



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



ENVIRONMENTAL ASSESSMENT

EA NUMBER. DOI-BLM-CO-040-2014-0012 EA

CASEFILE NUMBER. 057546

PROJECT NAME. Reissue a grazing permit on the Dry Park (No. 08352), Crystal River (No. 08342), Cotton Wood (No. 08301), Upper Place (No. 08304), and Cattle Creek Drive (No. 08302) allotments.

LOCATION. Garfield County, portions West and North of Carbondale, CO

LEGAL DESCRIPTIONS. Dry Park (No. 08352) T7S R89W Sec. 12, 13, 36 & T8S R88W Sec. 1. Crystal River (No. 08342) T8S R88W Sec. 7, 8, 17-20, 29, 30 & T8S R89W Sec. 12,13,24,25. Cotton Wood (No. 08301) T5S R87W Sec. 34, 35& T6S R87W Sec. 2-10. Upper Place (No. 08304) T6S R87W Sec. 16,17,20,29. Cattle Creek Drive (No. 08302) T6S R87W Sec. 7, 8,9,18 (see attached allotment maps).

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, 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 3-1 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 is to renew one grazing permit with the following terms and conditions. These are the existing terms and conditions and are used as a baseline for comparison with the other alternatives described hereafter. The permit 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 permit are summarized below.

Table 1. Existing Grazing Schedules:

Operator Name and Authorization No.	Allotment Name and Number	Livestock Kind And Number	Period of Use	% Public Land	AUMs
Crystal River Ranch No. 057546	Cattle Creek Drive 08302	200 Cattle	07/08 to 08/31	50	181
	Crystal River 08342	295 Cattle	05/15 to 6/30	65	296
		146 Cattle	09/16 to 10/15		94
	Cotton Wood 08301	750 Cattle	06/16 to 9/30	3	79
	Dry Park 08352	110 Cattle	06/01 to 07/10	18	26
			09/15 to 10/15		20
Upper Place 08304	200 Cattle	08/01 to 10/15	3	15	

Table 2. Grazing Preference AUMS:

Operator Name	Auth. No.	Allotment	Active	Suspended	Total
Crystal River Ranch Co	057546	Cattle Creek Drive	181	0	181
		Crystal River	390	304	694
		Cotton Wood	85	0	85
		Dry Park	46	0	46
		Upper Place	15	0	15

Other Terms and Conditions:

Travel restrictions within the Thompson Creek (Crystal River Allotment) Area:
In areas closed to motorized travel, normal grazing administration, facilities maintenance, or facilities operation will be accessed by non-motorized methods only unless authorized by an

approved administrative access agreement. In areas closed to motorized travel, the permittee will be required to get pre-approval from a BLM authorizing officer for reconstruction of existing permitted facilities or other operations requiring motorized equipment. In case of an emergency, the permittee will be allowed access by motorized vehicle but must notify a BLM authorizing officer within 72 hours of the emergency. The permittee will not be allowed to use motorized equipment in an area closed to motorized travel for activities other than those authorized by the BLM

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.

Average utilization levels by livestock shall 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.

Adaptive management will be employed on this allotment. The Mandatory Terms and Conditions on this grazing permit show the maximum allowable flexibility. The permittee may use the allotment when the range is ready but not earlier than the beginning dates described in the permit. The range will be considered ready when there is a minimum of 4 inches of new growth on grasses. AUM usage may not exceed active preference.

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 Dry Park, Crystal River, Cotton Wood, Upper Place, and Cattle Creek Drive 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. The No Action alternative would involve reissuing the grazing permits with current terms and conditions and is substantially the same as the Proposed Action and was not analyzed in further detail.

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.”

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 Roaring Fork Watershed in 2010 which included the Cattle Creek Drive, Cotton Wood, Crystal River, Dry Park, and Upper Place allotments. The allotments were considered to be meeting or moving towards meeting all the standards at the time of the assessment.

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

DIRECT AND INDIRECT EFFECTS, MITIGATION MEASURES. 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 3). Only those elements that are present and potentially affected are described and brought forth for detailed analysis

<i>Table 3. Programs, Resources, and Uses (Including Supplemental Authorities)</i>	<i>Potentially Affected?</i>	
	<i>Yes</i>	<i>No</i>
Access and Transportation		X
Air Quality		X
Areas of Critical Environmental Concern	X	
Cadastral Survey		X
Cultural Resources	X	
Native American Religious Concerns	X	
Environmental Justice		X
Farmlands, Prime or Unique		X

Fire/Fuels Management		X
Floodplains		X
Forests		X
Geology and Minerals		X
Law Enforcement		X
Livestock Grazing Management	X	
Noise		X
Paleontology		X
Plants: Invasive, Non-native Species (Noxious Weeds)	X	
Plants: Sensitive, Threatened, or Endangered	X	
Plants: Vegetation	X	
Realty Authorizations		X
Recreation		X
Social and/or Economics	X	
Soils	X	
Visual Resources		X
Wastes, Hazardous or Solid		X
Water Quality, Surface and Ground	X	
Water Rights		X
Wetlands and Riparian Zones	X	
Wild and Scenic Rivers		X
Wilderness/WSAs/Wilderness Characteristics		X
Wildlife: Aquatic / Fisheries	X	
Wildlife: Migratory Birds	X	
Wildlife: Sensitive, Threatened, and Endangered Species	X	
Wildlife: Terrestrial	X	

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

AFFECTED ENVIRONMENT.

The southern portion of the Crystal River Allotment falls within the Thompson Creek ACEC. The Thompson Creek ACEC was designated in the 1984 RMP for its scenic, geologic, historic and ecological values. The scenic values are tied to the striking geologic formations and the sharp contrasting colors. The geologic values pertain to the unique geologic features (sandstone fins) that are tilted nearly vertically and erosion has exposed and isolated the fins. Historic values are associated with the remains of the abandoned Aspen and Western Railway, which operated between 1887 and 1889. The area’s intact natural ecological state with diverse and healthy plant communities was also recognized as important for environmental education. The ACEC is being managed as a VRM Class I area and is protected with a No Surface Occupancy stipulation. Lands within the ACEC must be managed to preserve the existing characteristic landscape.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The portion of the Crystal River allotment that falls within the ACEC is above the rim of the Thompson Creek drainage and hence protected from view from the fins and the main body of the ACEC. This portion of the allotment was determined to be meeting all the Standards during the 2010 Roaring Fork Land Health Assessment (BLM 2011). The Proposed Action, with no changes in class of livestock, duration, or numbers, would not adversely impact the relevant and important values found within the Thompson Creek ACEC.

No Grazing Alternative. Due to the light grazing use occurring within the Thompson Creek ACEC, cancelling the grazing permit is unlikely to create any noticeable impact, either adverse or beneficial, on the ACEC values.

CULTURAL RESOURCES

AFFECTED ENVIRONMENT.

Grazing authorization renewals are undertakings under Section 106 of the National Historic Preservation Act. During Section 106 review, a cultural resource assessment (CRVFO#1014-12) was completed for the Crystal River, Dry Park, Cotton Wood, Upper Place, and Cattle Creek Drive allotments on March 3, 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 five allotments in this EA. The table shows known cultural resources, the potential of Historic Properties, and Management recommendations.

Table 4. Cultural Resources Assessment Summary.

Allotment Name and Number	Land Status	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level	Percent Allotment Inventoried at a Class III Level (%)	Number of Cultural Resources known in Allotment	Potential of Historic Properties	Management Recommendations (Additional inventory required and historic properties to be visited)
Crystal River #08342	BLM	474.1	3487.9	11.9%	3	Low	Recommend 15 acres inventory; Monitor site 5PT.1138
	Private	10.4	616.8	1.6%			

Dry Park #08352	BLM	351.7	417	45.7%	3	Low	No additional inventory; no sites to monitor
Cotton Wood #08301	BLM	89.1	118	43%	1	Low	No additional inventory; no sites to monitor
	Private	997.1	2198	31.2%			
Upper Place #08304	BLM	0	40	0%	0	Low	No additional inventory; no sites to monitor
	Private	0	1366	0%			
Cattle Creek Drive #08302	BLM	0	643.1	0%	0	Low	No additional inventory; no sites to monitor
	Private	0	602.8	0%			

Within the Crystal River allotment #08342, a total of six cultural resource inventories (CRVFO CRIR# 192, 591, 764, 952, 5458A, 8205-1) have been previously conducted resulting in the survey coverage of 474.1 BLM acres and 10.4 private land acres at a Class III level. Three cultural resources have been documented during these inventories all of which are prehistoric isolated finds which are not eligible for the National Register of Historic Places (NRHP). Looking at the GLO maps from T8S R89W in 1885 show no potential for historic sites but from 1887 shows potential for a historic homestead. During the last analysis, additional acreage was recommended to be inventoried and based on this analysis it was accomplished. The maps in T8S R88W from 1885 show no potential for historic sites and the map from 1908 show that some of the existing roads may have started as historic trails in sections 19, 20 & 29.

A total of six cultural resource inventories (CRVFO CRIR# 46, 121, 378, 845, 9481, 15405-5) have been previously conducted within the Dry Park allotment #08352 resulting in the survey coverage of 351.7 acres at a Class III level. Three cultural resources have been documented during these inventories and include one historic trash scatter (5GF.3735) and two prehistoric isolated finds (5GF.1213 & 5GF.1751), all of which are not eligible for the NRHP. During the previous analysis of this allotment, no new areas were recommended for inventory. Looking at the GLO maps from 1885 & 1888 there is potential for a historic road through Sections 13 & 36.

