesions. Adequate macro invertebrates were also found during this survey. Several water diversions exist on private lands along Willow Creek. Riparian inventories along Willow Creek within this allotment rate this creek as Functioning at Risk. Causal factors leading to this rating were largely attributed to water diversions.

Environmental Consequences, Proposed Action: Potential impacts from livestock grazing include trampling of individuals or nests/eggs; water displacement, sedimentation and nitrification; and removal or degradation of shading vegetation. The proposed livestock grazing system would be the same as what has occurred since approximately 1994 when the BLM acquired additional lands within this allotment from a land exchange. Livestock grazing guidelines for riparian areas have been incorporated into this proposed grazing system to help ensure livestock grazing does not further degrade riparian systems within this allotment. Water diversions along private lands are beyond the BLM's control. These diversions are the most significant factor limiting aquatic wildlife habitat in Willow Creek.

Environmental Consequences, No Action: The allotment boundary of the Serviceberry Allotment would not be changed. The dates on the expiring lease would remain the same; livestock would continue to graze the allotments as permitted in the expiring lease. This livestock grazing system would not likely lead to negative impact to fisheries or other aquatic wildlife within Willow Creek.

Mitigative Measures: None.

Name of specialist and date: Timothy Novotny, 8/21/09

WILDLIFE, TERRESTRIAL

Affected Environment: The Serviceberry Mountain and Upper Putt Creek Allotments provide year round habitat for mule deer and elk, including severe winter range for both species. Bear, mountain lion and a variety of small mammals, songbirds and reptiles may also be found within these allotments.

Environmental Consequences, Proposed Action: The Proposed Action would ensure that wildlife habitats remain capable of supporting healthy productive wildlife populations. Big game animals would not be directly impacted from livestock grazing. There is an increased potential that ground nesting songbirds using this allotment could have nests destroyed by livestock. This is unlikely to occur frequently and would not have a negative impact on any species population.

Environmental Consequences, No Action: Under this alternative, the same grazing system that has been in use for the past 10 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: Gail Martinez, 05/29/09

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 04/21/09		
Forest Management	KLM 08/13/09		
Hydrology/Ground		JAM 08/18/09	
Hydrology/Surface			KLM 08/18/09
Paleontology		MDW 04/21/09	
Range Management			KLM 08/18/09
Realty Authorizations		LM 4/17/09	
Recreation/Travel Mgmt		GMR 04/20/09	
Socio-Economics		LM 5/4/09	
Solid Minerals		JAM 4/20/09	
Visual Resources		GMR 04/20/09	
Wild Horse & Burro Mgmt	KLM 05/20/09		

CUMULATIVE IMPACTS SUMMARY: The allotments and the surrounding area has 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

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The Serviceberry Mountain and Upper Putt Creek Allotments are meeting this standard. Implementation of either alternative would not result in diminished animal production, diversity, or resilience. This standard would continue to be met under either the Proposed Action or the No Action Alternative.

Name of specialist and date: Gail Martinez, 05/29/09

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: There are no threatened or endangered animal species or habitats for such species present with the Serviceberry Mountain and Upper Putt Creek Allotments. These allotments do provide overall and winter range habitat for greater sage-grouse, a BLM special status species. This standard is currently being met and would continue to be met under either alternative.

Name of specialist and date: Gail Martinez, 05/29/09

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: This standard is being met within these allotments. The allotments consists 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, 08/24/09

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, 4/14/09

RIPARIAN SYSTEMS STANDARD: The riparian standard for healthy public lands is met for the both the Serviceberry and Upper Putt Creek Allotments under each of the alternatives. The

current rotational grazing that is occurring has allowed the riparian resources to remain stable or move toward an upward trend. Incorporation of additional acreage into the Serviceberry Allotment would provide additional flexibility in livestock management and improved livestock distribution. This standard would be met for this allotment under the Proposed Action and No Action alternatives.

Name of specialist and date: Kathy McKinstry, 08/25/09

WATER QUALITY STANDARD: The water quality standard for healthy rangelands is met for the Serviceberry and Upper Putt Creek Allotments under each of the alternatives. Runoff from snowmelt and storms flows into Willow Creek and Spring Creek which have some wetland and stable ephemeral floodplain areas to help filter sediment, nutrients and other nonpoint sources of contamination. No impaired stream segments exist within the affected area.

Name of specialist and date: Kathy McKinstry, 08/25/09

UPLAND SOILS STANDARD: The upland soil standard for healthy rangelands is met for the Serviceberry and Upper Putt Creek Allotments under each of the alternatives. The current rotational grazing system has allowed the plant communities and especially key forage plants in the Serviceberry Allotment some early spring deferment followed by late summer rest and deferment periodically through the growing season to maintain or improve vigor and plant diversity. The growing season deferment within the Upper Putt Creek Allotment benefits vegetation health and vigor and allows a full growing season and seed drop to occur across the entire allotment. 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 Proposed Action and the No Action Alternatives would not reverse the condition and trend of the forage and upland soil resources. Implementation of the Proposed Action would continue to improve plant cover, residual forage conditions and plant diversity across these allotments, providing diverse plant cover and diverse root systems to protect the soil surface and enhance upland soil health.

Name of specialist and date: Kathy McKinstry, 08/25/09

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

ATTACHMENTS:

Attachment 1- Allotment Map

Attachment 2- Standard and Common Terms and Conditions

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Based on the analysis of potential environmental impacts contained in DOI-BLM-CO-N010-2009-0052 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
DOI-BLM-CO-N010-2009-0052
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 lease may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.