



United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Colorado River Valley Field Office
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ENVIRONMENTAL ASSESSMENT

DOI-BLM-CO-040-2014-0041 EA

CASEFILE NUMBERS. 0504547, 0504661

PROJECT NAME. Reissue 2 grazing permits on the Callahan Mountain (No. 08919), Kelly Gulch (No. 08921) and Smith Gulch (No. 08922) Allotments.

LOCATION. Garfield County, South of Silt, CO

LEGAL DESCRIPTIONS. T7S R96W Sections 3, 10-11, 14-15, 20-22, 28-29 (see attached allotment map).

APPLICANT. Grazing Permittees

PURPOSE AND NEED FOR ACTION. These permits/leases 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 permits/leases consistent with the provisions of the Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act, Roan Plateau Resource Management Plan Amendment, and the Colorado Public Land Health Standards.

The mission of the BLM is “to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations”. Land Health Standards and Guidelines for Livestock Grazing Management were developed between the BLM and the Colorado Resource Advisory Council to ensure that the mission of the BLM will be achieved.

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. This action was scoped internally with the NEPA Interdisciplinary Team on January 8, 2014. Issues raised during the internal scoping are itemized in table 6 and analyzed in Section 3 Affected Environment and Environmental Consequences.

A notice of public scoping was posted on the Colorado BLM’s Internet web page March 6, 2013 regarding grazing permits and associated allotments scheduled for renewal in 2013-2014. A

news release was posted on March 7, 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 permit renewal NEPA documents that have been initiated. They are generally posted approximately one month prior to the estimated completion date.

PROPOSED ACTION. The Proposed Action alternative is to renew 2 grazing permits with the following terms and conditions. The period of use will be expanded to allow for flexibility in timing of use. The allotments would only be used for 2-3 weeks each as described below in the terms and conditions. The Smith Gulch Allotment boundaries would be modified to avoid federally-listed plant populations in the western portion (see attached map). AUMs on the Smith Gulch Allotment would be reduced from 237 to 72 due to the adjustments in the allotment boundary and amount of forage available during the winter months. The permits will be issued for a 10-year period, unless the base property is leased for less, but for purposes of the 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. Scheduled grazing use, grazing preference, and terms and conditions for the proposed grazing permits are summarized below.

Table 1. Grazing Schedules.

Operator Name	Auth. No.	Allotment	Livestock Number	Livestock Kind	Begin Date*	End Date *	Public Land %	AUMs
Craig Bair Ranch Co.	0504547	Kelly Gulch	1000	Sheep	12/1	3/31	59	72
Craig Bair Ranch Co.	0504661	Callahan Mtn.	1000	Sheep	12/1	3/31	100	72
		Smith Gulch	1000	Sheep	12/1	3/31	100	72

Table 2. Grazing Preference AUMS.

Operator Name	Auth. No.	Allotment	Active	Suspended	Total
Craig Bair Ranch Co.	0504547	Kelly Gulch	72	132	204
Craig Bair Ranch Co.	0504661	Callahan Mtn.	72	162	234
		Smith Gulch	72	165	237

Other Terms and Conditions for Proposed Action. The timing of use on the Kelly Gulch, Smith Gulch, and Callahan Mountain Allotments may be adjusted annually within the dates on the permit as needed as long as the duration of use does not exceed the following limits:

- Kelly Gulch Allotment: 1000 Sheep for 20 days or 800 Sheep for 24 days
- Smith Gulch Allotment: 1000 Sheep for 11 days or 800 Sheep for 14 days
- Callahan Mtn. Allotment: 1000 Sheep for 11 days or 800 Sheep for 14 days

Sheep use would be authorized when there is sufficient snow cover to provide a source of water.

Sheep will be actively herded through the allotments to avoid excessive use in any one area.

Average utilization levels by livestock should not exceed 50% by weight on key grass species, and 40% of the key browse species current year's growth. Grazing in riparian areas should leave an average minimum 4-inch stubble height of herbaceous vegetation. If utilization is approaching allowable use levels, livestock should be moved to another portion of the allotment, or removed from the allotment entirely for the remainder of the growing season. Application of this term may be flexible to recognize livestock management that includes sufficient opportunity for regrowth, spring growth prior to grazing, or growing season deferment.

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 advance 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.

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 lands 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.

Other Grazing Use Currently Authorized. There is also one cattle permit on the Callahan Mtn. Allotment authorizing the following use:

Table 3. Other Existing Grazing Schedules.

Auth. No.	Allotment	Livestock Number	Livestock Kind	Begin Date	End Date	Public Land %	AUMs
0504759	Callahan Mtn.	26	Cattle	5/16	6/15	100	26

NO ACTION ALTERNATIVE. This alternative would involve reissuing 3 permits with current terms and conditions. The boundaries of the Smith Gulch Allotment would not be changed and the permit schedule would not allow for annual flexibility. Scheduled grazing use, grazing preference, and terms and conditions for the grazing permits are summarized below.

Table 4. Grazing Schedules.

Operator Name	Auth. No.	Allotment	Livestock Number	Livestock Kind	Begin Date	End Date	Public Land %	AUMs
Craig Bair Ranch Co.	0504547	Kelly Gulch	580	Sheep	10/20	11/20	59	72
Craig Bair Ranch Co.	0504661	Smith Gulch	970	Sheep	2/13	3/21	100	236
Craig Bair Ranch Co.	0507512	Callahan Mt.	1000	Sheep	11/20	11/30	100	72

Table 5. Grazing Preference AUMs.

Operator Name	Auth. No.	Allotment	Active	Suspended	Total
Craig Bair Ranch Co.	0504547	Kelly Gulch	72	132	204
Craig Bair Ranch Co.	0504661	Smith Gulch	237	0	237
Craig Bair Ranch Co.	0507512	Callahan Mtn.	72	162	234

Other Terms and Conditions for the No Action Alternative applicable to Authorization Numbers 0504661 and 0507512. 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 BLM shall be given 48 hours advance 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.

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 lands 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.

Other Terms and Conditions for the No Action Alternative Applicable to Authorization Number 0504547. If an assessment of rangeland health results in a determination that changes are necessary in order to comply with the standard for public land health and the guidelines for livestock grazing management in Colorado, this permit will be reissued subject to revised terms and conditions.

Additional stipulations may be required over the term of the permit if new cultural sites are identified that have the potential to be adversely impacted from livestock grazing, or if Native American concerns need to be addressed.

NO GRAZING ALTERNATIVE. Under this alternative the grazing permits described in the Proposed Action would be cancelled. As a result, no cattle grazing would be authorized on the Callahan Mtn., Kelly Gulch and Smith Gulch Allotments. This alternative would initiate the process in accordance with 43 CFR parts 4100 and 1600 to eliminate grazing on these allotments and would amend the resource management plan.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL. No other alternatives were considered.

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):

Decision Number/Page: The action is in conformance with Administrative Actions (pg. 5) and Livestock Grazing Management (pg. 20).

Decision Language: Administrative actions states, “Various types of actions will require special attention beyond the scope of this plan. Administrative actions are the day-to-day transactions required to serve the public and to provide optimal use of the resources. These actions are in conformance with the plan”. The livestock grazing management objective as amended states, “To provide 56,885 animal unit months of livestock forage commensurate with meeting public land health standards.”

_____ 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

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.

A Formal Land Health Assessment was conducted in the Rifle West Watershed in 2005 which included the Callahan Mtn., Kelly Gulch, and Smith Gulch Allotments. The Kelly Gulch and Callahan Mtn. Allotments were considered to be meeting all the standards or making progress towards meeting all the standards at the time of the assessment. The Smith Gulch Allotment was not meeting Standard 3 for healthy plant communities due to the abundance of cheatgrass and the lack of other functional groups. Past livestock grazing activities were considered to be a contributing factor.

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 below.

AFFECTED ENVIRONMENT AND 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 consequences 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 6). Only those elements that are present and potentially affected are described and brought forth for detailed analysis

Table 6. Programs, Resources, and Uses Potentially Affected.

Programs, Resources, and Uses (Including Supplemental Authorities)	Potentially Affected?	
	Yes	No
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	

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#1015-3) was completed for the Kelly Gulch #08921, Smith Gulch #08922, and Callahan Mountain Common #08919 Allotments on December 9, 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.

The table 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 7. 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)
Kelly Gulch #08921	BLM	1604.5	74.1	95.5%	5	Moderate	Recommend inventory 1.1 new acres and no sites to monitor
	Private	28.7	319.6	8.2%			
Smith Gulch #08922	BLM	1173.9	1199	49.4%	3	Moderate	Recommend no new acres to inventory and monitor sites 5GF.4139 & 5GF.4328
Callahan Mtn. Com. #08919	BLM	956.1	674.4	58.6%	18	Moderate-High	Recommend inventory 2.2 new acres and no sites to monitor
	Private	28.7	184.4	13.5%			

A total of eight cultural resource inventories (CRVFO CRIR# 591, 1175, 772, 1102-1, 1105-21, 1107-25, 1111-4, GJFO 15911-01) have been previously conducted within the Kelly Gulch Allotment #08921 resulting in the survey coverage of 1996.7 acres at a Class III level. Five cultural resources have been documented with these inventories and include one eligible historic site (5GF.4554.4), one needs data prehistoric site (5GF.2907), one not eligible historic site (5GF.2502), and two not eligible prehistoric isolated finds (5GF.2911, 5GF.4458) for the

National Register of Historic Places (NRHP). Looking at the GLO records from 1890 and 1921 for T7S R96W there are no indicators for historic sites.

Eight cultural resource inventories (CRVFO CRIR# 591, 954, 1175, 1098-7, 1005-9, 1105-21, 1109-20, 1109-11, 1109-19, 1108-10, 1111-4, 1112-22; OAH# GF.LM.NR987) have been previously conducted within the Smith Gulch Allotment #08922 resulting in the survey coverage of 1173.9 acres at a Class III level. Three cultural resources have been documented with these inventories and include two eligible prehistoric sites (5GF.4139, 5GF.4328) and one not eligible prehistoric site (5GF.654.5) for the National Register of Historic Places (NRHP). Looking at the GLO records from 1890 and 1921 for T7S R96W there is no indicators for historic sites; however, on the 1893 survey there is a historic ditch and dam present, it is difficult to determine if both are on BLM lands.

In the Callahan Mountain Common Allotment #08919, 38 inventories (CRVFO CRIR# 108, 591, 1285SA, 869A, 869B, 906, 931, 953, 949,955, 995, 1088, 1107, 1150, 1216, 1199, 1216, 1223, 1229, 1274, 94104, 94101, 94106, 1196-5, 1197-8, 1197-6, 1198-3, 1100-4, 1104-1, 14504-4, 1106-6, 1107-25, 1107-33, 1111-4, GJFO 15911-01; OAPH# GF.LM.NR987) have been previously conducted within resulting in the survey coverage of 984.8 acres at a Class III level. Eighteen cultural resources have been documented with these inventories and include one eligible historic site (5GF.4554.4), four needs data historic site (5GF.4553.3, 5GF.4553.4, 5GF.4553.5, 5GF.2935.3), one needs data prehistoric site (5GF.780), four not eligible prehistoric sites (5GF.2435-5GF.2437, 5GF.156), one no assessment given prehistoric site (5GF.350), one not eligible historic isolated find (5GF.3195), four not eligible prehistoric isolated finds (5GF.1658, 5GF.1659, 5GF.579, 5GF.1657), one eligible paleontological site (5GF.2127), and one not eligible paleontological site (5GF.2131) for the National Register of Historic Places (NRHP). Looking at the GLO records from 1890 and 1921 for T7S R96W there are no indicators for historic sites.

ENVIRONMENTAL CONSEQUENCES.

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 gullyng, 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.

Common to all Alternatives. Based on the affected environment analysis, portions of allotments may require additional inventory in areas livestock concentrate, areas of known historic activity, or monitoring of known cultural resources. Table 7 summarizes additional inventory needs and known sites to monitor.

A small portion of the Kelly Gulch and Callahan Mountain Common Allotments totaling 3.2 acres is recommended to be surveyed within the term of this permit. Two sites (5GF.4139 & 5GF.4328) are recommended to be monitored within the Smith Gulch Allotment. New survey

areas were determined by identifying areas where livestock concentrate, specifically around water sources, and in areas where historic sites are likely to occur based on archival data. New range improvements, maintenance of existing range improvements, or additional feeding areas may require cultural resource inventories, monitoring, and/or data recovery.

Proposed Action. *All Allotments.* Changes in livestock numbers and adjustments in the allotment boundary proposed in this alternative will help reduce potential impacts to cultural resources from grazing activities such as trampling, concentration and erosion. Additionally, requiring average utilization and a minimum stubble height may be beneficial to lessen ground disturbance because livestock will not be grazing when soils are more exposed or when the area is more susceptible to erosion.

No Action Alternative. *All Allotments.* Under this alternative, the permit would be issued with the current terms and conditions. By maintaining the current conditions, this alternative has greater potential to impact cultural resources than the proposed action over time because there will be more livestock which can increase livestock concentration areas and trampling.

No Grazing Alternative. *All Allotments.* 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.

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 November 19, 2014, requested the tribes to identify issues and areas of concern within the allotments. No comments were received.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. *All Allotments.* No traditional cultural properties, unique natural resources, or properties of a type previously identified as being of interest to local tribes, were identified during the overview of the cultural resources inventory of the project area. Therefore, areas of concern to Native American tribes will not be affected.

No Action Alternative. *All Allotments.* Impacts are the same as the Proposed Action.

No Grazing Alternative. *All Allotments.* 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.