Within the Cotton Wood allotment #08301, a total of three cultural resource inventories (CRVFO CRIR# 125, 9458A, 14502-1) have been previously conducted resulting in the survey coverage of 89.1 BLM acres and 997.1 private land acres at a Class III level. Only 3% of this allotment is BLM land. One cultural resource has been documented and is a prehistoric isolated find that is not eligible for the NRHP. During the previous analysis of this allotment, no new areas were recommended for inventory. Looking at the GLO maps for T6S R87W from 1885 show no potential for historic sites but in 1908 there is a historic wagon road but it is all on private land.

No cultural resource inventories have occurred within the Upper Place allotment #08304 and no cultural resources have been documented. Only 3% of this allotment is BLM (40 acres) and the rest is private land. During the previous analysis of this allotment, no new areas were recommended for inventory. Looking at the GLO maps for T6S R87W from 1885 show no potential for historic sites but in 1908 there is a historic wagon road but it is all on private land.

Within the Cattle Creek Drive allotment #08302 no cultural resource inventories have been conducted and no cultural resources have been documented. A Class II sample survey was conducted for about 160 acres within this allotment in 1980 but this inventory does not count

toward Class III intensive inventory. During the previous analysis of this allotment, no new areas were recommended for inventory. Looking at the GLO maps for T6S R87W from 1885 show no potential for historic sites but in 1908 there is a historic wagon road but it is all on private land.

ENVIRONMENTAL CONSEQUENCES.

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

Terms and conditions limiting utilization levels will be beneficial by reducing ground disturbance and therefore livestock will not be grazing when soils are more exposed or when the area is more susceptible to erosion.

Within the Crystal River Allotment #08342 an additional 15 acres is recommended to be inventoried around a spring with a possible historic homestead. Additionally, site 5PT.1138 is recommended to be monitored and possibly re-documented. No additional inventory or sites to be monitored are recommended in the Dry Park, Cotton Wood, Upper Place, or Cattle Creek Drive allotments.

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

NATIVE AMERICAN RELIGIOUS CONCERNS

AFFECTED ENVIRONMENT.

American Indian religious concerns are legislatively considered under the American Indian Religious Freedom Act of 1978 (PL 95-341), the Native American Graves Environmental Assessment Protection and Repatriation Act of 1990 (PL 101-601), and Executive Order 13007 (1996; Indian Sacred Sites). These require, in concert with other provisions such as those found in the NHPA and Archaeological Resources Protection Act (ARPA), that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life. This ensures, to the degree possible, that access to sacred sites, the treatment of human remains, the possession of sacred items, the conduct of traditional religious practices, and the preservation of important cultural properties are considered and not unduly infringed upon. In some cases, these concerns are directly related to “historic properties” and “archaeological resources”. In other cases, elements of the landscape without archaeological or other human material remains may be involved. Identification of these concerns is normally completed during the land use planning efforts, reference to existing studies, or via direct consultation.

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

ENVIRONMENTAL CONSEQUENCES.

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

LIVESTOCK GRAZING MANAGEMENT

AFFECTED ENVIRONMENT.

The Cattle Creek Drive allotment consists of 1,247 total acres. Cattle Creek Drive allotment is 50% public land which is equivalent to 642 acres. The allotment ranges in elevation from approximately 8,400 to 9,200 feet. The Cotton Wood allotment consists of 3,411 total acres. Cotton Wood allotment is 3% public land which is 202 acres and ranges in elevation from approximately 7,000 to 9,000 feet.

The Crystal River allotment consists of 5,304 total acres. Crystal River allotment is 65% public land which is 3,962 acres and ranges in elevation from approximately 7,000 to 9,000 feet. The Dry Park allotment is 18% public land with 766 acres and ranges in elevation from approximately 6,000 to 7,000 feet. The Upper Place allotment consists of 1,399 total acres. Upper Place allotment is 3% public land which is 41 acres and ranges in elevation from approximately 8,000 to 9,200 feet.

The grazing allotments involved with this action lie within Garfield County near Carbondale, CO. Lower elevations receive an annual precipitation from 12 to 14 inches/year and 18 to 22 inches/year in upper elevations (HPRCC). Common vegetation types include pinyon-juniper, oakbrush, mountain shrub and sagebrush.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. The Proposed Action would authorize the same level of use as the existing expiring permits. The Cattle Creek Drive allotment would be permitted at a stocking rate of 3.5 acres/AUM, the Cotton Wood allotment would be permitted at a stocking rate of 2.3 acres/AUM, Crystal River allotment would be permitted at a stocking rate of 11.3 acres/AUM, Dry Park allotment would be permitted at a stocking rate of 16.6 acres/AUM, and Upper Place allotment would be permitted at a stocking rate of 2.7 acres/AUM. Existing conditions are expected to be maintained or improved at these stocking levels and at utilization similar to the existing use.

No Grazing Alternative. Under this alternative grazing use would be canceled entirely on the five allotments involved with this action. An alternative source of forage would be required by the permittees during the spring and summer months. Traditional routes to Forest Service allotments would be altered and fencing to prevent livestock trespass may be required. Permittees would not contribute to maintenance or construction of improvements such as water developments that support wildlife. This decision would result in economic harm to the permittees.

PLANTS: INVASIVE NON-NATIVE SPECIES (NOXIOUS WEEDS)

AFFECTED ENVIRONMENT.

A recent landscape wide inventory has not been completed on the Cattle Creek Drive, Cotton Wood, Crystal River, Dry Park, and Upper Place allotments; however, some infestations of noxious weeds such as houndstongue, plumeless thistle, and common mullein have been documented on some of the allotments associated with the Proposed Action. Given the nature of noxious weed infestations it can be assumed that these species, along with other noxious weeds species may be found within the allotments.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Weeds generally germinate and become established in areas of surface disturbing activities. Livestock grazing can contribute to the establishment and expansion of noxious weeds through various mechanisms. Improperly managed grazing can cause a decline in desirable native plant species and ground cover which provides a niche for noxious weed invasion and establishment. Noxious weed seed can be transported and introduced to new areas by fecal deposition or by seed that clings to animal's coats. This effect is minimal compared to other weed seed dispersal vectors such as recreation and ground disturbing activities. Properly, managed livestock grazing maintains the vigor and health of native plant species which inhibits the spread of noxious weeds. Since the Proposed Action was designed to sustain and/or improve land health, no significant impacts to level of non-native, invasive species (noxious weeds) are expected. Noxious and invasive plant species are not expected to radically increase as a result of the continuation of livestock grazing practices. Most infestations will be isolated to watering facilities, salting areas, and other areas where livestock concentrate.

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.

There are no known occurrences or any potential habitat for any federally listed, proposed or candidate plant species within the five allotments in this proposed action (USFWS 2013).

Occupied habitat for the BLM sensitive plant, *Penstemon harringtonii* (Harrington's penstemon) exists within the Crystal River Allotment. A small amount of uninventoried potential habitat exists within the Dry Park Allotment. For the purposes of this analysis, the potential habitat within the Dry Park Allotment will be presumed to be occupied.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Due to the absence of potential or occupied habitat, the proposed grazing permit renewal would have "No Effect" on any ESA-listed plant species.

Harrington's penstemon is quite palatable to both livestock and wildlife and flowering stalks are often removed by grazing. Reductions in populations could result if excessive grazing removes a high percentage of the flower stalks annually thereby inhibiting seed dissemination and reproduction. The period of grazing use on the Crystal River and Dry Park Allotments coincides with the period when Harrington's penstemon plants would be sending up flower stalks and flowering, thus the potential for adverse impacts during this time is greater. If flower stalks are removed by grazing, a new flower stalk will not develop that year regardless of the length of the recovery period. In addition, concentrated grazing at any time of year can result in trampling damage which can cause mortality to individual plants and reductions in long-term viability of populations.

Proper livestock grazing in which the animals are well distributed and graze lightly on a variety of herbaceous vegetation tends to balance the competition between Harrington's penstemon and other herbaceous vegetation which compete with it for sunlight, water, and nutrients. Light grazing, therefore, can be beneficial to penstemon populations. Utilization data for the Crystal River and Dry Park Allotments is extremely limited. Utilization records which do exist indicate slight grazing use. The level of observed grazing use on these allotments would not be expected to result in any appreciable grazing of Harrington's penstemon flowering stalks and reproduction should be unaffected.

To date, no adverse impacts to Harrington's penstemon specific to livestock grazing have been documented in these allotments. If future monitoring or assessments determine that livestock grazing in these allotments is having an adverse impact to this species (i.e. failure to achieve Standard 4), mitigation measures will be identified and added to the terms of the permits at that time.

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

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

The Proposed Action is located within the Roaring Fork (2010) Land Health Assessment area. A determination of findings from the assessment was completed in September 2011 and found that the five allotments in this proposed action were considered to be meeting Standard 4 for threatened, endangered and other special status plants at the time of the assessments. No changes in grazing use have occurred since the previous assessments; therefore, continuation of grazing in the same manner and at the same level is not expected to result in a failure to achieve the standard.

PLANTS: VEGETATION

AFFECTED ENVIRONMENT.

