

U.S. Department of the Interior
Bureau of Land Management
Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-N040-2011-0064-EA

CASEFILE NUMBER: 0503702, 0507697

PROJECT NAME: Combine Willow Creek Allotment/Ralph Place Pasture with the Hack Creek Allotment, Grazing Preference Transfer from Eight Bar Ranch LLLP to Mike Luark, Issue Grazing Permits Reflecting Allotment Boundary Change and Transfer Action

LOCATION: Hack Creek Allotment – T3S R86W Sec 6; T3S R87W Secs. 1, 2, 3, 10, 11, 12, 13, 14, 15, 24 & 35. Willow Creek Allotment (Ralph Place Pasture) - T3S R86W Secs. 6 & 7. Refer to attached allotment map.

APPLICANT: BLM and Grazing Permittees

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Proposed Action: The proposed action would be:

- An adjustment of allotment boundaries to incorporate the Willow Creek Allotment (Ralph Place Pasture) with the Hack Creek Allotment.
- Change period of use and livestock numbers on the Ralph Place Pasture to reflect its use as a holding pasture in the fall.
- Grazing preference transfer of 26 Animal Unit Month (AUMs) (Hack Creek allotment as revised) from Eight Bar Ranch LLLP to Mike Luark.
- Issuance of grazing permits to Eight Bar Ranch LLLP and Mike Luark. These permits will reflect the allotment boundary change, changes in scheduled grazing use (livestock numbers and period), and grazing preference transfer.

The permits would be re-issued for a 10 year term. The proposed action is in accordance with 43 CFR 4100.0-8, 4110-2-2(a), 4110.2-3, 4110.2-4, 4130.2(a)(d), 4130.3 and 4130.3-1(a).

The tables below describe the scheduled grazing use and grazing preference for the current permits and the proposed changes resulting from the allotment change and transfer action. Allotments, grazing use, and preference affected by the proposed action are highlighted in blue.

Current Grazing Use:

Mandatory Terms and Conditions - Scheduled Grazing Use

Permittee	Allotment Name & No.	Pasture Name	Livestock No. & Kind	Period of use	Percent Public Land	AUMs
Eight Bar Ranch	River Common 08615		13 Cattle	05/01 – 05/31	100	13
	Red Dirt 08626		16 Cattle	05/15 – 06/11	100	15
			63 Cattle	12/04 – 12/20	100	35
	Willow Creek 08629	Lower	70 Cattle	05/15 – 06/11	100	64
	Willow Creek 08629	Watson	89 Cattle	06/11 – 06/21	100	32
	Willow Creek 08629	Ralph Place	96 Cattle	06/22 – 07/01	100	32
			135 Cattle	09/27 – 10/15	100	84
	Hack Creek 08632		96 Cattle	07/01 – 09/27	100	281
Mike Luark	Horse Creek 08631		100 Cattle	05/01 – 07/13	100	243
			100 Cattle	09/28 – 10/31	100	112
	Hack Creek 08632		100 Cattle	07/14 – 09/27	100	250

Proposed Grazing Use:

Mandatory Terms and Conditions - Scheduled Grazing Use

Permittee	Allotment Name & No.	Pasture Name	Livestock No. & Kind	Period of use	Percent Public Land	AUMs
Eight Bar Ranch	River Common 08615		13 Cattle	05/01 – 05/31	100	13
	Red Dirt 08626		16 Cattle	05/15 – 06/11	100	15
			63 Cattle	12/04 – 12/20	100	35
	Willow Creek 08629	Lower	70 Cattle	05/15 – 06/11	100	64
	Willow Creek 08629	Watson	89 Cattle	06/11 – 06/21	100	32
	Hack Creek 08632	Hack Creek	97 Cattle	06/22 – 09/15	100	274
	Hack Creek 08632	Hack Creek	60 Cattle	09/16 – 09/27	100	24
	Hack Creek 08632	Ralph Place	37 Cattle	09/16 – 09/27	100	15
	Hack Creek 08632	Ralph Place	97 Cattle	09/28 – 10/15	100	57
Mike Luark	Horse Creek 08631		100 Cattle	05/01 – 07/13	100	243
			100 Cattle	09/28 – 10/31	100	112
	Hack Creek 08632	Hack Creek	100 Cattle	07/14 – 09/15	100	210
	Hack Creek 08632	Hack Creek	60 Cattle	09/16 – 09/27	100	24
	Hack Creek 08632	Ralph Place	40 Cattle	09/16 – 09/27	100	16
	Hack Creek 08632	Ralph Place	100 Cattle	09/28 – 10/05	100	26

Current Grazing Preference AUMS

Permittee	Allotment Name & No.	Active	Suspended	Total
Eight Bar Ranch	River Common 08615	13	0	13
	Red Dirt 08626	50	0	50
	Willow Creek 08629	212	0	212
	Hack Creek 08632	281	0	281
Mike Luark	Horse Creek 08631	355	0	355
	Hack Creek 08632	250	0	250

Proposed Grazing Preference AUMS

Permittee	Allotment Name & No.	Active	Suspended	Total
Eight Bar Ranch	River Common 08615	13	0	13
	Red Dirt 08626	50	0	50

	Willow Creek 08629	96	0	96
	Hack Creek 08632	371	0	371
Mike Luark	Horse Creek 08631	355	0	355
	Hack Creek 08632	276	0	276

The following Other Terms and Conditions were included on the current permits and will be carried forward on the renewed permit:

- In accordance with the settlement agreement of grazing appeal #CO-07-95-1, the permittee shall not intentionally put livestock east of Horse Creek in the Hack Creek Allotment., including use for access to the Hack Creek Allotment. Additionally, the permittee shall minimize travel across Horse Creek in order not to create a trail that will facilitate cattle movement east of Horse Creek. Any trails that are used or created by the permittee would be closed by the permittee with downed trees or brush to reduce cattle movement.
- Maintenance of range improvements is required and shall be in accordance with all approved cooperative agreements and range improvement permits. Maintenance shall be required prior to turn out. 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.¹
- 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.²
- Red Dirt Allotment (Eight Bar Ranch permit) - Grazing in Riparian areas by livestock within mapped lynx habitat along Red Dirt and Poison Creek should leave an average minimum 4-inch stubble height of herbaceous vegetation and should not exceed an average utilization of 40% of the current year's growth for browse species. Within the uplands, average livestock utilization levels will be limited to 50% by weight on key grass species. Livestock will be moved to another portion of the allotment, moved to the next scheduled pasture, or removed immediately from the allotment when the above utilization levels occur.
- Red Dirt Allotment (Eight Bar Ranch permit) – Fall grazing will be restricted to the lower elevation portion of the allotment located in SW4 Sec. 12, E2SE4, NW4, Sec. 13, and E2SW4 Sec. 14, T3S, R86W, 6th P.M. Should snow depth exceed 10 inches, grazing use will not be permitted.

¹ This term and condition has been modified from the current permits to help ensure resource protection when heavy equipment is utilized.

² This term and condition pertaining to cultural resources is the most current version and is a revision from the one contained on the current grazing permits.

- River Common Allotment (Eight Bar Ranch permit) - To minimize the areas of concentrated grazing use on the River Common allotment and to allow the vegetation to recover, permittees shall not use the same salting areas in any two consecutive years and shall avoid salting within ¼ mile of water sources.

