

**United States Department of the Interior
Bureau of Land Management**

**Environmental Assessment
for the Renewal of the Grazing Lease on the Berry Gulch
Allotment #04144**

Little Snake Field Office
455 Emerson Street
Craig, Colorado

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Table of Contents

CHAPTER 1 - INTRODUCTION.....	3
1.1 IDENTIFYING INFORMATION	3
1.2 PROJECT LOCATION AND LEGAL DESCRIPTION	3
1.3 BACKGROUND	3
1.4 PURPOSE AND NEED.....	3
1.4.1 Decision to be Made	4
1.5 PLAN CONFORMANCE REVIEW	4
1.6 PUBLIC PARTICIPATION	5
1.6.1 Scoping:	5
CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES.....	5
2.1 INTRODUCTION	5
2.2 ALTERNATIVES ANALYZED IN DETAIL	6
2.2.1 Proposed Action.....	6
2.2.2 No Action Alternative.....	6
2.2.3 No Grazing Alternative.....	7
CHAPTER 3 – AFFECTED ENVIRONMENT AND EFFECTS.....	7
3.1 INTRODUCTION	7
3.2 PHYSICAL RESOURCES.....	9
3.2.1 Soils.....	9
3.2.2 Water Quality, Surface.....	11
3.3 BIOLOGICAL RESOURCES	12
3.3.1 Invasive/Non-Native Species.....	12
3.3.2 Migratory Birds.....	13
3.3.3 Special Status Animal Species.....	14
3.3.4 Upland Vegetation	15
3.3.5 Wetlands and Riparian Zones	16
3.3.6 Wildlife, Aquatic.....	17
3.3.7 Wildlife, Terrestrial.....	18
3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT	19
3.4.1 Cultural Resources	19
3.4.2 Native American Religious Concerns.....	22
3.4.3 Social and Economic Conditions	23
CHAPTER 4– PUBLIC LAND HEALTH STANDARDS	24
4.1 INTRODUCTION	24
4.2 COLORADO PUBLIC LAND HEALTH STANDARDS	24
4.2.1 Standard 1	24
4.2.2 Standard 2	25
4.2.3 Standard 3	25
4.2.4 Standard 4	25
4.2.5 Standard 5	26

CHAPTER 1 - INTRODUCTION

1.1 IDENTIFYING INFORMATION

PROJECT NAME: Renewal of the grazing lease on the Berry Gulch Allotment #04144

CASEFILE/ALLOTMENT OR PROJECT NUMBER: 0503903 / 04144

1.2 PROJECT LOCATION AND LEGAL DESCRIPTION

ALLOTMENT NAME AND NUMBER: Berry Gulch #04144

LEGAL DESCRIPTION: see Allotment Map, Attachment #1.

T5N R89W parts of Sections 17-22 and 27-33

ALLOTMENT SUMMARY:

1,884 acres BLM
<u>3,669 acres private</u>
5,553 acres total

COUNTY AND GENERAL LOCATION: Routt County; East of Hamilton, CO on Highway 317 at county border.

LANDSCAPE DESCRIPTION: This allotment lies within the Williams Fork Mountains and consists of rugged, brush covered ridges. Intermittent and ephemeral drainages run through the valleys. Elevation within the allotment ranges from 6,600 feet in Berry Gulch to 8,218 feet on Daton Peak.

CLIMATE/PRECIPITATION SUMMARY: The mean annual precipitation within the allotment ranges from 14-30 inches with a mean annual temperature of 40-45 degrees.

1.3 BACKGROUND

Historically, this allotment was authorized to the Culverwell's under the existing terms and conditions since about 1966. This grazing authorization was transferred to James Floyd in 2009. It has subsequently been rested from livestock grazing based on riparian health concerns. In 2012 Mr. Floyd applied for renewal of the grazing lease with requested changes to the terms and conditions. These changes are included in the Proposed Decision.

1.4 PURPOSE AND NEED

BLM lease 0503903, which authorizes livestock grazing on the Berry Gulch Allotment #04144, was scheduled to expire February 28, 2012 but was extended under the 2012 Appropriation Act through February 28, 2022. This lease is subject to renewal at the discretion of the Secretary of the Interior, who delegated the authority to BLM, for a period of up to ten years. BLM has the authority to renew the livestock grazing permits and leases 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 *Record of Decision and Resource Management Plan*. This

plan includes the *Colorado Public Land Health Standards* and the *Guidelines for Grazing Management*.

BLM is required to provide for public uses of public land resources under the principles of multiple use and sustained yield. Among these uses is the allocation of forage for the purposes of domestic livestock grazing. BLM allocates grazing privileges in a manner that ensures orderly and sustainable consumption of forage while ensuring that wildlife habitat, vegetative, and soil resources remain healthy and provide for a wide array of other public benefits.

The following Environmental Assessment will analyze the impacts of livestock grazing on public land managed by the BLM. The analysis will recommend terms and conditions to the lease which improve or maintain public land health. The Proposed Action will be assessed for meeting land health standards.

In order to graze livestock on public land, the livestock producer (permittee/lessee) must hold a grazing permit/lease. The grazing permittee has a preference right to receive the permit if grazing is to continue. The land use plan allows grazing to continue. This EA will be a site specific look to determine if grazing should continue as provided for in the land use plan and to identify the conditions under which it can be renewed.

The action is needed to respond to an application for renewal and to fully process an extended lease.

1.4.1 Decision to be Made

The BLM will decide whether or not to issue a grazing lease and if issued, the terms and conditions grazing would occur under.

1.5 PLAN CONFORMANCE REVIEW

The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: Little Snake Record of Decision and Resource Management Plan (RMP)

Date Approved: October 2011

Decision Language: The Proposed Action and all alternatives are consistent with the Little Snake Record of Decision and Resource Management Plan, Livestock Grazing Management goals to manage resources, vegetation, and watersheds to sustain a variety of uses, including livestock grazing, and to maintain the long-term health of the rangelands; provide for efficient management of livestock grazing allotments; and contribute to the stability and sustainability of the livestock industry.

Section/Page: 2.14 Livestock Grazing/RMP-41

1.6 PUBLIC PARTICIPATION

1.6.1 Scoping: NEPA regulations (40 CFR §1500-1508) require that the BLM use a scoping process to identify potential significant issues in preparation for impact analysis. The principal goals of scoping are to allow public participation to identify issues, concerns, and potential impacts that require detailed analysis.

External Scoping Summary: The action in this EA is included in the NEPA log posted on the LSFO web site: http://www.blm.gov/co/st/en/BLM_Information/nepa/lsfo.html. Additionally, the BLM Range Specialist had conversations with the lessee to discuss the renewal of the grazing lease. These comments have been incorporated into the Proposed Action.

The Little Snake Field Office sent out a Notice of Public Scoping to all interested parties on December 22, 2006 to determine the level of public interest, concern, and resource conditions on the grazing authorizations that were due for renewal in fiscal year 2008. A Notice of Public Scoping was posted on the Internet, at the Colorado BLM Home Page, asking for public input on grazing permit and lease renewals. Individual letters were sent to the affected permittee/lessee informing them that their permit and/or lease was due for renewal and requesting any information they wanted included or taken into consideration during the renewal process. The issuance of a grazing lease is being carefully analyzed within the scope of the specific action being taken, resources issues or concerns, and public input received.

Persons/Agencies Consulted:

Four Native American tribes have cultural and historical ties to lands administered by the BLM LSFO. These tribes include the Eastern Shoshone Tribe, Ute Mountain Ute Tribe, Uinta and Ouray Agency Ute Indian Tribe, and the Southern Ute Indian Tribe. Consultation for proposed general activities requiring recreational permits is consulted on annually with the tribes. Letters were sent to the tribes in the spring of 2012 describing general livestock permitting. No comments were received.