Cattle Creek Drive, Cotton Wood, Upper Place. Cattle Creek Drive consists of approximately equal acreage of public (~640 acres) and private lands (605 acres). Cotton Wood Allotment consists of 5 small parcels of public land (202 acres total) surrounding a much larger parcel of private lands (~3,210 acres). The Upper Place Allotment consists of 40 acres of public land and about 1,360 acres of private land. Elevations on Cattle Creek Drive, Cotton Wood, and the Upper Place Allotments range between 8,400 to 9,200 feet. These areas are mesic and productive. Vegetation consists of Gambel oak/serviceberry and mountain big sagebrush shrublands, aspen forests and mountain meadows dominated by Idaho fescue, Letterman's needlegrass, and mountain brome.

Crystal River. Elevations range from 6,800 to 8,500 feet. Vegetation is a mix of mountain big sagebrush/mixed mountain shrubs in the swales and on the mesa tops, Gambel oak on the moderate north, east and west slopes, pinyon-juniper woodlands on ridgelines and south-facing slopes, and patches of Douglas-fir on the steeper north-facing slopes. The allotment consists of approximately 3,960 acres of public land contributing 65% of the forage and 630 acres of private land which comprise 35% of the forage.

Dry Park. The allotment consists of four parcels of public land interspersed with private land. Public land makes up 18% of the forage on the allotment. Elevations range from 6,000 to 8,000 feet. Vegetation on the public land is a mixture of pinyon-juniper woodlands on the steeper slopes and sagebrush parks in the flatter terrain with some scattered Gambel oak patches.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Livestock grazing results in the direct removal of vegetation, both green shoots from the current year and old, dried growth from the previous year. Properly managed livestock grazing can improve plant vigor by removing dried stems and seedheads thereby improving photosynthetic activity of live plant material. If the timing 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, change the species' composition in favor of less palatable plant species, and create surface disturbance and bare ground that serves as a niche for the invasion of noxious weeds. Grazing that does not exceed roughly 40-50% of the current year's growth and does not repeatedly defoliate the same plants or species will generally maintain plant health.

Cattle Creek Drive. Cattle Creek Drive Allotment is grazed for 2 months in mid-summer which encompasses most of the growing season. However, utilization on public lands in this allotment varied from none to up to 30% use with much of the grazing occurring on private lands. Land health assessment indicated good plant diversity and productivity.

Cotton Wood, Upper Place. The Cotton Wood Allotment is grazed for the entire growing season (6/16-9/30). The Upper Place Allotment is grazed for two and a half months in late summer-early fall (8/1-10/15). No utilization data has been collected for the Upper Place or Cotton Wood Allotments. However, private lands comprise the majority of grazable forage for both of these allotments so it is likely that the period of use on public lands is much shorter than shown on the permit. These allotments are in the mesic montane/aspen zone which generally receives good precipitation throughout the summer to facilitate plant growth. This should allow adequate grazing rest and moisture prior to or following grazing to restore plant root reserves and allow for seed dissemination and seedling establishment.

Crystal River. The Crystal River Allotment is grazed for a month and a half in early summer and again for a month in the fall. Utilization studies in 2010 indicated no use at the established key area in the northern part of the allotment. As indicated in the transect notes, this area may not be representative of grazing on the allotment and a new study site should be established and monitored.

Dry Park. The Dry Park Allotment is important big game winter range. The parcels that were visited showed very heavy big game use with all palatable shrubs heavily browsed and decadent. Even the juniper trees had been browsed. There was no evidence of livestock use on public land within the allotment in 2004 or 2010. In 2010, a new fence was noted around one of the BLM parcels which excluded it from livestock grazing.

Given the information above, no adverse impacts to vegetation are anticipated from the proposed action to renew the grazing permit for the Cattle Creek Drive, Cotton Wood, Dry Park, and Upper Place Allotments. New key areas and additional monitoring should be conducted on the Crystal River Allotment to ensure that the current grazing system is maintaining plant health.

Mitigation. Review existing key areas for livestock grazing use on the Crystal River Allotment. If these areas no longer represent grazing use on the allotment, identify new key

areas and establish and conduct rangeland and riparian monitoring on a schedule consistent with the allotment categorization.

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

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 3 FOR HEALTHY PLANT AND ANIMAL COMMUNITIES

The Roaring Fork Land Health Assessment determined that most of the vegetative communities in these allotments were in very good ecological condition, with vigorous growth, good canopy cover and moderate species diversity. Grass cover within sagebrush/Gambel oak sites was moderate to high, but Kentucky bluegrass, an invasive, introduced grass species was a common component of many of these sites. All of the allotments within the proposed action area were at least marginally meeting Standard 3 for healthy plant communities and no concerns were raised regarding livestock use. No changes in grazing use have occurred since the land health assessment; therefore, continuation of grazing in the same manner and at the same level is not anticipated to result in a decline in the condition of the vegetative communities on these allotments.

SOCIO-ECONOMICS

AFFECTED ENVIRONMENT.

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

Public land grazing in the CRVFO supports a traditional and historical way of life. Although historically livestock grazing in the region was at a higher intensity than at the present time, the livestock business has, and continues to be a traditional way of life for many permit holders.

Income derived from public land grazing permits continues to comprise a moderate to substantial portion of their individual livelihoods.

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

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

ENVIRONMENTAL CONSEQUENCES.

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

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

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

No 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 *Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield and Pitkin Counties* indicate 32 soil map units occur within the proposed allotments (NRCS 1992). The NRCS soil map unit descriptions (NRCS 2014) are provided below for the dominant soils within the allotments:

Arle-Ansari-Rock outcrop complex (12). This soil map unit is found on mountain and valley sides at elevations ranging from 6,000 to 8,200 feet and on slopes of 12 to 50 percent. Approximately 40 percent of this unit is Arle very stony loam, 30 percent Ansari loam, 20 percent Rock outcrop, and the other 10 percent a mixture of soil types. The Arle soil is moderately deep, well drained and is derived from redbed sandstone and shale. Surface runoff is medium and the water erosion hazard is slight to severe. The Ansari soil is shallow, well drained and is derived from redbed sandstone and shale. Surface runoff is rapid and the water erosion hazard is slight to severe.

Cushool-Rentsac complex (25). This soil map unit is found on mountains and mesa side slopes at elevations ranging from 6,200 to 7,600 feet and on slopes of 15 to 65 percent. Approximately 45 percent of this soil map unit is Cushool soil and 40 percent Rentsac soil. The Cushool soil is moderately deep, well drained, derived from sandstone and shale, and is found on slopes of 15 to 50 percent. Surface runoff for this soil is rapid and the erosion hazard is classified as severe. The Rentsac soil is shallow, well drained, derived from sandstone, and is found on slopes of 25 to 65 percent. Surface runoff for this soil is rapid and the erosion hazard is classified as severe.

Earsman-Rock outcrop complex (33). This soil map unit is found on mountainsides and ridges at elevations ranging from 6,000 to 8,500 feet and on slopes of 12 to 65 percent. Approximately 45 percent of this unit is Earsman very stony sandy loam and 35 percent Rock outcrop. The Earsman soil is shallow, excessively drained, and derived from calcareous redbed sandstone. Surface runoff for this soil map unit is rapid and the water erosion hazard is classified as slight to severe depending on slope.

Evanston loam (40). This deep, well-drained soil formed in mixed alluvium and is found on Alluvial fans, terraces, and valley sides at elevations ranging from 6,500 to 8,000 feet and on slopes of 25 to 45 percent. Surface runoff for this soil is rapid and the erosion hazard is classified as moderate to severe.

Showalter-Morval complex (95). This soil map unit is found on alluvial fans, high terraces, and valley sides at elevations ranging from 7,000 to 8,500 feet and on slopes of 15 to 25 percent. Approximately 45 percent of this unit is Showalter very stony loam, 35 percent Morval loam, and the other 20 percent a mixture of soil types. The Showalter soil is deep, well drained and is derived from basaltic alluvium. Surface runoff is medium and the water erosion hazard is moderate. The Morval soil is deep, well drained and is derived from basaltic alluvium. Surface runoff is medium and the water erosion hazard is slight.

Soil health was evaluated in 2010 during the Roaring Fork Land Health Assessment. BLM staff concluded that uplands soils were meeting land health standards throughout the proposed allotments, with slight to moderate departures from expected conditions (BLM 2011).

ENVIRONMENTAL CONSEQUENCES.

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

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

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 1 FOR SOILS.

Based on the Roaring Fork Land Health Assessment, BLM staff concluded that upland soils are meeting Standard 1 (BLM 2011). Implementation of the proposed action is not anticipated to degrade soil health from current conditions.

WATER QUALITY, SURFACE AND GROUND

AFFECTED ENVIRONMENT.

The Crystal River allotment (#08342) lies within the Crystal River watershed. Barbers Gulch carries most runoff generated from the northern and central portion of the allotment to the river. Barbers Gulch empties into the Crystal River approximately two miles from the allotment boundary. Overland flow generated on the south end of the allotment flows into either Smith Gulch or unnamed tributaries to North Thompson Creek. Smith Gulch would naturally flow into the Crystal River, but now crosses three irrigation ditches before terminating in a field some 1/4 mile from the river. While no flow or water quality data have been collected for the gulches within the allotment, flow is projected to be limited to snowmelt periods and when runoff is generated by convective summer storms. Water quality is thought to be similar to the Crystal River, given similar geology and topography in the basin. Flow data has been collected by USGS on the Crystal River at station #09081600 located upstream of this allotment. Mean flow for the 1956 to 1996 water years was 301 cubic feet per second. High flow resulted from snowmelt with peak flow occurring in June. Limited water quality data indicate waters low in total dissolved solids with conductance levels ranging from approximately 200-800 microsiemens/cm.