Additional Background Information: The Ralph Place pasture was formerly part of the Dotsero Wildlife Area (DWA) which was acquired by BLM in 1994 through a land exchange with Colorado Division of Wildlife. In 1997 the BLM prepared an EA that proposed several allotment boundary adjustments in the Sheep Creek, Horse Creek, Willow Creek, and Hack Creek area. The proposal included incorporation of the DWA with several existing grazing allotments. The Ralph Place pasture was incorporated with the Willow Creek allotment through a subsequent grazing permit issued in 1999 to Albertson Ranch Company (now Eight Bar Ranch, LLLP).

The rationale for combining the Ralph Place Pasture with the Willow Creek Allotment is not clear. The pasture is not contiguous with the allotment and is separated by a parcel of private land. The pasture is contiguous to both the Horse Creek and Hack Creek allotments. The main access route to the Hack Creek Allotment also goes through the Ralph Place pasture. This is the route historically used by grazing permittees (currently Eight Bar Ranch and Mike Luark) to trail cattle to and from the Hack Creek allotment.

During mid to late September, cattle in the Hack Creek allotment begin drifting towards the Ralph Place pasture. Although the pasture is completely fenced, gates tend to be left open due to increased public use associated with the hunting season in addition to other recreational activities that are popular in the area. Both permittees' cattle then drift into the Ralph Place pasture. Rather than making a futile attempt to push cattle back the Hack Creek allotment, the permittees hold the cattle in the pasture where they remain until the final gather around September 27. Cattle are then sorted (separated by ownership). Mike Luark moves his cattle to the adjacent Horse Creek allotment. Cattle owned by Eight Bar Ranch are left in the pasture for a brief period before they are moved to private land.

The pasture has become a holding pasture and integral part of grazing management for the Hack Creek allotment. For that reason, it is more appropriate to combine the pasture with the Hack Creek allotment rather than as separate grazing unit associated with the Willow Creek allotment.

No Action Alternative: Allotment boundaries and grazing permits would remain unchanged.

ALTERNATIVES CONSIDERED BUT ELIMINATED: None

PURPOSE AND NEED FOR THE ACTION: The allotment boundary adjustment would better reflect the grazing use and management that is occurring on the allotments (see additional background section above). The resulting changes in grazing use on permits would more accurately describe grazing use for both permittees. The transfer action would provide Mike Luark a sufficient amount of AUMs for his grazing use on the Ralph Place Pasture.

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; amended in September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance; amended in June 2007 – Record of Decision for the Approval of Portions of the Roan Plateau Resource Management Plan Amendment; and amended in March 2009 - Record of Decision for the Designation of Areas of Critical Environmental Concern for the Roan Plateau Resource Management Plan.

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.”

STANDARDS FOR PUBLIC LAND HEALTH:

The Colorado Standards for Public Land Health consist of 5 standards: upland soils, riparian systems, plant and animal communities, special status species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands.

The Willow Creek allotment was the subject of a formal land health assessment as part of the Sweetwater to Burns Landscape in 2005. The allotment was determined to be meeting all the standards at the time of the assessment. A formal land health assessment was conducted on the Hack Creek allotment as part of the Deep Creek Landscape in 2008. This allotment was also meeting all of the land health standards at the time of the assessment.

The impact analysis must address whether the proposed action would result in impacts which would improve, maintain or deteriorate land health conditions for each of the parameters found in the Standards for Public Land Health and are addressed in the appropriate sections below.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and no action alternative. 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 critical environmental elements. Not all of the critical elements that require inclusion in this EA are present, or if they are present, may not be affected by the proposed action and alternative (see table below). Only those mandatory critical elements that are present and affected are described in the following narrative.

In addition to the mandatory critical elements, there are additional resources that would be impacted by the proposed action and alternative. These are presented under **Other Affected Resources**.

Critical Elements

Critical Elements of the Human Environment									
<i>Critical Element</i>	<i>Present</i>		<i>Affected</i>		<i>Critical Element</i>	<i>Present</i>		<i>Affected</i>	
	Yes	No	Yes	No		Yes	No	Yes	No
Air Quality	X			X	Prime or Unique Farmlands		X		X
ACECs		X		X	Special Status Species*	X		X	
Cultural Resources	X			X	Wastes, Hazardous or Solid		X		X
Environmental Justice	X			X	Water Quality, Surface and Ground*	X		X	
Floodplains	X			X	Wetlands and Riparian Zones*		X		X
Invasive, Non-native Species		X		X	Wild and Scenic Rivers	X		X	
Migratory Birds	X		X		Wilderness/ WSAs	X		X	
Native American Religious Concerns		X		X					

* Public Land Health Standard

Air Quality

Issuance of the livestock grazing permit and changes to the allotment boundaries will have little or no impact on air quality. Livestock grazing during dry conditions may result in a very minimal increase in dust which would be localized to the area being grazed and would last for a short duration. No mitigation is necessary.

Cultural Resources and Native American Religious Concerns

Affected Environment: Range permit renewals are undertakings under Section 106 of the National Historic Preservation Act. Additional range improvements (e.g., fences, spring improvements) are subject to compliance requirements under Section 106 and will undergo standard cultural resources inventory and evaluation procedures. During Section 106 review, a cultural resource assessment (CRVFO #1011-17) was completed for the Willow Creek and Hack Creek Allotments on July 14, 2011 following 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, CO-2001-026, and CO-2002-029. The results of the assessment are summarized in the table below. A copy of the cultural resource assessment is available at the CRVFO.

Allotment Number	Acres Inventoried at a Class III level	Acres NOT Inventoried at a Class III Level	Percent (%) Allotment Inventory data Class III level	Number of Cultural Resources known in allotment	High Potential of Historic Properties (yes/no)	Management Recommendations (Additional inventory required and historic properties to be visited)
08629 Willow Creek	0	3316	0	0	no	331 acres need to be inventoried to meet a 10% sample. 84% of the allotment has 30%+ slopes.
08632 Hack Creek	249	4855	5%	4	no	250 additional acres need to be inventoried to meet a 10% sample. 82% of the allotment has 30%+ slopes.

Two Class III cultural resource inventories (CRVFO #s 591 and 15405-6) have been conducted within the Hack Creek allotment. A 3.7 mile long segment of the Ute Trail (5GF1073.2) was identified and recorded in the western portion of the Hack Creek Allotment. This segment of the Ute Trail was classified as a “need data” site and will be treated as a historic property until a determination of eligibility is made. Historic properties are cultural or Native American resources that are considered eligible or potentially eligible for listing on the National Register of Historic Places. No additional areas of Native American concern were identified. Undiscovered historic era sites within these allotments could represent a time frame from the late 1800’s through the 1960’s; Native American sites could represent a time range from 200 to 10,000 years before present. No cultural inventories have been done to date in the Willow Creek Allotment. Based on available data surrounding these allotments, there is a low potential for historic properties within these allotments due primarily to steep slopes (over 80% of both allotments have slopes of 30% or greater) and the heavy oak brush community.

Subsequent site field visits, inventory, and periodic monitoring may have to be done to identify if historic properties are present as well as determine if there are impacts to these properties within the term of the permit and as funds are made available. If the BLM determines that grazing activities adversely impact the properties, mitigation will be identified and implemented in consultation with the Colorado SHPO.

