



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Colorado River Valley Field Office
2300 River Frontage Road
Silt, Colorado 81652



ENVIRONMENTAL ASSESSMENT

NUMBER. DOI-BLM-CO-040-2014-0009 EA

CASEFILE NUMBERS. 0507603 and 0503932

PROJECT NAME. Grazing permit renewals.

LOCATION. The one common use allotment, Bull Gulch adjoins with Trail Gulch to the south. Both are adjacent with the Colorado River to the west and private lands abut to the east. Spring Creek Allotment is just northeast of Burns CO and adjoins with the private lands to the east. Spring Creek is north of the Colorado River and the old historic rodeo grounds.

LEGAL DESCRIPTIONS.

Bull Gulch Common:

T., 3 S., R., 85 W., all/part sections: 2 – 11, 14 – 22, 27 – 29, 32 and 33.

Spring Creek:

T., 2 S., R., 84 W., all/part sections: 3 – 10.

T., 2 S., R. 85 W., all/part sections: 1, 11 – 14.

Trail Gulch:

T., 3 S., R., 86 W., all/part sections: 24 – 26, 34 – 36.

T., 4 S., R., 86 W., all/part sections: 1 – 3, 9 - 16, 21 – 24.

T., 3 S., R., 85 W., all/part sections: 18 – 20, 20, 29 – 33.

T., 4 S., R., 85 W., all/part sections: 4 – 9.

APPLICANT. Nicki Luark and Keith A. Scott (grazing permittees)

PURPOSE AND NEED FOR ACTION. These permits are subject to renewal or transfer at the discretion of the Secretary of the Interior for a period of up to ten years. The U.S. Bureau of Land Management has the authority to renew the livestock grazing permit/lease consistent with the provisions of the Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act, and Glenwood Springs Field Office's Resource Management Plan/Environmental Impact Statement. This Plan/EIS has been amended by Standards for Public Land Health in Colorado.

The renewal of these grazing permits are needed for the following reasons: (1) to meet the livestock grazing management goal and objective of the Resource Management Plan, (2) to continue to allow livestock grazing on the specified allotment, (3) to meet the forage demands of local livestock operations, (4) to provide stability to these operations and help preserve their rural agricultural lands for open space and wildlife habitat, and (5) to allow use of native rangeland resource for conversion into protein suitable for human consumption.

This action is needed to determine whether or not to reissue grazing permits on the following allotments and if so under what terms and conditions to ensure that Public Land Health Standards and objectives for resource management are or will continue to be achieved.

SCOPING AND PUBLIC INVOLVEMENT AND ISSUES. A notice of public scoping was posted on the Colorado BLM's Internet web page on March 06, 2013 regarding grazing permits and associated allotments scheduled for renewal in 2013-2014. A news release was posted March 07, 2013. The public was provided an opportunity to offer any information or concerns, or to be considered as an interested public on a permit or allotment scheduled for renewal. The Colorado River Valley Field Office Internet NEPA Register also lists grazing NEPA documents that have been initiated. They are generally posted approximately one month prior to the estimated completion date. No public comments specific to this proposed action have been received.

This action was scoped internally with the NEPA Interdisciplinary Team (Dec 30, 2013). Issues raised during the internal scoping are itemized in table 3-1 and analyzed in Section 3 Affected Environment and Environmental Effects.

PROPOSED ACTION ALTERNATIVE. The Proposed Action is to renew the term grazing permits of both applicants. On the Luark permit, the number of livestock, class of livestock, period of use and AUMs are the same as was on the previous permit. Scott has proposed changes to the permit to more accurately demonstrate their intended use. The changes are;

- A. Delay turnout and off dates by 10 days,
- B. Convert from cows and yearlings, to just cows, and
- C. Split the four months of continuous use (May 1 to August 31) into two, two-month use periods. This scheduled use would flip flop every other year. See table 1.

Both permits will be issued for a 10-year period, unless the base property is leased for less, but for purposes of this EA, we are assuming 10 years of grazing by this or another applicant (in case of transfer). The proposed action is in accordance with 43 CFR 4130.2. The tables below summarize the level of grazing use and permitted use, on Spring Creek and Trail Gulch and the common use allotment, Bull Gulch Common. The analysis of environmental consequences takes into account the cumulative impacts of both permits.

Table 1. Mandatory Terms and Conditions/Scheduled Grazing Use

Luark Land and Cattle Company, LLC, Number 0507603				
Allotment Name and Number	Livestock kind and number	Periods of Use	Percent Public Land	Total AUMs
Spring Creek No. 08614	5 Horses	05/07 to 05/22	100	3
	151 Cattle			79
	151 Cattle	10/01 to 10/14		70
Bull Gulch Common No. 08625	80 Cattle	07/26 to 10/01		179
Trail Gulch No. 08642	120 Cattle	05/07/to 07/26		320

Keith A. Scott, Number 0503932 ₁				
From	Livestock kind and number	Periods of Use	Percent Public Land	Total AUMs
Bull Gulch Common No. 08625	100 Cattle	05/01 to 06/30	100	201
	41 Cattle	07/01 to 08/31		84
	90 Yearlings			183
To	Livestock kind and number	Periods of Use	Percent Public Land	Total AUMs
Bull Gulch Common No. 08625	Year 1 261 Cattle	05/10 to 07/10	100	462
	Year 2 261 Cattle	07/11 to 09/10		

Notes: 1. Permittee can use only one schedule (Year 1 or Year 2) per year but not both in any one grazing year.

Table 2. Grazing Preference AUMS

Operator Name	Authorization Number	Allotment	Active	Suspended	Total
Luark Land and Cattle Company, LLC	0507603	Spring Creek	152	0	152
		Bull Gulch Common	180	0	180
		Trail Gulch	324	331	655
Keith A. Scott	0503932	Bull Gulch Common	462	244	706

There is a separate trailing authorization held by a third party that authorizes the use of Trail Gulch Road to move cattle onto allotments to the east and southeast.

The following other terms and conditions will be included on the permits:

Allotment Specific Terms and Conditions.

Bull and Trail Gulch. In the Bull Gulch and Trail Gulch Allotments, project maintenance is required to conform with visual resource management Class I objectives to maintain the Area of Critical Environmental Concern (ACEC) values.

Travel restrictions within the Castle Peak Area. In areas closed to motorized travel, or during seasonal closures to motorized travel, normal grazing administration, facility maintenance or facilities operation will be accessed by non-motorized methods only unless authorized by an approved administrative access agreement. In areas closed to motorized travel, or during seasonal closures to motorized travel, the permittee will be required to get pre-approval from a

BLM Authorized Officer for reconstruction or existing permitted facilities or other operations requiring motorized equipment. In case of emergency, the permittee will be allowed access by motorized vehicle but must notify the BLM Authorized Officer within 72-hours of the emergency. The permittee will not be allowed to use motorized equipment in an area closed to motorized travel other than those authorized by the BLM.

Bull Gulch Allotment. Keith Scott livestock will be kept by water availability, salting and herding to the use area known as Big Red Hill. Deferred grazing will be practiced every other year beginning in the second year of this 10-year term. Deferment from grazing is achieved when livestock are kept on Red Lake (private) until after July 10 beginning in the second year and every other year for the length of the term permit. Luark livestock authorized to graze under this authorization will be kept by water availability, salting and herding to the area known as Bull Gulch.

Spring Creek Allotment. Deferred rotational grazing would be practiced by alternating spring use (05/07 to 05/22) one year with fall use (10/01 to 10/14) in the next. Flexibility in this rotation is provided to account for range conditions, water availability, drought, fire, etc. (For example, the allotment may have to be grazed two years in a row in the fall because no water was available in the spring.) The number of livestock can be adjusted from what is indicated on the permit so the full permitted use of 152 AUMs is activated.

Within the Blue Hill Area of Critical Environmental Concern (ACEC). Blue Hill ACEC was designated to help preserve and protect the integrity of the setting and place where natural, cultural, and historic resources combine to form a cohesive, important landscape. As part of this designation, travel within the ACEC is classified as limited to designated routes (including over-the-snow motorized travel). This ensures that impacts to sensitive resources do not occur from this type of activity.

Trail Gulch Allotment. A 6-pasture rest rotational grazing system would be practiced within the Trail Gulch Allotment. Three lower-elevation pastures are: Alamo, Lower Trail Gulch North and Lower Trail Gulch South. Upper elevation pastures include: Upper Trail Gulch North, Upper Trail Gulch South and Big Cedar Hill. Two of the three low-elevation pastures would be used for 40 days, 20 days each. Two of the three upper elevation pastures would be used last for 40 days, 20 days each. Grazing rest will occur in one of the three low-elevation pastures and one of the three upper elevation pastures yearly. The pasture rested would be the one grazed first in the previous year.

Common to Bull Gulch, Spring Creek and Trail Gulch Allotments.

Within the uplands, livestock grazing should not exceed an average utilization of 50% on key forage species. Livestock grazing in riparian areas should leave an average minimum 4-inch stubble height of key herbaceous vegetation and should not exceed an average utilization of 40% of the current year's growth for browse species. If utilization is approaching allowable use levels, livestock will be moved to another portion of the allotment, moved to the next scheduled pasture or removed immediately from the allotment.

Fourteen days (plus or minus) of flexibility may be allowed for livestock movements based upon range condition, water availability, drought, fire, etc, as long as total Active AUMs are not exceeded on any one allotment.

Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits. Maintenance shall be completed prior to turnout. Maintenance activities shall be restricted to the footprint (previously disturbed area) of the project as it existed when it was initially constructed. The Bureau of Land Management shall be given 48 hours advanced notice of any maintenance work that will involve heavy equipment. Disturbed areas will be reseeded with a certified weed-free seed mixture of native species adapted to the site.

To prevent damage to cultural resources, the placement of supplemental feed (e.g. salt, mineral, protein blocks) are only authorized where designated. The authorized officer may direct the permittee to relocate the placement of supplemental feed if it is determined that concentrated grazing use is causing, or has potential to cause damage to cultural resources. Any changes to the designated locations must be submitted to the authorized officer for approval prior to implementation.

The permittee and all persons associated with grazing operations must be informed that any person who injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public land is subject to arrest and penalty of law. If in connection with allotment operations under this authorization any of the above resources are encountered, the proponent shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM authorized officer of the findings. The discovery must be protected until further notified in writing to proceed by the authorized officer.

DESCRIPTION OF NO GRAZING ALTERNATIVE. Under this alternative a grazing lease would not be reissued. As a result, no grazing would be authorized on Bull Gulch, Spring Creek and Trail Gulch Allotments. This alternative would initiate the process in accordance with 43 CFR parts 4100 and 1600 to eliminate grazing on this allotment and would amend the resource management plan.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL. The “No Action” alternative has been eliminated from further consideration. Guidelines for livestock grazing management suggest that grazing practices promote plant health by providing for periodic rest or deferment, adequate recovery, and opportunities for seed dissemination. These guidelines were not clearly addressed in the expiring permits and are addressed in the proposed action. This alternative would involve continuing the current management which would not conform to Colorado State Office and Washington Office guidance.

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: Glenwood Springs Resource Management Plan

Date Approved: Jan. 1984, revised 1988, amended in November 1991 - Oil and Gas Leasing and Development - Final Supplemental Environmental Impact Statement; amended Nov. 1996 - Colorado Standards and Guidelines; amended in August 1997 - Castle Peak Travel Management Plan; amended in March 1999 - Oil and Gas Leasing & Development Final Supplemental Environmental Impact Statement; amended in November 1999 - Red Hill Plan Amendment; and amended in September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance; amended in September 2009; and amended in October 2012 - Approved Resource Management Plan Amendments/ Record of Decision (ROD) for Solar Energy Development in Six Southwestern States.

X The Proposed Action is in conformance with the LUP because it is specifically provided for in the following LUP decision(s):

_____ The Proposed Action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decisions (objectives, terms, and conditions):

RELATIONSHIP TO STATUTES, REGULATIONS, OTHER PLANS.

- Taylor Grazing Act of 1934 as amended;
- Federal Land Policy and Management Act of 1976;
- Public Rangelands Improvement Act of 1978;
- Title 43 of the Code of Federal Regulations Subpart 4100 – Grazing Administration;
- Noxious Weed Act of 1974;
- Endangered Species Act of 1973;
- National Environmental Policy Act of 1969;
- Migratory Bird Treaty Act of 1918;
- National Historic Preservation Act (16 USC 470f);
- Archeological Resources Protection Act;
- Native American Graves Protection and Repatriation Act;
- Indian Sacred Sites – EO 13007; and
- Consultation and Coordination with Indian Tribal Governments – EO 13175
- Colorado Public Health Standards and Livestock Grazing Management Guidelines - March 1997
- Colorado Greater Sage-grouse Conservation Plan (January 2008)

STANDARDS FOR PUBLIC LAND HEALTH.

In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. The five standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands.

The proposed action is located within the Sweetwater to Burns (2005) and Burns to State Bridge (2006) Land Health Assessments. A determination of findings from the assessments was completed in October 2006 (Sweetwater to Burns) and Dec 2007 (Burns to State Bridge). Bull Gulch and Spring Creek Allotments were considered to be Meeting all of the standards at the time of the assessments. Trail Gulch Allotment was Not Meeting Standard 4 for sage-grouse;

however, livestock grazing was not considered to be a significant factor in the failure to meet the standard.

The impact analysis addresses whether the proposed action or any alternatives being analyzed would result in impacts that would maintain, improve, or deteriorate land health conditions for each of the five standards. These analyses are located in the program-specific analysis in this document.

AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES.