Four springs exist at the headwaters of Barbers Gulch. BLM holds absolute water rights on these sources, named Barbers Gulch Springs #1, 2, 3 and 4. Limited water quality data exists on these sources, but initial parameters collected in 1984 indicate good quality with temperature ranging from 7.2-20.7 °C, average conductivity = 324 microsiemens/cm, and average pH = 8.2. Barbers Gulch Spring #1 appears to have an old stock tank associated with this source. It is unclear what the functionality of this water development is at this time.

Dry Park allotment (#08352) lies within the Roaring Fork watershed. There are no perennial streams within the allotment. Overland flow on the south portion of the allotment is carried toward either Freeman Creek or Edgerton Creek. Runoff from the BLM administered ground in the central part of the allotment is carried to the Roaring Fork River by either an unnamed ephemeral tributary or terminates at a road or railroad grade borrow ditch. Runoff generated on the north end of the allotment flows to either Fourmile Creek or the Roaring Fork River. All flow is ephemeral, occurring from either snowmelt or convective storms. No water quality data are available because the allotment is virtually dry.

The Cottonwood allotment (#08301) is somewhat on a mesa situated on a watershed divide. Consequently, water is supplied to both the Colorado River and the Roaring Fork River. The Colorado River is fed by overland flow reaching either Cinnamon or Spring Creeks. Water that migrates toward the Roaring Fork River is conveyed by East Coulter Creek. There are very few defined drainages on BLM ground within the allotment. Snowmelt and/or convective rainstorms may generate runoff. There are no flow or water quality data available for the drainages on the allotment because they are virtually dry.

The Cattle Creek Drive allotment (#08302) is on a watershed divide between an ephemeral tributary to Ike Creek and a tributary to Cinnamon Creek, which both flow north to the Colorado River. Since these streams are generally dry, no water quality data are available for this part of the allotment. The southern portion of the allotment is within the West Coulter Creek watershed, which eventually empties into the Roaring Fork River. A dam on West Coulter Creek formed Consolidated Reservoir which backs water up onto a portion of the allotment. West Coulter Creek flows into Cattle Creek and then to the Roaring Fork River, a journey of more than 8 stream miles. It is a perennial stream with peak flows projected to occur in the spring (April through mid-May) from snowmelt, with occasional flashy flows from thunderstorm activity.

The BLM portion of Upper Place allotment (#08304) appears to be a dry parcel, with no identified streams or water bodies. Topographically the allotment drains toward to East Coulter Creek.

The State of Colorado has developed *Stream Classifications and Water Quality Standards* that identify beneficial uses of water and numeric standards used to determine allowable concentrations of water quality parameters (CDPHE 2011). Streams within the proposed allotments are listed under the Roaring Fork and Upper Colorado River Basins and have water use classifications described in Table 5.

Table 5. Stream Segment Descriptions.

Stream Segment Description	Classifications	Water Quality
3b. Mainstem of Red Canyon and all tributaries and wetlands from the source to the confluence with the Roaring Fork River, except for Landis Creek from its source to the Hopkins Ditch Diversion.	Aquatic Life Cold 2 Recreation N Water Supply Agriculture	D.O.=6.0 mg/l pH=6.5-9.0 E.Coli=126/100ml
7a. All tributaries to the Colorado River, including all wetlands, from a point immediately above the confluence with the Blue River and Muddy Creek to a point immediately below the confluence with the Roaring Fork River, which are not on National Forest lands, except for specific listings in Segment 7b, 7c and in the Blue River, Eagle River, and Roaring Fork River basins.	Aquatic Life Cold 1 Recreation N Water Supply Agriculture	D.O.=6.0 mg/l pH=6.5-9.0 E.Coli=630/100ml
8. Mainstem of the Crystal River, including all tributaries and wetlands, from the source to the confluence with the Roaring Fork River, except for specific listings in Segments 1, 9 and 10.	Aquatic Life Cold 1 Recreation E Water Supply Agriculture	D.O.=6.0 mg/l pH=6.5-9.0 E.Coli=630/100ml

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

The State of Colorado has developed a *303(d) List of Water Quality Limited Segments Requiring TMDLS and Monitoring and Evaluation List* (CDPHE 2010) 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 resulting from grazing could be elevated turbidity and fecal coliform, if cattle begin to congregate near water sources for extended periods of time. Hoof action can cause surface compaction, stream bank shearing, elevated erosion rates and subsequent deterioration of water quality. Indirect impacts may result from excessive utilization in upland watershed areas reducing effective vegetative cover, elevating erosion potential and increasing sediment delivery to streams, which could negatively impact water quality.

Cottonwood allotment (#08301) - Grazing would occur during most of the growing season, mid-June through September. This is an extended period of time, only allowing vegetative recovery during the spring. This may result in localized areas where vegetative cover is reduced serving as

sediment sources. With the topography being fairly level, minimal runoff is generated from the allotment. These factors would limit sediment transported from the allotment. Sediment that migrates off the allotment would settle out in any of a number of reservoirs, or be detained by upland vegetation. No increase in sediment level to perennial streams is expected.

Upper Place allotment (#08304) – Grazing would occur Aug 1- Oct 15 across only a small portion of BLM lands. With no perennial water bodies and mild topography on the BLM portion of the allotment; negligible impacts to water quality from grazing management are expected.

Cattle Creek Drive allotment (#08302) - Grazing would occur during much of the growing season, following spring runoff. With 181 AUMs on an allotment approximately one section in size, there is potential for the cattle to congregate in localized areas for an extended period of time. The soil may be compacted and the vegetative cover reduced in those areas. This could create a sediment source with potential water quality degradation. Since most of the public land within the allotment do not have perennial stream channels, and the portion that does drains into Consolidated Reservoir, the sediment would not be transported very far off the allotment. For runoff that flows to the Colorado River, there are numerous “tanks” downstream of the allotment that would catch sediment before it would reach the river. Sediment that moves to the south would be detained in Consolidated Reservoir within the allotment boundary. Consequently, no measurable increase in sediment loading would occur in perennial flowing streams from grazing this area.

Dry Park allotment (#08352) - Grazing would occur following the snowmelt period in spring, so little water to no water would be in the drainages during this grazing period. The area would be rested during the monsoon season and livestock would return for one month in fall. With this timing, the likelihood of overland flow during the grazing period is low. Consequently the ability to transport sediment off the allotment is low. Any sediment that is generated would not create a measurable increase in the sediment level of the Roaring Fork River. The ephemeral hydrology within the allotment coupled with the buffer offered by road borrow ditches, the railroad grade, vegetation down-gradient of the allotment, and slope break near the river would serve to limit sediment transport distance.

Crystal River allotment (#08342) - Grazing would occur in spring, probably at the tail end of the snowmelt period and then again for one month in fall, generally after the growing season. The timing and intensity of grazing is not projected to cause a significant increase in the sediment or coliform bacteria levels in either Barbers or Smith Gulches. There may be a few localized areas where livestock congregate that could produce upland erosion. Any sediment generated from those areas is not projected to move long distances. Sediment that does migrate to the defined drainages in the allotment would generally be detained by riparian vegetation, be moved to the irrigated fields or be detained in road borrow ditches. Barbers Gulch Springs #1-4 likely receive some direct livestock use, but appear to be undeveloped sources at this time. Direct impacts include short-term elevated turbidity and fecal coliform. Overall, impacts to ground water are expected to be minor, if best management practices are implemented to protect these sources.

No Grazing Alternative. Under this alternative, no livestock grazing would occur and there would be no direct or indirect impacts to water quality from livestock use. Trampling or removal of plant material may still occur from wildlife grazing, and soil disturbance and erosion may

persist due to other surface disturbing activities, such as roads and trails that exists throughout the allotment, which could potentially affect water quality.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 5 FOR WATER QUALITY.

Based on the Roaring Fork Land Health Assessment, BLM staff concluded that water quality is meeting Standard 5 (BLM 2011). Implementation of the proposed action is not anticipated to degrade water quality from current conditions.

WETLANDS AND RIPARIAN ZONES

Affected Environment.

Background. Wetland and riparian areas include marshes, wet meadows, shallow swamps, estuaries, and land adjacent to rivers, streams and lakes. Riparian areas make up a relatively small but productive and resilient portion of the landscape (USDI 2006). Healthy riparian areas are reflected in the vigorousness of the vegetation. Late seral vegetation stabilizes stream banks and shorelines and traps sediment that cleans and filters water. Accumulated detritus mixes with sediments creating a sponge that is penetrated by root masses as it stores water which is then slowly released back into the stream attenuating water flow and mitigating drought effects. The retention of water benefits adjacent plant communities as localized water tables rise. The aggraded sediments create habitat exploited by early successional riparian plants which is then replaced by late seral riparian plant species that have the kinds of root structures more capable of stream bank protection. Then as the banks build up, the creek channels narrow, deepen and become covered with overhanging vegetation that shades and cools the slower flowing water. Within the riparian bottom, any remaining residual plant material at the end of the growing season benefits water retention in the form of snow that later melts to provide additional water to riparian areas. A healthy riparian system slows the departure of water from the landscape creating conditions right for biological successional processes to occur which are a benefit to plant and animal life.