At present, there are no known areas of Native American concern within this allotment. On November 15, 2010 the Colorado River Valley Field Office mailed an informational letter and an allotment map to the Ute Tribe (Northern Ute Tribe), Southern Ute Tribe, and the Ute Mountain Ute Tribe, identifying the proposed 2011 grazing permit renewals. No response has been received. If new data is disclosed, new terms and conditions may have to be added to the permit

to accommodate their concerns. The BLM will take no action that would adversely affect these areas or location without consultation with the appropriate Native American Tribes.

Environmental Consequences: The direct impacts that occur where livestock concentrate include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art. Indirect impacts include soil erosion, gullyng, and increased potential for unlawful collection and vandalism. Continued grazing may cause substantial ground disturbance and cause cumulative long term irreversible adverse effects to historic properties. No historic properties were identified during the inventory for this allotment. A determination of a **Conditional No Adverse Effect** has been made for this renewal.

Mitigation: The cultural resource specialist should be involved in discussions for improvements, maintenance, supplemental feeding areas, etc to ensure that the historic properties and area of concern is avoided. This allotment may also contain other undiscovered historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders. The BLM may require modification to development proposals to protect such properties, or disapprove any activity that is likely to result in damage to historic properties or areas of Native American concern.

Any person who, without a permit, 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. Non-compliance could result in fines up to \$500,000 and imprisonment of up to six years or both.

No Action Alternative: Allotment boundaries and grazing permits would remain unchanged.

Invasive, Non-native Species

Affected Environment: A landscape wide inventory has not been completed in this area. However, given the widespread nature of noxious weed infestations throughout the area, it is assumed that some level of infestation does exist in the project area.

Environmental Consequences/Mitigation:

Proposed Action: Since the proposed action does not involve any surface-disturbing activities, there should be little potential for the introduction or spread of noxious weeds in the area.

No Action Alternative: Under this alternative, no boundary change would occur. Noxious and invasive plant species would be expected to continue at current levels.

Migratory Birds

Affected Environment: The CRVFO planning area provides both foraging and nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. The habitat diversity

provided by the broad expanses of sagebrush, mixed mountain shrub, oakbrush, aspen, pinyon-juniper woodlands, other types of coniferous forests and riparian and wetland areas support many bird species.

Raptors and neotropical migrants (both game and nongame) are afforded protection under the Migratory Bird Treaty Act. Neotropical migrants include birds that breed in the United States and Canada and winter in Latin America (Nicholoff 2003). BLM Instruction Memorandum No. 2008-050 provides guidance toward meeting the Bureau of Land Management’s (BLM) responsibilities under the Migratory Bird Treaty Act (MBTA) and the Executive Order (EO) 13186. The guidance directs Field Offices to promote the maintenance and improvement of habitat quantity and quality. To avoid, reduce or mitigate adverse impacts on the habitats of migratory bird species of conservation concern to the extent feasible, and in a manner consistent with regional or statewide bird conservation priorities.

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service (USFWS) to “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973.” The “*BIRDS OF CONSERVATION CONCERN 2008*” (U.S. Fish and Wildlife Service 2009) is the most recent effort to carry out this mandate.

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

The conservation concerns are the result of population declines - naturally or human-caused, small ranges or population sizes, threats to habitat, or other factors. Although there are general patterns that can be inferred, there is no single reason why any species is on the list. Habitat loss is believed to be the major reason for the declines of many species. When considering potential impacts to migratory birds the impact on habitat, including: 1) the degree of fragmentation/connectivity expected from the proposed project relative to before the proposed project; and 2) the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats. Continued private land development, surface disturbing actions in key habitats (e.g. riparian areas) and the proliferation of roads, pipelines, powerlines and trails are local factors that reduce habitat quality and quantity for many species.

The Colorado River Valley Field Office (CRVFO) is within the Southern Rockies/Colorado Plateau Bird Conservation Region (BCR). The 2008 list of Birds of Conservation Concern include the following:

2008 List of Birds of Conservation Concern within the CRVFO.

Species	Habitat Description	Potential Occurrence	Potentially Impacted
Gunnison Sage-	Sagebrush communities for hiding and thermal cover, food,	Not Present	No

Species	Habitat Description	Potential Occurrence	Potentially Impacted
Grouse (<i>Centrocercus minimus</i>)	and nesting; open areas with sagebrush stands for leks; sagebrush-grass-forb mix for nesting; wet meadows for rearing chicks. No found within the CRVFO.		
American Bittern (<i>Botaurus lentiginosus</i>)	Marshes and wetlands; ground nester. Summer resident.	Not Present	No
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Nests in forested rivers and lakes; winters in upland areas, often with rivers or lakes nearby. Generally winter resident, occasional breeding.	Irregular	No
Ferruginous Hawk (<i>Buteo regalis</i>)	Open, rolling and/or rugged terrain in grasslands and shrubsteppe communities; also grasslands and cultivated fields; nests on cliffs and rocky outcrops. Fall/ winter resident, non-breeding.	Not Present	No
Golden Eagle (<i>Aquila chrysaetos</i>)	Open country, grasslands, woodlands, and barren areas in hilly or mountainous terrain; nests on rocky outcrops or large trees. Year-round resident, breeding.	Irregular	No
Peregrine Falcon (<i>Falco peregrines</i>)	Open country near cliff habitat, often near water such as rivers, lakes, and marshes; nests on ledges or holes on cliff faces and crags. Spring/summer resident, breeding.	Not Present	No
Prairie Falcon (<i>Falco mexicanus</i>)	Open country in mountains, steppe, or prairie; winters in cultivated fields; nests in holes or on ledges on rocky cliffs or embankments. Spring/summer resident, breeding.	Not Present	No
Snowy Plover (<i>Charadrius alexandrinus nivosus/tenuirostris</i>)	Sparsely vegetated sand flats associated with pickleweed, greasewood, and saltgrass. Spring migrant, non-breeding. Spring migrant, non-breeding.	Not Present	No
Mountain Plover (<i>Charadrius montanus</i>)	High plain, cultivated fields, desert scrublands, and sagebrush habitats, often in association with heavy grazing, sometimes in association with prairie dog colonies; short vegetation.	Not Present	No
Long-billed Curlew (<i>Numenius americanus</i>)	Lakes and wetlands and adjacent grassland and shrub communities. Spring/ fall migrant, non-breeding.	Not Present	No
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	Riparian, deciduous woodlands with dense undergrowth; nests in tall cottonwood, mature willow riparian, moist thickets, orchards, abandoned pastures. Summer resident, breeding.	Not Present	No
Burrowing Owl (<i>Athene cunicularia</i>)	Open grasslands and low shrublands often in association with prairie dog colonies; nests in abandoned burrows created by mammals; short vegetation.	Not Present	No
Lewis's Woodpecker (<i>Melanerpes lewis</i>)	Open woodland, often logged or burned, including oak, coniferous forest (often ponderosa), riparian woodland, and orchards, less often in pinyon-juniper.	Not Present	No
Willow Flycatcher (<i>Empidonax traillii</i>)	Riparian and moist, shrubby areas; winters in shrubby openings with short vegetation. Summer resident, breeding.	Possible	No
Gray Vireo (<i>Vireo vicinior</i>)	Uncommon summer resident (primarily Mesa County). In habitats open pinyon-juniper woodlands.	Not Present	No
Pinyon Jay (<i>Gymnorhinus cyanocephalus</i>)	Common to abundant resident of pinyon-juniper woodlands. Year-round resident that travels broadly in flocks.	Possible	No
Juniper Titmouse (<i>Baeolophus ridgwayi</i>)	Pinyon-juniper woodlands, especially juniper; nests in tree cavities. Year-round resident, breeding.	Possible	No