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and alternatives. In addition, the section presents comparative analyses of the direct and indirect effects on the affected environment stemming from the implementation of the various actions.

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of a proposed action and alternative(s) on certain environmental elements. Not all programs, resources or uses are present in the area, or if they are present, may not be affected by the proposed action and alternatives (Table 3.). Only those elements that are present and potentially affected are described and brought forth for detailed analysis.

<i>Table 3. Programs, Resources, and Uses (Including Supplemental Authorities)</i>	<i>Potentially Affected?</i>	
	<i>Yes</i>	<i>No</i>
Access and Transportation		X
Air Quality		X
Areas of Critical Environmental Concern	X	
Cadastral Survey		X
Cultural Resources	X	
Native American Religious Concerns	X	
Environmental Justice		X
Farmlands, Prime or Unique		X
Fire/Fuels Management		X
Floodplains		X
Forests		X
Geology and Minerals		X
Law Enforcement		X
Livestock Grazing Management	X	
Noise		X
Paleontology		X
Plants: Invasive, Non-native Species (Noxious Weeds)	X	
Plants: Sensitive, Threatened, or Endangered	X	
Plants: Vegetation	X	
Realty Authorizations		X

Recreation		X
Social and/or Economics		X
Soils	X	
Visual Resources		X
Wastes, Hazardous or Solid		X
Water Quality, Surface and Ground	X	
Water Rights		X
Wetlands and Riparian Zones	X	
Wild and Scenic Rivers		X
Wilderness/WSAs/Wilderness Characteristics	X	
Wildlife: Aquatic / Fisheries	X	
Wildlife: Migratory Birds	X	
Wildlife: Sensitive, Threatened, and Endangered Species	X	
Wildlife: Terrestrial	X	

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

AFFECTED ENVIRONMENT.

The 3,722-acre Blue Hill Area of Critical Environmental Concern (ACEC) falls entirely within the Spring Creek Allotment. This ACEC was designated in the Record of Decision, GSFO Resource Management Plan (RMP), 1984 to protect significant cultural resources. In the 1984 Management Plan, special management for the ACEC values includes limiting off-road vehicle use to existing roads and trails. More than half of the Blue Hill ACEC is dominated by dense stands of pinyon-juniper with a sparse understory. The remainder of the ACEC, particularly in the southern and southwestern part, consists of scattered sagebrush parks.

The majority of the Bull Gulch ACEC lies within the Bull Gulch Allotment and encompasses roughly 75% of the allotment. Approximately 700 acres of the Bull Gulch ACEC also overlaps the northern portion of the Trail Gulch Allotment. This ACEC was designated in the 1984 RMP for its scenic values and is being managed as a VRM Class I area and is closed to OHV use. Lands within the ACEC must be managed to preserve the existing character of the landscape.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Much of the significant cultural resources occur in the eastern portion of the Blue Hill ACEC/Spring Creek Allotment, which is dominated by pinyon-juniper woodlands. There is very little forage available for livestock within the pinyon-juniper woodlands and no water developments to attract livestock; consequently, this portion of the ACEC receives little use. Most of the grazing use on the Spring Creek Allotment occurs in close proximity to the irrigated, southwestern portion of the allotment where there are fewer cultural resources. (See also the Cultural Resources section below.)

Most of the ACEC portion of the Bull Gulch Allotment receives little livestock use due to the steep, rugged terrain, lack of water, and slopes dominated by dense pinyon-juniper or Douglas-fir/mixed conifer woodlands with a sparse understory. The areas that are dominated by big sagebrush/mixed mountain shrubs appear to be in good ecological condition (BLM 2005). The ACEC portion of the Trail Gulch Allotment is also found in steep, rugged terrain north of Alamo Creek. Consequently, the lands within the Bull Gulch ACEC generally receive only light grazing use. The Luark permit would graze cattle from 7/26-10/1 which would generally be after grasses have already set seed and are beginning to go dormant. Grazing at this time of year should not adversely affect the reproductive capability of grasses and the hoof action of livestock may help incorporate the seeds into the soil and improve seed germination. The Scott permit would alternate grazing between spring and mid-summer use every other year. This should allow adequate time for plant recovery and regrowth following grazing or for seed set and dispersal prior to grazing in alternating years. Small-scale localized disturbances to vegetation would likely be limited to trailing, loafing and watering areas.

Given the timing of grazing and the overall light grazing use within the ACEC, the proposed action, would not be expected to create substantial adverse impacts to the relevant and important cultural and scenic values found within the Blue Hill and Bull Gulch ACECs.

No Grazing Alternative. Under this alternative, no livestock grazing would occur on these allotments. The potential for direct and indirect impacts to cultural resources from grazing would be reduced, thereby maintaining the cultural resource values of the Blue Hill ACEC.

The absence of livestock grazing would have little effect on the majority of the Bull Gulch ACEC since livestock do not currently utilize the more rugged and remote sections of the ACEC. However, the absence of livestock grazing may benefit the scenic values of the livestock-accessible portions of the Bull Gulch ACEC. Lack of trampling and forage utilization by livestock may improve the scenic quality of the Bull Gulch ACEC. However, trampling and forage use by wildlife would continue and may increase in the absence of competition from livestock.

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 (CRVFO#1014-8) was completed for the Spring Creek, Trail Gulch, and Bull Gulch Common allotments on January 23, 2014 by Erin Leifeld, Colorado River Valley Field Office Archaeologist. 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 available at the Colorado River Valley Field Office archaeology files.

Data developed here was taken from the cultural program project report files, site report files, and base maps filed at the Colorado River Valley Field Office as well as information from General Land Office (GLO) maps, BLM land patent records, and the State Historic Preservation Office (SHPO) site records, report records, and GIS data.

Table 4 below is based on the allotment specific analysis for the three allotments in this EA. The table shows known cultural resources, the potential of Historic Properties, and Management recommendations.

Table 4. Cultural Resources Assessment Summary

Allotment Name and Number	Land Status	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level	Percent Allotment Inventoried at a Class III Level (%)	Number of Cultural Resources known in Allotment	Potential of Historic Properties	Management Recommendations (Additional inventory required and historic properties to be visited)
Spring Creek #08614	BLM	1116.2	3897.2	22.2%	167	High	Recommend a portion of 43 acres for inventory; monitor a portion of sites with no assessment
Trail Gulch #08642	BLM	736.9	12,457.5	5.5%	16	Low	Recommend 10.3 acres for inventory; no sites to monitor.
Bull Gulch #08625	BLM	606.3	10,242.9	5.6%	19	Moderate	Recommend a portion of 40 acres for inventory; 4 sites to monitor (5EA.1897, 5EA.1898, 5EA.1899, 5EA.1902.)

Nineteen cultural resource inventories (CRVFO# 323, 335, 440, 444, 540, 591, 739, 741, 857, 971, 1017, 1018, 1074, 5498-9, 1002-27, 1102-1, 1004-32, and 15806-4) have been previously conducted within the Spring Creek Allotment #08614 resulting in the survey coverage of 1,116.2 acres at a Class III level. Nine prehistoric sites are eligible for the National Register of Historic Places (NRHP) and are mainly open camps or lithic scatters (5EA.328, 5EA.335, 5EA.352, 5EA.526, 5EA.566, 5EA.633, 5EA.1938, 5EA.2311, 5EA.2691). Twenty-three prehistoric sites are needs data (potentially eligible) for the NRHP and consist of open lithic scatters (5EA.145, 5EA.148, 5EA.147, 5EA.150, 5EA.325, 5EA.341, 5EA.530, 5EA.554, 5EA.562, 5EA.640, 5EA.641, 5EA.644), open camps sites (5EA.134, 5EA.144, 5EA.2315, 5EA.2317, 5EA.343, 5EA.525, 5EA.552, 5EA.643, 5EA.837, 5EA.866), and one possible wickiup site (5EA.523). Thirty-five prehistoric sites are not eligible for the NRHP and consist mainly of open lithic scatters (5EA.545, 5EA.553, 5EA.2309, 5EA.2310, 5EA.2312, 5EA.2313, 5EA.2318, 5EA.2345, 5EA.140, 5EA.143, 5EA.133, 5EA.146, 5EA.151, 5EA.156, 5EA.326, 5EA.327, 5EA.336-5EA.342, 5EA.539, 5EA.543, 5EA.546, 5EA.547, 5EA.557, 5EA.632, 5EA.868, 5EA.544) and open camps (5EA.132, 5EA.2314, 5EA.2326, 5EA.538, 5EA.563). Eight prehistoric sites have no assessment given and are an open camp (5EA.630) and open lithic sites (5EA.542, 5EA.556, 5EA.559, 5EA.564, 5EA.567, 5EA.568, 5EA.635). Four sites are historic sites and consist of a historic fence line (5EA.2316), a historic sheep loading dock (5EA.2360), and two historic cabins with associated trash dumps (5EA.634, 5EA.867) all of which are not eligible for the NRHP. One historic site is a log structure (5EA.253) which has not been assessed. One site is a multicomponent site (5EA.565) consisting of a prehistoric open lithic site and a historic camp

site and is eligible for the NRHP. Finally, there are 85 prehistoric isolated finds within the allotment which are mainly debitage, flakes or tools (5EA.353, 5EA.358- 5EA.361, 5EA.524, 5EA.527-5EA.529, 5EA.531-5EA537, 5EA.540, 5EA.548-5EA.551, 5EA.555, 5EA.558, 5EA.560, 5EA.561, 5EA.569-5EA.572, 5EA.5EA.631, 5EA.638, 5EA.639, 5EA.642, 5EA.840, 5EA.857-5EA.865, 5EA.1939, 5EA.2096, 5EA.2319-5EA.2325, 5EA.2327-5EA.5EA.2344, 5EA.2346-5EA.2359, 5EA.2743) and are not eligible for the NRHP. Looking at the General Land Office (GLO) maps for T2S R84W from 1883 show no potential for historic sites and the map from 1918 shows potential for historic structures but it is on what is now private land. Additionally, in T2S R85W maps from 1882 show no potential for historic sites but the map from 1918 shows potential historic sites such as roads, ditches and a telephone line.

Twenty cultural resource inventories (CRVFO CRIR# 79, 123, 124, 144, 247, 591, 705, 821, 968, 971, 1116, 1001-1, 1001-40, 5402-18, 5403-4, 5408-1, 18011-2,1012-7, 1012-32, 15413.2) have been conducted within the Trail Gulch Allotment #08642 resulting in the survey coverage of 736.9 acres at a Class III level. These inventories have documented one prehistoric site (5EA.515) which is an open camp and is eligible for the National Register of Historic Places (NRHP). Four prehistoric cultural resource sites (5EA.1600, 5EA.1813, 5EA.2912, 5EA.2915) which are open camp sites and are not eligible for the NRHP. Four historic sites (5EA.923, 5EA.2184.1, 5EA.2184.2, 5EA.2977) which are three segments of a historic road and a historic stock pond are all not eligible for the NRHP. Finally, there are seven prehistoric isolated finds (5EA.1814, 5EA.2978-5EA.2981, 5EA.2991, 5EA.2992) all of which are not eligible for the NRHP. Looking at the General Land Office (GLO) maps for T3S R85W show no potential for historic features or sites on maps from 1882 or 1919. For T3S R86W maps in 1890 show no potential for historic sites and maps from 1923 show the historic Trail Gulch road. In T4S R85W the map from 1882 shows no potential for historic sites, but in 1923 the map shows the Trail Gulch Road. For T4S R86W historic maps from 1887 show no potential for historic site but the 1923 map shows the historic Trail Gulch road and also some of the current stock ponds show up labeled as “Water in Holes”.

Within the Bull Gulch Allotment #08625 a total of five cultural resource inventories (CRVFO CRIR# 971, 1001-1, 1102-3, 17310-2, 1013-54) have been conducted resulting in the survey coverage of 606.3 acres at a Class III level. A total of nineteen cultural resources have been documented within this allotment. Eight cultural resources are prehistoric open camp or open lithic sites which are eligible (5EA.1898, 5EA.1902), needs data (5EA.1897, 5EA.1899), not eligible (5EA.1896) or have not been assessed (5EA.176, 5EA.178, 5EA.183) for the National Register of Historic Places (NRHP). Six prehistoric isolated finds (5EA.177, 5EA.1903-5EA.1907) have been documented within the allotment and are not eligible for the NRHP. Four historic sites have been documented and include two historic ditches (5EA.1900.1 & 5EA.1901.1), a historic road (5EA.224), and a historic homestead (5EA.224) all of which are not eligible for the NRHP. Finally, there is one historic isolated find that is not eligible for the NRHP. Looking at the General Land Office (GLO) maps for T3S R85W there is potential for historic sites near the Upper Colorado River on the 1882 and on the 1918 map. Additionally, on the 1918 map, there is potential for historic sites near the private land inholding.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The direct impacts that occur where livestock concentrate, during normal livestock grazing activity, can include trampling, chiseling, artifact breakage, and churning of site soils, cultural features, and cultural artifacts. Impacts from livestock standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art can also have direct impacts to cultural resources. Indirect impacts include soil erosion and gullying, which can lead to increased ground visibility which has the potential to increase unlawful collection and vandalism. Continued livestock use in these concentration areas has the potential to cause substantial ground disturbance and in turn, irreversible adverse effects to historic properties.

Changes in livestock kind and turnout date proposed for Scott's permit in this alternative will not change ground disturbing impacts to cultural resource because it includes a built in rest schedule and having a later turn out date would help vegetation to establish and therefore, reduce potential ground disturbance. Additionally, changes in the terms and conditions to have average stubble heights, utilization requirements, flexibility in livestock movements, and a rest rotational grazing system may be beneficial to cultural resources. These changes may reduce ground disturbance by lessening soil erosion, especially in areas where livestock concentrate because livestock will not be grazing when soils are more exposed or when the area is more susceptible to erosion.