LIVESTOCK GRAZING MANAGEMENT

AFFECTED ENVIRONMENT.

The Smith Gulch Allotment currently consists of 2,374 acres and ranges in elevation from approximately 5,400 to 7,400 feet. The Kelly Gulch Allotment consists of 1,677 acres and ranges in elevation from approximately 5,200 to 7,400 feet. The Callahan Mtn. Allotment consists of 1,633 acres and ranges in elevation from approximately 5,400 to 7,400 feet.

The grazing allotments involved with this action lie within Garfield County west of Parachute, CO. These allotments receive an average of 12 inches of precipitation annually (HPRCC). Common vegetation types include salt desert shrubs, sagebrush, oakbrush, and mountain shrubs.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The proposed action would authorize the same level of use (AUMs) as the existing expiring permits on the Kelly Gulch and Callahan Mtn. Allotments. The Smith Gulch allotment would be reduced by 165 AUMs. A flexible schedule will allow the permittee to use the allotments whenever there is enough snow on the ground to provide a source of water for sheep and would allow the use to be synchronized so that the sheep could be moved from one allotment to another. Existing conditions are expected to be maintained or improved under this management.

No Action Alternative. Under this alternative grazing use would be authorized under the existing schedules. This does not allow the permittee any flexibility in use periods and sheep could not be rotated from one allotment to the next since the schedules do not match up that way. Most likely the permits would continue to be in non-use status. Existing conditions are expected to be maintained or improved under this management.

No Grazing Alternative. Under this alternative grazing use would be canceled entirely on the 3 allotments involved with this action. An alternative source of forage would be required by the permittees during the winter months. This decision would result in economic harm to the

permittees. Existing conditions are expected to be maintained or improved under this management.

PLANTS: INVASIVE NON-NATIVE SPECIES (NOXIOUS WEEDS)

AFFECTED ENVIRONMENT.

A landscape-wide weed inventory has not been completed on the allotments involved with these grazing permit renewals. However, monitoring and other inventories have shown that several species of noxious weeds and invasive non-native species occur within the area of the proposed action. Table 8 lists species noxious weed species known to occur in each allotment associated with the Proposed Action.

Table 8. Noxious Weeds Infestation Known to Occur in Area of the Proposed Action.

Scientific Name	Common Name	Statewide List Type
<i>Carduus nutans</i>	Musk thistle	B List
<i>Cirsium arvense</i>	Canada thistle	B List
<i>Cynoglossum officinale L.</i>	Houndstongue	B List
<i>Verbascum Thapsus L.</i>	Common mullein	C List
<i>Arctium minus Bernh.</i>	Common burdock	C List

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. 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. Grazing as proposed should not create areas of bare ground and should maintain the vigor and health of native plant species, particularly herbaceous species, thus, the proposed action should not cause a substantial increase in noxious weeds. 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, and other high concentration locations.

No Action Alternative. Under this alternative grazing use would be authorized under the existing schedules. This does not allow the permittee any flexibility in use periods and sheep could not be rotated from one allotment to the next since the schedules do not match up that way. Most likely the permits would continue to be in non-use status. If the allotment is in a non-use status there would be no direct or indirect impacts to noxious weeds from livestock use. Wildlife and other authorized BLM activities could continue to be vectors for the transportation and spread of noxious weed seeds.

No Grazing Alternative. Under this alternative, no livestock grazing would occur on these allotments and there would be no direct or indirect impacts to noxious 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 and spread of noxious weed seeds.

PLANTS: SENSITIVE, THREATENED AND ENDANGERED

AFFECTED ENVIRONMENT.

The Endangered Species Act (ESA), as amended (16 U.S.C. 1531-1534) mandates the protection of species listed as threatened or endangered of extinction and the habitats on which they depend. Section 7 of the ESA clarifies the responsibility of federal agencies to utilize their authorities to carry out programs for the conservation of listed species. In addition, federal agencies must consult with the U.S. Fish and Wildlife Service (Service) to ensure that any action authorized, funded or carried out by the agency is "...not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species...". In accordance with BLM’s Special Status Species Management Policy 6840 (*BLM Manual 6840*), the goal of management for BLM sensitive species is to initiate proactive conservation measures that reduce or eliminate threats to these species to minimize the likelihood of and need for ESA listing.

Table 9 summarizes the 2014 species list from the U. S. Fish and Wildlife Service for Federally listed, proposed, or candidate plant species (USFWS 2014) and the November 2009 Colorado BLM State Director's Sensitive Species List for BLM sensitive plants (BLM 2009) that may likely occur within the action area or be impacted by the Proposed Action.

Table 9. Federally Listed, Proposed or Candidate Plant Species.

<i>Species and Status</i>	<i>Habitat Description</i>	<i>Potential For Occurrence</i>
Colorado hookless cactus (<i>Sclerocactus glaucus</i>) – Threatened	Rocky hills, mesa slopes, and alluvial benches in salt desert shrub communities; often with well-formed microbiotic crusts; can occur in dense cheatgrass. 4,500 to 6,600 feet	Yes: Known populations occur on private land immediately adjacent to the grazing allotments. Potential habitat is present within the allotments.
DeBeque phacelia (<i>Phacelia submutica</i>) – Threatened	Sparsely vegetated, expansive clay soils derived from the Atwell Gulch and Shire Members of the Wasatch Formation; 4,700 to 6,200 feet. In salt desert shrubland or scattered juniper woodland	Yes: No populations have yet been documented within the action area, but some mapped potential habitat in Smith Gulch and Kelly Gulch Allotments.
Parachute penstemon (<i>Penstemon debilis</i>) -- Threatened	Steep, sparsely vegetated, white shale talus of the Parachute Creek Member of the Green River Formation; 8,000 to 9,200 feet.	Yes: Populations have been documented in Smith and Kelly Gulch Allotments and designated critical habitat falls within the action area.
Ute ladies’-tresses orchid (<i>Spiranthes diluvialis</i>) – Threatened	Seasonally flooded or subirrigated alluvial soils along streams, lakes or wetland areas; 4,500 to 7,000 feet	No: No known occurrences and no subirrigated riparian habitat capable of supporting Ute ladies’-tresses in the action area
BLM Sensitive Plant Species		
Cathedral Bluffs meadowrue (<i>Thalictrum</i>)	Endemic on sparsely vegetated, dry shale slopes of the Green River Formation between 6,200 and 8,800 feet in elevation.	Yes: Small occurrences in Smith and Kelly Gulches.

<i>Species and Status</i>	<i>Habitat Description</i>	<i>Potential For Occurrence</i>
<i>heliophilum</i>)		
DeBeque milkvetch (<i>Astragalus debequaeus</i>)	Found on varicolored, fine-textured soils of the Wasatch Formation in the vicinity of DeBeque and Rulison, Colorado. Elevations of known populations are between 5,100 and 6,400 feet.	Yes: No known occurrences, but some potential habitat in the action areas
Harrington's penstemon (<i>Penstemon harringtonii</i>)	Wyoming or mountain sagebrush or mixed mountain shrub communities on rocky loam or rocky clay loam soils of basaltic origin between 6,200 to 10,000 feet.	No: No known occurrences or suitable habitat in the action areas
Naturita milkvetch (<i>Astragalus naturitensis</i>)	Sandstone mesas, ledges, crevices, and slopes in pinyon-juniper woodlands between 5,000 and 7,000 feet. In shallow soils over exposed bedrock.	Yes: No known occurrences, but some sandstone ledges present
Piceance bladderpod (<i>Lesquerella parviflora</i>)	A western Colorado endemic on shale outcrops of the Green River Formation, on ledges and slopes of canyons in open areas; 6,200 to 8,600 feet.	Yes: Some potential habitat present, but no occurrences documented in action area
Roan Cliffs blazing star (<i>Mentzelia rhizomata</i>)	On steep talus slopes of the Green River Formation from 5,800 to 9,000 feet.	Yes: Known occurrence in Smith Gulch

Numerous surveys for special status plant species have been conducted within the three allotments in the action area. Thus, those species that have not yet been documented within the action area are unlikely to occur there.

ENVIRONMENTAL CONSEQUENCES.

Domestic livestock grazing can affect plants and their habitats through physical impact from herbivory and trampling; deposition of nutrient-rich feces and urine; and by dispersal of plant propagules over the landscape on their hooves, hides, and in their guts. The effect can be direct, through herbivory, crushing, or burial of individual plants and their seeds. It can also be indirect, through modification of habitat components such as soil, biological soil crusts, and the vegetation community.

Trampling can affect plants directly through crushing, or indirectly by compacting soils, destroying biological soil crusts or destroying ground nests of pollinators. Effects from trampling will be greatest in areas where livestock concentrate, such as along trails, at salt licks, and at water sources. Sheep aggregate in bedding grounds and during daily movements to and from bedding grounds. This behavior may result in distinctive swaths of heavily trampled soil and vegetation. Trailing across steep talus slopes may cause accelerated shifting or sliding of talus substrate, thereby burying plants or shearing off roots.

Grazing could also have indirect effects to rare plants by altering the plant community composition or through the introduction and spread of invasive plants. Sheep are known to show seasonal forage preferences, consuming more woody forage in the winter when their

preferred herbaceous forage is absent or dormant (Pollock et al. 2007; NRC 2008). Sheep will graze grasses at any time of year, but will show a preference for forbs, particularly in spring when tender.

Proposed Action. On September 11, 2014, the CRVFO submitted an amendment to the Programmatic Biological Assessment for Livestock Grazing Activities (BLM 2014) to the USFWS Western Colorado Ecological Services Field Office requesting formal ESA consultation for the Proposed Action. Formal consultation was requested because not all potential effects could be feasibly avoided by the Proposed Action. The BA described expected effects to ESA-listed species and provided conservation measures to minimize adverse effects to ESA-listed species. The BA reached an effects determination of “May Affect, Likely to Adversely Affect” for the Colorado hookless cactus, DeBeque phacelia, and Parachute penstemon and a “May Affect, Not Likely to Adversely Affect” for Parachute penstemon Critical Habitat. FWS responded with a tiered BO that concluded the proposed action with the proposed conservation measures “is not likely to jeopardize the continued existence of the Colorado hookless cactus, DeBeque phacelia, or Parachute beardtongue (penstemon)” (USFWS 2014). The Conservation Measures resulting from Section 7 consultation on this proposed action would be attached as terms and conditions on the permit. These are listed in Appendix B, Conservation Measures.

Colorado hookless cactus. There are known populations of the Colorado hookless cactus in the western portion of the Smith Gulch Allotment and on unfenced private land immediately adjacent to the allotment. As part of the Proposed Action, the Smith Gulch Allotment boundary would be moved east to the top of the ridge on the west side of the Smith Gulch drainage (See Appendix A2). The modified allotment boundary would exclude all occupied Colorado hookless cactus habitat from the grazing allotment and the number of AUMs would be reduced accordingly. Although no occupied habitat for Colorado hookless cactus would fall within the new allotment boundaries, occupied habitat occurs on adjacent private lands and on the portion of the former Smith Gulch Allotment that would be excluded from the boundary of the newly permitted grazing allotment. Since there is no fence separating the occupied habitat from the new allotment boundary and no fence between the BLM and private lands adjacent to the allotments, there is the potential for direct impacts if sheep drift off the allotment into occupied habitat.

Although sheep are not known to graze on Colorado hookless cactus, impacts may occur from trampling of plants, compaction of soils, or destruction of biological soil crusts. Herbivory can also indirectly affect the cactus by changing the vegetation community composition and structure with the potential of altering the function and suitability of a community for the cactus. Cacti frequently use shrubs as a nurse plant where young cacti can germinate and receive the benefit of reduced evapotranspiration and higher soil nitrogen levels (Franco and Nobel 2003). If sheep preference for shrubs in the fall and winter causes a reduction in shrub cover, opportunities for germination and establishment of hookless cactus may also be reduced.

Extensive surveys have found no new hookless cactus sites east of Smith Gulch within the three allotments in the action area, thus the likelihood of finding more occurrences is very low. If occupied habitat is discovered within any of these allotments in the future, the Conservation Measures from the Programmatic Biological Assessment (BIO-Logic 2012) and Programmatic Biological Opinion (USFWS 2012) for Livestock Grazing would be applied to this permit.

The implementation of these Conservation Measures would minimize the potential for direct and indirect effects to Colorado hookless cactus from the proposed action. However, some effects to the species and its habitat from grazing activities would most likely be unavoidable.

DeBeque phacelia. There are no known occurrences of DeBeque phacelia within the action area, thus direct effects to the species are not anticipated. Past surveys have identified some potential habitat within the area, but a 2014 assessment of these sites using the latest scientific knowledge of habitat characteristics found that nearly all of them were unsuitable habitat. If undocumented occurrences do exist within the action area, there is potential for direct impacts to the species. The Proposed Action allows for grazing the allotments only when there is snow on the ground which would help protect the habitat and seeds from trampling. However, there is no guarantee that snow cover would be complete enough to fully protect the habitat and some effects to DeBeque phacelia and its habitat would most likely be unavoidable.

Parachute penstemon. Several new clusters of Parachute penstemon plants were found in 2013 along the steep, talus slopes of Mount Callahan between 6,400 and 7,600 feet in elevation. Livestock are extremely unlikely to access these slopes as the slopes are too steep for stable footing and there is little vegetation to attract use. As a precautionary measure, a Conservation Measure will be added to the terms and conditions of the permit prohibiting use on slopes above 6,200 feet.