Species	Habitat Description	Potential Occurrence	Potentially Impacted
Veery (<i>Catharus fuscescens</i>)	Dense riparian thickets and hillside brush near streams. Uncommon spring/fall migrant in Eastern Colorado.	Not Present	No
Bendire's Thrasher (<i>Toxostoma bendirei</i>)	Desert, especially areas of tall vegetation, cholla cactus, creosote bush and yucca, and in juniper woodland Possible summer resident.	Not Present	No
Grace's Warbler (<i>Dendroica graciae</i>)	Breeds in ponderosa pine forests. Uncommon summer resident in southwest Colorado.	Not Present	No
Grasshopper Sparrow (<i>Ammodramus savannarum</i>)	Open grasslands and cultivated fields. Spring migrant, non-breeding.	Not Present	No
Chestnut-collared Longspur (<i>Calcarius ornatus</i>)	Open grasslands and cultivated fields. Spring migrant, non-breeding.	Not Present	No
Black Rosy-Finch (<i>Leucosticte atrata</i>)	Open country including mountain meadows, high deserts, valleys, and plains; breeds/ nests in alpine areas near rock piles and cliffs. Winter resident, non-breeding.	Possible	No
Brown-capped Rosy-Finch (<i>Leucosticte australis</i>)	Alpine meadows, cliffs, and talus and high-elevation parks and valleys. Summer resident, breeding.	Possible	No
Cassin's Finch (<i>Carpodacus cassinii</i>)	Open montane coniferous forests; breeds/ nests in coniferous forests. Year-round resident, breeding.	Possible	No
Brewer's Sparrow (<i>Spizella breweri</i>)	Summer resident that primarily breeds in sagebrush-grass stands and shrublands. Migrant at low elevations.	Addressed under Special Status Terrestrial Wildlife	

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 occasionally summer in this region but usually winter along portions of the Colorado, Eagle and Roaring Fork Rivers and their major tributaries. 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.

Many species of raptors (red-tailed hawks, Cooper's hawks, kestrels and owls) not on the Fish & Wildlife Service's Birds of Conservation Concern list in addition to listed species would irregularly pass through the area or forage within the area if prey was sighted.

Environmental Consequences/Mitigation:

Proposed Action: The proposed actions are basically administrative changes that reflect the grazing use and management that is occurring on the allotments. The resulting changes in grazing use on permits would more accurately describe grazing use for both permittees. The actual on-the-ground impact to migratory birds would be negligible.

No Action Alternative: Impacts would be the same as the proposed action.

Special Status Plant Species (includes an analysis of Public Land Health Standard 4)

Affected Environment: The table below summarizes the latest species list from the U. S. Fish and Wildlife Service for Federally listed, proposed, or candidate plant species (USFWS 2010) and the Colorado BLM State Director's Sensitive Species List (BLM 2009) for plant species that may occur within the CRVFO and be impacted by the proposed action.

Special Status Plant Species

Federally Listed, Proposed or Candidate Plant Species		
Species	Habitat	Potential Habitat Present / Absent
Colorado hookless cactus (<i>Sclerocactus glaucus</i>)	Typically found on rocky hills and alluvial benches in xeric fine-textured soils overlain with cobbles and pebbles. It grows in salt desert shrub and pinyon-juniper communities at elevations ranging from approximately 4,500 to 6,600 feet.	Absent: The proposed action is far from the geographic range of this species and no rocky, salt desert shrub habitat is present.
DeBeque phacelia (<i>Phacelia submutica</i>)	A rare annual plant restricted to expansive clay soils derived from the Atwell Gulch and Shire Members of the Wasatch Formation in Mesa and Garfield Counties, Colorado. The plant grows on sites that are nearly barren of vegetation.	Absent: No exposures of Atwell Gulch or Shire Members of the Wasatch formation present
Parachute penstemon (<i>Penstemon debilis</i>)	Endemic to steep, talus slopes on the southern escarpment of the Roan Plateau in Garfield County, Colorado. The plants are found only on the oil-shale rich Parachute Creek Member of the Green River Formation between 8,000 to 9,200 feet in elevation.	Absent: No Parachute Creek Member of the Green River formation present in the proposed action area.
Ute ladies'-tresses (<i>Spiranthes diluvialis</i>)	Habitat for this threatened species is found below 6,500 feet along streams, lakes or in wetland areas with seasonally saturated or subirrigated soils.	Absent: The proposed action area is well above the upper elevational range for this species.
BLM Sensitive Plant Species		
Species	Habitat	Potential Habitat Present/Absent
Cathedral Bluffs meadowrue (<i>Thalictrum heliophilum</i>)	Known from 18 occurrences in Garfield, Mesa and Rio Blanco Counties. The meadowrue is a narrowly endemic plant found in dry shale barren communities between 6,200 and 8,800 feet in elevation.	Absent: No Green River shale barrens in the vicinity of the proposed action
DeBeque milkvetch (<i>Astragalus debequaeus</i>)	Found only on the Wasatch Formation in the vicinity of DeBeque and Rulison, Colorado. Plants are common on the Atwell Gulch Member of the Wasatch Formation but are rare elsewhere. Elevations of known populations are between 5,100 and 6,400 feet.	Absent: No Atwell Gulch Member of Wasatch Formation in project area
Harrington's penstemon (<i>Penstemon harringtonii</i>)	Open sagebrush communities on rocky loam or rocky clay loam soils between the elevations of 6,200 to 10,000 feet.	Present: Known populations of Harrington's penstemon exist in both Hack Creek and Willow Creek allotments

Naturita milkvetch (<i>Astragalus naturitensis</i>)	Occurs on sandstone mesas, ledges, crevices, and slopes in pinyon-juniper woodlands at elevations from 5,000 to 7,000 feet. It grows in areas of shallow soils over exposed bedrock. Naturita milkvetch has been found in several locations on the western end of the CRVFO.	Absent: No sandstone rimrock or ledges present
Piceance bladderpod (<i>Lesquerella parviflora</i>)	A Colorado endemic known only in Garfield, Mesa, and Rio Blanco Counties. It occurs on shale outcrops of the Green River Formation, on ledges and slopes of canyons in open areas at elevations ranging from 6,200 to 8,600 feet.	Absent: No Green River Formation shale present in project area.
Roan Cliffs blazing star (<i>Mentzelia rhizomata</i>)	Found only on steep talus slopes of the Green River Formation in Garfield County. The species occurs on eroding oil shale at elevations from 5,800 to 9,000 feet. In the GSFO, the Roan Cliffs blazing star is known to occur on the cliffs of the Roan Plateau, along Parachute Creek drainage and in Main Elk Creek, near New Castle, Colorado.	Absent: No Green River Formation shale present in project area.