A portion of the Spring Creek allotment is recommended to be inventoried which totals 43 acres and a portion of the sites with no assessment should be revisited and evaluated (5EA.542, 5EA.556, 5EA.559, 5EA.564, 5EA.567, 5EA.568, 5EA.630, 5EA.635) and one possible wickiup site (5EA.523). This allotment falls within the Blue Hill ACEC which has been designated to protect cultural resources. This area needs to continue to be monitored for impacts from livestock and grazing. Within the Trail Gulch allotment, three existing ponds are recommended to be inventoried totaling 10.3 acres and there are no sites to monitor. Forty acres is recommended to be inventoried within the Bull Gulch allotment around existing ponds, although four of the ponds are in very remote areas and since the area is closed to motorized and mechanized travel, these areas may not be maintained and livestock may not be grazing in these areas. Four cultural resources (5EA.1897, 5EA.1898, 5EA.1899, 5EA.1902) are recommended to be monitored within the Bull Gulch allotment.

No Grazing Alternative. Under this alternative, direct and indirect impacts to cultural resources from grazing would be reduced based on the absence of livestock and no related surface disturbing activities.

Mitigation. New range improvements, maintenance of existing range improvements, or additional feeding areas may require cultural resource inventories, monitoring, and/or data recovery.

These allotments may contain undiscovered historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders. If the BLM determines that grazing activities will adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO. The BLM may also require modification to development proposals to protect such

properties, or disapprove any activity that is likely to result in damage to historic properties or areas of Native American concern.

NATIVE AMERICAN RELIGIOUS CONCERNS

AFFECTED ENVIRONMENT.

American Indian religious concerns are legislatively considered under the American Indian Religious Freedom Act of 1978 (PL 95-341), the Native American Graves Environmental Assessment Protection and Repatriation Act of 1990 (PL 101-601), and Executive Order 13007 (1996; Indian Sacred Sites). These require, in concert with other provisions such as those found in the NHPA and Archaeological Resources Protection Act (ARPA), that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life. This ensures, 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 other 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.

The Ute have a generalized concept of spiritual significance that is not easily transferred to Euro-American models or definitions. The BLM recognizes that the Ute have identified sites that are of concern because of their association with Ute occupation of the area as part of their traditional lands. The cultural resource evaluation of these allotments describing known cultural resources and their condition was sent to the Southern Ute Indian Tribe, Ute Mountain Ute Tribe, and the Uinta and Ouray Agency Ute Indian Tribe. The letter, sent on March 11, 2014, requested the tribes to identify issues and areas of concern within the allotments. No comments were received.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The Spring Creek Allotment is within the Blue Hill ACEC which has been designated to protect cultural resources. This area has many cultural resources some of which are sensitive to Native American religious concerns. The area will continue to be monitored for impacts from grazing or other uses and mitigation will occur on a site by site basis.

No Grazing Alternative. Under this alternative, direct and indirect impacts to cultural resources from grazing would be reduced based on the absence of livestock and no related surface disturbing activities. Therefore, areas of concern to Native American tribes would not be affected.

Mitigation.

Following the *Mitigation* in the Cultural Resources section will help to ensure direct and indirect impacts are not occurring in areas where concern is unknown.

LIVESTOCK GRAZING MANAGEMENT

AFFECTED ENVIRONMENT.

These grazing permits would allow grazing on three separate allotments at various times. Only the Bull Gulch Allotment would be grazed in common by both permittees.

Spring Creek Allotment. Livestock grazing on the 5,001 acre Spring Creek Allotment alternates between spring-use-only in one year followed by fall-use-only the next. The period of use remains fixed but cattle numbers can be adjusted as long as only 152 AUMs are consumed yearly. Personal conversations with the permittee indicate conservative stocking has been practiced on this allotment to the benefit of wildlife. This rest rotation provides more than a year of rest every other year for the allotment that is located on the drier south facing slopes of King Mountain, Routt County, Colorado and is adjacent to the Colorado River which is along most of the southern boundary. Livestock access to the Colorado River is mostly blocked by the cliff edge above the river and thick dense vegetation that fills drainages leading down to the river.

Trail Gulch Allotment. Following the construction of the Colorado Wildlife Fence in 1967, the Trail Gulch pasture of the Trail Gulch Allotment was split into two smaller pastures by the fence as displayed in Figure 3, page 47 and Table 5. They are now called Trail Gulch North and South. Within Trail Gulch North and South, topography limits livestock movements between the two low elevation areas and the two upper elevation areas. These four use areas combined with the entire Alamo and Big Cedar Hill pastures, creates six unique areas of use by livestock. Most of the allotment boundary and each interior pasture are fenced. With some exceptions, the Alamo pasture is being considered a low elevation pasture and Big Cedar Hill an upper elevation pasture.

Table 5. Pastures.

Low Elevation Pastures:	High Elevation Pastures
Alamo	Big Cedar Hill
Low Trail Gulch North	Upper Trail Gulch North
Low Trail Gulch South	Upper Trail Gulch South

The 13,194 acres of Trail Gulch is partitioned into 6 use areas utilizing existing fences, topography and water locations. As per the proposed action, two of the three low elevation pastures and two of the three upper elevation pastures would be used in any one year. The unused low elevation and upper elevation pastures would be rested for an entire grazing season. Typically the pasture rested would be the first one grazed the following year, however the rancher has the flexibility to rest any pasture based upon range condition and water availability. Water will be provided in those areas without naturally occurring water. Changes would be coordinated with BLM.

Bull Gulch Common Allotment. Largely within a wilderness study area, the 10,847 acre Bull Gulch Allotment presents grazing opportunities throughout. Mostly in canyon bottoms and mesa tops, where accumulated rain water and/or snow melt provide ephemeral water for livestock use throughout the allotment. However the majority of grazing is found mostly in the southeast and within two distinct use areas, Big Red Hill, used by Scott, and Bull Gulch, used by Luark. These

two areas are used at different times and the ranchers rely on limited fencing, topography, water availability as well as herding to hold their herds.

Scott's Big Red Hill Use Area. There are approximately 280 acres of partially fenced and privately owned land in this area. Seeded with crested wheatgrass, livestock water is provided by an irrigation ditch and adjacent pond. Another parcel of private land with abundant water and forage is adjacent to the east of the allotment and livestock controlled by Scott spend time alternating between the two private parcels. As water on the Public lands becomes less available such as during a drought, the livestock tend to withdraw from the allotment to one of the two private parcels and linger (see Permittee Use Areas pp 44).

Luark's Bull Gulch Use Area. Located north of Big Red Hill, this area includes the service area of Grouse Springs, the ridge running to the north and private lands to the east. With no fence to separate BLM from private land, livestock spend variable amounts of time grazing on both (see Permittee Use Areas – Figure 4).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Spring Creek Allotment. Under the proposed action, livestock would be turned out onto the Spring Creek Allotment May 7th and graze for 15 days. Then the allotment is rested until the following fall. This alternating spring-fall grazing use would be repeated throughout the term of the permit.

Trail Gulch Allotment. The proposed action allows livestock grazing on Trail Gulch allotment beginning May 7th with a duration of 80 days. This action considers there to be 6 pastures, 3 low elevation or early season pastures and 3 upper elevation or late-season pastures and all rely upon topography and limited fencing for separation.

Depending upon forage conditions, drought, fire, insects, water availability, Luark would use 2 of the 3 low elevation pastures and rest the third. The period of use in each would be 20 days. After 40 days livestock would be moved to one of the upper elevation pastures. Livestock use then would be in 2 of the 3 upper elevation pastures for 20 days each, resting the third. This will provide a full year of rest in one of the lower and upper elevation pastures yearly. Typically the pasture rested would be the first one grazed the year before. All cattle will be kept as one herd. The only other authorization for livestock on Trail Gulch allotment involves a trailing permit held by another permittee who trails up the county road to the allotments beyond.

Bull Gulch Common Allotment. Beginning May 10th and alternating the start date with July 10th every other year, the Scott grazing permit authorizes up to 231 Cows to graze in the Big Red Hill use area for a period of 60-days. In that second year and every-other-year, no cattle would be allowed on Public lands of the Bull Gulch Allotment until July 10th. This alternating schedule provides rest for cool season forage plants from grazing every-other-year.

The Luark permit allows 80 cows to graze in the Bull Gulch use area beginning July 26th and ending October 1st yearly after forage vegetation has set seed. When grazing in this area, there is no fencing to keep livestock from accessing the more abundant forage and water found on private lands to the east.

No Grazing Alternative. Under this alternative the grazing permits would be cancelled. Cancelling grazing use on these allotments may result in economic harm to the permittee. This alternative would initiate the process in accordance with 43 CFR parts 4100 and 1600 to eliminate grazing on these allotments and devote the land to some other purpose and would require an amendment to the resource management plan.

PLANTS: INVASIVE NON-NATIVE SPECIES (NOXIOUS WEEDS)

AFFECTED ENVIRONMENT.

A landscape-wide weed inventory has not been completed on Spring Creek, Trail Gulch, Bull Gulch Common allotments. Table 6 reflects infestations known to occur within areas of the proposed action. Given the nature of noxious weed infestations throughout the area along recreation routes, range improvements, wildlife and livestock movement between allotments it is assumed that these and other noxious weeds may be found in areas throughout all the allotments.

Table 6. Infestations Known to Occur within Area of Proposed Action.

Common Name	Scientific Name	State	Allotment (s)
Canada thistle	<i>Cirsium arvense</i>	B	
Houndstongue	<i>Cynoglossum officinale</i>	B	Trail Gulch, Bull Gulch
Musk thistle	<i>Carduus nutans</i>	B	
Plumeless thistle	<i>Carduus acanthoides</i>	B	
Russian knapweed	<i>Acroptilon repens</i>	B	Trail Gulch

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Weeds generally germinate and become established in areas of surface disturbing activities. Livestock grazing can contribute to the establishment and expansion of noxious weeds through various mechanisms. Improperly managed grazing can cause a decline in desirable native plant species and ground cover which provides a niche for noxious weed invasion. In addition, noxious weed seed can be transported and introduced to new areas by fecal deposition or by seed that clings to the animal’s coat. However, this effect is minimal as compared to other weed seed dispersal vectors such as vehicle routes and ground disturbing activities. Conversely, properly managed livestock grazing which does not create areas of bare ground and maintains the vigor and health of native plant species, particularly herbaceous species, is not expected to cause a substantial increase in noxious weeds. Since the proposed action was designed to sustain and/or improve land health, no significant impacts to non-native, invasive species are expected. Noxious and invasive plant species are not expected to radically increase as a result of the continuation of livestock grazing practices and most infestations will be isolated to watering facilities, salting areas, or other areas where livestock concentrations are high.

No Grazing Alternative. Under this alternative, no livestock grazing would occur on the allotments and there would be no direct or indirect impacts to weeds from livestock use. Grazing

by wildlife may continue to create localized disturbances that would enable weed expansion. Wildlife and recreation would continue to be vectors for the transportation of noxious weeds.

PLANTS: SENSITIVE, THREATENED, AND ENDANGERED

AFFECTED ENVIRONMENT.

Table 7 summarizes the 2013 species list from the U. S. Fish and Wildlife Service for Federally listed, proposed, or candidate plant species (USFWS 2013) and the November 2009 Colorado BLM State Director's Sensitive Species List for BLM sensitive plants (BLM 2009) that may occur within Eagle County and be impacted by the proposed action.

Table 7. Threatened, Endangered, and Sensitive Plant Species in Eagle County.

Federally Listed, Proposed or Candidate Plant Species		
Species	Habitat	Potential Habitat Present / Absent
Ute ladies'-tresses orchid (<i>Spiranthes diluvialis</i>)	Potential habitat for this threatened species is found below 7,200 feet along streams, lakes or in wetland areas with seasonally saturated or subirrigated soils.	Present: Riparian areas along the Colorado River may provide suitable habitat for the Ute ladies'-tresses.
Penland Alpine Fen mustard (<i>Eutrema penlandii</i>)	Found at margins of moss-dominated fens fed by perennial snowbeds. Known from Lake, Park and Summit Counties in Colorado at elevations between 11,900 and 13,280 ft.	Absent: No elevations above 9,000 feet and no known fens in these three allotments.
BLM Sensitive Plant Species		
Species	Habitat	Potential Habitat Present/Absent
Harrington's penstemon (<i>Penstemon harringtonii</i>)	Open sagebrush communities on rocky loam or rocky clay loam soils between the elevations of 6,200 to 10,000 feet.	Present: Multiple populations exist in the Bull Gulch Common, Spring Creek and Trail Gulch Allotments.

Ute Ladies'-tresses have been documented in Colorado at elevations between 4,500 and 6,400 feet in mesic to wet floodplain terraces along streams or rivers, lakeshores, or abandoned oxbows, and occasionally along ditches and irrigated meadows. (NatureServe 2012). The USFWS now considers 7,200 feet to be the upper elevational limit of potential habitat.

The orchid colonizes early successional riparian habitats such as point bars, sand bars and low-lying, gravelly or cobbly edges. The orchid persists in those areas where the hydrology provides continual dampness in the rooting zone throughout the growing season. Ute ladies'-tresses orchids have been found in five systems defined by hydrology and habitat type across its range: perennial streams, rivers, lakeshores and reservoirs, groundwater-fed springs or sub-irrigated meadows, and human-influenced riparian habitats (Fertig et al. 2005). These areas include old oxbows, side channels, or seasonally irrigated meadows (USFWS 1992).