General Description of Riparian/Wetland Systems.

Crystal River. Within the Crystal River Allotment riparian and wetland resources are found at Barbers Gulch. Barbers Gulch begins in the southwest upland area of the allotment and flows to the northeast. There is one developed spring on Barbers Gulch that has an offsite water tank. Below the ephemeral beginnings of this creek, water flow from an unknown spring provides a consistent flow of water creating a perennial riparian area. From ArcGIS information and photos, the canyon bottom is narrow and is used by cattle for trailing, loafing and foraging.

Cattle Creek Drive. Within the Cattle Creek Drive allotment riparian and wetland resources are found at West Coulter Creek. The creek begins at the outflow of the Consolidated Reservoir and flows to private lands in the southwest. Aerial imagery from ArcGIS suggests that this creek bottom is shaded by a woody overstory. Water flows within this creek bottom are highly regulated by the reservoir.

Cotton Wood, Dry Park and Upper Place allotments. There are no known riparian wetland resources on these allotments.

Proper Functioning Condition.

Properly Functioning Condition (PFC) is a qualitative method for assessing the condition of riparian-wetland areas. The term PFC is used to describe both the assessment process and a defined, on the ground condition of a riparian-wetland area. The PFC assessment refers to a consistent approach for considering hydrology, vegetation and erosion/deposition (soils) attributes and processes to assess the condition of riparian-wetland areas (BLM 2003). Table 6 below displays the results of PFC assessments of riparian resources in the Crystal River and Cattle Creek Drive allotments.

Table 6. Proper Functioning Condition Ratings.

Allotment	Riparian Area	Year Assessed	Miles ₁	Condition Rating
Crystal River	Barbers Gulch	1994, 1997	3.2	PFC
		2010		FAR Upward
Cattle Creek Drive	West Coulter Creek	1994	1.4	PFC
		2010	0.25	

Notes: 1. Distances shown in miles are those within the allotments.

2. **PFC** - Lentic riparian-wetland areas are functioning properly when adequate vegetation, landform, or debris is present to: dissipate energies associated with wind action, wave action, and overland flow from adjacent sites, thereby reducing erosion and improving water quality; filter sediment and aid floodplain development; improve flood-water retention and ground-water recharge; develop root masses that stabilize islands and shoreline features against cutting action; restrict water percolation; develop diverse ponding characteristics *to provide* the habitat and the water depth, duration, and temperature necessary for fish production, waterbird breeding, and other uses; and support greater biodiversity.

3. **FAR**; Functioning-At Risk areas are riparian-wetland areas that are in functional condition, but have an existing soil, water, or vegetation attribute that makes them susceptible to degradation. In this case the trend is upward.

General. Livestock can indirectly and directly affect stream condition through soil compaction, bank shearing, or severing of roots of riparian vegetation, which are needed for plant survival and bank stability (Behnke and Raleigh 1978). Over-utilization of late seral riparian plant species diminishes the plants vigorousness to withstand grazing. Loss of photosynthetic plant material reduces plant physiological ability to store root carbohydrates, grow elongated roots and produce seed. Stressed late seral plant species disappear from riparian plant communities and are replaced by species more capable of exploiting stressed habitats. This is expressed in riparian plant composition changes from a suite of late seral plants to a community dominated by more early seral plant species like tufted hairgrass, redtop and other invasive species.

The successional status of riparian plant communities directly determines the health of the riparian area. Micheli and Kirchner (2002) have shown that riparian species, especially obligates, are six to ten times more effective in providing bank stability and in resisting the forces of water than those plant species adapted to drier environments. Riparian plant community types are important because they are more suitable for maintaining and enhancing the stability of streams.

Attributes that can change in response to grazing include (USDI 2006);

- Plant community composition, distribution, and production
- Plant species diversity
- Rooting characteristics (deep-rooted or shallow rooted)
- Vegetation contribution to percentage of soil organic matter
- Amount of bare ground vs. vegetated ground cover
- Plant community structure including woody plant size, diverse age classes, location, and abundance.

Barbers Gulch. A PFC assessment was done on Barbers Gulch in 1994 when this stream was rated as being at PFC. The assessment was done again in 2010 when that rating was downgraded to functioning-at-risk, but with an upward trend. Reasons for this stream not achieving PFC was that the width/depth ratio of Barbers Gulch was out of balance with its surroundings. There was insufficient riparian plant cover to protect banks and dissipate energy during high flow events. The streambank vegetation was comprised of early seral plant species that lack sufficient root masses needed to armor banks and protect them from high streamflow events and grazing cattle. Head cuts were also noted during in 2010.

West Coulter Creek. A Proper Functioning Condition (PFC) assessment was done in 1994 and again in 2010 and in both years this stream was as being at PFC. In 1994 the PFC assessment noted that there was no cattle sign in this riparian bottom.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. *Crystal River.* The Proposed Action authorizes the grazing of 295 head of cattle from May 15 to June 30 and a second period of use by 146 head of cattle from September 16th to October 15th each year. The Proposed Action authorizes late spring and early summer period of use, rest during the hot season, followed by the fall period of use in the riparian areas. Based upon the PFC assessments and the changes made by the permittee to livestock management, the Barbers Gulch stream is expected to achieve a PFC rating. The width/depth ratio of this riparian area is expected to improve by becoming more in balance with the landscape settings. Riparian vegetation is expected to become dominated by later seral riparian species that armor banks and protect them from high streamflow events and grazing cattle. The fall period of use will occur after the riparian plant species have mostly completed their season of growth by replenishing root carbohydrate reserves, root elongation and the setting of seed.

Cattle Creek Drive. Based upon PFC assessments, the Proposed Action is not expected to impact the riparian resources within this allotment.

Cottonwood, Dry Park and Upper Place allotments. Because there are no known riparian areas within these allotments, the proposed action will not impact riparian wetland resources.

No Grazing Alternative. *Crystal River.* Without the presence of livestock grazing on this allotment, over time it is anticipated that the riparian plant communities would improve over current conditions and reach their maximum potential regarding riparian plant community development. Willows, rushes and sedges would increase and potentially dominate the riparian bottom.

Cattle Creek Drive. Without the presence of livestock grazing on this allotment, the present condition of the riparian bottom would be maintained and even improve without livestock grazing.

Cottonwood, Dry Park and Upper Place allotments. There are no known riparian areas within these allotments, therefore no impacts to riparian/wetlands.

ANALYSIS OF THE PUBLIC LAND HEALTH STANDARD 2 FOR RIPARIAN SYSTEMS.

The Proposed Action would likely maintain or improve Colorado Public Land Health Standard 2 for riparian/wetland systems within the Crystal River, Cattle Creek Drive allotments.

WILDLIFE: AQUATIC / FISHERIES (INCLUDING SPECIAL STATUS SPECIES)

AFFECTED ENVIRONMENT.

None of the allotments contain fish-bearing streams. The Dry Park and Cottonwood allotments do not contain riparian areas and consequently there would be no impacts from the proposed action or any alternative.

The Crystal River Allotment contains some perennial waters and riparian vegetation along Barbers Gulch but no data on fish and aquatic wildlife exists for that particular reach. A small portion (0.25-mile) of West Coulter Creek is in the Cattle Creek Driveway Allotment. West Coulter Creek was sampled in 2010 on the BLM reach and no fish were collected or seen. It is possible that fish reside in areas not sampled or on private land parcels. It is estimated they both contain commonly occurring amphibians and macroinvertebrates.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Livestock grazing can have direct negative impacts on streams containing sediment-intolerant aquatic species. There are four general components of an aquatic system that can be affected by livestock grazing: streamside vegetation, stream channel morphology, shape and quality of the water column and the structure of the soil portion of the streambank (Behnke, R. J., and R. F. Raleigh 1979). The potential impacts on aquatic species and their habitats are: habitat alteration, increased water temperatures, reduced macroinvertebrate productivity and increased sedimentation and turbidity.

Livestock have a tendency to concentrate their foraging use in or near riparian areas so actions that protect or reduce impacts on riparian areas benefit aquatic wildlife and macroinvertebrates. Well vegetated streambanks provide both thermal and hiding cover for fish as well a source of nutrients and food for all forms of aquatic life. Healthy riparian corridors dissipate flood energies and filter sediments, resulting in reduced sediment loads and better spawning substrates. Riparian communities also provide diverse ponding structures creating pool habitat for fish and other aquatic wildlife.

Field observations indicate that the components of aquatic systems are currently in good condition on the allotments associated with the Proposed Action. The period of use and livestock numbers are anticipated to afford sufficient vegetative cover to prevent increased sediments loads from entering watersheds through erosion. Thus, the Proposed Action of renewing grazing permits with the same number/kind of livestock, period of use, and AUMs would likely result in maintaining adequate aquatic habitat conditions.

No Grazing Alternative. Under this alternative, no livestock grazing would occur and there would be no direct or indirect impacts to aquatic wildlife or their habitat from livestock use. Riparian vegetation biomass would likely increase without the presence of livestock.

ANALYSIS OF THE PUBLIC LAND HEALTH STANDARD 3 FOR AQUATIC WILDLIFE (INCLUDING SPECIAL STATUS SPECIES).

All the allotments were meeting land health standard 3 for aquatic wildlife in the 2010 Roaring Fork Land Health Assessment. Based on: 1) the current conditions of waters and riparian habitat condition within the allotments, 2) information from the 2010 Roaring Fork Land Health Assessment, 3) the terms and conditions attached to the permit and 4) the continuation of the current grazing schedule; the proposed action will continue to support achievement of land health standard 3 for aquatic wildlife on all BLM managed waters located within these allotments.