With the exception of Harrington’s penstemon, there is no habitat for any special status plant species on the Hack Creek or Willow Creek allotments and the proposed action would have “No Effect” on these other species. Several small populations of Harrington’s penstemon occur on the rocky ridges in the Hack Creek allotment and in dry sagebrush swales on the Willow Creek allotment.

Environmental Consequences/Mitigation:

Proposed Action:

Harrington’s penstemon

The flowering stalks of Harrington’s penstemon are highly palatable to wildlife and livestock. Livestock grazing has the potential to create adverse impacts on Harrington’s penstemon if repeated removal of flowering stalks over a period of years prevents the plants from reproducing.

The duration of grazing use would be increased by 12 days in the fall on the Ralph Place Pasture, but spring grazing would be eliminated. This would generally be beneficial for Harrington’s penstemon since grazing would not occur on the Ralph Place Pasture until after the plants had flowered and set seed. Grazing on the Hack Creek allotment would begin on June 22nd, ten days earlier than the current permit. This may have a slight negative effect on Harrington’s penstemon if cattle graze the flower stalks before the plants have the opportunity to set seed. The change in grazing use on the two parcels would balance each other out and the net impacts to Harrington’s penstemon from the proposed action would be negligible.

No Action Alternative:

The No Action alternative, which permits livestock grazing on the Ralph Place Pasture beginning on June 22nd, may have a slight negative effect on populations of Harrington’s penstemon if they are grazed before the plants have the opportunity to flower and set seed. This effect would be offset by the later grazing period on the Hack Creek allotment which does not begin until July 1st.

Analysis on the Public Land Health Standard 4 for Special Status Plant Species (partial, see also Special Status Terrestrial and Aquatic Wildlife Species):

The land health assessment reports that encompass the project area indicate that the standard for special status plants was being met at the time of the assessment. Neither the proposed action nor the no action alternative would be expected to result in a failure to achieve this standard.

Special Status Aquatic Wildlife Species (includes an analysis of Public Land Health Standard 4)

Affected Environment: (The Table below summarizes the latest: 1) species list (USFWS 2010) from the U. S. Fish and Wildlife Service for Federally listed, proposed, or candidate aquatic wildlife species and 2) Colorado BLM State Director's Sensitive Species List for aquatic species; that may occur within the CRVFO and be impacted by the proposed action.

Special Status Aquatic Wildlife Species.

Federally Listed, Proposed or Candidate Aquatic Wildlife Species		
Species	Habitat/Range	Occurrence/ Potentially Impacted
Greenback cutthroat trout (<i>Oncorhynchus clarki stomias</i>)	Federally listed as threatened. The greenback is the subspecies of cutthroat trout native to the Platte River drainage on the Eastern Slope of Colorado, while the Colorado River cutthroat trout is the subspecies native to the Western Slope of Colorado. Historically found in cold, clear, gravely headwater streams and mountain lakes of the Arkansas and South Platte River systems in Colorado and part of Wyoming. The greenback cutthroat trout was not identified on the USFWS list for Garfield County; however, recent surveys have identified a population in Cache Creek.	Absent /No
Bonytail (<i>Gila elegans</i>)	Federally listed as endangered. This large chub is a member of the minnow family found in large, fast-flowing waterways of the Colorado River system. Their current distribution and habitat status are largely unknown due to its rapid decline prior to research into its natural history. The bonytail is extremely rare in Colorado and no self-sustaining population exists. Only one has been captured in the state since 1980.	Absent /No
Colorado pikeminnow (formerly Colorado squawfish) (<i>Ptychocheilus lucius</i>)	Federally listed as endangered. Primarily exists in the Green River below the confluence with the Yampa River, the lower Duchesne River in Utah, the Yampa River below Craig, Colo., the White River from Taylor Draw Dam near Rangely downstream to the confluence with the Green River, the Gunnison River in Colorado, and the Colorado River from Palisade, Colo., downstream to Lake Powell. Colorado pikeminnow populations in the upper Colorado River basin are now relatively stable or growing. Designated Critical Habitat includes the Colorado River and its 100-year floodplain west (downstream) from the town of Rifle.	Absent /No
Humpback chub (<i>Gila cypha</i>)	Federally listed as endangered. Found in deep, clear to turbid waters of large rivers and reservoirs over mud, sand or gravel. The nearest known population of humpback chub is in the Colorado River at Black Rocks west of Grand Junction..	Absent /No

Federally Listed, Proposed or Candidate Aquatic Wildlife Species		
Razorback sucker (<i>Xyrauchen texanus</i>)	Federally listed as endangered. The razorback sucker was once widespread throughout most of the Colorado River Basin from Wyoming to Mexico. In the upper Colorado River Basin, they are now found only in the upper Green River in Utah, the lower Yampa River in Colorado and occasionally in the Colorado River near Grand Junction. Because so few of these fish remain in the wild, biologists have been actively raising them in hatcheries in Utah and Colorado and stocking them in the Colorado River. Designated Critical Habitat for the razorback sucker includes the Colorado River and its 100-year floodplain west (downstream) from the town of Rifle.	Absent /No
Colorado BLM Sensitive Aquatic Species		
Species	Habitat/Range	Occurrence / Potentially Impacted
Northern leopard frog (<i>Rana pipiens</i>)	Generally found between 3,500 to 11,000 feet, in wet meadows and in shallow lentic habitats. They require year-round water sources, deep enough to provide ice free refugia in the winter. Within the CRVFO, this species has been documented in locales where quality riparian vegetation exists in conjunction with perennial water sources. Larger populations of this species have been documented northwest of King Mountain within the small drainage that feeds King Mountain (Ligon) Reservoir, June Creek and East Divide Creek south of Silt, Colorado, and in portions of the Rifle Creek watershed north of Rifle, Colorado.	Absent /No
Great Basin spadefoot toad	This toad is known to occupy a wide variety of habitat including lowlands, foothills, and shortgrass plain. This species generally inhabits and breeds in seasonal pools and ponds in pinyon-juniper woodland, sagebrush, and semi-desert shrubland habitats, mostly below 6,000 feet in elevation.	Absent /No
Bluehead sucker (<i>Catostomus discobolus</i>), Flannelmouth sucker (<i>Catostomus latipinnis</i>), and Roundtail chub (<i>Gila robusta</i>)	Primarily found in larger rivers but may also be found in smaller tributaries with good connectivity to larger river systems. These fish are endemic to the Colorado River basin and reside within the mainstem Colorado River and its major tributary streams. Given their biology, feeding habits, habitat needs, and niche in the ecosystem, these species can persist in the face of actions that increase sediments to streams and rivers containing these species.	Absent /No
Mountain sucker (<i>Catostomus platyrhynchus</i>)	The mountain sucker is found primarily in small, low- mid elevation streams in northwestern Colorado with gravel, sand or mud bottoms. They inhabit undercut banks, eddies, small pools, and areas of moderate current. Young fish prefer backwaters and eddies. A population of mature adults is found in Steamboat Lake. Within the CRVFO, only known occurrence is in Piceance Creek.	Absent /No