The Colorado River forms the southern boundary of the Spring Creek Allotment, the western boundary of the Bull Gulch Allotment and a portion of the western boundary of the Trail Gulch Allotment. This section of the Colorado River has been identified as potential habitat for the Ute ladies'-tresses.

Suitable habitat for Harrington's penstemon consists of open sagebrush parks with rocky loam or clay loam soils. Harrington's penstemon is a pioneer species which does not compete well with dense vegetative cover. Populations of the BLM Sensitive plant, *Penstemon harringtonii*, are known to occur within sagebrush parks of the Spring Creek, Trail Gulch, and Bull Gulch Common Allotments.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action.

Ute ladies'-tresses (*Sprinathes diluvialis*). The Trail Gulch Allotment is fenced from the river and the Bull Gulch Allotment has steep, rugged cliffs along the river which preclude livestock access to the river bank. The Spring Creek allotment is not fenced from the river; however, livestock access to the Colorado River is mostly blocked by a cliff edge above the river and thick dense vegetation that fills the drainage leading down to the river. As a result, the proposed action would have "No Effect" on Ute ladies'-tresses orchid or its potential habitat.

Harrington's penstemon (*Penstemon harringtonii*). The flowering stalks of Harrington's penstemon are highly palatable to both livestock and wildlife and flowering stalks and sometimes basal rosettes are removed by grazing or trampling. Impacts to the plant populations could result if excessive grazing removes a high percentage of the flower stalks each year thereby inhibiting seed dissemination and reproduction. The flowering season for Harrington's penstemon varies across sites based on elevation and varies annually due to changes in temperature and precipitation patterns, but generally occurs between June 1 and July 10.

The Trail Gulch Allotment is essentially managed under a 6-use area rest-rotation system which utilizes 4 "pastures" and rests two pastures each year. Grazing which occurs prior to June 1 or after July 10th should have little effect on reproduction of Harrington's penstemon. In addition, a full year of grazing rest would be provided for Harrington's penstemon populations at least once every three years. Given this use pattern, grazing on Trail Gulch allotment should provide time for flowering, seed dissemination and seedling establishment during the years of grazing rest and in the years when a particular pasture is used early or late in the season. Grazing on the Trail Gulch allotment, as proposed, should maintain the long-term viability of the Harrington's penstemon populations.

The Bull Gulch Common Allotment is divided into two pastures and each pasture is grazed exclusively by one of the two permittees. One permittee uses the Big Red Hill pasture in the southern portion of the Bull Gulch Allotment. Cattle would graze in the Big Red Hill pasture for a two-month period beginning on May 10th the first year and alternating with July 10th the second year in a rest-rotation fashion. This should allow time for flowering and seed dissemination of Harrington's penstemon in alternate years when grazing does not begin until July 10th.

The other permittee exclusively uses the Bull Gulch pasture in the northern portion of the Bull Gulch Allotment. Grazing in this pasture would not begin until 7/26. By this time of year, *Penstemon harringtonii* plants should have already flowered and set seed. Grazing at this time of year is not expected to have any adverse impacts to the populations, and in fact, cattle use at this time of year may help disperse seeds.

Livestock grazing on the Spring Creek Allotment alternates between spring-use-only in one year followed by fall-use-only the next. Winter-long use is also authorized on a small portion of the allotment. This grazing system should provide rest or deferment from grazing during critical growth periods and an adequate recovery period following grazing. This will allow for seed dissemination and opportunities for seedling establishment to maintain the long-term viability of the Harrington's penstemon populations.

Mitigation.

Grazing under the proposed action is not expected to have any adverse impacts on long-term viability of Harrington's penstemon populations. If future monitoring or assessments determine that livestock grazing in these allotments is having an adverse impact to this species (i.e. failure to achieve Standard 4), mitigation measures will be identified and added to the terms and conditions of the permit at that time.

No Grazing Alternative. Under this alternative, no livestock grazing would occur on these allotments. Without livestock, fewer flowering stalks of Harrington's penstemon may be removed by grazing, and there may be a slight increase in population density due to more successful reproduction of penstemon plants. Conversely, without livestock grazing, there would be less removal of competing vegetation and penstemon populations may decrease due to competition with other plants. These impacts may ultimately balance out and the resulting change in Harrington's penstemon populations would be negligible or minor.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 4 FOR SPECIAL STATUS PLANT SPECIES.

The proposed action is located within the Sweetwater to Burns (2005) and Burns to State Bridge (2006) Land Health Assessments. A determination of findings from the assessments was completed in October 2006 (Sweetwater to Burns) and December 2007 (Burns to State Bridge) and found that the three allotments in this proposed action were considered to be meeting Standard 4 for threatened, endangered, and other special status plants at the time of the assessments. The Scott permit on the Bull Gulch allotment would be changed from a 4-month grazing period to a 2-month grazing period. Continuation of existing grazing patterns for the Luark permit with the changes proposed for the Scott permit would be expected to continue to achieve the standard for threatened, endangered and other special status plants.

PLANTS: VEGETATION

AFFECTED ENVIRONMENT.

Bull Gulch Allotment. Due to a wide elevation range (6,400 to 9,800 feet), the Bull Gulch Allotment contains a wide variety of vegetation types. Wyoming big sagebrush is found in the flatter, lower elevation areas, mountain big sagebrush and mesic mountain shrubs such as common snowberry and serviceberry are found at higher elevations in swales, on mesa tops, and on the gentler side slopes. Pinyon/juniper woodlands, aspen, and Douglas-fir/mixed conifer forests are found on shallower soils and steeper slopes.

Spring Creek Allotment. The Spring Creek Allotment is a south-facing allotment ranging in elevation from 6,500 feet to 8,000 feet. Much of the allotment consists of arid, rocky slopes or shale badlands. The flatter, lower portions of the Spring Creek Allotment consist primarily of Wyoming and black sagebrush shrublands and needle-and-thread grasslands. Irrigation water flows through a small portion of the allotment supporting pasture and riparian vegetation such as alfalfa, Kentucky bluegrass, smooth brome, and several sedge species. The steeper, upper elevations of the allotment consist of dense pinyon/juniper woodlands with a sparse understory.

Trail Gulch Allotment. The Trail Gulch Allotment ranges in elevation from 6,400 feet to 8,400 feet. Vegetation consists primarily of Wyoming big sagebrush on the flatter, lower elevation areas, mountain big sagebrush and mixed mountain shrubs at higher elevations and on north-facing slopes, and pinyon/juniper woodlands on the rocky ridgelines and south-facing slopes.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action.

Bull Gulch Allotment. There are no recent utilization data available for the Bull Gulch Allotment. Upland photo points and notes from allotment visits indicate generally light use and good species diversity and cover within the allotment.

The Bull Gulch Common Allotment is divided into two pastures and each pasture is grazed exclusively by one of the two permittees. One permittee uses the Big Red Hill pasture in the southern portion of the Bull Gulch Allotment. Cattle would graze in the Big Red Hill pasture for a two-month period beginning on 5/10 the first year and beginning on 7/10 the second year in a deferred-rotation fashion. This should allow adequate time for plant recovery and regrowth following grazing or for seed set and dispersal prior to grazing in alternating years. In addition, there are approximately 280 acres of partially fenced, private land included in this pasture. Livestock water is provided by an irrigation ditch and adjacent pond. Another parcel of private land with abundant water and forage is located adjacent to the east side of the allotment. Livestock spend time moving between the two private parcels and public land. As water on the public lands becomes less available later in the year or during a drought, the livestock tend to concentrate on the two private parcels where water is more reliable.

The other permittee exclusively uses the Bull Gulch pasture of the Bull Gulch Allotment. With no fence to separate BLM lands from private lands to the east, livestock spend variable amounts of time grazing on both. Grazing on the Bull Gulch pasture does not begin until 7/26. By this time of year, grasses and forbs should have already flowered and set seed. Grazing at this time of year should not adversely affect the reproductive capability of grasses and the hoof action of livestock may help incorporate the seeds into the soil and improve seed germination. Grazing at this time of year and at the current levels of use is not expected to have any adverse impacts to the health of plant communities.

Spring Creek Allotment. Utilization measured in 2010 and 2011 found livestock utilization to be in the slight range. Under the proposed action, the allotment would be grazed in a deferred rotational system for a two week period either in the spring or fall. This should allow for seed dissemination and ample grazing rest/recovery time for upland plant species.

Trail Gulch Allotment. Recent utilization data were collected on the Trail Gulch Allotment in 2008 and 2011. In 2008, one of the two key areas monitored reached 70% use. In 2011, none of the monitored areas exceeded 40% use. The Trail Gulch Allotment is essentially managed under a 6-use area rest-rotation system which utilizes 4 “pastures” for a total of three months and rests two pastures each year. A full year of grazing rest would be provided for each area at least once every three years. This should provide time for flowering, seed dissemination and seedling establishment during the years of grazing rest.

In addition to the rest-rotation and deferred rotation practices, the terms and conditions of the permit provide for utilization limits and adequate stubble heights to maintain plant health. In consideration of the above, renewal of the permits with the proposed changes to the Scott permit and with application of the utilization limits in the permit terms and conditions is not expected to cause adverse impacts to upland plant species in the Bull Gulch, Spring Creek and Trail Gulch Allotments.

No Grazing Alternative. Under this alternative, no livestock grazing would occur on these allotments and there would be no direct or indirect impacts to vegetation from livestock use. There would be an increase in vegetative biomass (plant height and production) without the presence of livestock to remove vegetative material. Dead and dried stems and seed stalks may build up over time, particularly on the more mesic and more productive sites, reducing photosynthetic activity and resulting in less vegetative vigor and biomass in the long-term. There would also be less surface disturbance due to trampling and removal of vegetation and therefore, less risk of noxious weed invasion. Wind, wildlife and vehicular traffic would continue to distribute weed seeds and contribute to weed expansion. Big game animals would continue to use the allotments, particularly in the winter, resulting in hedging and decadence of sagebrush and other palatable shrubs.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 3 FOR HEALTHY PLANT COMMUNITIES.

The proposed action is located within the Sweetwater to Burns (2005) and Burns to State Bridge (2006) Land Health Assessments. A determination of findings from the assessments was completed in December 2007 (Burns to State Bridge) and October 2012 (King Mountain) and found that the three allotments in this proposed action were considered to be meeting Standard 3 for healthy plant communities at the time of the assessments. The Spring Creek and Trail Gulch allotments would be grazed in the same manner and at the same level as when they were assessed. One of the Bull Gulch permits would be changed from a 4-month grazing period to a 2-month grazing period with alternating periods of use every other year. These changes should result in maintenance or improvement of the health of vegetative communities on the Bull Gulch allotment. Standard 3 would continue to be met on all three allotments.

SOCIO-ECONOMICS

AFFECTED ENVIRONMENT.

Regionally, livestock operations are dependent on both federal lands (BLM and U.S. Forest Service) and nonfederal lands (state and private). The federal grazing fee for public lands managed by the

BLM and the U.S. Forest Service is \$1.35 per animal unit month (AUM). An AUM is the amount of forage needed to sustain one cow and her calf, one horse, or five sheep or goats for a month. The annually adjusted grazing fee is computed by using a 1966 base value of \$1.23 per AUM for livestock grazing on public lands in the western states. The figure is then adjusted according to three factors - current private grazing land lease rates, beef cattle prices, and the cost of livestock production. The formula used for calculating the grazing fee, established by Congress in the 1978 Public Rangelands Improvement Act, has continued under a presidential Executive Order issued in 1986. Under that order, the grazing fee cannot fall below \$1.35 per AUM, and any increase or decrease cannot exceed 25 percent of the previous year's level.

Public land grazing in the CRVFO supports a traditional and historical way of life. Although historically livestock grazing in the region was at a higher intensity than at the present time, the livestock business has, and continues to be a traditional way of life for many permit holders. Income derived from public land grazing permits continues to comprise a moderate to substantial portion of their individual livelihoods.

The total economic contribution from ranching operations on BLM lands is statistically low within the region. Jobs and labor income associated with BLM grazing accounts for less than 1 percent of the area's total jobs and labor income (BLM 2014).

Fees paid to the federal government for livestock grazing permits generate revenue for the U.S. Treasury, of which 12.5 per cent is returned to the local Grazing Advisory Board to fund range improvements and maintenance projects. This provides a direct economic benefit to the permit holders who pay the fees. The support of livestock operations contributes to the economic support of local communities and to the livestock industry in the West in general.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The Proposed Action would renew ten year term grazing permits for the livestock operator, thereby continuing an historical and traditional way of life for this area. The social value of retaining a rural, agricultural lifestyle would be preserved and would align with many of the public's perception of the western Colorado culture.

Issuance of the permits would allow the permit holders to continue their grazing operations with some degree of predictability during the ten-year period of the term permit.

The local economy is benefited from capital spent to establish and maintain a ranching operation and contributions to the labor force. The proposed action would support some direct employment. Additional employment would be generated as the affected livestock operators purchase services and materials as inputs ("indirect" effects) and ranchers spend their earnings within the local economy ("induced" effects).

No Grazing Alternative. Under the No Grazing Alternative, the ten year term grazing permit would not be renewed. The individual permit holders could be negatively impacted in the short term by loss of income. If livestock grazing was terminated, there would also be adverse impacts to the base property owner(s). There could be an annual loss of income because they may not be able to lease their private lands without having the BLM land grazing allotments. Consequently, the value of their properties could be reduced because of the elimination of the federal grazing

preference. Such a loss of income would be important to the individuals, but would likely not measurably or adversely impact the local economies.

SOILS

AFFECTED ENVIRONMENT.