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, breeding habitat is of special importance because it is critical for supporting reproduction in terms of both nest sites and food. In addition, because birds are generally territorial during the nesting season, their ability to access and utilize sufficient food is limited by the quality of the territory occupied. During non-breeding seasons, birds are generally non-territorial and able to feed across larger areas and wider ranges of habitat.

The allotments provide both foraging and nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. Of the birds listed by the United States Fish and Wildlife Service as Birds of Conservation Concern (USFWS, 2008), the Roaring Fork Audubon Society has identified the following species on their 2010 checklist (Table 7).

Table 7. Birds of Conservation Concern.

Species	Status	Winter	Spring Migrant	Summer	Fall Migrant
Bald Eagle	Resident	Fairly Common	Uncommon	Uncommon	Uncommon

Species	Status	Winter	Spring Migrant	Summer	Fall Migrant
Ferruginous Hawk	Winters	Uncommon	Uncommon	Uncommon	Uncommon
Golden Eagle	Resident	Uncommon	Uncommon	Uncommon	Uncommon
Peregrine Falcon	Resident	Resident	Resident	Resident	Resident
Prairie Falcon	Resident	Uncommon	Uncommon	Uncommon	Uncommon
Yellow-billed Cuckoo	Casual and Accidental Species				
Burrowing Owl	Breeding	NA	Resident	Resident	Resident
Lewis's Woodpecker	Resident	Uncommon	Uncommon	Uncommon	Uncommon
Willow Flycatcher	Breeding	NA	Resident	Uncommon	Resident
Gray Vireo	Casual and Accidental Species				
Pinyon Jay	Resident	Fairly Common	Fairly Common	Fairly Common	Fairly Common
Juniper Titmouse	Resident	Uncommon	Uncommon	Uncommon	Uncommon
Veery	Migrant	NA	Resident	Resident	Resident
Brewer's Sparrow	Breeding	NA	Uncommon	Fairly Common	Uncommon
Black Rosy-Finch	Winters	Uncommon	NA	NA	NA
Brown-capped Rosy-Finch	Resident	Uncommon	Uncommon	Uncommon	Uncommon
Cassin's Finch	Resident	Uncommon	Fairly Common	Fairly Common	Fairly Common
<p>Resident – Found year-round in the area. Numbers may fluctuate due to the arrival of migrant population and to partial seasonal withdrawals. Local altitude fluctuation may occur.</p> <p>Breeding – Migratory species. Nests in the area, some years a few may winter.</p> <p>Migrant – Species that migrates through the area in spring or fall. Some may be found in summer but do not breed.</p> <p>Winters – Migratory species that winters but does not nest in the area.</p> <p>Fairly Common – Present in smaller numbers in suitable habitat, likely to be seen daily.</p> <p>Uncommon – Occurs in small numbers in suitable habitat, not always seen daily.</p> <p>Causal/Accidental – Sporadic and unexpected, vagrant species outside of its normal range.</p>					

Bald eagle (*Haliaeetus leucocephalus*). Bald eagles are increasing in numbers throughout their range and were removed from the federal threatened and endangered species list in 2007 however bald eagles are still protected under the Migratory Bird Treaty Act. Bald eagles are known to mostly winter along portions of the Roaring Fork River and its major tributaries. The Crystal River and Dry Park allotments overlap with bald eagle winter range. Wintering bald eagles are generally present from mid-November to mid-April. Large mature cottonwood trees along the rivers and their major tributaries are used as roosting and perching sites, and these waterways provide the main food sources of fish and waterfowl. Upland habitats adjacent to these waterways

are used as scavenging areas primarily for winter killed animals. Major threats include habitat loss, human disturbance and illegal shooting.

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Livestock grazing can alter vegetation structure, composition, and function. Effects on migratory birds are dependent on the species of interest and may be adverse or beneficial depending on grazing timing, frequency, and intensity. Aerial, bark and canopy insectivores may be less influenced by grazing than species feeding on nectar, insects, or seeds in the understory or on the ground. Birds may be displaced as a result of fence and pond construction/maintenance and/or grazing. Trampling of nests, eggs, or young could occur. Losses or decreases in vegetation from overgrazing can decrease rodent prey species and affect local populations of raptors. Areas lacking vegetative structure and complexity would be expected to be lacking bird species richness. This is especially important in riparian areas since riparian areas are essential habitat for bird species of the arid and semiarid west, including upland birds, waders, shorebirds, raptors, neotropical migratory birds and passerines.

Based on available data it is not expected that any long-term adverse effects on migratory bird populations would occur from continuing the current livestock grazing schedule. There is the potential for negative impacts on both upland and riparian/meadow habitats during those years with nominal growth (e.g. drought). However, the terms and conditions specifying an average utilization level by livestock to not exceed 50% by weight on key grass species, and 40% of the key browse species current year's growth would maintain vertical and horizontal vegetative structure and complexity where it presently exists.

No Grazing Alternative. Under this alternative, no livestock grazing would occur and there would be no direct or indirect impacts to migratory birds or their habitat from livestock use. Species which respond positively to grazing might not be as abundant and species that respond negatively to grazing might increase on the allotments.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 3 FOR TERRESTRIAL WILDLIFE.

All the allotments were meeting land health standard 3 for terrestrial wildlife in the 2010 Roaring Fork Land Health Assessment. Based on: 1) the current conditions of waters and riparian habitat condition within the allotments, 2) information from the 2010 Roaring Fork Land Health Assessment, 3) the terms and conditions attached to the permit and 4) the continuation of the current grazing schedule; the proposed action will continue to support achievement of land health standard 3 for migratory birds on BLM lands within these allotments.

WILDLIFE: SENSITIVE, THREATENED, AND ENDANGERED

AFFECTED ENVIRONMENT.

No special status aquatic wildlife species habitat is known or documented to occur on BLM lands within these allotments however the following terrestrial species may occasionally be present and impacted by livestock grazing.

Canada lynx (*Lynx Canadensis*). Federally listed as threatened, the Canada lynx occupy high-latitude or high-elevation coniferous forests characterized by cold, snowy winters and an adequate prey base. In the western US, lynx are associated with mesic forests of lodgepole pine, subalpine fir, Engelmann spruce, and quaking aspen in the upper montane and subalpine zones, generally between 8,000 and 12,000 feet in elevation. Although snowshoe hares (*Lepus Americanus*) are the preferred prey, lynx in also feed on mountain cottontails (*Sylvilagus nuttallii*), pine squirrels (*Tamiasciurus hudsonicus*), and blue grouse (*Dendragapus obscurus*). The Forest Service has mapped suitable denning, winter, and other habitat for lynx within the White River and Routt National Forests. The mapped suitable habitat comprises areas known as Lynx Analysis Units (LAUs) that are the approximate the size of a female's home range. Several LAUs include small parcels of BLM lands.

The Cotton Wood, Cattle Creek Drive and Upper Place allotments are within the Glenwood Lynx Linkage Area. This linkage area provides for movement between the Flattops, south through Glenwood Canyon, and then across shrub-steppe habitats to the Red Tables. Underpasses of I-70 are in place (e.g. Bair Ranch). There is mixed land ownership within this linkage area. There are several existing barriers to movement: Glenwood Canyon, the Colorado River, the railroad and Interstate 70, so remaining crossing areas are in need of maintenance/protection. Linkage areas are areas of movement opportunities. They exist on the landscape and can be maintained or lost by management activities or developments. They are not "corridors" which imply only travel routes, they are broad areas of habitat where animals can find food, shelter and security. The Lynx Conservation Assessment and Strategy (Ruediger, 2000) defines linkage areas as: "Habitat that provides landscape connectivity between blocks of habitat. Linkage areas occur both within and between geographic areas, where blocks of lynx habitat are separated by intervening areas of non-habitat such as basins, valleys, or agricultural lands. Connectivity provided by linkage areas can be degraded or severed by human infrastructure such as high-use highways, subdivisions or other developments.

Fringed Myotis (*Myotis thysanodes*) and Townsend's Big-eared Bat (*Plecotus townsendii*). Fringed Myotis and Townsend's Big-eared Bats occur as scattered populations at moderate elevations on the western slope of Colorado. Special status bats may occur within the allotments, but likely only occasional migrating individuals or animals foraging or passing through from adjacent habitats. Habitat associations are not well defined. Both bats will forage over water and along the edge of vegetation for aerial insects. Townsend's big-eared bat is not very abundant anywhere in its range. This is attributed to patchy distribution and limited availability of suitable roosting habitat (Gruver, J.C. and D.A. Keinath 2006).

These species commonly roost in caves, rock crevices, mines, or buildings, but also may roost in tree cavities. Both species are widely distributed and usually occur in small groups. There are no known caves, adits, shafts, or outbuildings on the BLM portion of the allotment capable of providing hibernacula for bats. Habitat is unknown on adjacent private lands.

Northern goshawk (*Accipiter gentilis*). The Northern Goshawk is an uncommon, seasonal resident of foothills and mountains and occasionally present during migration or winter at lower elevations. Goshawks predominantly use mature stands of aspen, and pines (ponderosa and lodgepole).