Internal Scoping Summary: The renewal of this grazing lease was discussed at the LSFO priority meeting on April 16, 2012. Two separate site visits occurred on this allotment. The first included an ecologist, biologist and rangeland management specialist evaluating the riparian health of Berry Gulch on July 28, 2011. An upland health assessment was completed on October 25, 2011 by a biologist and rangeland management specialist.

Issues Identified: Noxious weeds are present throughout the allotment on public and private lands in both the uplands and the drainages. Mr. Floyd is making efforts to control these weeds on the private land. Additionally, the Berry Gulch riparian drainage is currently Functioning at Risk with an improving trend.

CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

The purpose of this chapter is to provide information on the Proposed Action and Alternatives. Alternatives considered but not analyzed in detail are also discussed. The issues identified during scoping helped to formulate the Proposed Action.

2.2 ALTERNATIVES ANALYZED IN DETAIL

2.2.1 Proposed Action

Renew the grazing lease on the Berry Gulch Allotment #04144 for 10 years, expiring February 28, 2022. The lease would be renewed as follows:

From:

Allotment Name & Number	Livestock		Dates		%PL	AUMs
	Number & Kind		Begin	End		
Berry Gulch	130	Sheep	06/15	11/15	100	132
04144	26	Cattle	06/15	11/14	100	131
	6	Horse	06/15	11/14	100	30
						<u>Total</u> 293

To:

Allotment Name & Number	Livestock		Dates		%PL	AUMs
	Number & Kind		Begin	End		
Berry Gulch	117	Cattle	05/01	07/15	100	292
04144						<u>Unscheduled</u> 1
						<u>Total</u> 293

Special Terms and Conditions:

1. Spring OR fall use is authorized on this lease. Alternate authorized fall use season is 8/1 - 10/31 (97 cattle @293 AUMs). Both seasons cannot be used in the same year.
2. Cattle or sheep may graze this allotment.
Spring use season (5/01 - 7/15) = 585 sheep; Fall use season (8/1 - 10/31) = 485 sheep.

The above lease would be subject to the Standard and Common Terms and Conditions, see Attachment #2.

2.2.2 No Action Alternative

Renew the lease with the existing mandatory terms and conditions. The Standard and Common Terms and Conditions would continue to apply. The lease would be renewed as follows:

Allotment Name & Number	Livestock		Dates		%PL	AUMs
	Number & Kind		Begin	End		
Berry Gulch	130	Sheep	06/15	11/15	100	132
04144	26	Cattle	06/15	11/14	100	131
	6	Horse	06/15	11/14	100	30
						<u>Total</u> 293

2.2.3 No Grazing Alternative

The application for renewal of the grazing authorization on the Berry Gulch Allotment #04144 would be denied. As a result, livestock grazing would not be authorized. The BLM would initiate a process in accordance with the 43 CFR 4110.3 regulations to remove authorized grazing on this allotment.

CHAPTER 3 – AFFECTED ENVIRONMENT AND EFFECTS

3.1 INTRODUCTION

Affected Resources:

The CEQ Regulations state that NEPA documents “must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail” (40 CFR 1500.1(b)). While many issues may arise during scoping, not all of the issues raised warrant analysis in an environmental assessment (EA). Issues will be analyzed if: 1) an analysis of the issue is necessary to make a reasoned choice between alternatives, or 2) if the issue is associated with a significant direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of the impacts. Table 1 lists the resources considered and the determination as to whether they require additional analysis.

Table 1. Resources and Determination of Need for Further Analysis

Determination ¹	Resource	Resource Issue/Rationale for Determination
Physical Resources		
NI	Air Quality	Activities associated with grazing that may affect air quality, namely dust and exhaust from ranch operation vehicles as well as dust from livestock hoof action, fall below EPA emission standards for the six criteria pollutants of concern (sulfur dioxide, nitrogen oxide, ground-level ozone, carbon monoxide, particulate matter [both PM2.5 and PM10], and lead). Furthermore, ranch operation and livestock activities are not a significant source of these pollutant emissions that do occur in Routt and Moffat Counties. Impacts to air quality caused by any alternative are therefore considered negligible.
NI	Floodplains	No floodplains occur on public lands within the allotment; however, there is a small portion of floodplain along Berry Gulch (above public lands) that may (rarely) flood. There are no structures proposed on private land as part of this renewal that might affect floodplain form or function.
NI	Hydrology, Ground	See Ground Water Quality.
PI	Hydrology, Surface	Included in Surface Water Quality analysis.
NI	Minerals, Fluid	There is a producing well located in the NESW of Section 17, T5N, R89W. Activities associated with grazing will not affect this operation.
NI	Minerals, Solid	There are no authorized leases, mining claims or authorized mineral material permits within the allotment boundary.

Determination¹	Resource	Resource Issue/Rationale for Determination
PI	Soils	See Section 3
NI	Water Quality, Ground	Activities associated with grazing do not affect Ground Water Quality. Known water levels are normally in the range of 300 – 600 ft.
PI	Water Quality, Surface	See Section 3
Biological Resources		
PI	Invasive, Non-native Species	See Section 3
PI	Migratory Birds	See Section 3
PI	Special Status Animal Species	See Section 3
NP	Special Status Plant Species	There are no federally listed threatened or endangered or BLM sensitive plant species present on the Berry Gulch Allotment.
PI	Upland Vegetation	See Section 3
PI	Wetlands and Riparian Zones	See Section 3
PI	Wildlife, Aquatic	See Section 3
PI	Wildlife, Terrestrial	See Section 3
NP	Wild Horses	There are no HMAs in the area of the allotment.
Heritage Resources and the Human Environment		
PI	Cultural Resources	Included in Cultural Resources analysis.
NI	Environmental Justice	No minority or low income populations would be directly affected in the vicinity of the proposed action.
NI	Hazardous or Solid Wastes	Existing laws, regulations, standard lease stipulations, and contingency plans and emergency response resources are expected to adequately mitigate any potential hazardous or solid waste issues associated with the Proposed Action.
NP	Lands with Wilderness Characteristics	Subject to WO-IM 2011-154 and in accordance with BLM policy, the proposed project area was evaluated for suitability as lands with wilderness characteristics and did not meet the size criteria for an area greater than 5,000 acres. Therefore, the proposed action would not affect lands with wilderness characteristics.
PI	Native American Religious Concerns	Included in Native American Religious Concerns analysis.
NI	Paleontological Resources	Surface formation is Williams Fork (PFYC:5). No surface disturbance is planned.
PI	Social and Economic Conditions	See Section 3
NI	Visual Resources	The proposed project is located in a VRM Class III area where moderate change to the characteristic landscape would be allowed as long as the existing characteristics of the landscape are partially retained. The Scenic Quality Rating is B and the Sensitivity Level

Determination ¹	Resource	Resource Issue/Rationale for Determination
		Rating is Moderate. No impacts to visual resources would be anticipated from grazing use.
Resource Uses		
NI	Access and Transportation	Public access in the area is limited. The majority of the roads that traverse that area, start on private property. However, there is foot access in those areas. Impacts to transportation and access are present, but not significant.
NI	Fire Management	The Proposed Action and Alternatives would not affect fire management.
NP	Forest Management	There are no forestry resources within the project area.
NI	Livestock Operations	Livestock operations would continue in a sustainable manner under the Proposed Action and Alternatives.
NP	Prime and Unique Farmlands	No federally recognized farmlands occur anywhere within the allotment. A small amount of Farmland of Statewide Importance is present on private land within the allotment.
NI	Realty Authorizations, Land Tenure	Minimal impact, either beneficial or adverse, to realty authorizations from any alternative.
NI	Recreation	The main recreational use of this area is big game hunting. Big game hunting and livestock grazing have always coexisted in this area. The impact to recreation in this area is present, but is not significant.
Special Designations		
NP	Areas of Critical Environmental Concern	The project area is not located near the Irish Canyon ACEC, therefore there would be no impact to ACECs.
NP	Wild and Scenic Rivers	There are no WSRs within the project Area.
NP	Wilderness Study Areas	There are no Wilderness Study Areas within the allotment boundary.