A review of the soil survey by the NRCS for the Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield and Pitkin Counties indicate over 40 soil map units occur within the proposed allotments (NRCS 1992). The NRCS soil map unit descriptions (NRCS 2014) are provided below for the four dominant soils, which together make up about half of the total allotment acreage:

Cushool-Rentsac complex (25) – This soil map unit is found on mountains and mesa side slopes at elevations ranging from 6,200 to 7,600 feet and on slopes of 15 to 65 percent. The Cushool soil is moderately deep, well drained, derived from sandstone and shale. Surface runoff for this soil is rapid and the erosion hazard is classified as severe. The Rentsac soil is shallow, well drained, derived from sandstone. Surface runoff for this soil is rapid and the erosion hazard is classified as severe.

Earsman-Rock outcrop complex (33) – This soil map unit is found on mountainsides and ridges at elevations ranging from 6,000 to 8,500 feet and on slopes of 12 to 65 percent. The Earsman soil is shallow, excessively drained, and derived from calcareous redbed sandstone. Surface runoff for this soil map unit is rapid and the water erosion hazard is classified as slight to severe depending on slope.

Miracle loam (78) – This moderately deep, well-drained soil is found on hills and ridges at elevations ranging from 8,000 to 9,000 feet and on slopes of 3 to 30 percent. This soil is derived primarily from redbed sandstone and shale. Surface runoff is rapid and the water erosion hazard is moderate.

Torriorthents-Camborthids-Rock outcrop complex (104) – This soil map unit occurs on south-facing mountainsides, hills, and ridges with slopes ranging from 6 to 65 percent. The Torriorthents are shallow to moderately deep, well drained, and are derived from sedimentary rock. Surface runoff is rapid and the water erosion hazard is severe. The Camborthids are shallow to deep, well drained, and are derived from sandstone, shale, and basalt. Surface runoff is rapid and the water erosion hazard is severe. The Rock outcrop component of this unit consists of exposed sandstone, shale, and basalt.

Soil health was evaluated in 2005 and 2006 as part of the Land Health Assessment process. BLM staff concluded that soils were meeting land health standards throughout the proposed allotments, with only slight departures from expected conditions (BLM 2005, 2006).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Grazing activities may result in direct soil compaction and displacement that increase the likelihood of erosional processes, especially on steep slopes and areas devoid of vegetation. Soil detachment and sediment transport are likely to occur during runoff events associated with spring snowmelt and short-duration high intensity thunderstorms. Indirect impacts include soil erosion and gullying. Based on existing soil conditions and generally good vegetative cover; the likelihood of livestock grazing contributing to excessive soil degradation and transport to nearby drainages is not expected. Grazing activities on the proposed allotments would not likely create long term affects that would compromise soil stability on a large scale. Small-scale localized disturbances would likely be limited to trailing, loafing and watering areas. Allowing for adaptive management and rest rotation grazing practices should maintain soil health and upland vegetation conditions.

No Grazing Alternative. Under this alternative, no livestock grazing would occur and there would be no direct or indirect impacts to soils from livestock use. Trampling or removal of plant material may still occur from wildlife grazing. In addition, soil disturbance and erosion may persist due to other surface disturbing activities, such as roads and trails that exist throughout the allotment.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 1 FOR SOILS.

Based on the Land Health Assessments, BLM staff concluded that soils are meeting Standard 1 (BLM 2005, 2006). Implementation of the proposed action is not anticipated to degrade soil health from current conditions.

WATER QUALITY

AFFECTED ENVIRONMENT.

The Spring Creek allotment (#08614) is drained by a series of south, southeast trending unnamed ephemeral tributaries to the Colorado River. These systems are naturally dry with the exception of snowmelt periods and when runoff is generated from convective summer storms. A few drainages now have supplemental flow provided by water diverted from Sunnyside Creek. Hydrology in those drainages is intermittent. Limited water quality data have been collected on these drainages because of their naturally dry nature. In general, water quality is considered fair given the saline parent geology in the area. Sedimentation is likely during high-intensity thunderstorms.

The Trail Gulch allotment (#08642) lies within the Alamo Creek, Trail Gulch, and Sheep Gulch watersheds which feed the Colorado River. The river flows just to the west of the allotment and forms short section of the allotment boundary on the southwest. Alamo Creek, the intermittent gulches, and other unnamed ephemeral tributaries carry overland flow from the allotment to the Colorado River. Snowmelt probably provides the greatest quantity of runoff, but the peak flows generally occur from thunderstorm runoff within these drainages. While no water quality data are available, some of the area is underlain by Eagle Valley Evaporite, which is saline parent

geology. The area has moderate to high erosion potential. This suggests that when these drainages do flow, they will carry a fairly high sediment load and have somewhat elevated ion concentrations.

Bull Gulch allotment (#08625) lies principally within the Bull Gulch and Posey Creek watersheds which are tributary to the Colorado River. The extreme southern portion of the allotment is drained by Greenhorn Gulch and an unnamed ephemeral drainage, both which are tributary to Trail Gulch. Bull Gulch is an intermittent system which flows seasonally, but has extended periods of no flow. Posey Creek is perennial. Snowmelt provides the most water yield each year. It generally occurs in early spring because of the west aspect. Peak flows in these watersheds generally result from intense thunderstorm activity. Numerous springs occur in the upper elevations of the allotment. During baseflow conditions, Posey Creek is probably almost entirely spring fed. Water quality data collected at the springs indicate pH ranging from neutral to slightly alkaline, specific conductance (an indication of salinity) as low as 170 microsiemens per centimeter (uS/cm) ranging up to 550 uS/cm. The higher specific conductance is likely produced from the portion of the watershed that is underlain by Eagle Valley Evaporite. The sediment level is projected to be high during major runoff events.

The State of Colorado has developed *Stream Classifications and Water Quality Standards* that identify beneficial uses of water and numeric standards used to determine allowable concentrations of water quality parameters (CDPHE 2011). Streams within the proposed allotments are listed under the Upper Colorado River Basin (Region 12, segment 7a) and have water use classifications of Aquatic life cold 1, Recreation N, Water supply, and Agriculture.

Aquatic life cold 1 indicates that a stream segment is capable of sustaining a wide variety of cold water biota. Recreation N refers to stream segments in which surface waters are not suitable or intended to become suitable for primary contact recreation uses. Water supply and agriculture refer to stream segments that are suitable or intended to become suitable for potable water supplies and suitable for irrigation or livestock use.

During the Land Health Assessments in 2005 and 2006, limited water quality data was collected. The data results are summarized below, and indicate relatively good water quality:

Table 8. Discharge and Water Quality Data.

Stream Name	Date (m/d/yr)	Flow (cfs)	Temp. (C)	Cond. (uS/cm)	pH	Phenol. Alkalinity (mg/l)	Total Alkalinity (mg/l)	Hardness (mg/l)
Posey Creek (upper)	5/5/05	0.53	5	184	8.2	0	120	140
Posey Creek near mouth	5/6/05	0.68	7	229	8.1	0	160	140
Tepee Creek (upper)	5/12/06	1.06	7.4	45	8.4	0	40	40
Tepee Creek (lower)	5/12/06	0.63	11.6	120	8.4	0	80	80
Stifel Creek	5/10/06	0.55	6.2	108	8.3	0	80	80

The State of Colorado has developed a *303(d) List of Water Quality Limited Segments Requiring TMDLS and Monitoring and Evaluation List* that identifies stream segments that are not currently meeting water quality standards with technology based controls alone (CDPHE 2010). No streams in the proposed allotments are on this list suggesting water quality standards are currently being met (CDPHE 2010).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Direct impacts to water quality resulting from grazing could be elevated nutrient levels (i.e. fecal coliform) if cattle begin to congregate near water sources for extended periods of time. Hoof action can cause surface compaction, stream bank shearing, elevated erosion rates and subsequent deterioration of water quality. Indirect impacts may result from excessive utilization in upland watershed areas reducing effective vegetative cover, elevating erosion potential and increasing sediment delivery to streams, which could negatively impact water quality. The proposed stocking rates and duration are not expected to have a negative effect on water quality. Sediment that is produced in areas where livestock may congregate would likely be captured by the existing vegetative ground cover or riparian vegetation, before entering nearby water bodies. Allowing for adaptive management and rest rotation grazing practices should maintain upland soils and vegetation, subsequently maintaining water quality conditions.

No Grazing Alternative. Under this alternative, no livestock grazing would occur and there would be no direct or indirect impacts to water quality from livestock use. Trampling or removal of plant material may still occur from wildlife grazing, and soil disturbance and erosion may persist due to other surface disturbing activities, such as roads and trails that exists throughout the allotment, which could potentially affect water quality.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 5 FOR WATER QUALITY.

Based on the Land Health Assessments, BLM staff concluded that water quality is meeting Standard 5 (BLM 2005, 2006). Implementation of the proposed action is not anticipated to degrade water quality from current conditions.

WETLANDS AND RIPARIAN ZONES

AFFECTED ENVIRONMENT.

Table 9 below displays the results from past Proper Functioning Condition (PFC) assessments for Spring Creek, Bull Gulch and Trail Gulch allotments.

Table 9. Proper Functioning Condition.

Allotment	Year	Riparian Area Name	Miles ¹	Condition Rating
Spring Creek	2006	Stifel Creek	0.68	PFC
	2006	Teepee Creek	1.6	
	2006	Colorado River	5.8	
Bull Gulch	2005	Posey Creek	3.9	

Trail Gulch	2005	Alamo Creek	1.9	
Notes: 1. Distances shown are those from within the allotments.				

The CRVFO ID team conducted PFC assessments on these reaches in 2005 and 2006 rating them all at PFC.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Based upon the most recent PFC assessments, the proposed action is not expected to degrade riparian conditions on the allotments and Standard 2 is expected to be met.

No Grazing Alternative. Without the presence of livestock on the allotment, there would be no impacts from grazing livestock on the riparian resource. Any impacts to riparian areas would be from wildlife.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 2 FOR RIPARIAN SYSTEMS.

Based upon the 2005 and 2006 PFC assessments, Land Health Standard 2 is expected to continue to be met during the life of the term permit.

WILDERNESS

AFFECTED ENVIRONMENT.

Bull Gulch Common and Trail Gulch allotments fall within the Bull Gulch Wilderness Study Area (WSA). The WSA was established to protect wilderness characteristics of sufficient size, naturalness and outstanding opportunities for primitive, unconfined recreation and/or solitude.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The Proposed Action will not affect the size or outstanding opportunities for primitive, unconfined recreation or solitude. Grazing is an allowed for activity under the Wilderness Act of 1964. This proposed action does not authorize any new projects or related developments. No impacts will occur in the Trail Gulch allotment under the Proposed Action as there are no changes in grazing from previous use.

The changes in the Scott permit to reduce the period of use from 4 months to 2 months with alternating seasons of use may be beneficial to the naturalness of the Bull Gulch Common allotment. The Proposed Action is more beneficial than Scott’s current permit that uses the allotment all growing season every year and may improve the naturalness of the allotment.

No Grazing Alternative. Under this alternative, no livestock grazing would occur on these allotments and there would be no direct or indirect impacts to the naturalness wilderness characteristic from livestock use. No impacts would be expected from grazing to size or outstanding opportunities for primitive, unconfined recreation and/or solitude. See Plants: Vegetation, Soils and Water Quality for further analysis on specific aspects of naturalness.

AFFECTED ENVIRONMENT.

These allotments are directly adjacent to the Colorado River which is rich in both native fish species and introduced game fish species including but not limited to: Bluehead sucker, flannelmouth sucker, carp, brown trout, mountain whitefish, rainbow trout, speckled dace, roundtail chub, and a variety of aquatic insects. Although frequently surveyed and unconfirmed, some endangered native fish such as Colorado pikeminnow, bonytail, and humpback chub may exist within the Colorado River in Eagle County.

Bluehead sucker (*Catostomus discobolus*), flannelmouth sucker (*Catostomus latipinnis*), and roundtail chub (*Gila robusta*) are three BLM sensitive species that do exist in this reach of the Colorado River. Historically, these fish were more abundant throughout the drainage. Overall, habitat in the Colorado River within the watershed assessment area is in pretty good condition. One factor affecting these fish is the presence of impoundments within the Colorado River drainage. These impoundments result in altered flow regimes, colder water temperatures at the outflow and downstream, and reductions in sediment. All of these factors likely impact the habitat required by these native suckers. Another concern for these fish is the presence of introduced species such as non-native white and longnose suckers into the Colorado River system. These non-native suckers compete for stream resources and can hybridize with native suckers. Based on habitat condition alone, the Colorado River located within BLM lands within the watershed appear to be meeting Standard 4 for these fish. Factors negatively affecting these fishes are largely outside of the BLM's management control.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Most of the areas near the river that could receive impacts are inaccessible to grazing, particularly in Bull Gulch Common. Livestock grazing can cause accelerated erosion or even unnatural sediment deposits in an overgrazing situation from repeated hoof action and soil compaction. The upper Colorado is known for its heavy sediment loading from natural parameters such as steep denuded terrain, hydrophobic soils, and strong isolated monsoonal rain events. Additionally, cattle often congregate near water sources and could cause unnatural nitrogen cycles to occur and magnify in smaller lentic or lotic areas. These impacts, although hard to quantify, do impact aquatic species. However, native fish and aquatic invertebrates native to the Colorado Plateau are adapted to heavy sediment loading and would not be negatively impacted by indirect soil compaction and sediment loading associated with the proposed action. Nitrogen cycles or associated algal blooms are expected to happen on a small or localized level (range improvements) and should be diluted by the greater Colorado River having minimal population impacts to aquatic species. Non-native fish species are not expected to have population level impacts from the proposed action.