A small population of Parachute penstemon was formerly present in Smith Gulch and one individual was discovered in the middle section of Kelly Gulch. Smith Gulch flows a small amount of water year-round or nearly year-round, so it is likely to have some flow during the proposed grazing period. Sheep may come to the drainage to drink or may trail across Smith Gulch to reach other grazable areas. Parachute penstemon is dormant in the winter (no rosettes persist) so direct herbivory of plants would not occur, however, trampling may cause damage to roots if adequate snow depth is not present to protect the soil surface. The implementation of the Conservation Measures presented in Appendix B would minimize the potential for direct and indirect effects to Parachute penstemon from the proposed action. However, some effects to the species and its habitat from grazing activities would most likely be unavoidable. They are expected to be measurable in localized areas where concentrated use cannot be fully avoided and less detectable in areas where dispersed use occurs.

Parachute penstemon Critical Habitat. There is little data addressing possible effects of livestock grazing to the PCEs. Most of the critical habitat is extremely steep and inaccessible to livestock. The most accessible portion is within the middle sections of Smith Gulch and Kelly Gulch drainages. Winter sheep grazing under the proposed action would not affect soils and geology, elevation and climate, and the associated plant community. Parachute penstemon prefers sites subjected to high levels of natural disturbance and sheep grazing would not substantially alter the natural disturbance regime. Alteration of habitat for pollinators is expected to be minimal as the terms and conditions limiting utilization levels should maintain plant health. Also grazing during the late fall-winter, when grasses and forbs are dormant should have little impact on the herbaceous community. At this time of year, sheep grazing generally focuses on shrubs since they are higher in nutrient and protein values than herbaceous vegetation in winter.

Conservation measures prohibiting bedding and salting in Smith Gulch and prohibiting grazing above the 6,200 foot contour line (i.e. the steep slopes of Mt Callahan which currently support known Parachute penstemon populations) would minimize effects to occupied habitat.

BLM Sensitive plants. Small populations of Cathedral Bluffs meadowrue and Roan Cliffs blazing star occur in the drainages and upper slopes of Mt Callahan in association with Parachute penstemon. Impacts on these BLM sensitive plants would be the same as or similar to impacts on Parachute penstemon.

No Action Alternative. The renewal of the existing grazing schedules would not allow the permittee any flexibility in use periods and sheep could not be rotated from one allotment to the next since the schedules are not consecutive on all three allotments. Most likely the permits would continue to be in non-use status. Thus, existing threatened, endangered and sensitive plant populations and critical habitat are expected to be maintained under this management.

If grazing does occur, Kelly Gulch and Callahan Mtn allotments would continue to be grazed with the same number of AUMS as in the proposed action but during the fall instead of winter months. Impacts would be similar to the proposed action except that there would be no snow on the ground, so the potential for trampling impacts on rare plants and their habitats would be greater. Smith Gulch Allotment boundaries would not be changed to exclude known Colorado hookless cactus populations and the allotment would be used from 2/13 to 3/21. Grazing within known hookless cactus populations and at a time of year when there would ordinarily not be adequate snow on the ground to protect the rare plants from trampling would likely result in some direct and indirect impacts to the population.

No Grazing Alternative. Under the No Grazing Alternative, there would be no livestock grazing on Smith Gulch, Kelly Gulch or Callahan Mtn Allotments and there would be no direct or indirect impacts to threatened, endangered, or BLM sensitive plants from livestock use. However, over the long term, without winter sheep grazing to browse on shrubs, the shrub canopy cover may begin to increase in density which may begin to compete with the rare plants. These impacts may ultimately balance out and the resulting change in rare plant populations and the condition of critical habitat would be minor.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 4 FOR THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES.

Based on the Rifle-West Land Health Assessment, which encompassed the proposed action area, BLM staff concluded that these allotments were meeting Standard 4 for special status plants at the time of the assessment (BLM 2005). Implementation of the proposed action should not result in a failure to achieve this standard.

PLANTS: VEGETATION

AFFECTED ENVIRONMENT.

The allotments in the action area are situated on the steep, rugged slopes along the eastern and southern flanks of Mount Callahan. Dominant topography consists of steep, deeply incised ridges dissected by numerous large and small drainages. The Callahan Mtn Allotment in the

eastern portion of the action area is slightly less deeply incised with an increased occurrence of lower, rolling hills. All of the drainages within the action area are ephemeral with the exception of Smith Gulch which flows nearly all year. Elevations in the action area range from a low of 5,200 feet on the south side of Parachute Creek and adjacent to Highway 6 to a high of 7,800 feet on the southern and eastern ridges of Mt Callahan.

Vegetation types in the action area include salt desert shrublands, sagebrush communities, pinyon-juniper woodlands, mesic mountain shrublands and Douglas-fir forests. The steepest, south-facing slopes are nearly devoid of vegetation.

Salt-desert shrub communities are found on highly alkaline soils and support shadscale (*Atriplex confertifolia*), Parry's rabbitbrush (*Chrysothamnus parryi*) and greasewood (*Sarcobatus vermiculatus*), with lesser amounts of Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*) and Gardner's saltbush (*A. gardneri*). The herbaceous layer varies from sparse to moderately dense and is dominated by perennial graminoids, such as galleta grass (*Pleuraphis jamesii*), Indian ricegrass (*Achnatherum hymenoides*), and Sandberg bluegrass (*Poa secunda*). Microbiotic crusts are often present in moderate to high amounts. Sites in degraded condition are dominated by cheatgrass (*Bromus tectorum*) and desert madwort (*Alyssum desertorum*).

Basin big sagebrush (*Artemisia tridentata* ssp. *tridentata*) is found in broad basins and drainages where soils are deeper and non-alkaline, and conditions are slightly more mesic. Wyoming big sagebrush may co-occur with basin big sagebrush but is usually dominant on drier and shallower soils in gently rolling terrain. The sagebrush shrublands vary in condition. In overgrazed stands of sagebrush, cheatgrass, desert madwort, or snakeweed (*Gutierrezia sarothrae*) are dominant species, and the density of sagebrush is low. Sagebrush stands which received less grazing have a higher density of sagebrush with a greater diversity of native species including Sandberg bluegrass, needle-and-thread grass (*Hesperostipa comata*), western wheatgrass (*Pascopyrum smithii*), bottlebrush squirreltail (*Elymus elymoides*), Indian ricegrass, and numerous forbs.

Pinyon-juniper woodlands are found on warm, dry sites on ridges, mesas, and south-facing slopes and are dominated by Utah juniper (*Juniperus osteosperma*) with some pinyon pine (*Pinus edulis*) on cooler, more mesic sites. Understory cover is variable and may be dominated by shrubs, graminoids or microbiotic crusts. Associated shrub species include Wyoming big sagebrush, mountain mahogany (*Cercocarpus montanus*), and Mormon tea (*Ephedra viridis*). Various native grasses and forbs are also present, usually in low densities.

Salina wildrye (*Elymus salinus*) grasslands are fairly prevalent throughout the action area, occurring either as a dominant community type or as a co-dominant with pinyon-juniper woodlands.

North-facing slopes at the upper elevations of the Callahan Mountain Allotment support some stringers and patches of Douglas fir (*Pseudotsuga menziesii*). Thick stands of Gambel oak (*Quercus gambelii*), mountain mahogany, and serviceberry (*Amelanchier utahensis*) chaparral occur below these forested uplands and extend downslope to the upper extent of pinyon-juniper woodlands. Other species within this association include mountain snowberry (*Symphoricarpos rotundifolia*), skunkbush sumac (*Rhus trilobata*), and chokecherry (*Prunus virginiana*).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Grazing results in the direct removal of plant biomass, both living tissue and dried or dormant stems from the previous growing season. Properly managed livestock grazing can improve plant vigor by stimulating leaf growth, and by removing dried stems and seedheads thereby improving photosynthetic activity of live plant material. If the timing, duration or intensity of grazing does not allow adequate recovery and regrowth periods between grazing events, grazing may reduce plant vigor or cause plant mortality by depleting root reserves and change the species' composition in favor of less palatable plant species or increased bare ground.

The Proposed Action would change the allotment boundaries for Smith Gulch Allotment, substantially reduce the number of active AUMs, and allow for flexibility in the timing of grazing use on this allotment. This would reduce the grazing pressure on cool-season perennial grasses and forbs at a time of year when they may be actively growing. The Proposed Action should maintain or improve the cover and composition of perennial herbaceous vegetation.

The Proposed Action would also allow for grazing the allotments only when there is snow on the ground which would help protect microbiotic crusts and herbaceous vegetation from trampling impacts. Grazing would occur primarily in late fall and winter, when grasses and forbs are generally dormant which should have little impact on the herbaceous community. At this time of year, sheep grazing generally focuses on shrubs since they are higher in nutrient and protein values than herbaceous vegetation in winter. The density and canopy cover of shrubs may decrease slightly with sheep grazing.

During mild winters, grasses and forbs may begin growth in early March at lower elevations. Grazing during this time of year may have more impact on the health of herbaceous vegetation; however, cheatgrass also occurs on each of the allotments and this annual grass is one of the first to begin growth in the spring. Sheep will utilize cheatgrass early in the growing season when it is most palatable and nutritious, thereby alleviating some of the pressure on cool-season perennial grasses. Perennial grasses and forb cover and density should remain largely unchanged or may increase slightly if sheep grazing reduces competition with cheatgrass and shrubs.

No Action Alternative. Grazing use would be authorized under the existing use periods which are not consecutive across the three allotments. The current grazing schedules are not compatible with moving sheep from allotment to allotment, so it is likely these allotments would remain in non-use. Most likely the permits would continue to be in non-use status and existing vegetative conditions would be maintained.

If grazing does occur, Kelly Gulch and Callahan Mtn Allotments would continue to be grazed with the same number of AUMS as in the proposed action but during the fall instead of winter months. Impacts would be similar to the proposed action except that there would typically be no snow on the ground, so the potential for trampling impacts would be greater. The Smith Gulch Allotment boundary would not be changed, AUMS would not be reduced, and the allotment would be used from 2/13 to 3/21 each year. Grazing Smith Gulch for 5 weeks each year in late winter with full numbers of AUMs may cause heavy use on cool-season grasses just as they are initiating growth for the year. Grazing on cheatgrass may offset some of this grazing pressure; however, there may be some plant mortality or reduction in vigor of palatable perennial grasses

and forbs. The cover and composition of perennial grasses and forbs on the Smith Gulch Allotment would not likely improve.

No Grazing Alternative. Under the No Grazing Alternative, there would be no livestock grazing on Smith Gulch, Kelly Gulch or Callahan Mtn Allotments and there would be no direct or indirect impacts to vegetation from livestock use. Shrub densities may increase slightly without winter browsing by sheep; however, the allotments would continue to be grazed by wild ungulates, particularly in winter, which would have similar effects as livestock grazing.

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

The three allotments in the action area were included in the Rifle-West Watershed Land Health Assessment in 2005. The assessment found that the Callahan Mtn and Kelly Gulch Allotments were meeting Standard 3 for healthy plant communities, but Smith Gulch was not meeting Standard 3 due to the lack of cover and diversity of native perennial grasses and the abundance of cheatgrass in the understory. Historic overgrazing by sheep was determined to be the primary cause for failing to meet the standard. Since current livestock grazing was very sporadic, it was not considered a contributing factor in the existing conditions. Implementation of the Proposed Action is not anticipated to degrade plant communities from their current condition.

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 Action Alternative. Under this alternative grazing would continue at past levels on the allotments. The ranching livelihood, local economic benefit, and cultural settings of the area would continue to be supported and no net increase or loss to the permittee or county would be expected.

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 *Rifle Area, Colorado, Parts of Garfield and Mesa Counties* indicate 10 soil map units occur within the proposed allotments (NRCS 1985). The NRCS soil map unit descriptions (NRCS 2014) are provided below for the four dominant soil types:

Badland (9) – This soil map unit consists of steep, barren land that has been dissected by intermittent drainages. This unit occurs in soft shale, sandstone, and siltstone of the Green River, Wasatch, Mancos, and Mesa Verde Formations. This soil map is approximately 85 percent unvegetated, has very severe erosion hazard, and frequent active erosion.

Nihill channery loam (47) – This soil map unit is deep, well drained, and is found on alluvial fans and the sides of valleys at elevations ranging from 5,000 to 6,500 feet and on slopes of 6 to 25 percent. This soil is derived from Green River shale and sandstone parent material. Surface runoff for this soil is slow and erosion hazard is severe. Primary uses for this soil include grazing and wildlife habitat.

Rock outcrop-Torriorthents complex (62) – This soil map unit consists of bedrock and soils of variable depth occurring on slopes of 50 to 80 percent. The majority of the complex is rock outcrop which consists primarily of Green River shale. The remainder of the complex is Torriorthents which are shallow to moderately deep, clayey to loamy soils containing gravel, cobbles, and stones. Surface runoff is rapid to very rapid and erosion hazard is moderate to severe.

Torriorthents-Camborthids-Rock outcrop complex, steep (66) – This soil map unit consists of sandstone and shale bedrock and soils of variable depth occurring on slopes of 15 to 70 percent. About 45 percent of this complex is Torriorthents, 20 percent is Camborthids, and 15 percent is Rock outcrop. The Camborthids occur on the lower toe slopes on foothills and mountainsides while the Torriorthents are found on the foothills and mountainsides below the Rock outcrop. The Torriorthents are shallow to moderately deep, and clayey to loamy with gravel, cobbles, and stones. The Camborthids are shallow to deep and clayey to loamy. Rock outcrop primarily consists of Mesa Verde sandstones and Wasatch shales with occasional basaltic boulders and stones. This complex is characterized by moderate to severe erosion hazard.