Federally Listed, Proposed or Candidate Aquatic Wildlife Species		
Colorado River cutthroat trout (CRCT) (<i>Oncorhynchus clarkii pleuriticus</i>)	CRCT are one of three subspecies of native trout found in Colorado. CRCT prefer clear, cool headwaters streams with coarse substrates, well-distributed pools, stable streambanks, and abundant stream cover. CRCT have been documented as occurring in Parachute Creek, Abrams Creek, Battlement Creek, Mitchell Creek, North Thompson Creek and Red Dirt Creek. It is likely that all of the perennial waters capable of harboring fish historically contained this native trout species. CRCT have hybridized with non-native salmonids in many areas, reducing the genetic integrity of this subspecies. Rainbow trout hybridize with cutthroat trout. Brook and brown trout tend to replace them in streams and rivers.	Absent /No

Environmental Consequences/Mitigation:

Proposed Action: None of the special status aquatic wildlife species, or their habitat, are found within the project area or nearby. Due to the absence of any known occurrences or suitable habitat for any special status aquatic wildlife species the proposed action should have no effect on these species. In addition, the proposed actions are basically administrative changes that reflect the grazing use and management that is occurring on the allotments. The resulting changes in grazing use on permits would more accurately describe grazing use for both permittees. The actual on-the-ground impact to migratory birds would be negligible.

No Action Alternative: Impacts would be the same or similar as the proposed action.

Analysis on the Public Land Health Standard 4 for Special Status Aquatic Wildlife Species: (partial, see also Special Status Plants and Terrestrial Wildlife): The proposed action as well as the no action alternative would maintain current land health standards for special status aquatic species. Neither action would have a bearing on the watershed’s ability to continue to meet Standard 4 for special status aquatic wildlife species.

Special Status Terrestrial Wildlife Species (includes an analysis of Public Land Health Standard 4)

Affected Environment: The table below summarizes the latest: 1) species list (USFWS 2010) from the U. S. Fish and Wildlife Service for Federally listed, proposed, or candidate terrestrial wildlife species and 2) Colorado BLM State Director’s Sensitive Species List (Updated November 2009) for terrestrial species; that may occur within the CRVFO and be impacted by the proposed action.

Special Status Terrestrial Wildlife Species.

Federally Listed, Proposed or Candidate Terrestrial Wildlife Species		
Species	Habitat/Range	Occurrence/ Potentially Impacted
Black-footed Ferret (<i>Mustela nigripes</i>)	Federally listed as endangered. Black-footed ferrets have ranged statewide but never have been abundant in Colorado. Their habitat included the eastern plains, the mountain parks and the western valleys – grasslands or shrub lands that supported some species of prairie dog, the ferret’s primary prey. State and federal biologists have established two major black-footed ferret colonies: one at Coyote Basin (Colorado-Utah border west of Rangely) and another at the BLM’s Wolf Creek Management Area southeast of Dinosaur National Monument .	Absent /No
Canada lynx (<i>Lynx Canadensis</i>)	Federally listed as threatened. 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 (<i>Lepus americanus</i>) are the preferred prey, lynx in also feed on mountain cottontails (<i>Sylvilagus nuttallii</i>), pine squirrels (<i>Tamiasciurus hudsonicus</i>), and blue grouse (<i>Dendragapus obscurus</i>). 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.	Present/No
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	Federally listed as endangered. This owl nests, roosts, and hunts in mature coniferous forests in canyons and foothills. The key habitat components are old-growth forests with uneven-age stands, high canopy closure, high tree density, fallen logs and snags. The only extant populations in Colorado are in the Pikes Peak and Wet Mountain areas of south-central Colorado and the Mesa Verde area of southwestern Colorado.	Absent /No
Greater Sage-grouse (<i>Centrocercus urophasianus</i>)	Candidate for Federal listing. Sage-grouse, as the name implies, are found only in areas where sagebrush is abundant, providing both food and cover. Sage-grouse prefer relatively open sagebrush flats or rolling sagebrush hills. In winter, sagebrush accounts for 100% of the diet for these birds. In addition, it provides important escape cover and protection from the elements. In late winter, males begin to concentrate on traditional strutting grounds or leks. Females arrive at the leks 1-2 weeks later. Leks can occur on a variety of land types or formations (windswept ridges, knolls, areas of flat sagebrush, flat bare openings in the sagebrush. Breeding occurs on the leks and in the adjacent sagebrush, typically from March through May. Females and their chicks remain largely dependent on forbs and insects for food well into early fall. Within the CRVFO sage-grouse are still present in the northeast part of the Field Office in the Northern Eagle/Southern Routt population, while small (<500 birds), probably has, or had, a relationship with the larger population in Moffat, Rio Blanco and western Routt counties, and probably with the Middle Park population to the east.	Absent /No

Federally Listed, Proposed or Candidate Terrestrial Wildlife Species		
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	Candidate for Federal listing. This secretive species occurs in mature riparian forests of cottonwoods and other large deciduous trees with a well-developed understory of tall riparian shrubs. Western cuckoos breed in large blocks of riparian habitats, particularly woodlands with cottonwoods (<i>Populus fremontii</i>) and willows (<i>Salix</i> sp.). A few sightings of yellow-billed cuckoo have occurred in western Colorado along the Colorado River near Grand Junction.	Absent /No
Uncompahgre fritillary butterfly (<i>Boloria acrocynema</i>)	Federally listed as endangered. The butterfly has been verified at only two areas in the San Juan Mountains in Colorado. There is anecdotal evidence of other colonies in the San Juans and southern Sawatch ranges in Colorado. The butterfly exists above treeline on north and east facing slopes in patches of its larval host plant, snow willow. The greatest threat is butterfly collecting. Climatological patterns, disease, parasitism, predation, and trampling of larvae by humans and livestock pose additional threats.	Absent /No
Colorado BLM Sensitive Terrestrial Wildlife Species		
Species	Habitat/Range	Occurrence/ Potentially Impacted
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>) and Fringed myotis (<i>Myotis thysanodes</i>)	Occur as scattered populations at moderate elevations on the western slope of Colorado. Habitat associations are not well defined. Both bats will forage over water and along the edge of vegetation for aerial insects. 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. 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).	Absent /No
Midget faded rattlesnake (<i>Crotalus viridis concolor</i>)	A small, pale-colored subspecies of the common and widespread western rattlesnake. The midget faded rattlesnake is endemic to northwestern Colorado, including western Garfield County. Habitats include sandy and rocky areas in pinyon-juniper and semi-desert shrub.	Absent /No
Northern goshawk (<i>Accipiter gentilis</i>)	An uncommon resident in mountains. Occasional migrant that may winter at lower elevations. Predominantly uses mature stands of aspen, and ponderosa/ lodgepole pines. Goshawks prey on small-medium sized birds and mammals. It breeds in coniferous deciduous and mixed forests. The nest is typically located on a northerly aspect in a drainage or canyon and is often near a stream. Nest areas contain one or more stands of large, old trees with a dense canopy cover. A goshawk pair occupies its nest area from March until late September. The nest area is the center of all movements and behaviors associated with breeding from courtship through fledging.	Absent /No
Goldeneye, Barrow's (<i>Bucephala islandica</i>)	This bird is an uncommon winter resident and spring/fall migrant. A few may breed in the northern mountains such as the Flat Tops Wilderness Area. Goldeneye's prefer alkaline-freshwater lakes in parkland areas and to a lesser extent subalpine/alpine lakes/beaver ponds for breeding.	Absent /No
Brewer's sparrow (<i>Spizella berweri</i>)	Neotropical migrant that summers in western Colorado mountain parks and spring/fall migrant at lower elevations. Breeds primarily in sagebrush shrublands.	Present /No