No Grazing Alternative. Aquatic species would likely benefit from this alternative as soil compaction and sediment loading would be limited to existing and natural events.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 3 FOR AQUATIC WILDLIFE AND FISHERIES AND PUBLIC LAND HEALTH STANDARD 4 FOR SPECIAL STATUS AQUATIC SPECIES.

All the perennial streams assessed were meeting Standard 2 for riparian systems and riparian condition was also adequate to provide the needs of aquatic wildlife in the Sweetwater to Burns LHA of 2006. Factors limiting the fisheries potential of some of the streams are related to natural geological conditions, low seasonal flows, and water diversions all of which are outside of BLM management control. Standard 3 is currently being met for aquatic wildlife within the watershed. Limiting factors identified for aquatic species with the proposed area are non-native fish species competition with native species and other threats independent of this proposal. The proposed permit renewal would not keep Standard 3 or 4 for aquatic species from being met.

MIGRATORY BIRDS

AFFECTED ENVIRONMENT.

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service (USFWS) to “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973.” *Birds of Conservation Concern 2008* (<http://www.fws.gov/migratorybirds/reports/BCC2008/BCC2008m.pdf>) is the most recent effort to carry out this mandate. The conservation concerns may be the result of population declines, naturally or human-caused small ranges or population sizes, threats to habitat, or other factors. The primary statutory authority for *Birds of Conservation Concern 2008* (BCC 2008) is the Fish and Wildlife Conservation Act of 1980 (FWCA), as amended. Although there are general patterns that can be inferred, there is no single reason why any species was is on the list. The Glenwood Springs Field Office is within the Southern Rockies/Colorado Plateau Bird Conservation Region (BCR). The 2008 list include the following birds: Gunnison sage grouse, American bittern, bald eagle, ferruginous hawk, golden eagle, peregrine falcon, prairie falcon, snowy plover, mountain plover, long-billed curlew, yellow-billed cuckoo, burrowing owl, Lewis's woodpecker, willow flycatcher, gray vireo, pinyon jay, juniper titmouse, veery, Bendire's thrasher, Grace's warbler, Brewer's sparrow, grasshopper sparrow, chestnut-collared longspur, black rosy-finch, brown-capped rosy-finch, and Cassin's finch.

Habitat loss due to alteration or destruction continues to be the major reason for the declines of many species (<http://www.fws.gov/migratorybirds/reports/BCC2008/BCC2008m.pdf>). When considering potential impacts to migratory birds the impact on habitat, including: 1) the degree of fragmentation/connectivity expected from the proposed project relative to before the proposed project; and 2) the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats. Continued private land development, surface disturbing actions in key habitats (e.g. riparian areas) and the proliferation of roads, pipelines, powerlines and trails are local factors that reduce habitat quality and quantity.

The CRVFO planning area provides both foraging and nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, aspen, pinyon-juniper woodlands, other

types of coniferous forests, and riparian and wetland areas support many bird species. The pinyon jay is characteristically found in pinyon/juniper woodlands and the Brewer's sparrow (*Spizella breweri*) is found within sagebrush habitats. Other Birds of Conservation Concern may also occur locally. Many species of raptors (red-tailed hawks, golden eagles, northern goshawks, Cooper's hawks, kestrels and owls) not on the Fish & Wildlife Service's Birds of Conservation Concern list also could occur in the area. Numerous raptors nest along the steep cliff and treed areas of the Colorado River and up tributary drainages located within these allotments. Prairie falcons, golden eagles, peregrine falcons, kestrels, red-tailed hawks, and great-horned owls are all known to nest within or adjacent to these allotments.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Limited bird count or species data exists for the area; however the greater concern is the continued fragmentation of habitat and losses of large blocks of contiguous habitat required by many bird species. No intentional take of native bird species is anticipated under the proposed action. Grazing by cattle could result in the accidental destruction of ground nests through trampling. This impact is expected to be minimal and isolated and would not influence populations of migratory birds on a landscape level. Given current overall existing habitat condition, livestock grazing, as proposed, will not negatively affect the degree of fragmentation/connectivity expected relative to the existing condition of the allotment and the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats would also likely not change. Overall it is unlikely that, livestock grazing in both numbers and duration, as proposed would not reduce the extent or quality of habitat available for migratory bird breeding functions.

No Grazing Alternative. Under this alternative, no livestock grazing would occur on these allotments and there would be no direct or indirect impacts to migratory birds from livestock use. This alternative would leave more residual plant growth and would benefit all migratory bird species with a possible exception of the Brewer's sparrow that may benefit from maintained grass and shrub heights and densities. A no grazing alternative would leave residual growth and the year's vegetative growth that would support habitat cover and nesting material necessary for breeding behavior.

SENSITIVE, THREATENED, AND ENDANGERED WILDLIFE

AFFECTED ENVIRONMENT.

Bald Eagle (*Haliaeetus leucocephalus*). On June 28, 2007 the Department of Interior took the Bald Eagle off the Endangered Species List. The Bald Eagle remains on the BLM Sensitive Species list and reserves protections under the Bald and Golden Eagle Protection Act of 1940 against "take" of eagles. Winter habitat associated with some of these permit renewals represents foraging grounds for prey and carrion prior and during breeding and nesting time frames from mid-January through mid-February. Additionally the Spring Creek allotment has 133 acres of nesting habitat which includes a ½ mile radius buffer around a nearby nest site that provides habitat needed for reproductive behavior.

Canada Lynx (*Lynx Canadensis*). Canada lynx are considered threatened under the Endangered Species Act of 1973. Bull Gulch has 5,260 acres or 52% of the allotment is within the Castle Peak landscape linkage area. A “linkage area” is defined as habitat that provides landscape connectivity between blocks of habitat that provide movement opportunity for lynx. These areas are to be managed as broad areas of habitat where both lynx and associated prey species can find food, shelter and security. (LCAS Revised definition, Oct. 2001).

Programmatic Section 7 Consultation with the USFWS was completed for the GSFO grazing program specific to Canada lynx on December 4, 2003. Through the issuance of a Biological Opinion, the FWS concurred with the BLM’s determination that livestock grazing as administered by the CRVFOFO “May Effect, but is Not Likely to Adversely Affect”, Canada Lynx. This determination was based on the fact that the CRVFO has the Colorado Land Health Standards and Guidelines in place, and through the Land Health Assessment process, is managing grazing allotments to move toward, maintain, or exceed the Land Health Standards. In addition, as grazing permits are renewed, a Land Health Standard 4 evaluation is being conducted on all allotments containing Canada Lynx habitat or occurring within an identified Landscape Linkage. If livestock grazing is determined to be a significant factor in failing to meet or achieve Standard 4, then actions necessary to move the subject allotment toward meeting the Standard will be initiated prior to the next authorized grazing period. As livestock grazing permits are renewed, the Guidelines will be reviewed to assure that permits are in conformance with one or more of the following:

- Periodic rest or deferment from grazing during the critical [plant] growth periods
- Adequate [plant] recovery and regrowth periods
- Opportunity for seed dissemination and seedling establishment

The Bull and Trail Gulch allotments will be under annual rest rotation schedules, meaning that different pastures in different areas will not be grazed each year. This system allows for periodic growing season rest, adequate regrowth periods, and adequate opportunity for seed dissemination and seedling establishment in the landscape linkage.

Greater Sage-grouse (*Centrocercus urophasianus*). The greater sage-grouse, a species restricted to sagebrush rangelands in western North America, is declining across much of its range (CGSGCP 2008). In 2010, the U.S. Fish and Wildlife Service (USFWS) added the greater sage-grouse to the Endangered Species Act “Candidate” list. The reason for the listing is tied to reduced habitat quality and quantity throughout its range. This local sage-grouse population relative to the proposed grazing permits is small (<500 birds) and represents the very southeastern range of the bird’s habitat, which leaves it vulnerable to extirpation.

The North Eagle/South Routt Greater Sage-grouse Working Group developed a specific conservation plan that has identified issues contributing to this population’s general decline including: powerlines/utilities, habitat change (pinyon-juniper woodland encroachment), disease, pesticides, land use changes and residential development, reservoir development and other water related issues, recreation, predation, grazing (both wild and domestic), and hunting (NESRGSGWG 2004). Over 2,000 acres of vegetation treatments have been conducted by BLM since the development of the North Eagle/South Routt conservation plan, primarily in the Deer Pen allotment to improve habitat conditions for sage-grouse.

Colorado Parks and Wildlife developed the greater sage-grouse GIS data set identifying Preliminary Priority Habitat (PPH) and Preliminary General Habitat (PGH) within Colorado. This data is a combination of mapped grouse occupied range, production areas, and modeled habitat (summer, winter, and breeding). PPH is defined as areas of high probability of use (summer or winter, or breeding models) within a 4 mile buffer around leks that have been active within the last 10 years. Isolated areas with low activity were designated as general habitat. PGH is defined as greater sage-grouse occupied range outside of PPH. Table 10 below reflects these habitats within the permits proposed for renewal.

Table 10. Greater Sage-Grouse Habitat

Allotment	PPH acres/%	PGH acres/%
Bull Gulch	0	1,725 / 16%
Spring Creek	587 / 12%	408 / 8%
Trail Gulch	0	127 / 1%
Total Acres	587	2,260

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Bald Eagle (*Haliaeetus leucocephalus*). Current land health suggests that these allotments have sufficient vegetation structure and components necessary to support upland prey species and big game for Bald Eagle winter foraging opportunity. Effects from livestock grazing typically are not within the parameters of disrupting nesting eagles as they do not directly disrupt nests sites. Impacts from the proposed action are not expected to impact Bald Eagles.

Canada Lynx (*Lynx canadensis*). Since there are no changes planned in the proposed action from the previous determination and recent land health determinations show achieving standards for threatened and endangered species under current management, there is no reason to believe that the proposed action would adversely impact lynx. Recent grazing utilization in Bull Gulch have found slight use (6-20%) by livestock thus minimally impacting the structural quality of this habitat and would not be a factor on how lynx use this allotment in relation to the landscape linkage. Under the proposed action it is expected that adequate residual vegetation would remain to support movement, prey forage opportunity, and security for lynx.

Greater Sage-grouse (*Centrocercus urophasianus*). The BLM is signatory to the Colorado Greater Sage-Grouse Conservation Plan of 2008 (CGSGCP). Agency policy and procedures are also guided by the 2012 Instruction memorandum 2012-043 that incorporates interim conservation strategies for proposed activities that could affect greater sage-grouse and their habitat until a long term strategy is developed. The proposed action is compliant with these best management practices for grazing actions.

Cattle and horse grazing can reduce vegetation heights and covers needed to support sage grouse lifecycles. Although not documented, it is likely that nesting could take place on these permits, which could cause trampling of nests and reduce recruitment of this population; particularly in

the allotments which initiate grazing in early May-June which coincides with nesting and early brood rearing time frames.

Chick survival has been identified as a population “sink”, where chicks are not surviving past the brood rearing period of the spring through summer (CGSGCP 2008). Causes for low chick recruitment can indirectly be attributed to overgrazing that would cause less residual herbaceous heights necessary for sage grouse survival such as concealment from predation. Low herbaceous heights may also cause avoidance behavior or brood abandonment near mesic areas that hold critical forb and insect production needed for brood development. Mesic areas are often grazed heavily and receive proportionately high soil compaction that impacts vegetation’s ability to grow. Adequate cover and forb production in these areas is essential as these riparian areas represent feeding grounds for developing broods.

Grass height and cover affect sage grouse nest site selection and success (Wakkinen 1990, Gregg 1991, Gregg et al. 1994, DeLong et al. 1995, Sveum et al. 1998 [CGSGCP 2008]). Nesting selection is not uniform across the range and is documented that 80% of females will select nest sites within 4 miles of a lek site (Peterson 1980, Haulslitner 2003A, D. Apa, CPW, unpublished data, K. Giesen, retired CPW, unpublished data [CGSGCP 2008]). Approximately 12% of the Spring Creek allotment (587 acres) lies within 4 miles of a lek site. Nesting activities could potentially be directly impacted by trampling or indirectly by grazing herbaceous nest cover as hatching typically starts around mid-May and continues through July. However, more recent assessments of this upland habitat portion within Spring Creek in 2013 show that the sagebrush and herbaceous cover and densities are not capable of supporting sage grouse nesting habitat (D. Long, S. Ringer professional judgment based on structural habitat guidelines outlined in the CGSGCP). These habitat inadequacies are thought to be related to historic overgrazing and pinyon-juniper (pinyon-juniper) woodland encroachment that is prevalent in the area. Pinyon-juniper removal habitat treatments were conducted in 2013 on this allotment, and while not expected to completely off-set impacts of grazing, are expected to help restore sagebrush communities in this area and thus improve conditions for sage-grouse and better distribute livestock and big game grazing pressures.

The sage-grouse habitat associated with Bull Gulch Common and Trail Gulch represents stringers/flats of sagebrush and ridges of mixed mountain shrub communities that are capable of supporting sage-grouse winter habitat. Additionally some springs and water sources may provide valuable brood rearing habitat. Historic leks in the area are currently believed to be inactive. Upland utilization limits and riparian stubble heights (50% utilization of upland herbaceous vegetation and 4” stubble height for riparian) described in the permit terms and conditions should be adequate to conserve sage-grouse and meet their vegetative habitat needs within all three allotments.

No Grazing Alternative. Lynx and sage grouse would likely benefit from this alternative as lack of livestock grazing would allow for greater vegetation heights and densities. This scenario would increase prey species density potential and create more structural obscurity needed for lynx movement. Greater residual and current year’s growth would allow for greater species richness and river bank stability with fewer impacts to water quality which would also benefit bald eagles.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 4 FOR SPECIAL STATUS TERRESTRIAL WILDLIFE.