Map units 62 and 66 make up the majority of the total allotment acreage. Soil health was evaluated in 2004 during the Rifle-West Land Health Assessment. BLM staff concluded that soils were meeting land health standards throughout the proposed allotments, with slight departures from expected conditions (BLM 2005).

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 of livestock grazing may include soil erosion and gullyng. The proposed action would authorize the same level of use (AUMs) as the existing expiring permits on the Kelly Gulch and Callahan Mtn. Allotments. The Smith Gulch Allotment would be reduced by 165 AUMs. A flexible schedule will allow the permittee to use the allotments whenever there is enough snow on the ground to provide a source of water for sheep and would allow the use to be synchronized so that the sheep could be moved from one allotment to another. Existing soil conditions are expected to be maintained or improved under this management, if snow levels and forage availability are confirmed prior to turn out.

No Action Alternative. Direct and indirect impacts from livestock grazing would be similar to the proposed action. However, the renewal of the existing schedules would not allow the permittee any flexibility in use periods and sheep could not be rotated from one allotment to the next since the schedules do not match up that way. Most likely the permits would continue to be

in non-use status. Thus, existing soil conditions are expected to be maintained or improved under this management. If grazing does occur, the Smith Gulch Allotment may continue to experience soil and vegetation issues noted during the Land Health Assessment in 2004. There will likely be a continued loss of perennial grasses, forbs and microbiotic crusts, along with dominance by cheat grass, which are substantial negative impacts to soil health (BLM 2005).

No Grazing Alternative. Under this alternative, no livestock grazing would occur and there would be no direct impacts to soils on any of the allotments. Indirect benefits to soils are likely to occur quickly in the absence of livestock grazing, as vegetation and soil conditions return to more natural conditions. Trampling or removal of plant material may still occur from wildlife use, and soil disturbance and erosion may persist due to other surface disturbing activities, such as roads and trails that exist throughout the allotments.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 1 FOR SOILS.

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

WATER QUALITY, SURFACE AND GROUND

AFFECTED ENVIRONMENT.

The proposed allotments lie within two 6th level watersheds. Smith Gulch and Kelly Gulch are within the Colorado River watershed below Rifle, CO. The Callahan Mtn. Allotment is within the Lower Parachute Creek watershed. The stream drainages throughout these allotments flow in response to snowmelt and summer rain storms and were determined to be non-riparian systems.

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 2013). Tributaries in the proposed allotments are listed under the Lower Colorado River Basin and have water use classifications described below (CDPHE 2013):

Table 10. Stream Segment Description.

Stream Segment Description	Classification
12b. All tributaries, including wetlands, to the Colorado River from a point immediately below the confluence with Parachute Creek to a point immediately below the confluence with Roan Creek.	Aquatic life cold 2 Recreation P Water supply Agriculture

Aquatic life cold 2 are waters that are not capable of sustaining a wide variety of cold water biota, including sensitive species, due to physical habitat, water flows, or levels, or uncorrectable water quality conditions that result in substantial impairment of the abundance and diversity of species. Recreation P indicates potential primary contact. 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.

Limited water quality has been collected because the streams in the proposed allotments are generally dry. Table 11 displays discharge and water quality data collected during the West Rifle Land Health Assessment.

Table 11. Discharge and water quality data from the West Rifle Land Health Assessment.

Stream Name	Date (m/d/yr)	Flow (cfs)	Temp. (C)	Cond. (uS\cm)	pH
Smith Gulch tributary	4/15/2004	0.013	10.4	4370	8.4
Smith Gulch	4/15/2004	0.173	9.8	1508	8.5
Kelly Gulch	4/15/2004	0.069	14.2	1854	8.4

While the limited data collected by BLM do not show a violation of the water quality standards established to protect the classified uses, visual observations during the Land Health Assessment indicated some accelerated erosion creating elevated sediment loading within the assessment area (BLM 2005). Parent geology throughout these allotments is comprised of the Wasatch Formation and Lower Green River Formation. Surface water in these types of geology generally have elevated sediment, salinity, bicarbonate, and sulfate levels of surface water thereby decreasing water quality. During snow melt runoff and especially during intense thunderstorm activity, sediment and salinity yields are likely to be higher than during low flow periods. Vegetative cover also affects the sediment and salinity yield from watersheds. Sparsely vegetated areas tend to yield higher amounts of sediment and salinity during runoff events.

Ultimately, the State of Colorado uses a *303(d) List of Impaired Waters and Monitoring and Evaluation List* (CDPHE 2012) that identifies stream segments that are not currently meeting water quality standards with technology based controls alone. No streams in the proposed allotments are on this list suggesting water quality standards are currently being met.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Direct impacts to water quality from livestock grazing may result in elevated turbidity, nutrients and fecal coliform bacteria, if livestock 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. Any sediment that is produced in areas where livestock may congregate would likely be captured by the existing vegetative ground cover. A flexible schedule will allow the permittee to use the allotments whenever there is enough snow on the ground to provide a source of water for sheep and would allow the use to be synchronized so that

the sheep could be rotated through allotments to provide for adequate rest. Existing water quality conditions are expected to be maintained under this management.

No Action Alternative. Direct and indirect impacts from livestock grazing would be similar to the proposed action. However, the renewal of the existing schedules would not allow the permittee any flexibility in use periods and sheep could not be rotated from one allotment to the next since the schedules do not match up that way. Most likely the permits would continue to be in non-use status, which would maintain existing water quality conditions. If grazing does occur, the Smith Gulch Allotment in particular, could continue to experience soil and vegetation issues noted during the Land Health Assessment in 2004. There will likely be a continued loss of perennial grasses, forbs and microbotic crusts, along with dominance by cheat grass, which may negatively impact water quality (BLM 2005).

No Grazing Alternative. Under this alternative, no livestock grazing would occur and there would be no direct impacts to water quality on any of the allotments. Indirect benefits to water quality are likely to occur quickly in the absence of livestock grazing, as vegetation and soil conditions return to more natural conditions. 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 exist throughout the allotments, which could potentially affect water quality.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 5 FOR WATER QUALITY.

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

WETLANDS AND RIPARIAN ZONES

AFFECTED ENVIRONMENT.

There are no perennial streams within the three allotments in the action area. Smith Gulch, Kelly Gulch and other drainages throughout these allotments flow in response to snowmelt and summer rain storms. The drainages are in steep watersheds which experience frequent flash floods in response to severe summer thunderstorms. The flash flooding events periodically scour the stream banks and, in conjunction with the intermittent flows, preclude the persistence of any riparian vegetation except a few scattered salt cedar shrubs. These are not considered riparian systems.

ENVIRONMENTAL CONSEQUENCES.

Due to the absence of any known riparian systems in these allotments, none of the alternatives would have any effect on wetlands or riparian zones.

AQUATIC WILDLIFE: INCLUDING SPECIAL STATUS AQUATIC SPECIES

AFFECTED ENVIRONMENT.

The action area is located in Garfield County, Colorado. Five federally listed fish species may occur within or be impacted by actions occurring in Garfield County (USFWS 2014). In addition, there are five BLM sensitive fish species with occupied or potential habitat in Garfield County (BLM 2009). The following table lists these species and summarizes information on their habitat descriptions and potential for occurrence in the proposed action area based on known geographic range and habitats present.

Table 12. Special Status Aquatic Wildlife Species Summary.

Federally Listed, Proposed or Candidate Aquatic Wildlife Species		
Species and Status	Habitat/Range	Occurrence/ Potentially Impacted
Green Lineage cutthroat trout (<i>Oncorhynchus clarkii stomias</i>) Threatened	The greenback cutthroat trout is the subspecies of cutthroat trout native to the Platte River drainage on the Eastern Slope of Colorado. Currently, FWS is advising federal agencies to consider Green Lineage cutthroat trout on the west slope of CO as threatened until such time as review and interpretation of recent genetics and meristic research has been completed. A Green Lineage cutthroat trout population is located in Beaver Creek within the Porcupine Common Allotment, south of Rifle, CO, outside the proposed action area.	Absent/No
Bonytail (<i>Gila elegans</i>) Endangered	This large chub is a member of the minnow family found in large, fast-flowing waterways of the Colorado River system. Their current distribution and habitat status are largely unknown due to its rapid decline prior to research into its natural history. The bonytail is extremely rare in Colorado and no self-sustaining population exists. Only one has been captured in the state since 1980.	Absent /No
Colorado pikeminnow (<i>Ptychocheilus lucius</i>) Endangered	Primarily exists in the Green River below the confluence with the Yampa River, the lower Duchesne River in Utah, the Yampa River below Craig, Colorado, the White River from Taylor Draw Dam near Rangely downstream to the confluence with the Green River, the Gunnison River in Colorado, and the Colorado River from Palisade, Colorado, downstream to Lake Powell. Colorado pikeminnow populations in the upper Colorado River basin are now relatively stable or growing. Designated Critical Habitat includes the Colorado River and its 100-year floodplain west (downstream) from the town of Rifle.	Absent /No
Humpback chub (<i>Gila cypha</i>) Endangered	Found in deep, clear to turbid waters of large rivers and reservoirs over mud, sand or gravel. The nearest known population of humpback chub is in the Colorado River at Black Rocks west of Grand Junction.	Absent /No
Razorback sucker (<i>Xyrauchen texanus</i>) Endangered	The razorback sucker was once widespread throughout most of the Colorado River Basin from Wyoming to Mexico. In the upper Colorado River Basin, they are now found only in the upper Green River in Utah, the lower Yampa River in Colorado and occasionally in the Colorado River near Grand Junction. Because so few of these fish remain in the wild, biologists have been actively raising them in hatcheries in Utah and Colorado and stocking them in the Colorado River. Designated Critical Habitat for the razorback sucker includes the Colorado River and its 100-year floodplain west (downstream) from the town of Rifle.	Absent /No
BLM Sensitive Aquatic Wildlife Species		
Species	Habitat/Range	Occurrence/ Potentially Impacted

Northern leopard frog (<i>Rana pipiens</i>)	Generally found between 3,500 to 11,000 feet, in wet meadows and in shallow lentic habitats. They require year-round water sources, deep enough to provide ice free refugia in the winter. Within the CRVFO, this species has been documented in locales where quality riparian vegetation exists in conjunction with perennial water sources. Larger populations of this species have been documented northwest of King Mountain within the small drainage that feeds King Mountain (Ligon) Reservoir, June Creek and East Divide Creek south of Silt, Colorado, and in portions of the Rifle Creek watershed north of Rifle, Colorado.	Absent/No
Great Basin spadefoot toad (<i>Spea intermontana</i>)	This toad is known to occupy a wide variety of habitat including lowlands, foothills, and shortgrass plain. This species generally inhabits and breeds in seasonal pools and ponds in pinyon-juniper woodland, sagebrush, and semi-desert shrubland habitats, mostly below 6,000 feet in elevation.	Potential/No
Boreal toad (<i>Bufo boreas boreas</i>)	Occurs between 7,000-12,000 feet in the Southern Rocky Mountains in the vicinity of mountain lakes, ponds, meadows, and wetlands in subalpine forest (e.g., spruce, fir, lodgepole pine, aspen). Adults often feed in meadows and forest openings near water, but sometimes in drier forest habitats. Restricted to areas with suitable breeding habitat in spruce-fir forests and alpine meadows. Breeding habitat includes lakes, marshes, ponds, and bogs with sunny exposures and quiet, shallow water.	Absent/No
Bluehead sucker (<i>Catostomus discobolus</i>), Flannelmouth sucker (<i>Catostomus latipinnis</i>), and Roundtail chub (<i>Gila robusta</i>)	Primarily found in larger rivers but may also be found in smaller tributaries with good connectivity to larger river systems. These fish are endemic to the Colorado River basin and reside within the mainstem Colorado River and its major tributary streams. Given their biology, feeding habits, habitat needs, and niche in the ecosystem, these species can persist in the face of actions that increase sediments to streams and rivers containing these species.	Absent /No
Mountain sucker (<i>Catostomus platyrhynchus</i>)	The mountain sucker is found primarily in small, low- mid elevation streams in northwestern Colorado with gravel, sand or mud bottoms. They inhabit undercut banks, eddies, small pools, and areas of moderate current. Young fish prefer backwaters and eddies. Within the CRVFO, the only known occurrence is in Piceance Creek.	Absent /No
Colorado River cutthroat trout (CRCT) (<i>Oncorhynchus clarkii pleuriticus</i>)	Select streams within the action area contain Colorado River cutthroat trout - Blue Lineage. CRCT prefer clear, cool headwaters streams with coarse substrates, well-distributed pools, stable streambanks, and abundant stream cover. CRCT occur in Trapper Creek, Northwater Creek, East Fork Parachute Creek, and JQS Gulch within the action area.	Hybridized Population /No

There are no fish bearing streams within the project area. Small ephemeral streams drain into Parachute Creek and the Colorado River, which support the closest fisheries. Kelly Gulch and Smith Gulch are non-riparian. Parachute Creek flows east of the Callahan Mountain Allotment and supports cutthroat, rainbow and brown trout, speckled dace, suckers, and a BLM sensitive species, roundtail chub. All three allotments are north and upslope of the Colorado River, which supports Colorado pikeminnow (endangered), razorback suckers (endangered), flannelmouth and bluehead suckers (BLM sensitive), roundtail chub (BLM sensitive), brown and rainbow trout, mountain white fish, speckled dace, suckers, and carp. BLM managed land is extremely limited adjacent to the Colorado River and Parachute Creek.