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. Livestock grazing can alter vegetation structure, composition, and function. On the other hand, livestock grazing can have a beneficial effect on forage quality by removing the rough or dried seedheads and stems, while leaving or creating the more palatable leaves for deer or elk to graze later in the season. Effects on terrestrial wildlife are dependent on the species of interest and may be adverse or beneficial depending on grazing numbers, timing, frequency, and intensity.

Little is known about the actual use of the allotments by special status terrestrial wildlife species. Because these animals are uncommon or occur in scattered populations, population assessment of these species is difficult. In addition, the special status species that potentially could occur in these allotments are part of populations that occupy much larger ranges. However, grazing management operations are adequate to meet or maintain land health standards and mechanisms (e.g. terms and conditions attached to the permit) are in place for adherence to BLM land health standards.

Canada lynx. This analysis is in conformance with and tiered to the programmatic consultation regarding the CRVFO livestock grazing program (ES/GJ-6-CO-03-F-013). If: 1) land health standard 3 for terrestrial wildlife is currently being achieved; 2) the proposed number/kind of livestock, allowable AUMs, percent of public land and periods of use remain the same; and 3) terms/conditions are anticipated to result in continued acceptable residual herbivore forage and riparian conditions necessary to maintain adequate prey habitat across the linkage area; then the resulting impact of the proposed action is basically an administrative action resulting in unmeasurable on-the-ground changes or impacts. The grazing allotments would continue to meet land health standard 3 within linkage areas because connectivity to other habitats across the linkage area would continue to be maintained. Based on these factors a determination of “no effect” on Canada lynx is made.

All Other Terrestrial Wildlife Species. Healthy functioning riparian ecosystems and uplands provide habitat for a diverse and abundant plant community and in turn insect and rodent populations that attract numerous foraging bat and bird species. 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.

No Grazing Alternative. All Terrestrial Wildlife Species. Ending livestock grazing would benefit special status species terrestrial wildlife by eliminating all direct and indirect competition with livestock for forage, cover and space. There would also be no disturbance to wildlife from vehicular traffic or human presence during maintenance of infrastructure or tending to livestock.

ANALYSIS OF LAND HEALTH STANDARD 4 FOR SENSITIVE, THREATENED, AND ENDANGERED TERRESTRIAL WILDLIFE SPECIES.

All the allotments were meeting land health standard 4 for special status terrestrial wildlife in the 2010 Roaring Fork Land Health Assessment. Based on the information from the 2010 Roaring Fork Land Health Assessment, the continuation of the current grazing schedule, and the application of the terms and conditions attached to the permit; the proposed action will continue to support achievement of land health standard 4 for terrestrial wildlife on BLM lands within these allotments.

WILDLIFE: TERRESTRIAL

AFFECTED ENVIRONMENT.

Big Game. Mule deer (*Odocoileus hemionus*) are a recreationally important species that are common throughout suitable habitats in the Roaring Fork watershed. Another recreationally important big game ungulate (hoofed animal), the Rocky Mountain elk (*Cervus elaphus nelsonii*), is also present. Mule deer and elk usually occupy higher elevations, forested habitat, during the summer and then migrate to sagebrush-dominant ridges and south-facing slopes at lower elevation in the winter. BLM lands provide a large portion of the undeveloped winter range available to deer and elk.

The Dry Park and Crystal River (east half) Allotments overlap with Colorado Parks and Wildlife (CPW) mule deer critical winter range. The Upper Place and Cattle Creek Drive Allotments overlap with CPW mapped elk production areas. The Dry Park and Crystal River Allotments overlap with CPW mapped elk severe winter range and elk winter concentration areas.

Big game populations are managed by Colorado Parks and Wildlife (CPW) to achieve population and sex ratio objectives established for data analysis units (DAU). A DAU is the geographic area that represents the year-around range of a big game herd and includes all of the seasonal ranges of a specific herd. Each DAU usually is composed of several Game Management Units (GMUs), but in some cases only one GMU makes up a DAU. The purpose of a DAU plan is to integrate the plans and intentions of CPW with the concerns and ideas of land management agencies and interested publics to determine how a big game herd in a DAU should be managed.

The Avalanche Creek Elk Herd E-15 Data Analysis Unit (DAU) Plan and the Frying Pan River Elk Herd E-16 DAU Plan state that elk are currently within population objective ranges. D-13 (Maroon Bells Deer) DAU Plan for GMUs 43, 47, and 471 states that mule deer populations are currently below population objective range (CPW 2014). There is no DAU Plan for mule deer covering the Cotton Wood, Cattle Creek Drive and Upper Place Allotments.

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

(*Canis latrans*). Black bears (*Ursus americanus*) make use of oaks and the associated chokecherries and serviceberries for cover and food, while mountain lions (*Felis concolor*) are likely to occur during seasons when mule deer (*Odocoileus hemionus*) are present.

Passerine Birds. Passerine (perching) birds are commonly found in the area include: the American robin (*Turdus migratorius*), Western Scrub-jay (*Aphelocoma californica*), Black-capped Chickadee and Mountain Chickadee (*Poecile atricapilla* and *Poecile gambeli*), Cedar Waxwing (*Bombycilla cedrorum*), Crow (*Corvus brachyrhynchos*), Common Raven (*Corvus corax*), Sparrow spp., Humming birds (*Selasphorus platycercus* and *Archilochus alexandri*), and black billed magpie (*Pica pica*).

Gallinaceous Birds. Gallinaceous (game birds) are commonly found in the area and include: Ring-necked Pheasant (*Phasianus colchicus*), Dusky Grouse (*Dendragapus obscurus*), and Wild Turkey (*Meleagris gallopavo*).

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

ENVIRONMENTAL CONSEQUENCES.

Proposed Action. All Species. Domestic livestock can compete with elk and mule deer for herbaceous forage, although moderate levels of grazing can also help promote shrub growth by limiting grasses.

For other terrestrial wildlife species, livestock grazing can alter vegetation structure, composition, and functionality of the habitat for terrestrial wildlife. On the other hand, livestock grazing can have a beneficial effect on forage quality by removing the rough or dried seedheads and stems, while leaving or creating the more palatable leaves for deer or elk to graze later in the season. Effects on terrestrial wildlife are dependent on the species of interest and may be adverse or beneficial depending on grazing numbers, timing, frequency, and intensity.

Based on available data, and analysis in other sections of this EA, it is not expected that any long-term adverse effects on terrestrial wildlife would occur from continuing the current livestock grazing schedule. There is the potential for negative impacts on both upland and riparian/meadow habitats during those years with nominal growth (e.g. drought). However, the terms and conditions specifying an average utilization level by livestock to not exceed 50% by weight on key grass species, and 40% of the key browse species current year's growth would maintain vertical and horizontal vegetative structure, biomass and complexity where it presently exists.

No Grazing Alternative. All Species. Ending livestock grazing would benefit terrestrial wildlife by eliminating all direct and indirect competition with livestock for forage, cover and space thus

making a greater availability to wild fauna. There would also be no disturbance to wildlife from vehicular traffic or human presence during maintenance of infrastructure or tending to livestock.

ANALYSIS OF PUBLIC LAND HEALTH STANDARD 3 FOR TERRESTRIAL WILDLIFE.

The watershed assessment area that includes these allotments appears to be meeting the needs of terrestrial wildlife. Overall, ecological processes are presently functioning within a normal range of variability. Habitat condition is generally good and all of the allotments were meeting land health standard 3 for terrestrial wildlife in the 2010 Roaring Fork Land Health Assessment. With continuation of the current grazing schedule and the application of the terms and conditions attached to the permit, the proposed action would continue to support achievement of land health standard 4 for terrestrial wildlife on BLM lands within these allotments. Adequate habitat conditions (suitability and connectivity) will be available to ensure that terrestrial wildlife are maintained at viable population levels commensurate with the species and habitat's potential.

CUMULATIVE EFFECTS:

Soil and Water. Cumulative impacts to soil and water resources can occur from existing roads and trails throughout the allotment. Roads and trails can contribute to increased surface runoff and accelerated erosion, especially where proper drainage is lacking. Other impacts such as vegetation treatments or weed treatments may also change water infiltration or runoff rates and affect soil and water resources. Based on limited land management activities occurring across the allotment, it is assumed that cumulative effects to soil and water are minor if proper best management practices are implemented.

CONSULTATION: The following stakeholders were contacted:

- Southern Ute Indian Tribe
- Ute Mountain Ute Tribe
- Uinta and Ouray Agency Ute Indian Tribe
- Grazing permittees

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 8, along with their areas of responsibility.