¹ NP = Not present in the area impacted by the Proposed Action or Alternatives. NI = Present, but not affected to a degree that detailed analysis is required. PI = Present with potential for impact analyzed in detail in the EA.

3.2 PHYSICAL RESOURCES

3.2.1 Soils

Affected Environment: Loam-based soils on relatively steep topography characterize soils within this allotment. A fall 2011 upland health assessment found that soils are stable (little to no evidence of movement, rills, or pedestalling) and vegetation density, production, and species composition is high providing protection from soil erosion. All soil health standards were met.

Environmental Consequences, Proposed Action: While soil conditions currently appear to be stable given current livestock management (season-long use 6/15-11/15), the proposed action includes two changes that are likely to result in improved soil and plant conditions: avoiding grazing the same location at the same time year after year, and allowing for plant development prior to, or plant recovery following, the grazing period. Loam-based soils can be resilient during any season of use because they generally support more diverse and productive vegetation communities, provided the above principles are followed. Spring use generally results in better

livestock distribution between uplands and riparian areas because of highly palatable forage, which is especially important given the steep topography within the allotment. Most herbaceous vegetation has completed its growth for the season by late summer, making it less susceptible to overgrazing. However, use during this time may lead to greater livestock (cattle) concentration (and therefore soil compaction) in the bottom of the gulch and around water sources since vegetation quality is not as high and use of woody species, especially in riparian areas, may increase. Sheep are actively herded, so concentration in an area over a long period of time is not an issue for the soil resource. The proposed grazing intensity would not compromise soil stability and vegetation community health given the condition of the vegetation within the allotment.

Environmental Consequences, No Action Alternative: While public lands within the allotment are currently meeting standards for soil health, continuing the opportunity for (growing) season-long use could lead to a decline in perennial vegetation and resulting soil function over the long term. Depending on the class and number of livestock used, both cool and warm season vegetation get little to no rest, woody shrub cover declines, and soil erosion/sedimentation becomes more likely under this alternative.

Environmental Consequences, No Grazing Alternative: Removal of livestock from public lands would lead to decreased hoof compaction of soil surfaces, especially in riparian areas where livestock tend to congregate, particularly during the summer and in steep areas. Over time the lack of compaction, combined with the annual freeze-thaw cycle, may lead to a decrease in soil bulk density and improved soil moisture conditions, which facilitates vegetation germination and root development. With the exception of continued wildlife utilization, removing livestock would also result in an increase of both plant litter and live vegetative ground cover that would provide more protection from wind and water erosion. Any livestock trails and the resulting erosion would heal over time.

If grazing were to continue on adjacent private or other non-federal lands in the allotment, fences would have to be built by the landowner(s) to prevent trespass onto federally-managed lands. Given the natural tendency of cattle to congregate and trail along fence lines, it is likely that paths and forage depletion would occur along the fences. The resulting decrease in canopy cover would increase the impact of raindrops on the soil surface, while the expected increase in compaction would increase runoff from both rain and snowmelt. These factors would combine to increase the likelihood of both wind and water erosion in the areas adjacent to fences. This may result in blowouts and gullies which could indirectly impact federal lands through deposition or by the eroded area actually spreading onto federal lands.

Environmental Consequences, Cumulative Impacts: Past, present, and reasonably foreseeable actions that affect soils in the lower Williams Fork Valley primarily include ranching, fluid mineral exploration and development, and the infrastructural development necessary to support these activities. The majority of livestock grazing impacts occur around existing water sources such as streams, springs, troughs, stock ponds, areas providing cover or shade, and along fence lines where livestock tend to trail. The soils within and closely surrounding these areas receive heightened use and may exhibit signs of soil compaction, erosion, and reduced productivity.

Oil and gas activities have historically occurred in the valley in a limited amount. However,

there has been a recent renewal of interest in the area and development is on the rise. These areas of decreased vegetation and litter cover are generally more susceptible to soil erosion, increased runoff, and infestation by invasive, non-native plant species. Some restoration work has occurred at the pad sites to limit the amount of soil erosion, but bare soil still remains in places. Development on public lands always includes mitigation measures to reduce or eliminate these impacts. However, development on private land may not be as closely monitored or mitigated.

The primary impact to soils from infrastructural development has been disturbance, spread of invasive species, runoff and off-site sedimentation associated with road construction and use. The nature and extent of the impact varies with the type of road, the extent of use, and the level of maintenance.

3.2.2 Water Quality, Surface

Affected Environment: Surface runoff from the Berry Gulch allotment would flow into Berry Gulch, a perennial tributary to the mainstem of the Williams Fork River. Water quality for the mainstem of the Williams Fork River (from the confluence of the East and South Forks to the Highway 13/317 bridge at Hamilton) must support Aquatic Life Cold 2, Recreation E, Water Supply, and Agricultural uses. There are no water quality impairments or suspected water quality issues for waters influenced by the Berry Gulch allotment.

Environmental Consequences, Proposed and No Action Alternatives: Livestock wastes deposited in or near streams, or entrained or dissolved in runoff reaching streams, may contribute to nutrient (nitrogen, phosphorous) and bacteria (*E. coli*) exceedances in surface waters influenced by grazing allotments, although the source(s) of these pollutants, when present, can be difficult to determine. Livestock use of perennial surface waters may also contribute to increased suspended solids (soil particles, organic matter particles) and increased water temperatures by removing or trampling streamside vegetation when use is concentrated for extended periods of time or during certain times of year.

Surface waters present within the allotments are currently supporting classified uses. Permitting livestock grazing as proposed is consistent with land uses throughout the watershed and is not likely to result in changes to water quality.

Environmental Consequences, No Grazing Alternative: Potential direct and indirect impacts to water quality caused by livestock use, such as deposition and concentration of waste directly into the water body or trampling, trailing, overgrazing of streamside vegetation that may lead to increased sedimentation, would be eliminated within the BLM portions of the allotment. However, any livestock use of Berry Gulch on private lands that are situated above public lands is likely to have an effect on downstream water quality.

Environmental Consequences, Cumulative Impacts: Past, present, and reasonably foreseeable actions that affect surface water quality in the lower Williams Fork Valley primarily include ranching, fluid mineral exploration and development, and the infrastructural development necessary to support these activities.

The Williams Fork River watershed is that area which drains water to the point where the Williams Fork confluences with the Yampa River, a few miles below the small town of Hamilton, CO. Pollutants that are delivered downstream typically include nitrogen, pathogens, and sediment, however no reach of the Williams Fork River (including all tributaries) is presently listed as impaired by the State of Colorado, nor is it on the State's Monitoring and Evaluation list for any suspected water quality problems. Grazing occurs at some level in nearly every portion of the watershed. During snow melt driven high-flow events that occur in the late spring sediment is delivered to the lower Williams Fork valley from its numerous tributaries. This sediment flush is a natural occurrence; the amount of sediment occurring above background levels as a result of grazing across the watershed is not known.

The effect to water quality due to fluid mineral and infrastructural development is primarily sedimentation, a result of the construction and maintenance of roads and pads adjacent to riparian areas in the watershed. The portion of sediment that is delivered to the Williams Fork River as a direct consequence of these improvements is not known, but is likely to occur during the spring high flow period coincident with the natural sediment discharge peak as well as summer storm events.

Treatment of invasive species within riparian corridors for any of the above land uses would have likely introduced chemicals into streams, but in small amounts relative to the watershed, and dilution and dispersal in these effects may not be detectable in water that is discharged to the Williams Fork River.