Bull and Trail Gulch Allotments. Land Health summaries completed in September of 2006 for the Sweetwater to Burns area describe small amounts of mapped sage grouse habitat including 1 inactive lek, approximately 400 acres of winter range, and some limited nesting/production habitat is found within the watershed. The lek and winter range habitat are located on private lands in the southeast portion of the watershed. Mapped nesting habitat is located on BLM lands within the Trail Gulch allotment in the southwest portion of the watershed.

Based on the current status of sage-grouse in the assessment area, Standard 4 for sage-grouse is not being met on a watershed basis within the assessment area. Although all of the individual sites assessed within the landscape that contained mapped sage grouse habitats were meeting Standard 3, a combination of habitat fragmentation, recreation and human use, loss of habitat, fire suppression, and to a lesser degree habitat condition resulting from drought and browse decadence are all negatively affecting sage-grouse use of the area. These effects are occurring at a landscape level within and beyond the allotment and watershed boundary.

The issues with regard to sage-grouse habitat are only occurring within the sagebrush communities in the assessment area. Per reporting requirements, all of the allotment acreage was reported as not meeting Standard 4, when in reality with regard to habitat condition, only portions of the sagebrush habitats located in the watershed are in less than desired condition. For this reason, the entire Trail Gulch allotment was considered not to be meeting Standard 4 at the time of the assessment.

Livestock was not identified as a cause for not achieving standard 4. Additionally, DAU objectives for both mule deer and elk have been lowered and revised since the previous assessment. Big game populations are currently within population objectives and with less browsing pressure from big game, future habitat conditions are expected to improve. The BLM has performed over 1,400 acres of habitat improvement projects since the last LHA, which are also expected to improve conditions for sage-grouse. Due to this information and a shortening of the Scott grazing permit on the Bull Gulch allotment from 4 months to 2 months, the proposed action is not expected to be a contributing factor in the failure to achieve Land Health Standard 4 for sage-grouse or any other threatened, endangered, or sensitive wildlife species.

With a combination of proposed grazing, adjusted big game objectives and habitat improvement treatments, it is expected that these allotments will make progress toward meeting Land Health Standard 4 for Threatened and Endangered Species.

Spring Creek Allotment. This allotment is located within the Burns to State Bridge (2006) Land Health Assessment area. A determination of findings from this assessment was completed in December 2007 (Burns to State Bridge) and found to be meeting for sage-grouse in standard 4 for threatened and endangered species. The majority of the sites assessed contained a healthy shrub component, with a productive understory of grasses and forbs. Sage-grouse sign was found at 10 sites scattered throughout the watershed. In some areas, sagebrush was too dense and these areas would be good candidates for mechanical treatments or fire to improve sage-grouse habitat. Sagebrush also showed moderate to heavy browsing by big game at 10 sites.

Encroachment of pinyon-juniper trees into sagebrush stands was a common problem in the watershed and was noted at 16 sites. Some fragmentation from roads, fences, powerlines and residential development does exist within the watershed. None of these issues were extreme enough to degrade habitat to the extent that would preclude use by sage-grouse.

In 2013 approximately 600 acres of sage-grouse habitat was treated for pinyon-juniper encroachment into sagebrush habitat. These treatments are expected to improve sage-grouse habitat in this allotment and alleviate grazing pressures associated with wildlife and livestock. With these treatments in combination with the proposed grazing, it is expected that Land Health Standard 4 will make progress towards meeting Standard 4 for Threatened and Endangered Species.

WILDLIFE TERRESTRIAL

AFFECTED ENVIRONMENT.

Reptiles. Reptile species most likely to occur in the proposed allotment areas include the western fence lizard (*Sceloporus undulatus*) and gopher snake (bull snake) (*Pituophis catenifer*) in xeric shrublands or grassy clearings and the western terrestrial garter snake (*Thamnophis elegans*) along creeks/riparian areas. Other reptiles potentially present along creeks, although more commonly found at lower elevations than the site, are the milk snake (*Lampropeltis triangulum*) and smooth green snake (*Opheodrys vernalis*).

Passerine Birds. Passerine (perching) birds are commonly found in the assessment area include: the American robin (*Turdus migratorius*), western scrub-jay (*Aphelocoma californica*), black-capped chickadee and mountain chickadee (*Poecile atricapilla* and *Poecile gambeli*), cedar waxwing (*Bombycilla cedrorum*), crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), sparrow spp., humming birds (*Selasphorus platycercus* and *Archilochus alexandri*), and black billed magpie (*Pica pica*).

Gallinaceous Birds. Gallinaceous (game birds) found in the area include: ring-necked pheasant (*Phasianus colchicus*), dusky grouse (*Dendragapus obscurus*), and wild turkey (*Meleagris gallopavo*).

Waterfowl. The Colorado River, numerous creeks, reservoirs, ponds, and associated riparian vegetation provide habitat for a wide variety of waterfowl and shorebirds. Common species include great blue heron (*Ardea Herodias*), Canada goose (*Branta Canadensis*), mallard (*Anas platyrhynchos*), green-winged teal (*Anas carolinensis*), common merganser (*Mergus merganser*), northern pintail (*Anas acuta*).

Birds of Prey. Birds of prey (eagles, falcons, hawks, and owls) may migrate, nest, or be year-round residents in the area. Common raptor species in the area include the: northern harrier (*Circus cyaneus*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), northern goshawk (*Accipiter gentilis*), red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*), rough-legged hawk (*Buteo lagopus*), American kestrel (*Falco sparverius*), barn owl (*Tyto alba*), flammulated owl (*Otus flammeolus*), western screech-owl (*Otus*

kennicottii), great horned owl (*Bubo virginianus*), northern pygmy-owl, long-eared owl (*Asio otus*), boreal owl (*Aegolius funereus*), northern saw-whet owl (*Aegolius acadicus*).

Mammals. Numerous small mammals reside within the assessment area, including ground squirrels (*Spermophilus* spp.), chipmunks (*Neotamias* spp.), rabbits (*Sylvilagus* spp.), skunks (*Mephitis mephitis*), and raccoons (*Procyon lotor*). Many of these small mammals provide the main prey for raptors and larger carnivores. These species are most likely to occur along the drainages, near the margins of dense oakbrush, in pinyon-juniper woodland, or in the small area of aspen and spruce/fir. Larger carnivores expected to occur include bobcat (*Lynx rufus*) and coyote (*Canis latrans*). Black bears (*Ursus americanus*) make use of oaks and the associated chokecherries and serviceberries for cover and food.

Big Game. Big game occurring in the assessment area includes bighorn sheep, mule deer, moose, Rocky Mountain elk, pronghorn, and mountain lion. Mule deer and elk usually occupy higher elevations, forested habitat, during the summer and then migrate to sagebrush-dominant ridges and south-facing slopes at lower elevation in the winter. BLM lands provide a good portion of the undeveloped habitat available to big game. CPW classifies and maps big game habitats in Colorado. The ranges for big game generally overlap in the assessment area.

Game Management Units (GMU) 26 and 35 are included in the allotment areas. The population of big game is managed within GMUs to have an objective of healthy herd number of animals and manage those numbers by providing public hunting opportunities. Mule deer and elk are the primary game species within these units that require extensive management efforts. Mule deer are at herd objective for both 26 and 35. Elk are meeting objectives as well in 35, however are exceeding population objectives for GMU 26. The objective range is 32,000 to 39,000 and includes multiple GMU's including the greater Flat Top region. The 2012 herd estimate for GMU 26 was 42,890; alternatively, this population surplus is reflected in the 2007 Burns to State Bridge land health standards that describe hedging and overutilization of browse vegetation on big game winter ranges by wildlife use.

Bighorn sheep habitat overlaps significant portions of these allotments, particularly in Bull Gulch which is considered to have 98% overlap. However, conflicts for forage are not expected because these animals would generally be considered to be from Deep Creek or Derby herds and would not compete for resources as these herds are small (30+ individuals) and widely distributed across their range.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Grazing directly poses a trampling hazard for some smaller reptile/amphibious species as well as ground nesting birds. Indirectly, grazing has the potential to reduce both residual and current year's herbaceous growth that generally benefits terrestrial wildlife for both food and cover needs. The proposed permits terms and conditions show an acceptable number and overall distribution of cattle over time. Additionally the terms and conditions of the permit illustrate an adequate amount of each growing season's herbaceous growth to provide food and cover needs for existing species and their populations. Grazing impacts to terrestrial species should be minimal under the proposed action.

No Grazing Alternative. This alternative would benefit most terrestrial species of wildlife in the form of food and cover. Lack of trampling and soil compaction involved with no grazing would also indirectly benefit all terrestrial wildlife species within these allotments. However, lack of grazing may negatively impact some ground nesting birds and other species such as raptors that benefit from edge and maintained vegetation heights. In addition, lack of livestock grazing may further inflate unsustainable levels of elk that are already above herd objectives in GMU 26.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 3 FOR TERRESTRIAL WILDLIFE.

Bull and Trail Gulch Allotments. Land Health summaries completed in September of 2006 for the Sweetwater to Burns area describe big game browsing as being a contributing factor in the decadence and lack of recruitment in some sagebrush communities. Since this assessment, big game population objectives in the DAU were lowered and more hunting permits were issued including a late season cow elk hunt. As discussed above, population objectives are now being met for this DAU and the general condition of habitat is expected to improve. Due to this alleviated pressure, livestock grazing in these allotments is expected to be a compatible land use to maintain Land Health Standard 3 for wildlife.

Spring Creek Allotment. A determination of findings from this assessment was completed in December 2007 (Burns to State Bridge) and found sagebrush and mixed mountain shrub species were in less-than-desirable condition due to concentrated winter use by both mule deer and elk. Sagebrush and other desirable browse plants, such as serviceberry, were moderately to severely hedged resulting in a reduction in productivity and vigor and an increase in decadence or mortality. The heavily browsed areas were concentrated in the lower elevations or on south-facing slopes in Spring Creek.

Since the assessment, big game population objectives within the DAU were lowered and more hunting permits were issued including a late season cow elk hunt, yet populations remain above objectives. Continued big game hunting pressure combined with recent pinyon-juniper removal projects aimed at improving sagebrush communities in this allotment; it is expected that big game impacts should be lessened over time and eventually improve land health. Proposed grazing associated with the Spring Creek allotment is expected to be compatible with achieving overall Land Health Standard 3 for the Burns to State Bridge assessment area as these habitats improve.

CUMULATIVE EFFECTS. *Soil and Water.* Cumulative impacts to soil and water resources may occur from existing roads/railroads, trails, fence lines and power lines throughout the allotments. These types of infrastructure can contribute to increased surface runoff and accelerated erosion, especially where proper drainage is lacking or the topography is steep. Roads, trails, and utility lines may require maintenance with heavy equipment, which can have both direct and indirect effects to soil and water resources. Overall, these allotments encompass a large land mass, with relatively low density of infrastructure occurring across the landscape. Thus, it is assumed that cumulative effects to soil and water are minor if proper best management practices are implemented.

TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED. The following Tribes, individuals, organizations and agencies were consulted:

- Southern Ute Tribe,
- Ute Tribe of the Uinta and Ouray Bands,
- Ute Mountain Ute Tribe, and
- Niki Luark (grazing permittee)
- Keith A. Scott (grazing permittee)

LIST OF PREPARERS. Members of the CRVFO interdisciplinary team who participated in the impact analysis of the Proposed Action and alternatives, development of appropriate mitigation measures, and preparation of this EA are listed in Table 11 along with their areas of responsibility.

Table 11. BLM Interdisciplinary Team Authors and Reviewers

<i>Name</i>	<i>Title</i>	<i>Areas of Participation</i>
Everett Bartz	Rangeland Management Specialist	Livestock grazing and Riparian
Carla DeYoung	Ecologist	Areas of Critical Environmental Concern; T/E/S Plants; Vegetation; Land Health Standards
Kimberly Miller	Outdoor Recreation Planner	Wilderness, Wild and Scenic Rivers, Recreation
Darren Long	Wildlife Biologist	T/E/S wildlife, Migratory birds, Terrestrial and Aquatic Wildlife
Greg Wolfgang	Outdoor Recreation Planner	Visual Resources, Access and Travel
Kristy Wallner	Rangeland Management Specialist	Invasive, Non-Native species (Noxious weeds)
Pauline Adams	Hydrologist	Water, Soil, Air Quality, Geology

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UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
COLORADO RIVER VALLEY FIELD OFFICE
SILT, COLORADO

FINDING OF NO SIGNIFICANT IMPACT

DOI-BLM-N040-2014-0009-EA

Finding of No Significant Impact

I have reviewed the direct, indirect and cumulative effects of the proposed action documented in the EA referenced above. The effects of the proposed action are disclosed in the Alternatives and Environmental Consequences sections of the EA. Implementing regulations for NEPA (40 CFR 1508.27) provide criteria for determining the significance of the effects. Significant, as used in NEPA, requires consideration of both *context* and *intensity* as follows:

(a) Context. This requirement means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short and long-term effects are relevant (40 CFR 1508.27):

(b) Intensity. This requirement refers to the severity of the impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following are considered in evaluating intensity (40 CFR 1508.27).

1. Impacts that may be both beneficial and/or adverse.

Impacts associated with this livestock grazing permit renewal are identified and discussed in the Affected Environment and Environmental Consequences section of the EA. The proposed action will not have any significant beneficial or adverse impacts on the resources identified and described in the EA.