Amphibians in Colorado need access to ponds, lakes, seeps, springs, or other bodies of water. They avoid cold winter temperatures and dry midday summer heat by taking refuge in buffered microenvironments such as underground burrows, crevices beneath rocks, or bodies of water. Amphibian records within the CRVFO are limited, and extensive surveys have not been conducted. Great Basin spadefoot toads (*Spea intermontana*) are on the BLM sensitive species list due to their limited occurrence and small range. They have been documented within the watershed boundary near the Colorado River and on private lands up Parachute Creek, but have not been documented in the project area.

Habitat does not exist for boreal toads (*Bufo boreas boreas*) and northern leopard frogs (*Rana pipiens*) in the project area. Western chorus frogs and Woodhouse's toads (*Bufo woodhousii*) occur throughout Colorado. Western chorus frogs are found primarily in wetland marshes and pond margins, also including seasonal waters, and across a wide range of elevations. Woodhouse's toads are present in ponds and slow-flowing streams, including seasonal waters, below 7,000 feet in Colorado (Hammerson 1999).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The proposed action would reduce the size of the Smith Gulch Allotment to protect Colorado hookless cactus habitat. AUMs would also be reduced in this allotment. The level of use would remain the same on the Kelly Gulch and Callahan Mountain Allotments. The proposed schedule would provide flexibility to use the allotments when snow is adequate to supply a water source for sheep and allow sheep to be rotated through the allotments. Although these allotments have not been used for several years, the proposed management changes would likely result in sheep being stocked on the allotments some years. Any amphibians potentially present in the allotments would not be expected to emerge until April or early May. Due to the grazing schedules and AUMs, lack of fish-bearing streams and riparian vegetation in the allotments, distance from the Colorado River and Parachute Creek, and availability of snow as a water source for sheep, existing conditions for aquatic wildlife are expected to be maintained under the proposed action. No detrimental effects from winter sheep grazing are anticipated.

No Action Alternative. The Smith Gulch Allotment would remain the same size with the same AUMs, and grazing use would be authorized under existing schedules. Grazing could occur during October and November on the Kelly Gulch Allotment, February and March on the Smith Gulch Allotment and November on the Callahan Mountain Allotment. The inconsistent grazing schedules are not compatible with moving sheep from allotment to allotment, so it is likely these allotments would remain in non-use. Existing conditions for aquatic wildlife are expected to be maintained under this alternative.

If grazing does occur, due to the lack of fish bearing streams and riparian vegetation in the allotments, distance from the Colorado River and Parachute Creek, and availability of snow as a water source for sheep, existing conditions for aquatic wildlife are expected to be maintained. No detrimental effects from winter sheep grazing are anticipated.

No Grazing Alternative. Sheep grazing would be discontinued on these allotments, so there would be no direct or indirect impacts to aquatic wildlife. Conditions are expected to remain the same for aquatic wildlife.

ANALYSIS OF THE PUBLIC LAND HEALTH STANDARD 4 FOR SPECIAL STATUS AQUATIC WILDLIFE SPECIES.

Based on the Rifle-West Land Health Assessment (2005), Standard 4 was being achieved for the Great Basin spadefoot toad. Due to the lack of perennial water sources within the allotments and distance from the closest fisheries in the Colorado River and Parachute Creek, winter sheep grazing on the project area is not expected to have an effect on Land Health Standards for special status aquatic species or the private lands along the Colorado River and Parachute Creek.

WILDLIFE: MIGRATORY BIRDS

AFFECTED ENVIRONMENT.

The Migratory Bird Treaty Act (MBTA) provides protections to native birds, with the exception of certain upland fowl managed by state wildlife agencies for hunting. Within the context of the MBTA, migratory birds include non-migratory resident species as well as true migrants. For most migrant and resident species, nesting habitat is critical for supporting reproduction in terms of both nest sites and food. Also, because birds are generally territorial during the nesting season, their ability to access and utilize sufficient food is limited by the quality of the occupied territory. During non-breeding seasons, birds are generally non-territorial and able to feed across a larger area and wider range of habitats.

The allotments provides cover, forage, breeding, and/or nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. Migratory bird species that are federally listed and classified by the BLM as sensitive species are addressed in the Wildlife: Sensitive, Threatened, and Endangered Species section of this EA.

BLM Instruction Memorandum No. 2008-050 provides guidance toward meeting the BLM's responsibilities under the MBTA and the Executive Order 13186. The guidance directs Field Offices to promote the maintenance and improvement of habitat quantity and quality and to avoid, reduce or mitigate adverse impacts on the habitats of migratory bird species of conservation concern to the extent feasible, and in a manner consistent with regional or statewide bird conservation priorities.

The MBTA prohibits the "take" of a protected species. Under the Act, the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The USFWS interprets "harm" and "kill" to include loss of eggs or nestlings due to abandonment or reduced attentiveness by one or both adults as a result of disturbance by human activity, as well as physical destruction of an occupied nest.

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the 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." The *Birds of Conservation Concern 2008* (USFWS 2008) is the most recent effort to carry out this mandate. The CRVFO is within the Southern Rockies/Colorado Plateau Bird Conservation Region 16.

The project area includes the following plant communities and potentially associated migratory bird species.

Salt-desert Shrublands. Semidesert shrublands typically support lower avian diversity and density than other shrublands. Species can include the Western meadowlark (*Sturnella neglecta*), horned lark (*Eremophila alpestris*), lark sparrow (*Chondestes grammacus*), sage thrasher (*Oreoscoptes montanus*), mourning dove (*Zenaida macroura*), vesper sparrow (*Pooecetes gramineus*), and a species on the Birds of Conservation Concern (BCC) list, the Brewer's sparrow (*Spizella breweri*).

Sagebrush Shrublands. Sagebrush and the associated native perennial grasses and forbs provide food, cover, and nest sites for migratory birds. Sagebrush obligates that potentially occur in the CRVFO include the sagebrush sparrow (*Artemisiospiza nevadensis*), sage thrasher, and Brewer's sparrow, a BCC species. Other migratory species associated with sagebrush shrublands within the CRVFO include the western kingbird (*Tyrannus verticalis*), western meadowlark, green-tailed towhee (*Pipilo chlorurus*), vesper sparrow, and lark sparrow. Some species are associated with both pinyon-juniper woodlands and sagebrush shrublands, including the Say's phoebe and gray flycatcher.

Pinyon-juniper Woodlands. Pinyon and juniper trees provide food, cover, and nest sites for numerous migratory birds. Species on the Birds of Conservation Concern (BCC) list that occur in the CRVFO and are associated with pinyon-juniper woodlands include the pinyon jay (*Gymnorhinus cyanocephalus*), juniper titmouse (*Baeolophus ridgwayi*), and Ferruginous Hawk (*Buteo regalis*). Other migratory species associated with this plant community within the CRVFO include the broad-tailed hummingbird (*Selasphorus platycercus*), black-chinned hummingbird (*Archilochus alexandri*), Say's phoebe (*Sayornis saya*), ash-throated flycatcher (*Myiarchus cinerascens*), gray flycatcher (*Empidonax wrightii*), Townsend's solitaire (*Myadestes townsendi*), American robin (*Turdus migratorius*), Western bluebird (*Sialia mexicana*), mountain bluebird (*S. currucoides*), bushtit (*Psaltriparus minimus*), blue-gray gnatcatcher (*Poliophtila caerulea*), plumbeous vireo (*Vireo plumbeus*), Western scrub-jay (*Aphelocoma californica*), Clark's nutcracker (*Nucifraga columbiana*), black-throated gray warbler (*Dendroica nigrescens*), Virginia's warbler (*Oreothlypis virginiae*), chipping sparrow (*Spizella passerina*), lesser goldfinch (*Spinus psaltria*), and house finch (*Haemorhous mexicanus*). Winter visitors to pinyon-juniper habitats include the Cassin's finch (*Carpodacus cassinii*), a BCC species, which typically nests in montane and subalpine forests, though occasionally nests in pinyon-juniper woodlands.

Mixed Mountain Shrublands. Species associated with these areas include Neotropical migrants such as the dusky flycatcher (*Empidonax oberholseri*), lazuli bunting (*Passerina amoena*), lesser goldfinch (*Carduelis psaltria*), black-headed grosbeak (*Pheucticus melanocephalus*), and spotted towhee (*Pipilo maculatus*).

Douglas-fir Forest. Shrubs, forbs, and grasses are typically absent or sparse in stands of Douglas-fir. Birds forage on seed-bearing cones and insects. Older trees can provide nest cavities. Bird species are typically similar to those occupying adjacent woodlands, and none are restricted to Douglas-fir. Common species include Steller's jays (*Cyanocitta stelleri*), red-breasted nuthatches (*Sitta canadensis*), mountain chickadees (*Poecile gambeli*), hermit thrushes

(*Catharus guttatus*), western tanagers (*Piranga ludoviciana*), pine siskins (*Spinus pinus*), and Townsend's solitaires.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Because grazing would occur before most migratory birds arrive on the project area, grazing should not impact breeding or nesting activities. Sheep would use snow as a water source and are expected to disperse throughout assessable portions of the allotments. They could be rotated from one allotment to another, spending 11-24 days on a single allotment depending on the allotment and number of sheep. Snow would offer some protection to herbaceous cover and microbiotic crusts from trampling. Sheep are expected to primarily forage on shrubs as most grasses and forbs would be dormant. The Smith Gulch Allotment would be reduced in size to protect federally listed plant populations, so there would be no impacts from livestock grazing in the western portion of the allotment. AUMs would be reduced in the rest of the allotment to compensate for the change in size and forage availability. As long as acceptable utilization levels are maintained, any negative impacts to migratory birds from sheep grazing are expected to be minimal and isolated, and should not influence migratory bird populations on a landscape level.

No Action Alternative. The Smith Gulch Allotment would remain the same size with the same AUMs, and grazing use would be authorized under existing schedules. Grazing could occur during October and November on the Kelly Gulch Allotment, February and March on the Smith Gulch Allotment and November on the Callahan Mountain Allotment. The inconsistent grazing schedules are not compatible with moving sheep from allotment to allotment, so it is likely these allotments would remain in non-use.

If grazing does occur, it should not affect breeding as young birds should have fledged before sheep are on the allotments. The peak fall migration period is in September and early October, but some birds might not leave the area until November. There might not be snow on the ground when sheep would be in the area, so there could be more impacts from trampling than under the proposed action. Grazing full numbers of AUMs within the current Smith Gulch Allotment boundary could have more impacts than grazing reduced numbers within the smaller allotment boundary under the proposed action.

No Grazing Alternative. No sheep grazing would occur on these allotments, so there would be no direct or indirect impacts to migratory birds from sheep use. Perennial grass and forb cover should increase over time in the absence of livestock, which would improve conditions for many migratory birds.

WILDLIFE: SENSITIVE, THREATENED, AND ENDANGERED

AFFECTED ENVIRONMENT.

The following table includes federally listed terrestrial wildlife species (USFWS 2014) and Colorado BLM sensitive species (BLM 2009) that are known to or are believed to occur in Garfield County, Colorado. Information pertaining to their habitat requirements and potential for occurrence in the proposed action is summarized.

Table 13. Federally Listed, Proposed, or Candidate Terrestrial Wildlife Species.

Species and Status	Habitat/Distribution Summaries	Occurrence
Canada lynx (<i>Lynx Canadensis</i>) Threatened	The U.S. Forest Service has mapped suitable denning, winter, and other habitat for lynx within the White River and Routt National Forests, and some of these areas overlap with the CRVFO. The mapped suitable habitat comprises areas known as Lynx Analysis Units (LAUs) that are the approximate the size of a female’s home range. Linkages identify habitat that provides landscape connectivity between blocks of lynx habitat. There are no LAUs or linkages in the project area.	Absent
Greater Sage-grouse (<i>Centrocercus urophasianus</i>) Candidate	Within the CRVO, sage-grouse are primarily found in sagebrush shrublands from the King Mountain/Sunnyside area (north of Burns, Colorado), across Castle Peak (including the Windy Point, State Bridge and Horse Mountain areas) to Wolcott, Colorado and on the Roan Plateau. The project area does not include preliminary general or preliminary priority habitat as mapped by CPW.	Possible
Mexican spotted owl (<i>Strix occidentalis lucida</i>) Threatened	This owl nests, roosts, and hunts in mature coniferous forests in canyons and foothills. The key habitat components are old-growth forests with uneven-age stands, high canopy closure, high tree density, fallen logs and snags. The only extant populations in Colorado are in the Pikes Peak and Wet Mountain areas of south-central Colorado and the Mesa Verde area of southwestern Colorado.	Absent
Yellow-billed cuckoo (<i>Coccyzus americanus</i>) Threatened	This secretive species occurs in mature riparian forests of cottonwoods and other large deciduous trees with a well-developed understory of tall riparian shrubs. Western cuckoos breed in large blocks of riparian habitats, particularly woodlands with cottonwoods (<i>Populus fremontii</i>) and willows (<i>Salix</i> sp.). A few sightings of yellow-billed cuckoo have occurred in western Colorado along the Colorado River near Grand Junction.	Absent
Colorado BLM Sensitive Terrestrial Wildlife Species Present or Potentially Present in the Project Area		
Species	Habitat/Range Summaries	Occurrence
Townsend’s big-eared bat (<i>Corynorhinus townsendii</i>) Fringed myotis (<i>Myotis thysanodes</i>)	Occurs as scattered populations at moderate elevations on the western slope of Colorado. Habitat associations are not well defined. Both bats will forage for aerial insects over pinyon-juniper, montane conifer, and semi-desert shrubland communities. Roosts in caves, rock crevices, mines, buildings and tree cavities. Both species are widely distributed and usually occur in small groups. Townsend’s big-eared bats are not abundant anywhere in its range due to patchy distribution and limited availability of suitable roosting.	Possible
Northern goshawk (<i>Accipiter gentilis</i>)	Montane and subalpine coniferous forests and aspen forests; may move to lower elevation pinyon-juniper woodlands in search of prey during winter. Preys on small-medium sized birds and mammals. Breeds in coniferous deciduous and mixed forests. Nests are typically located on a northerly aspect in a drainage or canyon and are often near a stream. Nest areas contain one or more stands of large, old trees with a dense canopy cover. A goshawk pair occupies its nest area from March until late September. The nest area is the center of all movements and behaviors associated with breeding from courtship through fledging.	Possible – winter only
Ferruginous hawk	Open, rolling and/or rugged terrain in grasslands and shrubsteppe communities; also grasslands and cultivated fields; nests on cliffs and rocky outcrops. Fall/ winter resident, non-breeding. See Migratory Bird section.	Possible