Reference: Colorado Department of Public Health and Environment Water Quality Control Commission. 2012. Regulations #33, 37, and 93. <http://www.cdphe.state.co.us/regulations/wqccregs/index.html>

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

3.3 BIOLOGICAL RESOURCES

3.3.1 Invasive/Non-Native Species

Affected Environment: Invasive and noxious weeds are present in the affected area. Invasive annuals such as downy brome (cheatgrass), blue mustard and yellow alyssum commonly occur in the area. Invasive annual weeds are typically established on disturbed areas whereas, biennial and perennial noxious weeds are less common in occurrence, but can invade native plant communities. Downy brome is on the Colorado List C of noxious weeds. Colorado List B noxious weeds that are present within the Berry Gulch Allotment and surrounding areas include hoary cress (whitetop), hound's tongue, bull thistle, musk thistle, Canada thistle and Dalmatian toadflax. This allotment did not fully meet vegetation standards because of invasive species presence. The BLM cooperates with Routt County and private landowners to employ the principals of Integrated Pest Management to control noxious weeds on public lands.

Environmental Consequences, Proposed Action and No Action Alternative: The adverse impact of increased invasive and/or noxious weed establishment is very similar under any of the alternatives. Vehicular use for 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 increase weed presence. The perennial noxious weeds in the area are established in some of the upland areas. 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 spread into new areas; 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 Grazing Alternative: This alternative removes the spread and introduction of weeds by livestock. Additional sources of seed dispersal would still be present throughout the allotment. However, under this alternative there would be no presence by the grazing permittee to assist with detection and treatment of infestation or detection.

Environmental Consequences, Cumulative Impacts: Overall weed infestation and dispersal resulting from livestock grazing may increase on a potential of 1,884 acres of BLM land. This potential increase would be at an acceptable level if monitored by the range staff and grazing permittees under the Proposed Action and No action Alternatives. Under the No Grazing Alternative there would be no additional increase in weed infestations resulting from authorized livestock grazing but other environmental factors would still facilitate weed invasion and infestations would still be present.

3.3.2 Migratory Birds

Affected Environment: Sagebrush stands and mixed mountain shrublands within the allotment provides habitat for a variety of migratory bird species. Limited aspen woodlands are also present in the Berry Gulch allotment at higher elevations. Priority species on the United States Fish & Wildlife Service (USFWS) Birds of Conservation Concern List (2008) that may utilize habitat within the allotment includes: golden eagle, Brewer's sparrow, sage sparrow, sage thrasher, loggerhead shrike, Williamson's sapsucker and Cassin's finch. The aspen woodlands provide nesting sites for cavity nesting species.

Environmental Consequences, Proposed Action: Although the proposed grazing schedule coincides with the breeding season, proposed livestock grazing would not reduce the extent or quality of habitat available for migratory bird breeding functions. Under the Proposed Action, the allotment would be grazed either in the spring or the fall. Eliminating season long grazing within this allotment would help to ensure a healthy vegetative community and provide suitable habitat for migratory bird species. Land Health Assessment data shows the herbaceous component of the ecosystem to be healthy and vigorous. The allotment is currently providing healthy and productive habitat for migratory bird species and these habitat conditions would continue under the Proposed Action.

Grazing by cattle could result in the accidental destruction of ground nests through trampling. This impact would be minimal and isolated and would not influence populations of migratory birds on a landscape level. Golden eagle nesting and fledgling activities would not be disturbed

by livestock grazing. Overall, the Proposed Action would be compatible with maintaining local migratory bird populations.

Environmental Consequences, No Action Alternative: The allotment would continue to be grazed by livestock. The allotment is meeting wildlife habitat Land Health Standards under this grazing system. Habitat conditions would continue unchanged under this alternative.

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

Environmental Consequences, Cumulative Impacts: The primary uses of this allotment are recreation (hunting) and livestock grazing. The proposed grazing system is not expected to add substantially to existing or future disturbances. As proposed, livestock grazing would occur either in the fall or spring, allowing adequate time for growth/regrowth opportunities. It is expected that over time the proposed grazing system would allow for improvements in vegetative cover and composition which would be expected to benefit migratory bird species.

3.3.3 Special Status Animal Species

Affected Environment: There are no threatened or endangered species, or habitats for such species, present within the proposed project area. The Berry Gulch Allotment is mapped by the Colorado Parks and Wildlife as overall and winter habitat for the Columbian sharp-tailed grouse, a BLM sensitive species. The allotment is also mapped by the Colorado Parks and Wildlife as winter and summer forage area for Bald Eagle, a BLM sensitive species.

Habitat for one additional BLM sensitive species, the Brewer's sparrow, occurs in the allotment. Brewer's sparrows are a summer resident in Colorado. They construct nests in dense patches of sagebrush and other shrubs. This species would likely be nesting in the project area from mid-May through mid-July.

Environmental Consequences, Proposed Action and No Action Alternative: The Proposed Action and No Action Alternative would not degrade or alter foraging opportunities for bald eagles. Columbian sharp-tailed grouse prefer to use vegetation types associated with moderate terrain (slopes ≤ 10 to 20°), except during winter when they may use vegetation types found on steeper slopes. The majority of the Columbian sharp-tailed grouse habitat found within this allotment is on steep slopes associated with winter habitat. Since livestock grazing will not occur during winter months, livestock grazing would not degrade winter habitat for Columbian sharp-tailed grouse.

Grazing can directly impact Brewer's sparrows by trampling nests, or indirectly affect this species by changing components of habitat. Grazing may cause an increase in weed infestations, primarily cheatgrass, which would degrade sparrow habitat. Additionally, the presence of livestock can increase the abundance of brownheaded cowbirds, increasing the chance for nest

parasitism by this species (Holmes and Johnson 2005). Grazing systems that promote healthy sagebrush communities should be compatible with maintaining Brewer's sparrow habitat. The proposed grazing schedule incorporates rotation and deferment and would help maintain healthy ecosystems. Sagebrush stands in the allotments exist in several seral stages. There are many areas of dense, taller shrubs that would provide potential nesting habitat for this species. Overall, sagebrush habitats within the allotment are in good condition and this is expected to continue under the Proposed Action and No Action Alternative.

Environmental Consequences, No Grazing Alternative: The No Grazing Alternative would benefit wildlife by reducing and eventually eliminating direct and indirect effects of livestock grazing and associated activities to wildlife. Increases in forage and hiding cover amounts, types, and quality for wildlife would be expected with this option.

Environmental Consequences, Cumulative Impacts: The Proposed Action would contribute little, if any, to cumulative adverse effects on special status animals. The Proposed Action is compatible with Columbian sharp-tailed grouse and other avian reproductive functions and recruitment.

3.3.4 Upland Vegetation

Affected Environment: The vegetation in this allotment is comprised of sagebrush and shrub communities. Species present include Wyoming big sagebrush, snowberry, serviceberry, Gambel's oak, needle and thread, bluebunch wheatgrass, western wheatgrass, prairie junegrass, and basin wildrye. Noxious species were also present throughout the allotment including hound's tongue, musk thistle, Canada thistle, common mullein and black henbane. Overall the upland vegetation communities are productive and diverse.

Environmental Consequences, Proposed Action: Under this alternative changing use to primarily cattle would shift the impact of grazing on the upland vegetation. Cattle would consume a higher percentage of grasses in comparison to the forb based diet preferred by sheep. The allotment currently has a healthy, diverse component of both vegetation types which would provide resiliency to any impacts from this change. Additionally, the change in season of use provides for a spring or fall grazing season. This allows for the vegetation to have a period of growth or recovery when no livestock grazing is occurring. The fall regrowth season provides benefits that specifically benefit grass growth cycles. Healthy upland vegetation would better compete with existing weed infestations and provide resilience to new establishments

Environmental Consequences, No Action Alternative: Under this alternative livestock grazing would continue to be season long and somewhat variable in livestock species. This alternative would not provide any change to improve noxious weed presence within the allotment.