Federally Listed, Proposed or Candidate Terrestrial Wildlife Species		
American Peregrine Falcon (<i>Falco peregrines anatum</i>)	Rare spring and fall migrant in western valleys. Peregrine falcons inhabit open spaces associated with high cliffs and bluffs overlooking rivers. The falcon nests on high cliffs and forages over nearby woodlands.	Absent /No
Ibis, white-faced (<i>Plegadis chihi</i>)	The species inhabits primarily freshwater wetlands, especially cattail (<i>Typha</i> spp.) and bulrush (<i>Scirpus</i> spp.) marshes. This bird is a very rare, non-breeding, summer migrant to western Colorado valleys and mountain lakes. This species feeds in flooded hay meadows, agricultural fields, and estuarine wetlands. This species breeds in isolated colonies in mainly shallow marshes with “islands” of emergent vegetation. This species is more commonly found on the eastern slope of Colorado (e.g. San Luis valley).	Absent /No

Environmental Consequences/Mitigation:

Proposed Action: The proposed actions are basically administrative changes that reflect the grazing use and management that is occurring on the allotments. The resulting changes in grazing use on permits would more accurately describe grazing use for both permittees. The actual on-the-ground impact to Canada lynx or Brewer’s sparrow habitat would be negligible. In conclusion, there would be no effect to individuals or the potential habitat for Canada lynx or Brewer’s sparrow.

No Action Alternative: Impacts on Canada lynx or Brewer’s sparrow would be the same as in the proposed action.

Analysis on the Public Land Health Standard 4 for Special Status Terrestrial Wildlife Species: (partial, see also Special Status Plants and Aquatic Wildlife): Neither action would have a bearing on the watershed’s ability to continue to meet Standard 4 for special status terrestrial wildlife species.

Wastes, Hazardous or Solid: There are no known solid or hazardous wastes sites or sources within the allotments.

Water Quality, Surface & Ground (includes an analysis of Public Land Health Standard 5)

Affected Environment: Hack Creek and Willow Creek allotments are drained by several south flowing intermittent and perennial streams including Hack Creek, Horse Creek, West Fork Sheep Creek, Sweetwater Creek and Willow Creek. A 2008 stream assessment noted that all these creeks were determined to have properly functioning condition (BLM 2008).

The State of Colorado has developed *Stream Classifications and Water Quality Standards* (CDPHE 2010a, Water Quality Control Commission, Regulation No. 33) that identify beneficial uses of water and numeric standards used to determine allowable concentrations of water quality parameters. The drainages throughout the Hack and Willow Creek allotments are tributaries to the Upper Colorado River Basin (Region 12, segment 7a and 7b) and have water use classifications described below:

Stream Segment Description	Classifications	Water Quality
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.	Aquatic Life Cold 1 Recreation N Water Supply Agriculture	D.O.=6.0 mg/l pH=6.5-9.0 E.Coli=630/100ml
7b. Mainstems of Rock Creek, Deep Creek, Sheephorn Creek, Sweetwater Creek and the Piney River, including all tributaries and wetlands, from their sources to their confluences with the Colorado River, which are not on National Forest lands.	Aquatic Life Cold 1 Recreation E Water Supply Agriculture	D.O.=6.0 mg/l pH=6.5-9.0 E.Coli=126/100ml

The State of Colorado has developed a *303(d) List of Water Quality Limited Segments Requiring TMDLS* (CDPHE 2010b, Water Quality Control Commission, Regulation No. 93) that identifies stream segments that are not currently meeting water quality standards with technology based controls alone. The drainages within these allotments are considered to meet state standards; however they are tributary to the main stem of the Upper Colorado River, which is listed as impaired due to temperature and given a high priority by the State.

During land health assessments in 2005 and 2008, surface water quality parameters were measured. The following is a summary of the water quality results:

Stream Name	Date	Discharge (cfs)	Temp. (°C)	Cond. (µS/cm)	pH	Salinity ppt	Dissolved Oxygen		Total Alkalinity (mg/L)	Hardness (mg/L)
							%	mg/l		
Hack Cr - lower	7/9/08	2.05	10.6	195	9.83	0.1	82	8.7	95	180
Hack Cr - upper	7/9/08	2.93	8.0	73	8.79	0.1	74	7.62	45	80
Hack Lake	7/8/08	NA	12.8	86	9.52	0.1	109	11.92	50	60
Horse Cr	7/10/08	3.51	10.6	63	9.69	0	85	9.36	50	80
Horse Lake	7/8/08	NA	9.7	59	9.13	0	78	8.32	35	60
WF Sheep Cr - lower	7/9/08	2.81	12.2	109	8.86	0.1	86	9.35	65	100
WF Sheep Cr - upper	7/9/08	0.64	8	66	8.94	0	80	8.71	45	60
Willow Cr	5/4/05	0.25	9	1524	8.3	n/a	n/a	n/a	220	1140

Based on a GIS analysis, over 20 springs are present in the Hack Creek and Willow Creek allotments. However, only four springs have been filed for water rights, which likely indicate an intermittent groundwater flow pattern for the majority of the other springs. No ground water quality data was collected during the land health assessments.

Environmental Consequences/Mitigation:

Proposed Action: Direct impacts to water quality resulting from grazing could be elevated nutrient levels (i.e. fecal coliform) if cattle begin to congregate near water sources for extended periods of time. Hoof action can cause surface compaction, stream bank shearing, elevated erosion rates and subsequent deterioration of water quality. Indirect impacts may result from excessive utilization in upland watershed areas reducing effective vegetative cover, elevating erosion potential and increasing sediment delivery to area streams which could negatively impact water quality.

The proposed actions are basically administrative changes that reflect the grazing use and management that is occurring on the allotments. The proposed stocking rate and rotation schedule are not expected to have a negative effect on water quality. Any sediment that is produced in areas where livestock may congregate would likely be captured by the existing vegetative ground cover.

No Action Alternative: Impacts would be similar to the proposed action.

Analysis on the Public Land Health Standard 5 for Water Quality: Land health summary reports for the project area indicate that water quality standards are currently being met (BLM 2006 and 2008). It is assumed that the proposed action would not result in a failure to achieve this standard.