Bald eagle (<i>Haliaeetus leucocephalus</i>)	Nesting/Roosting: mature cottonwood forests along rivers. Foraging: fish and waterfowl along rivers and lakes; may feed on carrion, rabbits, and other foods in winter.	Present
Peregrine Falcon (<i>Falco peregrinus</i>)	Rare spring and fall migrant in western valleys. Peregrine falcons inhabit open spaces associated with high cliffs and bluffs overlooking rivers. The falcon nests on high cliffs and forages over nearby woodlands. Potential nesting habitat exists on the east side of Parachute Creek.	Possible
Greater Sage-grouse (<i>Centrocercus urophasianus</i>)	See Federally Listed, Proposed or Candidate Terrestrial Wildlife Species portion of table.	Possible
Brewer's sparrow (<i>Spizella berweri</i>)	Prefers extensive stands of sagebrush, primarily big sagebrush, on level or undulating terrain. Mesic sites, particularly riparian areas within sagebrush habitats have been identified as an important primary habitat component.	Possible
Midget faded rattlesnake (<i>Crotalus viridis concolor</i>)	Found in northwestern Colorado, including western Garfield County. Sagebrush communities with an abundance of south-facing rock outcroppings and exposed canyon walls. Rocky outcrops are essential for cover, variable thermal conditions, and hibernation.	Possible
Utah milk snake (<i>Lampropeltis triangulum taylori</i>)	In Colorado, milk snakes occur in shortgrass prairie, sandhills, shrubby hillsides, canyons and open stands of ponderosa pine in the foothills, pinyon-juniper woodlands, and arid river valleys. <i>L. triangulum taylori</i> occurs in west-central Colorado.	Possible

Special Status Bats. Fringed myotis (*Myotis thysanodes*) and Townsend's big-eared bats (*Corynorhinus townsendii*) could occur in the project area, but this would likely be limited to occasional migrating individuals or bats foraging or passing through from adjacent areas. Both bats will forage for aerial insects over water and above pinyon-juniper woodlands and semi-desert shrublands.

Raptors. Bald eagles (*Haliaeetus leucocephalus*) were removed from the federal threatened and endangered species list in 2007, but are still protected under the MBTA and Bald and Golden Eagle Protection Act and are currently listed as a BLM sensitive species. Bald eagles nest and forage along the Colorado River. Winter range is mapped along Parachute Creek and the Colorado River. Potential peregrine falcon nesting habitat has been mapped in the cliffs east of Parachute Creek. If northern goshawks or ferruginous hawks use the project area, they are most likely to be present during winter (goshawks, ferruginous hawks) and fall (ferruginous hawks).

Brewer's Sparrow. The Brewer's sparrow (*Spizella berweri*) is a neotropical migrant that summers in western Colorado mountain parks and is a spring/fall migrant at lower elevations. The species is a sagebrush obligate with an apparently secure conservation status in Colorado. Primary Brewer's sparrow habitat is identified as mature big sagebrush ranging in height from 1.6 ft to 3 ft, with low to moderate canopy cover, and habitat patches greater than or equal to 15 acres. Mesic sites, particularly riparian areas within sagebrush habitats, were also identified as an important primary habitat component. Alteration of vegetation in sagebrush habitats due to livestock grazing may affect Brewer's sparrow abundance. In general, Brewer's sparrows occur at higher densities and have higher nesting success in areas that are lightly grazed or ungrazed than in areas that are heavily grazed, and benefit from greater percent cover of native, climax vegetation. Livestock may occasionally trample nests or dislodge them from nest shrubs (Vasquez 2005).

Reptiles. Potential habitat could exist for the Utah milk snake (*Lampropeltis triangulum taylori*) and midget faded rattlesnake (*Crotalus viridis concolor*). Few records exist for these species, and extensive surveys have not been conducted. The main threats to these snakes are development, outright killing, and illegal collection for the pet trade.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Snow would offer some protection to herbaceous cover and microbiotic crusts from trampling, potentially benefiting prey species, including insects. Sheep would use snow as a water source and are expected to disperse throughout assessable portions of the allotments. Sheep are expected to primarily forage on shrubs as most grasses and forbs would be dormant. The Smith Gulch Allotment would be reduced in size to protect federally listed plant populations, so there would be no impacts from livestock grazing in the western portion of the allotment. AUMs would be reduced in the rest of the allotment to compensate for the change in size and forage availability. As long as acceptable utilization levels are maintained, any negative impacts to sensitive, threatened, and endangered species from sheep grazing are expected to be minimal and isolated, and should not influence populations on a landscape level.

Special Status Bats. Bats would likely be hibernating when sheep are present on the allotments. Insects are abundant and widespread across the landscape, so any impacts to insect populations from the proposed action would be difficult to measure and are not expected to have a measurable effect to bat use.

Raptors. Any use of the project area during the time sheep could be present would likely be by individual birds hunting or scavenging across large expanses of open upland areas. Any impacts to prey species are not expected to have a measurable effect on raptors.

Brewer's Sparrow. Birds are not expected to be present when sheep would be grazing the allotments.

Reptiles. It is unlikely that any Utah milk snakes and midget faded rattlesnakes potentially in the project area would be active while snow is on the ground.

No Action Alternative. The Smith Gulch Allotment would remain the same size with the same AUMs, and grazing would be authorized under existing schedules (i.e., October, November, February, and March, depending on the allotment). If allotments remain in non-use, no impacts from grazing would occur. If grazing occurs, some special status species could be active in the project area that would be absent or hibernating during the proposed action schedule. Grazing is not expected to affect the breeding or nesting of any special status species. Grazing full numbers of AUMs within the current Smith Gulch Allotment boundary could have more impacts than grazing reduced numbers within the smaller allotment boundary under the proposed action. There would be no requirement that snow cover be sufficient to provide a water source for sheep, so snow would not necessarily reduce impacts from trampling.

No Grazing Alternative. No sheep grazing would occur on these allotments under these permits, so there would be no direct or indirect impacts to special status species from sheep use. Perennial

grass and forb cover should increase over time in the absence of livestock, which would improve conditions for many special status species.

ANALYSIS OF LAND HEALTH STANDARD 4 FOR SPECIAL STATUS TERRESTRIAL WILDLIFE

Based on the Rifle-West Watershed Land Health Assessment Report (2005), Standard 4 was being met for bald eagles because they are generally present during winter months and concentrate use along major water corridors. Although the upland habitats were not necessarily meeting Standard 3, suitable foraging habitat was available over the landscape.

With limited bird count data, it was difficult to determine if Standard 4 was being met for migratory birds and raptors, and in particular, species on the BCC list. The Land Health Assessment Report states that large portions of the landscape are fragmented by extensive natural gas development. Sagebrush dependent species are of concern due to the limited amount of sagebrush in the watershed, juniper encroachment into sagebrush shrublands, the poor condition of some sagebrush stands, and increasing fragmentation from increased natural gas development.

Although site specific locations were not achieving Standard 3, the landscape as a whole appeared to provide suitable habitat commensurate with the limited number of individual Utah milk snakes and midget faded rattlesnakes potentially in the project area. Standard 4 was being achieved for these species within the watershed.

Implementation of the Proposed Action is not expected to contribute to the degradation of conditions for special status terrestrial wildlife.

WILDLIFE: TERRESTRIAL

AFFECTED ENVIRONMENT.

Big Game. Species occurring in the project area include mule deer (*Odocoileus hemionus*) and Rocky Mountain elk (*Cervus elaphus nelsonii*). Grazing by wild ungulates as well as domestic livestock contributes to range conditions across the landscape. BLM managed lands provide a large portion of the undeveloped habitat for big game in Colorado. CPW maintains maps of habitat for big game and other wildlife species.

Mule deer and elk typically occupy higher elevation, forested areas during summer and migrate to lower elevation sagebrush-dominated ridges and south-facing slopes during winter. All allotments in the project area overlap with CPW mapped mule deer and elk overall and winter ranges. Mule deer severe winter range is mapped in the portions of the allotments closest to the Colorado River and Parachute Creek. Portions of the Callahan and Kelly Gulch Allotments are mapped as mule deer winter concentration areas. Part of the Callahan Mountain Allotment is mapped as an elk winter concentration area.

Other Mammals. Numerous small mammals could reside within the planning area, including mice (*Peromyscus* spp.), woodrats (*Neotoma* spp.), ground squirrels (*Spermophilus* spp.), chipmunks (*Neotamias* spp.), rabbits (*Sylvilagus* spp.), skunks (*Mephitis mephitis*), raccoons (*Procyon lotor*), and porcupines (*Erethizon dorsatum*). Many of these mammals are prey for

raptors and larger carnivores. Larger carnivores expected to occur include: black bear (*Ursus americanus*), mountain lion (*Felis concolor*), bobcats (*Lynx rufus*) and coyotes (*Canis latrans*).

Gallinaceous Birds. Game birds commonly found in the project area include dusky grouse (*Dendragapus obscurus*) and wild turkey (*Meleagris gallopavo*). All allotments overlap with CPW mapped wild turkey overall range. The dense cover, tall height, and abundant acorns and berries of mesic oak-serviceberry stands provide cover, forage, and nesting habitat for wild turkeys.

Waterfowl. A variety of waterfowl and wading birds use the Colorado River and Parachute Creek. Common species include great blue herons, Canada geese (*Branta canadensis*), mallards (*Anas platyrhynchos*), northern pintails (*A. acuta*), gadwalls (*A. strepera*), and American wigeon (*A. americana*).

Reptiles. Reptile species most likely to occur in the project area include sagebrush lizards (*Sceloporus graciosus*), prairie and plateau lizards (*S. undulatus*), tree lizards (*Urosaurus ornatus*), gopher snakes or bullsnakes (*Pituophis catenifer*), and western terrestrial garter snakes (*Thamnophis elegans*). Gopher snakes can be found throughout Colorado in most plant communities, including riparian areas, semidesert and mountain shrublands, pinyon-juniper woodlands, and ponderosa pine and other montane woodlands. Western terrestrial garter snakes occur throughout most of western Colorado, usually below 11,000 feet. Smooth green snakes (*Opheodrys vernalis*) can be present in riparian areas, but in western Colorado, may also be common in mountain shrublands far from water (Hammerson 1999).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Snow would offer some protection to herbaceous cover from trampling. Sheep would use snow as a water source and are expected to disperse throughout assessable portions of the allotments. Sheep are expected to primarily forage on shrubs as most grasses and forbs would be dormant. The Smith Gulch Allotment would be reduced in size to protect federally listed plant populations, so there would be no impacts from livestock grazing in the western portion of the allotment. AUMs would be reduced in the rest of the allotment to compensate for the change in size and forage availability. Timing would be changed to allow for the movement of sheep across allotments, within the duration of use designated for each allotment.

Big Game. Because these allotments include mapped winter range, mule deer and elk could compete with sheep for forage, cover and space. However, sheep would only be in each allotment from 11 to 24 days depending on the allotment and number of sheep. It is unlikely that the allotments would be used every year. Since the latest sheep could be present on the allotments is 3/31, there should be time for vegetation to recover before it would be grazed the following year.

Reptiles. Reptiles are not likely to be active during the period of use.

Other Mammals. Because sheep should be primarily browsing rather than grazing, impacts to small mammals are expected to be minimal.

Gallinaceous Birds. Sheep would be off the allotments before courtship begins for gallinaceous birds.

Grazing is not expected to affect the breeding or nesting of terrestrial species. As long as acceptable utilization levels are maintained, any negative impacts to terrestrial wildlife from sheep grazing are expected to be temporary, and should not influence populations on a landscape level.

No Action Alternative. The Smith Gulch Allotment would remain the same size with the same AUMs, and grazing would be authorized under existing schedules (i.e., October, November, February, and March, depending on the allotment). If allotments remain in non-use, no impacts from grazing would occur. If grazing occurs, some terrestrial wildlife species could be active in the project area that would be absent or hibernating during the proposed action schedule. Because these allotments include mapped winter range, mule deer and elk could compete with sheep for forage, cover and space. Grazing is not expected to affect the breeding or nesting of any terrestrial species. Grazing full numbers of AUMs within the current Smith Gulch Allotment boundary could have more impacts than grazing reduced numbers within the smaller allotment boundary under the proposed action. There would be no requirement that snow cover be sufficient to provide a water source for sheep, so snow would not necessarily reduce impacts from trampling.

No Grazing Alternative. No sheep grazing would occur on these allotments under these permits, so there would be no direct or indirect impacts to terrestrial wildlife from sheep use. Perennial grass and forb cover should increase over time in the absence of livestock, which would improve conditions for many terrestrial wildlife species. Wintering mule deer and elk would not compete with sheep for forage, cover and space.

ANALYSIS OF LAND HEALTH STANDARD 3 FOR TERRESTRIAL WILDLIFE.