Environmental Consequences, No Grazing Alternative: Removal of livestock grazing from this allotment would eliminate livestock forage pressure on upland vegetation communities. However, adjacent private lands would likely continue to be utilized for livestock grazing. Consequently, wildlife utilization would concentrate on the ungrazed BLM parcels resulting in similar utilization levels with no way to implement grazing management systems. Noxious

weeds would still be present within the allotment and potential for further infestations would still exist.

Environmental Consequences, Cumulative Impacts: The various upland plant communities on these allotments have been affected and influenced by a variety of natural and artificial influences over the years. BLM records indicate that the lands within this allotment have historically been grazed by livestock, primarily sheep. Additional herbivory by elk and mule deer occurred prior to human settlement and has continued alongside livestock use, though elk use has increased dramatically in the last 30 or so years. Livestock and wild ungulates, have influenced species composition in ways that tend to favor shrub species, however fire, disease, insects, and favorable moisture regimes have contributed to the healthy mix of woody and herbaceous species exhibited on the allotments today. Future use on adjacent private lands would likely continue to include livestock grazing as a primary use in addition to energy development, recreational use and farming. When added to the existing and future activities the approval of the Proposed Action would not cause undue damage to upland vegetation.

3.3.5 Wetlands and Riparian Zones

Affected Environment: Berry Gulch, a perennial tributary to the Williams Fork River, is the main drainage that bisects the allotment. Approximately one mile of Berry Gulch occurs on public lands. Assessed in July 2011, reaches 1 and 2 were found to be functioning-at-risk with an upward trend. Berry Gulch appears to have become incised over time. A private dirt road that parallels the entire drainage has likely contributed to this downcutting as well as the recent construction and instream dam work upstream of public lands. Invasive species are also a concern in the riparian area, namely musk thistle, houndstongue, and hoary cress. These weed species are common throughout the Williams Fork drainage. Livestock use of the area was noted as light and is not a contributing factor to the current assessment rating.

Environmental Consequences, Proposed Action: Alternating grazing use during the spring and late summer/fall period provides a rest period for vegetation. Care must be taken, however, to leave enough residual vegetative cover, particularly along Berry Gulch, to provide erosion protection. In most years, spring/early season grazing use can favor riparian areas as more palatable cool season upland vegetation peaks in growth, enabling riparian vegetation, particularly woody species, to remain largely ungrazed during a portion of the growing period. In addition, spring flooding along rivers and streams deters heavy use of these areas, which allows for carryover vegetation for bank protection and sediment trapping, where appropriate, during higher-flow events. However, soils can become compacted on thawed, moist soils during the spring. Overall, alternating late summer/fall and spring use of riparian areas can provide more opportunity for plant recovery and regrowth than other times of year and also can result in more residual cover for bank/soil stability and wildlife habitat. Of the alternatives presented, this alternative is most likely to improve overall riparian resource condition.

Environmental Consequences, No Action Alternative: Livestock use during the vegetative growing season (spring through fall) could lead to concentration in riparian areas and in the stream channel itself, particularly during the warmer summer months, where plant vigor could be reduced resulting in vegetation communities and channel form changing over time. There is also the possibility of adverse effects to aquatic life if damage to herbaceous vegetation leads to a

reduction in canopy and instream cover that influences water temperature and availability of any preferred bankside habitat. Changes to the channel configuration could increase sediment delivery and alter substrate composition that macroinvertebrates and native fish, if present, prefer.

Environmental Consequences, No Grazing Alternative: Removing cattle from the allotment would likely improve riparian and wetland resource conditions over the long-term. A decrease in herbivory on riparian vegetation and trampling pressure caused by livestock in riparian areas would increase soil moisture and reduce the potential for erosion and any associated changes to channel geomorphology, particularly in low and moderate gradient streams where the presence of riparian vegetation is one of the most important factors in maintaining stability. However, these benefits may not fully be realized if the riparian resource is used by wildlife, particularly large ungulates, since wildlife can also have similar impacts to riparian resources, especially during periods of drought. Also, livestock grazing on adjacent private and other non-federal lands would continue to produce direct effects to riparian resources that may indirectly affect riparian resources on federally managed lands.

Environmental Consequences, Cumulative Impacts: Past, present, and reasonably foreseeable actions that affect surface water quality in the lower Williams Fork Valley primarily include ranching, fluid mineral exploration and development, and the infrastructural development necessary to support these activities.

The lower Williams Fork River Valley is characterized by a relatively narrow valley bottom with steeper hillsides. Numerous perennial and ephemeral tributaries, most of which have a dirt or gravel road parallel to the drainage, drain into the river. The portion of sediment that is delivered to the Williams Fork River as a direct consequence of these improvements is unknown, but is likely to occur during the spring high flow period coincident with the natural sediment discharge peak as well as summer storm events. The presence of roads parallel to drainages undoubtedly impacts the systems' natural lateral movement over the long term by armoring and/or straightening banks and reducing any floodplain capability to moderate overbank flooding.

Most of the public lands within the lower portion of the watershed occur north of the river and are included in several grazing allotments. Where land health/riparian assessments are available, riparian standards are mostly being met. Roads adjacent to the floodplain or the presence of invasive species are usually cited as compromising riparian health in these instances. Livestock use of riparian areas on public lands in this allotment is light, as private portions of the allotments usually include water developments that help to keep extended livestock use away from these sensitive areas. Riparian conditions on private lands within the allotment and the watershed is not known.

3.3.6 Wildlife, Aquatic

Affected Environment: Approximately one mile of Berry Gulch, a tributary to the Williams Fork River, is on BLM lands in this allotment. Berry Gulch supports aquatic invertebrates, amphibians, and reptiles. Although no inventory data are available, this waterway may also support fish populations.

Environmental Consequences, Proposed Action and No Action Alternative: Potential impacts from livestock grazing include trampling of individuals or nests/eggs; water displacement, sedimentation and nitrification; and removal or degradation of shading vegetation. There would be no measurable impacts on aquatic wildlife under either alternative.

Environmental Consequences, No Grazing Alternative: Elimination of livestock grazing would result in improved riparian conditions and may improve ecological condition. As conditions improve, the health, vigor and abundance of forage species would increase. Utilization by wildlife would continue to be present. The probable increase in grass and forb availability would enhance habitat quality for aquatic wildlife.

Environmental Consequences, Cumulative Impacts: Upstream from where Berry Gulch goes through public lands is an in-stream dam and there is a private dirt road that parallels the drainage. These actions contribute to the down cutting of the drainage, which may eventually degrade aquatic wildlife habitat. Livestock access to the drainage exists on steep slopes, preventing the majority of livestock from degrading aquatic habitat. Current livestock grazing does not appear to have impacted the drainage and future livestock grazing practices are not expected to impact aquatic wildlife habitat within this allotment.

3.3.7 Wildlife, Terrestrial

Affected Environment: This allotment provides year round habitat for elk, mule deer, mountain lion and a variety of small mammals, reptiles and song birds. It is mapped as primarily summer habitat by the Colorado Division of Parks and Wildlife for elk and mule deer. There is a small amount of mule deer and elk winter habitat where the allotment crosses the Williams Fork River.

Environmental Consequences, Proposed Action and No Action Alternative: Data from land health assessments and allotment visits showed the vegetative community in the area to be meeting land health standard for wildlife habitat. These conditions are expected to continue under the grazing system described in both alternatives. Overall, both alternatives should be compatible with maintaining healthy habitat for terrestrial wildlife species.

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

Environmental Consequences, Cumulative Impacts: The proposed action is not expected to add substantially to current or future disturbances (namely hunting recreation). The proposed grazing system would result in annual reductions in residual and herbaceous ground cover, however this alternative allows for recovery throughout the growing season. Vegetative

response in the long-term is expected to be positive, with enhanced growth of perennial species and improvements in herbaceous density and composition which would benefit wildlife species.