2. The degree to which the proposed action affects health or safety.

The proposed activities will not significantly affect public health or safety. The purpose of the proposed action is to allow for multiple uses while maintaining or improving resource conditions to meet standards for rangeland health in the allotment. Similar actions have not significantly affected public health or safety.

3. Unique characteristics of the geographic area such as prime and unique farmlands, caves, wild and scenic rivers, wilderness study areas, or ACECs.

Within the allotment area are the Blue Hill ACEC, Bull Gulch ACEC, and Bull Gulch WSA.

4. The degree to which the effects are likely to be highly controversial.

The possible effects of continued livestock grazing are not likely to be highly controversial.

5. The degree to which the effects are highly uncertain or involve unique or unknown risks.

The possible effects on the human environment are not highly uncertain nor do they involve unique or uncertain risks. The technical analyses conducted for the determination of the impacts to the resources are supportable with the use of accepted techniques, reliable data, and professional judgment. Therefore, I conclude that there are no highly uncertain, unique, or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration.

This EA is specific to the Spring Creek, Bull Gulch and Trail Gulch Allotments. It is not expected to set precedent for future actions with significant effects or represent a decision in principle about a future management consideration in or outside of this allotment.

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

The area covered by the proposed action only comprises a small portion of the watershed. Cumulatively, many of the future actions planned on private and other lands may have some undetermined effect on wildlife including special status species habitat. The proposed action would create negligible landscape-level cumulative impacts to wildlife when viewed in conjunction with those activities currently occurring and reasonably certain to occur on adjacent private/other lands.

8. The degree to which the action may adversely affect scientific, cultural, or historical resources, including those listed in or eligible for listing in the National Register of Historic Places.

Of the 202 cultural resources identified, 38 have been determined eligible or potentially eligible for the National Register of Historic Places. Subsequent site field visits, inventory, and periodic monitoring may have to be done to identify if other historic properties are present as well as determine if there are impacts to these properties within the term of the permit and as funds are made available. If the BLM determines that grazing activities adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO. The EA discloses the adverse impacts that could occur to cultural resources from livestock grazing.

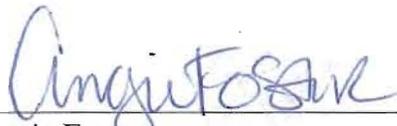
9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The analysis determined that there would be no detrimental effects on Threatened or Endangered species within the assessment area.

10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The proposed action does not violate or threaten to violate any Federal, State or local laws or requirements imposed for the protection of the environment.

Based upon the review of the test for significance and the environmental analyses conducted, I have determined that the actions analyzed in the EA will not significantly affect the quality of the human environment. Accordingly, I have determined that the preparation of an Environmental Impact Statement is not necessary for this proposal.



Angie Foster
Acting Authorized Officer
Colorado River Valley Field Office



Date

Figure 1. Bull Gulch Allotment 08625. Hatched area is Bull Gulch WSA

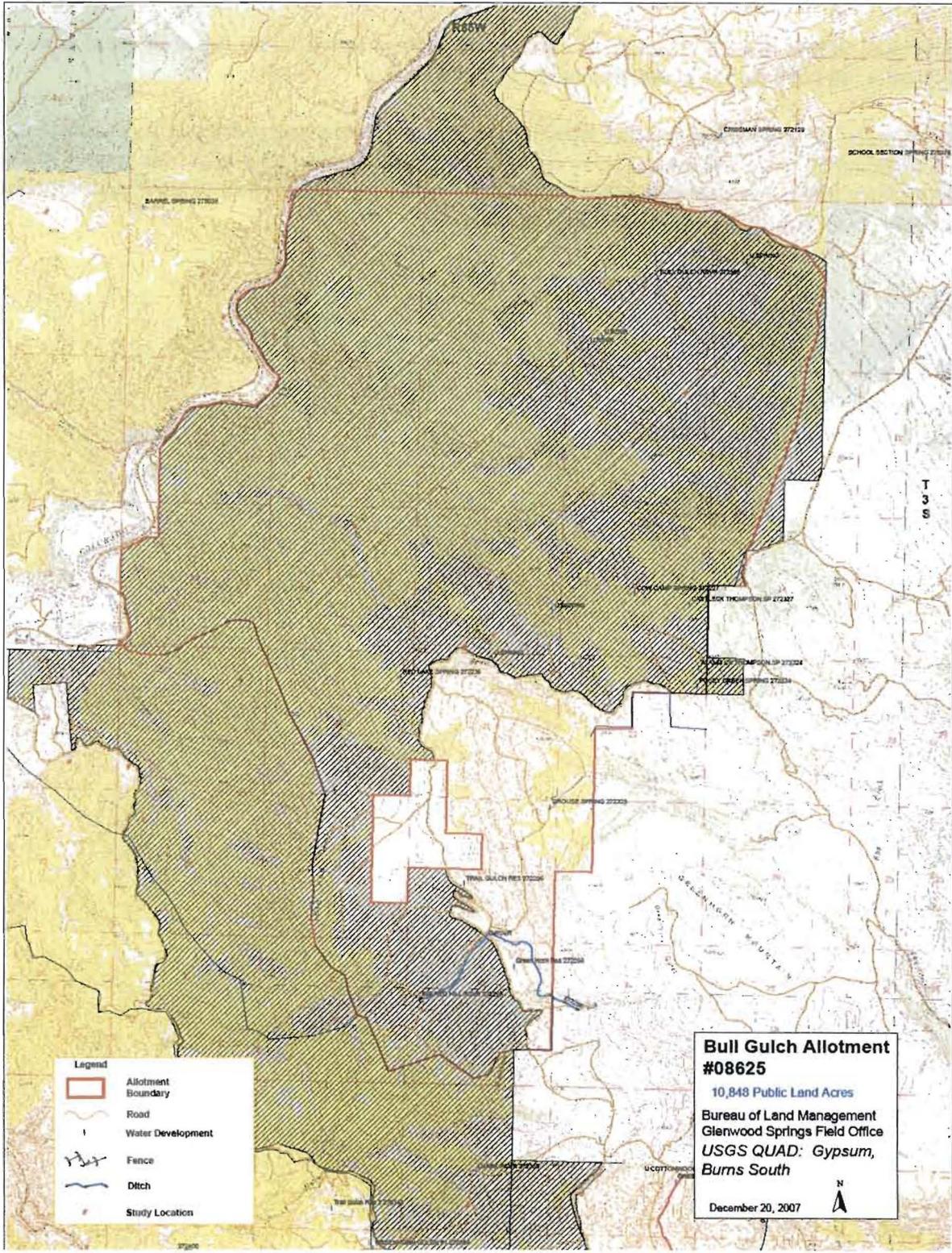


Figure 2. Spring Creek Allotment 08614 with Blue Hill ACEC outlined in purple.

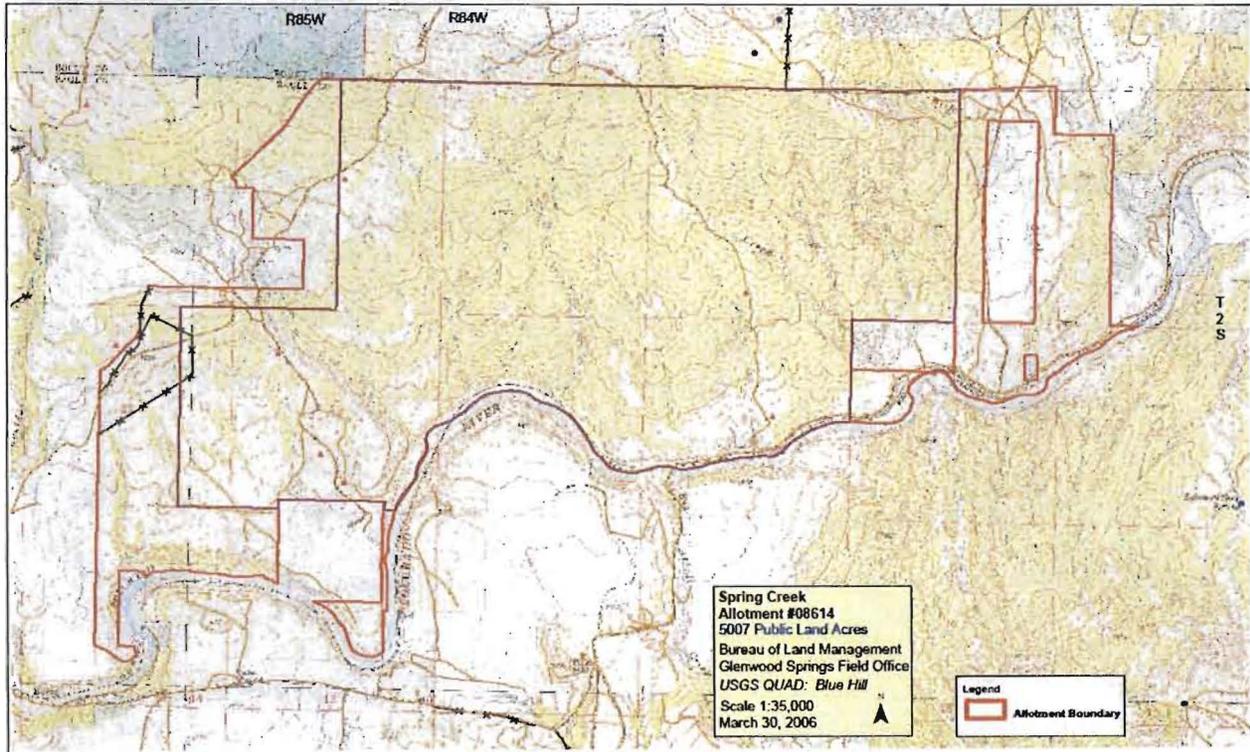


Figure 3. Trail Gulch allotment showing pastures and ACEC boundary

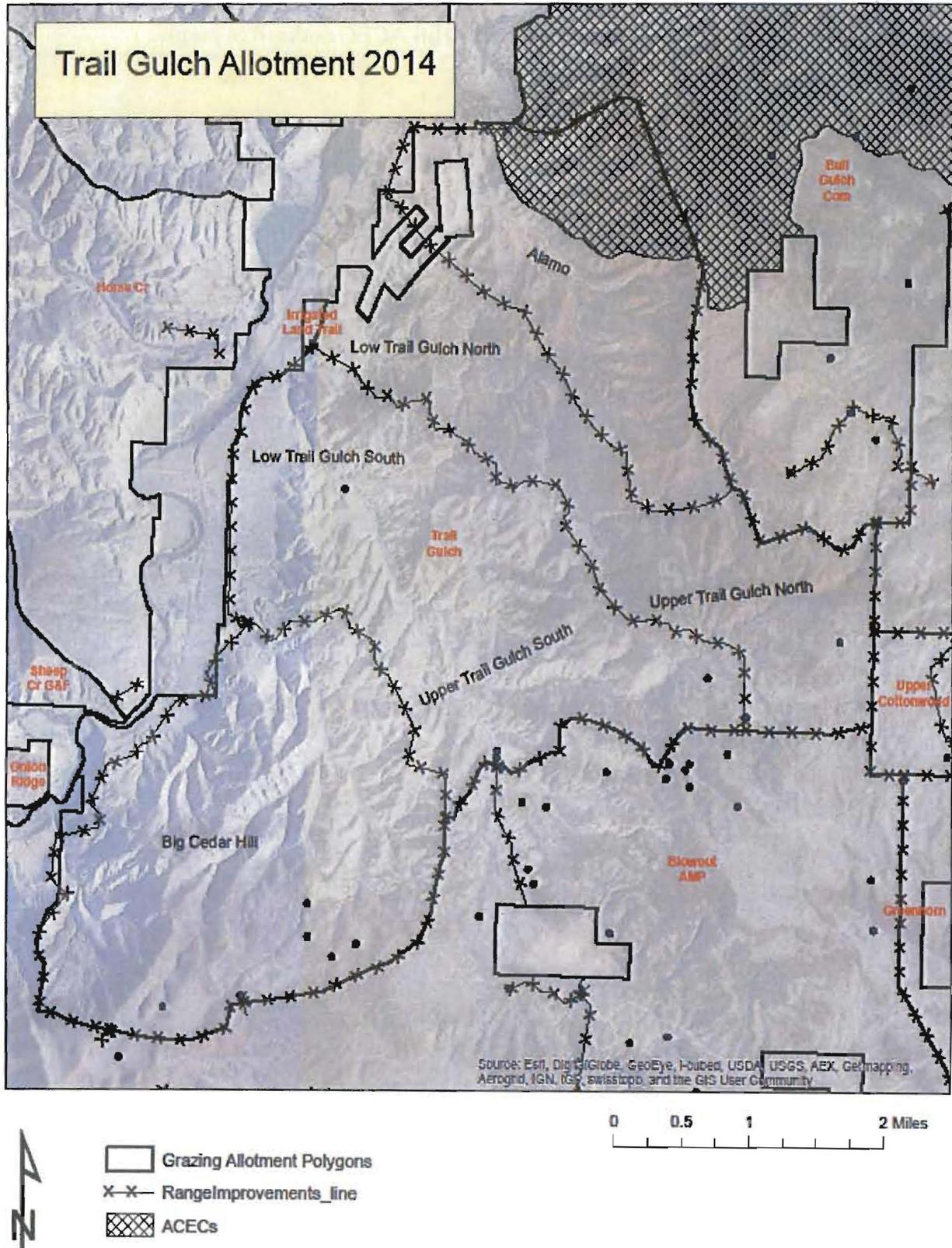


Figure 4. Bull Gulch Grazing Use Areas