The three allotments were assessed as part of the Rifle-West Watershed Land Health Assessment in 2005. Based on this assessment, the Smith Gulch Allotment was meeting Standard 3 for wildlife. The private portion of the Kelly Gulch Allotment was not meeting Standard 3 for wildlife, and neither are some portions of BLM managed land adjacent to that boundary. The Callahan Mountain Allotment was not meeting Standard 3 for wildlife. The primary reason these areas were not meeting Standard 3 for some wildlife species, most notably mule deer, is due to large scale habitat fragmentation associated with natural gas exploration and development including increased road, well pad, and pipeline densities. The physical loss of forage and cover is exacerbated when combined with the associated human use of these areas. Other factors contributing to the failure to achieve Standard 3 for wildlife include: the encroachment of juniper into sagebrush shrublands, a lack of forb production, poor condition of sagebrush, and poor understory conditions. Implementation of the Proposed Action is not expected to contribute to the degradation of these conditions.

CUMULATIVE EFFECTS. Wildlife, Including Special Status Species. The area covered by the proposed action only comprises a small portion of the watershed. Many other land use activities (e.g. natural gas development, recreation, housing, road maintenance) occur within the watershed. All of these activities have altered the amount of suitable and potentially suitable habitats for terrestrial wildlife species. 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 comparison with those activities currently occurring and reasonably certain to occur on adjacent private/other lands.

CONSULTATION. The following stakeholders were contacted:

- Southern Ute Indian Tribe
- Ute Mountain Ute Tribe
- Uinta and Ouray Agency Ute Indian Tribe
- Grazing permittees
- US Fish and Wildlife Service

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 16, along with their areas of responsibility.

Table 14. BLM Interdisciplinary Team Authors and Reviewers

Name	Title	Areas of Participation
Isaac Pittman	Rangeland Management Specialist	NEPA lead, Range
Carla DeYoung	Ecologist	Areas of Critical Environmental Concern; Vegetation; T/E/S Plants; Wetlands & Riparian Zones; Land Heath Standards
Greg Wolfgang	Outdoor Recreation Planner	VRM, Recreation, Travel Management
Kimberly Miller	Outdoor Recreation Planner	Wild and Scenic Rivers, Wilderness, Recreation
Erin Leifeld	Archaeologist	Cultural Resources and Native American Concerns
Hilary Boyd	Wildlife Biologist	Aquatic Wildlife and T/E/S , Migratory Birds, Terrestrial Wildlife and T/E/S
Pauline Adams	Hydrologist	Air Quality, Water Quality, Soils, Geology
Kristy Wallner	Rangeland Management Specialist	Invasive, Non-Native Species (Noxious Weeds)
Brian Hopkins	Planning and Environmental Coordinator	NEPA Compliance

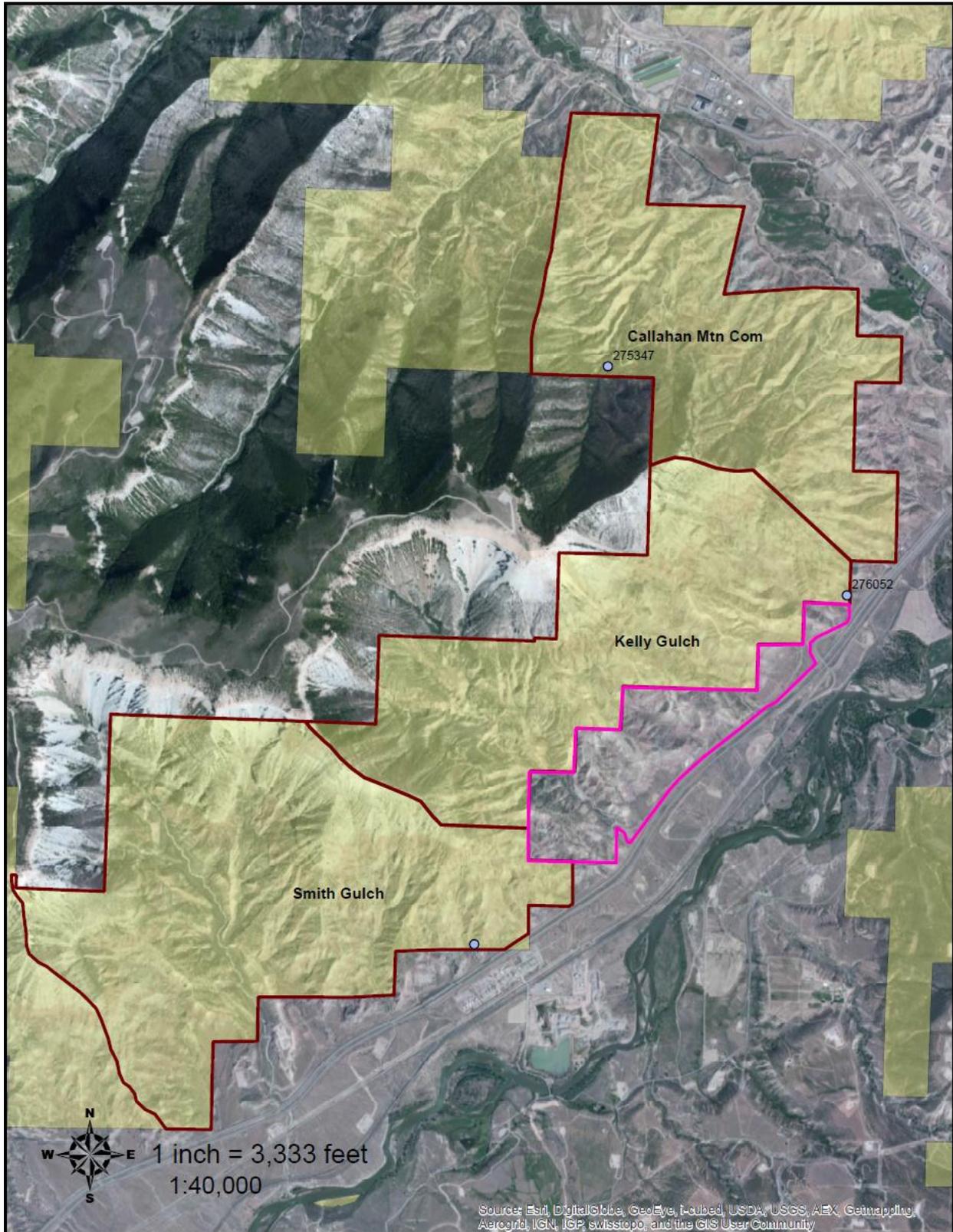
References

- Bureau of Land Management (BLM). 1988. Glenwood Springs Resource Area Resource Management Plan. Glenwood Springs, CO.
- Bureau of Land Management (BLM). 2005. Rifle-West Land Health Assessment Summary Report. Unpublished. Colorado River Valley Field Office, Silt, CO.
- Bureau of Land Management. (BLM) 2009. Information Bulletin No. CO-2010-007. State Director's Sensitive Species List, December 15, 2009.
- Bureau of Land Management (BLM) 2014. Amendment to Programmatic Biological Assessment for Livestock Grazing Activities on Smith Gulch, Kelly Gulch and Callahan Mountain Allotments. Garfield County, Colorado. September 2014.
- Bureau of Land Management (BLM) 2014. Colorado River Valley Field Office Proposed Resource Management Plan Final Environmental Impact Statement.
- Colorado Department of Public Health and the Environment (CDPHE). 2013. Regulation No. 37, Classifications and Numeric Standards for Lower Colorado River Basin (5 CCR 1002-37). Water Quality Control Commission. Available online: <http://www.cdphe.state.co.us/regulations/wqccregs/>
- Colorado Department of Public Health and the Environment (CDPHE). 2012. Regulation No. 93, Colorado's 303 (d) List of Impaired Waters and Monitoring and Evaluation List, (5 CCR 1002-93). Water Quality Control Commission. Available online: <http://www.cdphe.state.co.us/regulations/wqccregs/>
- Hammerson, G. A. 1999. Amphibians and Reptiles in Colorado. University Press of Colorado and Colorado Division of Wildlife., Niwot, CO, USA.
- HPRCC (High Plains Regional Climate Center), Data collected from the Rifle COOP station, <http://www.hprcc.unl.edu/data/historical/index.php>
- Natural Resource Conservation Service (NRCS). 1985. Soil Survey of Rifle Area, Colorado, Parts of Garfield and Mesa Counties. Available online: http://soils.usda.gov/survey/online_surveys/colorado/
- Natural Resource Conservation Service (NRCS). 2014. Map Unit Descriptions for *Rifle Area, Colorado, Parts of Garfield and Mesa Counties*. Soil Data Viewer application. Available online: <http://soils.usda.gov/sdv/>.
- U.S. Fish and Wildlife Service (USFWS). 2014. [Online]. Website: <http://www.fws.gov/angered/>. [Accessed on 10-9-14].
- U.S. Fish and Wildlife Service. 2014. Tiered Biological Opinion for Livestock Grazing Program Effects on Three Listed Plants in the Bureau of Land Management Colorado River Valley

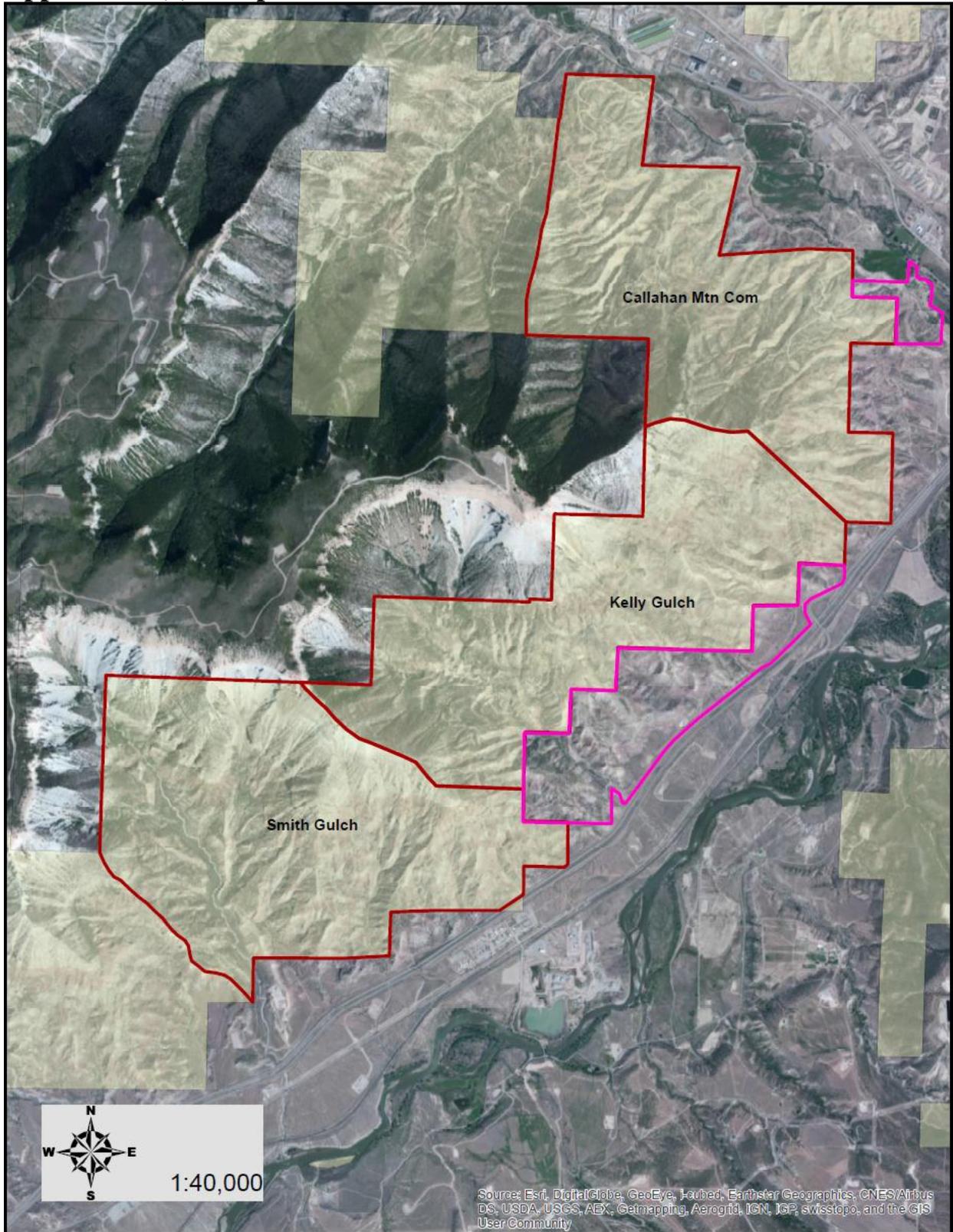
Field Office. ES/GJ-6-CO-12-F-006. U.S. Fish and Wildlife Service, Ecological Services, Grand Junction, Colorado.

Vasquez, Matt. 2005. Brewer's Sparrow (*Spizella breweri*) Species Assessment (Draft). Prepared for the Grand Mesa, Uncompahgre, and Gunnison National Forests. Website: http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5199815.pdf. Accessed on 9-30-14.