3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT

3.4.1 Cultural Resources

Affected Environment: Grazing authorization renewals are undertakings under Section 106 of the National Historic Preservation Act. Range Improvements associated with the allotment (e.g. fences, spring improvements) are subject to compliance requirement under Section 106 and will undergo standard cultural resources inventory and evaluation procedures. During Section 106 review, a cultural resource assessment was completed for the Berry Gulch Allotment (#04144) on April 24, 2011 by Ethan Morton, Little Snake Field Office Archaeologist. The assessment followed the procedures and guidance outlined by the State Director of the Colorado Bureau of Land Management in Instructional Memorandums IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, and IM CO-20002-29. The results of the assessment are summarized below. Copies of the cultural resource assessment are on file at the Little Snake Field Office.

The prehistoric and historic cultural context for northwestern Colorado has been described in several recent regional contexts. The prehistoric context is described in Reed and Metcalf's Northern Colorado River Basin overview (1999), a synthesis of archaeological data compiled for several large pipeline projects (2009). The historic context is described in overviews compiled by Frederic J. Athearn (1982) and Michael B. Husband (1984). A historical archaeology context has also been prepared for the state of Colorado by Church and others (2007). An overview of significant cultural resources on BLM-LSFO administered lands has been compiled by McDonald and Metcalf (2006).

Data developed here was taken from the cultural program project report files, site report files, and atlases kept at the Little Snake Field Office. Electronic files were also accessed at the Colorado Office of Archaeology and Historic Preservation through the on-line Compass database system. Government Land Office plat maps, patent records, and USGS 1:24,000 scale topographical maps were also reviewed for potential undocumented historic resources.

The table below is based on an analysis developed for the BLM-LSFO administered lands within the specific allotment in this EA. The table shows known cultural resources, eligible and need data, and those that are anticipated to be in the allotment.

Allotment Number (BLM acres)	BLM Acres Surveyed at a Class III Level	BLM Acres NOT Surveyed at a Class III Level	Percent of BLM Allotment Inventoried at a Class III Level	Eligible or Need Data Sites-Known in BLM Allotment	Estimated Sites for the BLM Allotment *(total number)	Estimated Eligible or Need Data Sites in the BLM Allotment (number)
04144(1,884)	8	1876	.4%	0	23	3

(Note *Estimates of site densities are based on known inventory data. Estimates should be accepted as baseline figures which may be revised upwards or downwards based on future inventory findings.)

One cultural resource inventory has been conducted resulting in the inventory of eight acres. No cultural resources have been identified. An examination of 1917 GLO plat depicts a historic fence line in the SW ¼ of Section 30. The historic Pagoda Townsite and the Pagoda Cemetery (5RT.790) are located on private lands within the allotment in Section 31. Both of these properties are likely eligible for the National Register (Historic Properties). There is the potential for additional unrecorded historic resources near these properties in Section 30 on BLM-LSFO administered lands.

Based on the available data (regional cultural site density) there are approximately 23 cultural resources on BLM-LSFO administered land with the allotment. It is likely that approximately 3 of these resources would be recommended Historic Properties. Subsequent cultural resource inventory will be conducted in areas where livestock concentrate within 10 years of issuance of a permit. This subsequent inventory will consist of approximately 60 acres and will also involve the evaluation of the fence line location identified on the GLO plat.

If Historic Properties are identified during the subsequent field inventory, and the BLM-LSFO determines that grazing activities are adversely impacting these Historic Properties, mitigation will be identified and implemented in consultation with the Colorado State Historic Preservation Officer.

Environmental Consequences-Proposed Action and No Action Alternative: The direct impacts to Historic Properties where livestock concentrate include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art (Broadhead 2001, Osbourn et al. 1987). Indirect impacts from where livestock concentrate include soil erosion, gulying, and increased potential for unlawful collection of artifacts and vandalism of cultural resources. Other indirect impacts can include detracting from the integrity of setting and feeling for nearby Historic Properties within the viewshed of livestock concentration areas.

It is assumed that larger numbers of cattle and sheep have a greater potential to adversely impact any undocumented Historic Properties. The proposed shorter period of use would not alleviate impacts to any Historic Properties. It is assumed that larger numbers of sheep have a greater potential to churn the ground surface in greater intensity than cattle which are more likely to compact the ground in a more dispersed manner.

There are no known Historic Properties on BLM-LSFO administered lands within the allotment. It is unlikely that the historic fence line identified on the GLO plat has any integrity or would be evaluated as eligible for the National Register and therefore is unlikely to be a Historic Property. Both the historic Pagoda Town site and Pagoda Cemetery (5RT.790) are fenced off from livestock and do not have the potential to be indirectly adversely effected by livestock concentrations.

The presence of livestock does not have the potential to detract from the integrity of setting and feeling for these properties as they are directly related to historic livestock use of the area. Based

on regional site density it is estimated that there are 3 undocumented Historic Properties on BLM-LSFO administered lands within the allotment. If present, these properties may be in areas where livestock concentrate (drainage bottoms, near springs, and open areas).

Mitigation Measures-Proposed Action and No Action Alternative: Continued livestock use of the area is appropriate. If BLM-LSFO determines that livestock are having an adverse effect to any newly discovered Historic Properties mitigation measures will be developed such that livestock will have no effect to these Historic Properties. If a no effect evaluation cannot be reached, specific mitigation will be developed in consultation with SHPO.

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

Mitigation Measures-No Grazing Alternative: If Historic Properties are present they may have to be mitigated if adverse impacts are identified.

Environmental Consequences-Cumulative Impacts: The cumulative impacts to Historic Properties are confined to the allotment, lands adjacent to the allotment, and land within the view shed of the allotment. The region has been historically used for livestock for over fifty years. The intensity of livestock grazing has generally decreased over time. Any Historic Property that has the potential to be adversely impacted by the present proposed actions was likely adversely impacted to a greater degree during the past when livestock use was more intensive. While continued livestock use may not directly impact areas where prior intensive use was present, secondary effects such as increased erosion may cause long term irreversible effects to Historic Properties if present. The presence of livestock has increased ground visibility and decreased erosion exposing deposits that would otherwise be obscured by vegetation or remain buried. The installation of range improvements and placement of mineral supplements has caused additional ground disturbances over time. Maintenance of roads and the removal and or replacement of range improvements have likely resulted in the obliteration of historic properties. Continued livestock use may cause substantial additional ground disturbance and cause cumulative, long term, irreversible adverse effects to historic properties if present.

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3.4.2 Native American Religious Concerns

Affected Environment: Four Native American tribes have cultural and historical ties to lands have administered by the BLM LSFO. These tribes include the Eastern Shoshone Tribe, Ute Mountain Ute Tribe, Uinta and Ouray Agency Ute Indian Tribe, and the Southern Ute Indian Tribe.

American Indian religious concerns are legislatively considered under several acts and Executive Orders, namely the American Indian Religious Freedom Act, the Native American Graves Environmental Assessment Protection and Repatriation Act, and Executive Order 13007 (Indian Sacred Sites). In summary, these require, in concert with other provisions such as those found in the NHPA and Archaeological Resources Protection Act, that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life and ensure, to the degree possible, that access to sacred sites, the treatment of human remains, the possession of sacred items, the conduct of traditional religious practices, and the preservation of important cultural properties are considered and not unduly infringed upon. In some cases, these concerns are directly related to “historic properties” and “archaeological resources”. In some cases elements of the landscape without archaeological or other human material remains

may be involved. Identification of these concerns is normally completed during the land use planning efforts, reference to existing studies, or via direct consultation.

Consultation for proposed general activities requiring recreational permits is consulted on annually with the tribes. Letters were sent to the tribes in the spring of 2012 describing general livestock permitting. No comments were received. Specific range permits are generally not consulted with the tribes unless they rise to a level that warrants specific consultation. The location of any specific range permit has likely not undergone an evaluation regarding the presence of items, sites, or landscapes which may be significant to the tribes.