Table 8. BLM Interdisciplinary Team Authors and Reviewers		
Name	Title	Areas of Participation
Kristy Wallner	Rangeland Management Specialist	NEPA lead, Invasive, Non-Native Species (Noxious Weeds)
Carla DeYoung	Ecologist	Areas of Critical Environmental Concern; Vegetation; T/E/S Plants; Land Heath Standards

Table 8. BLM Interdisciplinary Team Authors and Reviewers

Name	Title	Areas of Participation
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
Brian Hopkins	Planning and Environmental Coordinator	Migratory Birds, Terrestrial Wildlife and T/E/S Terrestrial Wildlife, Aquatic Wildlife and T/E/S Aquatic Wildlife
Everett Bartz	Rangeland	Wetlands & Riparian Zones
Pauline Adams	Hydrologist	Air Quality, Water Quality, Soils

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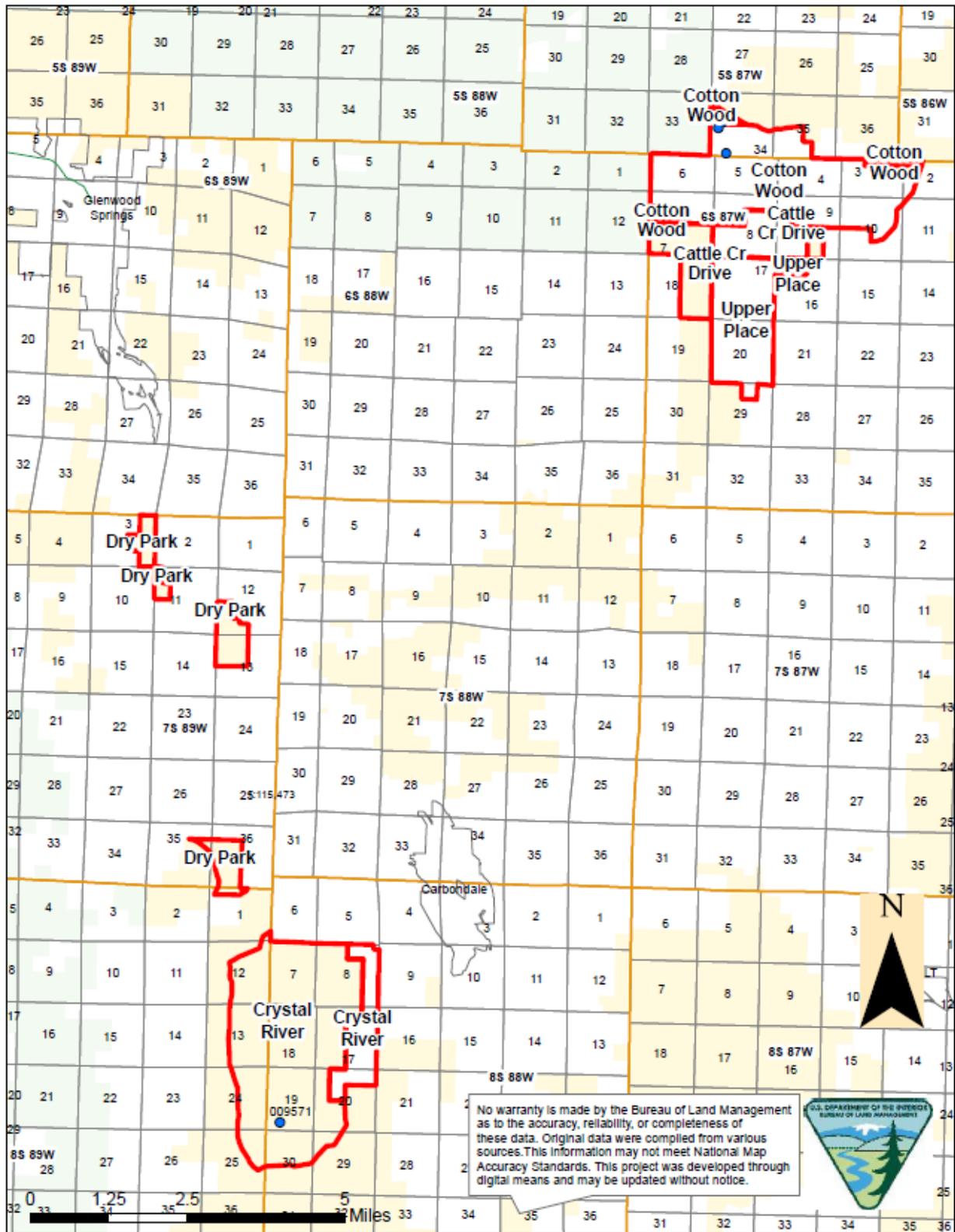
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Appendix 1.



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

FINDING OF NO SIGNIFICANT IMPACT

DOI-BLM-N040-2014-0010-EA

Finding of No Significant Impact

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

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

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

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

Impacts associated with issuing these livestock grazing permits are identified and discussed in the Affected Environment and Environmental Effects sections of the EA. The proposed action will not have any significant beneficial or adverse impacts on the resources identified and described in the EA.

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

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

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

A portion of the Crystal River allotment falls within the North Thompson Creek ACEC. Continued livestock grazing is not expected to affect the unique characteristics of the area.

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.

This EA is specific to the Dry Park, Crystal River, Cotton Wood, Cattle Creek Drive, and Upper Place allotments. It is not expected to set precedent for future actions with significant effects or represent a decision in principle about a future management consideration in or outside of these allotments.

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

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

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

The potential for historic properties on these allotments is low, with a total of seven sites none of which are eligible for the National Register of Historic Places (NRHP). Within the Crystal River allotment, many livestock ponds or springs have not been inventoried; therefore, a portion of 15 acres is recommended for inventory around a spring with a possible homestead. Site 5PT.1138 is recommended to be revisited and monitored. No additional inventory or sites to be monitored are recommended in the Dry Park, Cotton Wood, Upper Place, or Cattle Creek Drive allotments.

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.

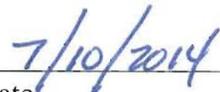
10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The proposed action 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.



Authorized Officer
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 0507546 (CON040)

CERTIFIED MAIL 7013 2630 0000 2732 8455
RETURN RECEIPT REQUESTED

Tom Harrington
Crystal River Ranch Co. LLP.
PO BOX 68
Carbondale, CO 81623

NOTICE OF PROPOSED DECISION

Dear Mr. Harrington:

Introduction & Background:

On February 28, 2014 the grazing permit for Crystal River Ranch (No. 0507546) expired. The grazing permits were reissued for a 3 year term in accordance with Section 411, Public Law 113-76 which contained the same terms and conditions as the previous permit. The permit has now 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 Analysis (EA) No. DOI-BLM-CO-N040-2014-0012. 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.

Finding Of No Significant Impact (FONSI):

The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. The proposed action with mitigation measures result in a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

Rationale: The analysis of the proposed action with mitigation measures did not identify any impacts that would be significant in nature either in context or intensity. The grazing authorization proposed allows for adequate plant growth recovery and promotes healthy rangelands as it relates to rangeland standards. In addition, there is nothing to indicate the action is highly controversial or that it is related to other actions with individually insignificant but cumulatively significant actions.

Proposed Decision:

As a result of this process, it is my proposed decision to cancel the existing grazing permit effective Feb 28, 2015 and reissue the grazing permit for Crystal River Ranch (No. 0507546) for a period of 10 years (Mar 1, 2015 – Feb 28, 2025). My Proposed Decision results in no changes to your Mandatory Terms and Conditions authorized on the previous permit. Please review your authorized use and terms and conditions outlined below.

Mandatory Terms and Conditions (Grazing Schedule):

Operator Name and Authorization No.	Allotment Name and Number	Livestock Kind And Number	Period of Use	% Public Land	AUMs
Crystal River Ranch No. 057546	Cattle Creek Drive 08302	200 Cattle	07/08 to 08/31	50	181
	Crystal River 08342	295 Cattle	05/15 to 6/30	65	296
		146 Cattle	09/16 to 10/15		94
	Cotton Wood 08301	750 Cattle	06/16 to 9/30	3	79
	Dry Park 08352	110 Cattle	06/01 to 07/10	18	26
			09/15 to 10/15		20
Upper Place 08304	200 Cattle	08/01 to 10/15	3	15	

Grazing Preference (AUMS):

Operator Name	Auth. No.	Allotment	Active	Suspended	Total
Crystal River Ranch Co	057546	Cattle Creek Drive	181	0	181
		Crystal River	390	304	694
		Cotton Wood	85	0	85
		Dry Park	46	0	46
		Upper Place	15	0	15

Other Terms and Conditions:

Travel restrictions within the Thompson Creek (Crystal River Allotment) Area:

In areas closed to motorized travel, normal grazing administration, facilities maintenance, or facilities operation will be accessed by non-motorized methods only unless authorized by an approved administrative access agreement. In areas closed to motorized travel, the permittee will be required to get pre-approval from a BLM authorizing officer for reconstruction of existing permitted facilities or other operations requiring motorized equipment. In case of an emergency, the permittee will be allowed access by motorized vehicle but must notify a BLM authorizing officer within 72 hours of the emergency. The permittee will not be allowed to use motorized equipment in an area closed to motorized travel for activities other than those authorized by the BLM

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.

Average utilization levels by livestock shall 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.

Adaptive management will be employed on this allotment. The Mandatory Terms and Conditions on this grazing permit show the maximum allowable flexibility. The permittee may use the allotment when the range is ready but not earlier than the beginning dates described in the permit. The range will be considered ready when there is a minimum of 4 inches of new growth on grasses. AUM usage may not exceed active preference.

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-N040-2014-0012) 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 Crystal River, Dry Park, Cottonwood, Cattle Creek Drive, and Upper Place 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, Associate Field Office 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.

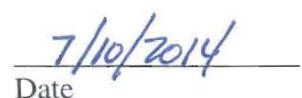
As noted above, the petition for stay must be filed in the office of the authorized officer and serviced in accordance with 43 CFR 4.473. Any person named in the decision from which an appeal is taken (other than the appellant) who wishes to file a response to the petition for a stay may file with the 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 Kristy Wallner (Rangeland Management Specialist) at (970)876-9023.

Sincerely,


Karl Mendonca

Associate Field Office Manager


Date