Appendix A (1). Existing Allotment Boundaries



Appendix A (2). Proposed New Allotment Boundaries



Appendix B

Conservation Measures

The terms and conditions of the two grazing permits will include conservation measures designed to avoid, minimize, and/or ameliorate effects to Colorado hookless cactus, DeBeque phacelia, and Parachute penstemon occupied and critical habitat. All applicable conservation measures from the Programmatic Livestock Grazing BA will be implemented. In addition, the following conservation measures specific to these three allotments will be added to the terms and conditions of the permits:

1. The Smith Gulch Allotment boundary will be moved east to the top of the ridge on the west side of the Smith Gulch drainage. This would exclude all occupied Colorado hookless cactus habitat from the allotment.
2. No livestock grazing will be allowed on the steep slopes of Mt Callahan (above 6,200 foot contour line) to protect occupied and designated critical habitat for Parachute penstemon.
3. No bedding or salting will be allowed within Smith Gulch drainage.
4. No water developments or other range improvements would be constructed or maintained within the allotments without first conducting surveys for threatened and endangered plants. For maintenance activities, avoidance measures will be applied where effects to listed plants may occur. New range developments that may affect listed species would not be permitted until completion of additional consultation.
5. Grazing would occur when snow is present on the ground. This would minimize surface soil trampling and compaction which could create unsuitable germination or growing conditions for Colorado hookless cactus, Parachute penstemon, and especially for DeBeque phacelia.
6. Within 200 meters (656 feet) of listed plants, motorized access for livestock grazing operations will be limited to existing roads and routes. Any additional access proposed for grazing operations would require additional surveys and section 7 consultation.

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

FINDING OF NO SIGNIFICANT IMPACT

DOI-BLM-N040-2014-0041-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 Effects 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 issuing this livestock grazing permit are identified and discussed in the Affected Environment and Environmental Consequences sections of the EA. The selected alternative will not have any significant beneficial or adverse impacts on the resources identified and described in the EA.

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

The selected alternative will not significantly affect public health or safety. The purpose of the selected alternative 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.*

There are no unique characteristics.

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 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.*

The EA is specific to the allotments defined in the proposed action and alternatives. 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 these allotments.

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

The area covered by the selected alternative 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 selected alternative 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.*

No traditional cultural properties, unique natural resources, or properties of a type previously identified as being of interest to local tribes, were identified during the overview of the cultural resources inventory of the project area. Therefore, areas of concern to Native American tribes will not be affected. Terms and conditions on the permit will prevent adverse impacts to unknown cultural resources.

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.*

Properly managed livestock grazing (i.e. meeting land health standards) is generally compatible with all wildlife species. The development and maintenance of water sources for livestock may unintentionally provide beneficial effects to foraging bat and bird species. As long as acceptable utilization levels are maintained and land health standards are achieved there would be no anticipated direct or indirect impact of grazing on special status bat or bird species.

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

The selected alternative does not violate or threaten to violate any Federal, State, or local law 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.

Signature



Karl Mendonca
Acting Field Manager
Colorado River Valley Field Office

Date





United States Department of the Interior
 BUREAU OF LAND MANAGEMENT
 Colorado River Valley Field Office
 2300 River Frontage Road
 Silt, CO 81652



IN REPLY REFER TO:
 ON 0504547 & 0504661 (CON040)

CERTIFIED MAIL 7013 2630 0000 2732 6826
RETURN RECEIPT REQUESTED

James Craig Bair Ranch Co.
 66418 Highway 6 and 24
 Glenwood Springs, Colorado 81601

NOTICE OF PROPOSED DECISION

Dear Mr. Bair:

Introduction & Background. On July 25, 2013 you applied to renew grazing permit No. 0504547 on the Kelly Gulch Allotment. The application initiated discussions on how to better manage the allotment with adjacent allotments you were currently permitted on. The result was a proposal to manage the Smith Gulch, Kelly Gulch, and Callahan Mountain Allotments in coordination with each other with a flexible window for the use period. The permits have undergone review for conformance with the land use plan and compliance with the National Environmental Policy Act (NEPA). The review and NEPA compliance have been completed as documented in Environmental Assessment (EA) No. DOI-BLM-CO-N040-2014-0041. A copy of the EA is enclosed. Renewal of the permit has also been reviewed for compliance with 43 Code of Federal Regulations (CFR) 4110.1(b)(1) which requires a satisfactory record of performance prior to renewal.

Proposed Decision. As a result of this process, it is my proposed decision to renew grazing permit No. 0504547 and reissue grazing permit No. 0504661. Grazing permit No. 0504547 will be issued for the term of your base property lease (expiring Oct 1, 2016) while grazing permit No. 0504661 will be issued for the remaining time on the existing permit (expiring Feb 28, 2018). My Proposed Decision results in changes to your previously authorized use. Please review your authorized use and terms and conditions outlined below.

Table 1. Grazing Schedules.

Operator Name	Auth. No.	Allotment	Livestock Number	Livestock Kind	Begin Date*	End Date *	Public Land %	AUMs
Craig Bair Ranch Co.	0504547	Kelly Gulch	1000	Sheep	12/1	3/31	59	72
Craig Bair Ranch Co.	0504661	Callahan Mtn.	1000	Sheep	12/1	3/31	100	72
		Smith Gulch	1000	Sheep	12/1	3/31	100	72

Table 2. Grazing Preference AUMS.

Operator Name	Auth. No.	Allotment	Active	Suspended	Total
Craig Bair Ranch Co.	0504547	Kelly Gulch	72	132	204
Craig Bair Ranch Co.	0504661	Callahan Mtn.	72	162	234
		Smith Gulch	72	165	237

Other Terms and Conditions. The timing of use on the Kelly Gulch, Smith Gulch, and Callahan Mountain Allotments may be adjusted annually within the dates on the permit as needed as long as the duration of use does not exceed the following limits:

- Kelly Gulch Allotment: 1000 Sheep for 20 days or 800 Sheep for 24 days
- Smith Gulch Allotment: 1000 Sheep for 11 days or 800 Sheep for 14 days
- Callahan Mtn. Allotment: 1000 Sheep for 11 days or 800 Sheep for 14 days

Sheep use would be authorized when there is sufficient snow cover to provide a source of water.

Sheep will be actively herded through the allotments to avoid excessive use in any one area.

Average utilization levels by livestock should not exceed 50% by weight on key grass species, and 40% of the key browse species current year's growth. Grazing in riparian areas should leave an average minimum 4-inch stubble height of herbaceous vegetation. If utilization is approaching allowable use levels, livestock should be moved to another portion of the allotment, or removed from the allotment entirely for the remainder of the growing season. Application of this term may be flexible to recognize livestock management that includes sufficient opportunity for regrowth, spring growth prior to grazing, or growing season deferment.

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 advance 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.

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 lands 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.

See attached conservation measures to avoid, minimize, and/or ameliorate effects to Colorado hookless cactus, DeBeque phacelia, and Parachute penstemon occupied habitat.

Rationale for the Proposed Decision. Renewal of the grazing permit is in conformance with the Glenwood Springs Resource Management Plan (RMP), approved January. 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; amended in September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance; amended in October 2012 – Record of Decision for Solar Energy Development in Six Southwestern States.

The proposed action is in conformance with Administrative Actions (pg. 5) and Livestock Grazing Management (pg. 20) of the Glenwood Springs RMP. Administrative actions states, “Various types of actions will require special attention beyond the scope of this plan. Administrative actions are the day-to-day transactions required to serve the public and to provide optimal use of the resources. These actions are in conformance with the plan”. The livestock grazing management objective as amended states, “To provide 56,885 animal unit months of livestock forage commensurate with meeting public land health standards.”

An interdisciplinary team prepared an EA (No. DOI-BLM-CO-N040-2014-0041) for the proposed permit renewal. My proposed decision is based on the findings of the analyses contained in the EA. The analysis of the proposed action indicated that the current conditions and land health standards in the Smith Gulch, Kelly Gulch and Callahan Mountain Allotments are expected to be maintained or improved. The grazing use proposed allows for adequate plant growth recovery and promotes healthy rangelands as it relates to rangeland standards.

Other terms and conditions have been included to mitigate potential impacts from grazing use.

Authority. 43 CFR 4100.0-8 states: “The authorized officer shall manage livestock grazing on public lands under the principle of multiple use and sustained yield, and in accordance with applicable land use plans. Land use plans shall establish allowable resource uses (either singly or in combination), related levels of production or use to be maintained, areas of use, and resource condition goals and objectives to be obtained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan as defined at 43 CFR 1601.0- 5(b).”

43 CFR 4110.2-2(a) states: “Permitted use is granted to holders of grazing preference and shall be specified in all grazing permits or leases. Permitted use shall encompass all authorized use including livestock use, any suspended use, and conservation use, except for permits and leases for designated ephemeral rangelands where livestock use is authorized based upon forage availability, or designated annual rangelands. Permitted livestock use shall be based upon the amount of forage available for livestock grazing as established in the land use plan, activity plan or decision of the authorized officer under § 4110.3-3, except, in the case of designated

ephemeral or annual rangelands, a land use plan or activity plan may alternatively prescribe vegetation standards to be met in the use of such rangelands.”

43 CFR 4130.2(a) states: “Grazing permits or leases authorize use on the public lands and other BLM-administered lands that are designated in land use plans as available for livestock grazing. Permits and leases will specify the grazing preference, including active and suspended use. These grazing permits and leases will also specify terms and conditions pursuant to §§4130.3, 4130.3-1, and 4130.3-2.”

43 CFR 4130.2(d) states: “The term of the grazing permits or leases authorizing livestock on the public lands and other lands under the administration of the Bureau of Land Management shall be 10 years unless -- (1) The land is being considered for disposal; (2) The land will be devoted to a public purpose which precludes grazing prior to the end of 10 years; (3) The term of the base property lease is less than 10 years, in which case the term of the Federal permit or lease shall coincide with the term of the base property lease; or (4) the authorized officer determines that a permit or lease for less than 10 years is the best interest of sound land management.”

43 CFR 4130.3 states: “Livestock grazing permits and leases shall contain terms and conditions determined by the authorized officer to be appropriate to achieve the management and resource condition objectives for the public lands and other lands administered by the Bureau of Land Management, and to ensure conformance with the provisions of subpart 4180 of this part.”

43 CFR 4130.3-1(a) states: “The authorized officer shall specify the kind and number of livestock, the period(s) of use, the allotment(s) to be used, and the amount of use, in animal unit months, for every grazing permit or lease. The authorized livestock grazing use shall not exceed the livestock carrying capacity of the allotment.”

43 CFR 4130.3-2 states: “The authorized officer may specify in grazing permits or leases other terms and conditions which will assist in achieving management objectives, provide for proper range management or assist in the orderly administration of the public rangelands.”

43 CFR 4160.1(a) states: “Proposed decisions shall be served on any affected applicant, permittee or lessee and any agent and lien holder of record, who is affected by the proposed actions, terms or conditions, or modifications relating to applications, permits and agreements (including range improvement permits) or leases, by certified mail or personal delivery. Copies of the proposed decisions shall also be sent to the interested public”.

Protest and/or Appeal. Any applicant, permittee, lessee or other interested public may protest a proposed decision under Sec. 43 CFR 4160.1 and 4160.2, in person or in writing to Karl Mendonca, Acting Field Manager, Bureau of Land Management, 2300 River Frontage Road, Silt, Colorado 81652 within 15 days after receipt of such decision. The protest, if filed, should clearly and concisely state the reason(s) as to why the proposed decision is in error.

In accordance with 43 CFR 4160.3 (a), in the absence of a protest, the proposed decision will become the final decision of the authorized officer without further notice unless otherwise provided in the proposed decision.

In accordance with 43 CFR 4160.3 (b) upon a timely filing of a protest, after a review of protests received and other information pertinent to the case, the authorized officer shall issue a final decision.

Any applicant, permittee, lessee or other person whose interest is adversely affected by the final decision may file an appeal in accordance with 43 CFR 4.470 and 43 CFR 4160.3 and 4160 .4. The appeal must be filed within 30 days following receipt of the final decision, or within 30 days after the date the proposed decision becomes final. The appeal may be accompanied by a petition for a stay of the decision in accordance with 43 CFR 4.471 and 4.479, pending final determination on appeal. The appeal and petition for a stay must be filed in the office of the authorized officer, as noted above. The person/party must also serve a copy of the appeal on any person named [43 CFR 4.421(h)] in the decision and the Office of the Solicitor, United States Department of Interior, 755 Parfet Street, Suite 151, Lakewood, Colorado 80215. The BLM does not accept appeals by facsimile or email.

The appeal shall state the reasons, clearly and concisely, why the appellant thinks the final decision is in error and otherwise complies with the provisions of 43 CFR 4.470.

Should you wish to file a petition for a stay, see 43 CFR 4.471 (a) and (b). In accordance with 43 CFR 4.471(c), a petition for a stay must show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied.
- (2) The likelihood of the appellant's success on the merits.
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

As noted above, the petition for stay must be filed in the office of the authorized officer and serviced in accordance with 43 CFR 4.473. Any person named in the decision from which an appeal is taken (other than the appellant) who wishes to file a response to the petition for a stay may file with the Hearings division a motion to intervene in the appeal, together with the response, within 10 days after receiving the petition. Within 15 days after filing the motion to intervene and response, the person must serve copies on the appellant, the office of the Solicitor and any other person named in the decision (43 CFR 4.472(b)).

Please sign and date both copies of the enclosed grazing permit and return to our office. If you have any questions about this proposed decision please contact Isaac Pittman (Rangeland Management Specialist) at (970)876-9069.

Sincerely,



Karl Mendonca
Acting Field Manager

1/13/2015
Date

Enclosure(s)

Environmental Assessment (No. DOI-BLM-CO-N040-2014-0041-EA)
BLM Form 4130-2a (Grazing Permit)

CC: Strait Bottom Ranch LLC
Box 26
Woody Creek, CO. 81656

Certified Mail 7013 2630 0000 2732 6833