Environmental Consequences, Proposed Action and No Action Alternative: Items, sites, or landscapes determined to be culturally significant to the tribes can be directly or indirectly adversely impacted by livestock. Direct impacts could include but are not limited to physical damage, removal of objects or items, and activities thought to be disrespectful (installation of holding pens or water control features near a sacred site). Indirect impacts include but are not limited to prevention of access (hindering the performance of traditional ceremonies and rituals), increased visitation of a previously little used area, and loss of integrity related to religious feelings and associations.

There are no known items, sites, or landscapes determined to be culturally significant to the tribes in the region. The proposed action and no action alternative does not prevent access to any known sacred sites, prevent the possession of sacred objects, or interfere or otherwise hinder the performance of traditional ceremonies and rituals.

Mitigation Measures, Proposed Action and No Action Alternative: There are no known adverse impacts to any items, sites, or landscapes determined to be culturally significant to the tribes. If new information is provided by Native Americans, additional or edited terms and conditions for mitigation may have to be negotiated or enforced to protect resource values.

Environmental Consequences, No Grazing Alternative: None

Mitigation Measures, No Grazing Alternative: None

Environmental Consequences, Cumulative Impacts: Continued use of the area by livestock has an additive effect of changing the landscape from that known by the tribes. There are no specific sites of concern identified in the project area, it is rather the broader continued change that modern culture brings to the landscape that is of concern.

3.4.3 Social and Economic Conditions

Affected Environment: Agricultural practices, energy exploration and development, and hunting are the main economic activities of the area. In this region, livestock operations and public land management are strongly linked through grazing permits.

Environmental Consequences, Proposed Action and No Action Alternatives: Indirect benefits to the surrounding economy would occur due to sustained employment opportunities related to the ranching service support industry in the region as well as the economic benefits to state and

county governments related to taxes. Profitable grazing operations would continue to supply personal income to the operator and employees, and would have a proportional influence on the regional, Colorado, and national economy.

Environmental Consequences, No Grazing Alternative: If the No Grazing Alternative were to be chosen, canceling the preference for the allotment under the proposed action, this would have a negative economic impact on individuals who could lose employment due to this action. The indirect effects would include negative effects due to overall employment opportunities related to the ranching service support industry in the region. A loss of the grazing permit on the allotment would reduce the profitability of the ranch, reducing economic benefits to state and county governments related to taxes.

Cumulative Impacts: This grazing lease renewal, when combined with the past, present and reasonably foreseeable actions, contributes to the local, state, and federal treasuries, and could contribute to continuation of an industry that provides stability, income, and jobs to the community.

CHAPTER 4— PUBLIC LAND HEALTH STANDARDS

4.1 INTRODUCTION

The Berry Gulch Allotment #04144 was assessed for compliance with the Colorado Standards of Public Land Health by an interdisciplinary team consisting of a rangeland management specialist and a wildlife biologist on October 25, 2011. This was an allotment specific assessment of upland sites. A Proper Functioning Condition assessment of Berry Gulch was completed July 28, 2011 by an ecologist, wildlife biologist and rangeland management specialist. Additionally, a Land Health Assessment was completed on June 26, 2006 as part of the Williams Fork Watershed assessment by four rangeland management specialists, a wildlife biologist, natural resource specialist and two private landowners.

4.2 COLORADO PUBLIC LAND HEALTH STANDARDS

In January 1997, the Colorado State Office of the BLM approved the Standards for Public Land Health and amended all RMPs in the State. Standards describe the conditions needed to sustain public land health and apply to all uses of public lands.

4.2.1 Standard 1 Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes.

Finding of most recent assessment: The most recent upland health assessment found that soils in the allotment are stable (little to no evidence of movement, rills, or pedestalling) and vegetation density, production, and species composition is high providing protection from soil erosion. All soil health standards were met.

Proposed Action and No Action Alternative: These alternatives would allow this standard to continue to be met since standards have been met in past assessments and continue to be met in current assessments.

No Grazing Alternative: Removal of livestock grazing would eliminate all potential impacts to soils on public lands by livestock. This would result in this standard continuing to be met.

4.2.2 Standard 2 Riparian systems associated with both running and standing water function properly and have the ability to recover from major disturbance such as fire, severe grazing, or 100-year floods.

Finding of most recent assessment: Berry Gulch, a perennial tributary to the Williams Fork River, is the main drainage that bisects the allotment. Approximately one mile of Berry Gulch occurs on public lands, which was assessed in July 2011. Both reaches were found to be functioning-at-risk with an upward trend.

Proposed Action and No Action Alternative: These alternatives would allow this standard to continue to be met since standards have been met in past assessments and continue to be met in current assessments.

No Grazing Alternative: Removal of livestock grazing would eliminate all potential impacts to riparian areas on public lands by livestock. This would result in this standard continuing to be met.

4.2.3 Standard 3 Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential.

Finding of most recent assessment: For plant species, the majority of the allotment is meeting this standard. Some portions of the allotment failed to meet land health standards due to noxious weed infestations. This failure is not a result of current authorized grazing.

Proposed Action, No Action Alternative and No Grazing Alternative: All of these actions would continue to maintain land health standards and work toward decreasing noxious weed presence.

Finding of most recent assessment: For animal species, the most recent landscape health assessments were found to have met this standard. The wildlife habitat included appropriate seral stages, good vegetation structure and adequate patch size to promote diverse and viable wildlife populations.

Proposed Action, No Action Alternative and No Grazing Alternative: All of these actions would allow this standard to continue to be met since standards have been met in past assessments and continue to be met in current assessments.

4.2.4 Standard 4 Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.

Finding of most recent assessment: There are no federally listed threatened or endangered or BLM sensitive plant species present on the Berry Gulch Allotment. For plants, this standard does not apply.

There are no federally listed threatened or endangered animal species present on the Berry Gulch Allotment. The allotment provides habitat for the following BLM sensitive species: bald eagle, Columbian sharp-tailed grouse and Brewer's sparrow. Most recent landscape health assessments were found to have met this habitat standard. During recent assessments, special status species were present in healthy numbers that appear to ensure stable

populations and habitat areas were connected adequately with other similar areas and large enough to support viable populations.

Proposed Action, No Action Alternative and No Grazing Alternative: All of these actions would allow this standard to continue to be met. Standards have been met in past assessments and continue to be met in current assessments.

4.2.5 Standard 5 The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado.

Finding of most recent assessment: There are no water quality impairments or suspected water quality issues for waters influenced by the Berry Gulch allotment, which includes Berry Gulch and Williams Fork River.

Proposed Action and No Action Alternative: These alternatives would allow this standard to continue to be met since standards have been met in past assessments and continue to be met in current assessments.

No Grazing Alternative: Removal of livestock grazing would eliminate potential direct impacts to water quality on surface waters influenced by grazing on these public lands parcels. This would result in this standard continuing to be met.

SIGNATURE OF PREPARER:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

Finding of No Significant Impact

Based upon a review of the EA and the supporting documents, I have determined that the Proposed Action is not a major federal action and will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity, as defined at 40 CFR 1508.27 and do not exceed those effects as described in the Little Snake Resource Management Plan and Record of Decision (2011). Therefore, an environmental impact statement is not required. This finding is based on the context and intensity of the project as described below.

Context:

The project is a site-specific action directly involving BLM administered public lands that do not in and of itself have international, national, regional, or state-wide importance.

Intensity:

The following discussion is organized around the 10 Significance Criteria described at 40 CFR 1508.27. The following have been considered in evaluating intensity for this Proposed Action:

1. Impacts that may be both beneficial and adverse:

The beneficial effects of the Proposed Action include: in authorizing public land grazing this action sustains the local economy as grazing operations would continue to supply personal income to the operator and employees, and would have a proportional influence on the regional, Colorado, and national economy. This action supports the western livestock industry. The authorized livestock operator has mandatory and special terms and conditions that must be met to maintain their grazing preference. This provides a certain level of stewardship of public lands in that if these lands were to become degraded by any activity or event, natural or human in origin, grazing and or other authorized uses would be terminated. This stewardship role of the livestock operator not only mandates proper livestock and forage management but also provides communication with the BLM as to other activities or events that could cause degradation to public lands.

2. Degree of effect on public health and safety:

There would be no effect to public health and safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas:

There are no park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas in the area of Proposed Action. As described in the EA, impacts to cultural resources were identified for the Proposed Action. As this action is not a new action but a continuation of historic land uses in this area there would be no affect to unique characteristics of the geographic area.

4. Degree to which the possible effects on the quality of the human environment are likely to be highly controversial:

Public input regarding the Proposed Action has been solicited during the planning process. The BLM Little Snake Field Office sent out a Notice of Public Scoping on December 22, 2006 to determine the level of public interest, concern, and resource conditions on the grazing authorizations that were up for renewal in FY 2008. A Notice of Public Scoping was posted on the Internet, at the Colorado BLM Home Page, asking for public input on permit/lease renewals. Individual letters were sent to the affected permittees/lessees, informing them their permit/lease was up for renewal and requesting any information they wanted included in or taken into consideration during the renewal process.

5. Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risk.

No highly uncertain or unknown risks to the human environment were identified during analysis of the Proposed Action.

6. Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration:

The Proposed Action neither establishes a precedent for future BLM actions with significant effects nor represents a decision in principle about a future consideration.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts:

No individually or cumulatively significant impacts were identified for the Proposed Action. Any adverse impacts identified for the Proposed Action, in conjunction with any adverse impacts of other past, present, or reasonably foreseeable future actions will result in negligible impacts to natural and cultural resources.

8. Degree to which the action may adversely affect district, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources:

There would be no loss or destruction to these resources.

9. Degree to which the action may adversely affect an endangered or threatened species or its critical habitat:

There are no threatened or endangered species or habitats for such species present within these allotments.

10. Whether the action threatens a violation of federal, state, or local environmental protection law:

The Proposed Action violates no federal, state, or local environmental protection laws.

SIGNATURE OF AUTHORIZED OFFICIAL: /s/ Wendy Reynolds

DATE SIGNED: 01/12/13

Allotment #4144 Berry Gulch

 Fence line - existing
Surface Management Status
 Private
 State DOW
 State Land Board
 US BLM

#4144 Berry Gulch

Private	3,669 acres
BLM	1,884 acres
Total	5,553 acres

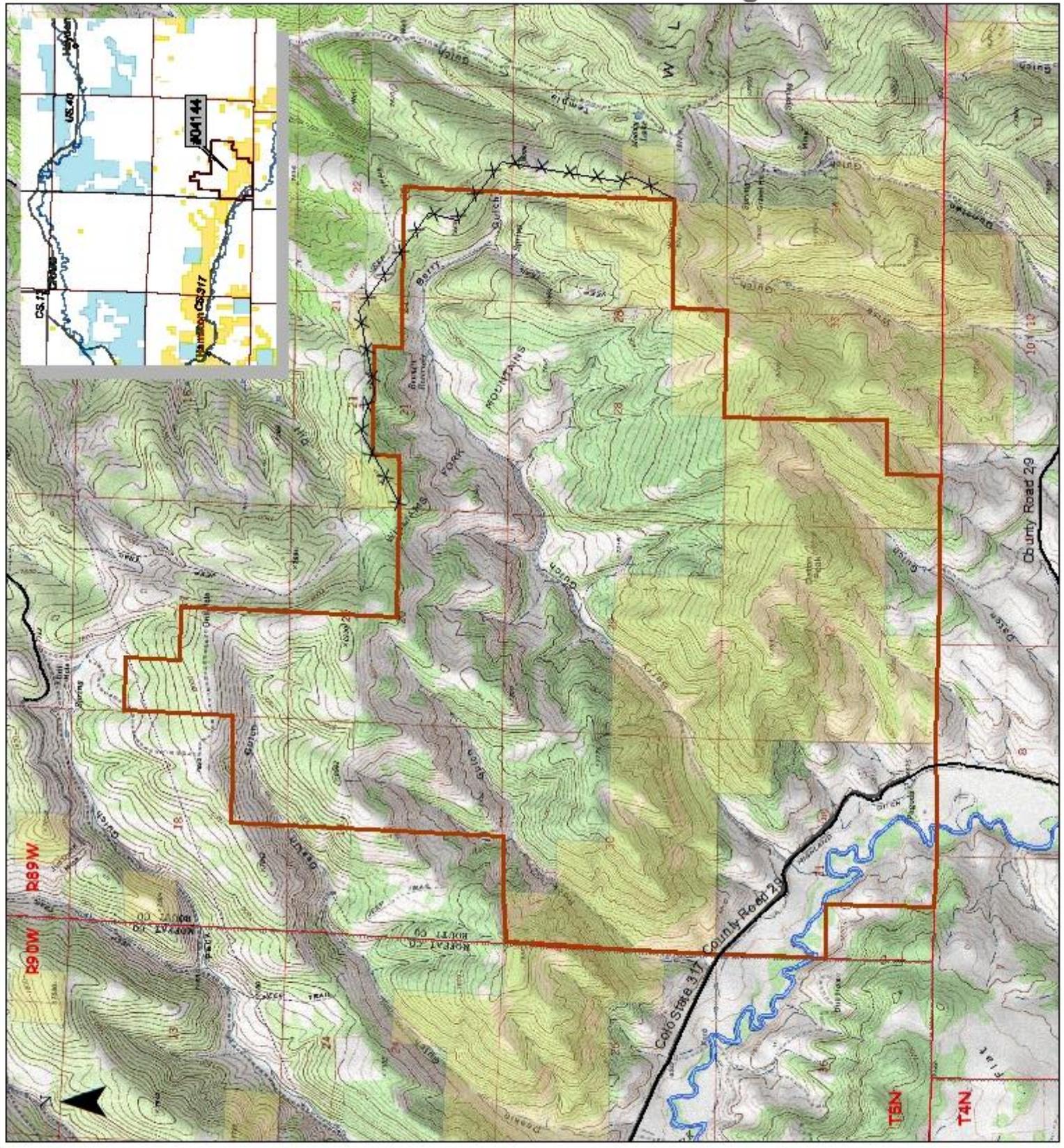
0 1,450 2,900 5,800



3/16/12 CR



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregation use with other data. All boundaries are an approximate representation.



ATTACHMENT #2
DOI-BLM-CO-N010-0012-0034
TERMS AND CONDITIONS

Standard Terms and Conditions

- 1) Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
- 2) They are subject to cancellation, in whole or in part, at any time because of:
 - a. Noncompliance by the permittee/lessee with rules and regulations;
 - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based;
 - c. A transfer of grazing preference by the permittee/lessee to another party;
 - d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described;
 - e. Repeated willful unauthorized grazing use;
 - f. Loss of qualifications to hold a permit or lease.
- 3) They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans **MUST** be incorporated in permits and leases when completed.
- 4) Those holding permits or leases **MUST** own or control and be responsible for the management of livestock authorized to graze.
- 5) The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
- 6) The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
- 7) Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
- 8) Livestock grazing use that is different from that authorized by a permit or lease **MUST** be applied for prior to the grazing period and **MUST** be filed with and approved by the authorized officer before grazing use can be made.
- 9) Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.

- 10) Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
- 11) No member of, or Delegate to, Congress or Resident Commissioner, after his/her election of appointment, or either before or after he/she has qualified, and during his/her continuance in office, and no officer, agent, or employee of the Department of Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App. 1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statute (41 U.S.C. 22), 18 U.S.C. Sections 431-433, and 43 CFR Part 7, enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

Common Terms and Conditions

- 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 ensure 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 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.

The terms and conditions of this permit/lease may be modified if additional information indicates that revision is necessary to conform with 43 CFR 4180.