Wetlands and Riparian Zones (includes an analysis on Public Land Health Standard 2)

Affected Environment: The table below lists riparian areas and their Proper Functioning Condition (PFC) assessment for each allotment:

Allotment	Riparian Area Name	Miles/Acres	Year Assessed	Condition Rating
Hack Creek	Horse Creek	0.8 mile	2008	Proper Functioning Condition
	West Fork Sheep Creek	2.5 miles	2008	Proper Functioning Condition
	Hack Creek	0.8 mile	2008	Proper Functioning Condition
	Sweetwater Creek	0.4 mile	2008	Proper Functioning Condition
	Hack Lake	0.6 acre	2008	Proper Functioning Condition
	Horse Lake	0.05 acre	2008	Proper Functioning Condition
	Horse Creek Wetlands	19 acres	2008	Proper Functioning Condition
Willow Creek (Ralph Place Pasture)	Horse Creek	0.4 mile	2008	Proper Functioning Condition

In addition to the above, riparian areas also exist on several ponds, seeps, and springs. These have not been assessed. Current monitoring, inventory or documented field observations for affected riparian areas, other than the proper functioning condition assessments listed above, is limited. A riparian photo plot was established on West Fork Sheep Creek within the Hack Creek Allotment in 2006. An examination of the photos indicates the riparian zone is in good to excellent condition. Photos and documented field observations on Horse Creek since 2001

indicate the riparian area is in excellent condition. Documentation mentions lush riparian growth, excellent riparian plant species diversity, and a narrow and well shaded stream channel.

Environmental Consequences/Mitigation:

Proposed Action: The proposed action would not result in any substantial changes in grazing use that would have impacts (positive or negative) to wetlands or riparian areas. Although the duration of grazing use would be increased by 12 days in the fall on the Ralph Place Pasture, spring grazing would be eliminated which would offset any negative impacts.

No Action Alternative: There would be no impacts to wetland or riparian resources.

Analysis on the Public Land Health Standard for Riparian Systems: Land health conditions would not be affected by the proposed action or no action alternative.

Wild and Scenic Rivers

Affected Environment: The Hack Creek Allotment encompasses Hack Creek that was found to be eligible under a Wild and Scenic Eligibility Study in 2007. Hack Creek will be managed to preserve the identified Outstanding Remarkable Values (ORV's) until such a time as a suitability study is completed. The ORV identified for Hack Creek was a historic variant of the Ute Trail. The overall objective is to not allow surface disturbing activities that might impair the identified ORV or its preliminary classification, which was classified as scenic.

Environmental Consequences/Mitigation:

Proposed Action: The proposed action would not result in any substantial changes in grazing use that would have impacts (positive or negative) to the historic ORV or scenic preliminary classification of Hack Creek.

No Action Alternative: The no action alternative would have no impacts to the ORV or preliminary classification of Hack Creek.

Wilderness

Affected Environment: The Hack Creek Allotment includes the Hack Creek WSA. This unit (Flat Tops Addition/Hack Lake) was part of the BLM's Initial Wilderness Inventory process in 1979 and was later part of the intensive wilderness inventory process in 1980. The original unit contained 5,300 acres of federal land which includes panoramic views of distant mountain ranges and high scenic quality of the steep, rugged cliffs and rocky outcrops of the adjacent Flat Tops Wilderness Area. In the intensive inventory phase, it was determined that 3,360 acres would be proposed for inclusion in the Wilderness Study Area. However, later in the "study process" (Glenwood Springs Resource Management Plan (RMP), Final EIS, June 15, 1983), 3,350 acres were found not suitable because it was "physically isolated from the existing wilderness." The report stated that managing the remainder of the area could conflict with future management on adjacent U.S. Forest Service lands and would "create an island of non-wilderness national forest lands between the WSA and existing wilderness." Subsequently, 10

acres were recommended for wilderness as an addition to the existing Flat Tops Wilderness. The 10 acres are located above the rim, are a logical extension of the Flat Tops Wilderness and were recommended as suitable. Upon designation, administration of the Hack Lake WSA was recommended for transfer to the U.S. Forest Service.

In 2002, the ‘White River National Forest Land and Resource Management Plan, Revision’, prescribed management direction on adjacent lands as “1.2 Recommended Wilderness” and “5.41 Deer and Elk Winter Range”. There are no longer management conflicts with adjacent U.S. Forest Service lands, nor would there be “islands” of non-wilderness lands.

The area is currently being managed under guidance provided by the Glenwood Springs RMP and amendments. For the current land use plan revision, the CRVFO has re-inventoried and assessed wilderness characteristics on BLM lands outside of existing WSAs. In a draft (unpublished) inventory and assessment, the CRVFO did determine that that the area has retained a natural appearing landscape and did offer outstanding opportunities for solitude and primitive and unconfined recreation. The historic Ute Trail, diverse wildlife habitat for mule deer, elk, bighorn sheep, lynx, and bald eagle, and excellent panoramic scenic views were identified as supplemental values. Through the assessment, the CRVFO is meeting its obligations for the updating and maintaining its inventory of wilderness resources under section 102, 201, 202 of FLPMA. Through the RMP planning revision, the CRVFO will determine which portions of BLM lands with wilderness characteristics would be protected or preserved through management prescriptions, stipulations, and allowable uses.

It is important to note that the Flat Tops Addition/Hack Lake area is identified to be managed as a wilderness area in a discussion draft released by Congresswoman Diana DeGette (DeGette 2011).

Environmental Consequences/Mitigation:

Proposed Action:

The proposed actions are basically administrative changes that reflect the grazing use and management that is occurring on the allotments. The resulting changes in grazing use on permits would more accurately describe grazing use for both permittees. The actual on-the-ground impact to solitude, naturalness, and primitive and unconfined recreation would be negligible. In conclusion, the proposed action does not create surface disturbances that could impact naturalness nor preclude any legislative actions for wilderness designation.

No Action Alternative:

The no action alternative would not positively or negatively change any wilderness characteristics nor preclude any legislative actions for wilderness designation.

Other Affected Resources

In addition to the critical elements, the resources presented in the table below were considered for impact analysis relative to the proposed action and no action alternative. Resources that would be affected by the proposed action and no action alternative are discussed below.

Other Resources Considered in the Analysis.			
<i>Resource</i>	<i>NA or Not Present</i>	<i>Present and Not Affected</i>	<i>Present and Affected</i>
Access and Transportation		X	
Cadastral Survey		X	
Fire/Fuels Management		X	
Forest Management		X	
Geology and Minerals	X		
Law Enforcement		X	
Paleontology	X		
Noise	X		
Range Management			X
Realty Authorizations		X	
Recreation		X	
Socio-Economics		X	
Soils*			X
Vegetation*			X
Visual Resources		X	
Wildlife, Aquatic*			X
Wildlife, Terrestrial*			X

*Public Land Health Standard

Range Management

Affected Environment: Refer to the description of the proposed action for the grazing use that is affected.

Environmental Consequences/Mitigation:

Proposed Action: The allotment boundary adjustment would better reflect the grazing use and management that is occurring on the allotments.

No Action Alternative: Allotment boundaries would remain unchanged. Sorting cattle by ownership would be extremely difficult as it would have to be done in the Hack Creek allotment where no holding pasture exists. Compliance with grazing dates for the Ralph Place pasture would continue to be problematic given the issues discussed in the Additional Background Section of this EA.

Soils (includes an analysis of Public Land Health Standard 1)

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 24 affected soil map units within the Hack Creek and Willow allotments (NRCS 1992). However, the majority of soils are described by five soil units, with the rest of the soils making up only minor acreage.

Approximately 17% of the project area is described by the Ansel-Anvik association, found on fans, foot slopes, and mountainsides at elevations ranging from 7,500 to 9,500 feet and on slopes of 25 to 45 percent (NRCS 2011). The Ansel soil is deep, well drained, and runoff for this soil is

rapid and the water erosion hazard is moderate to severe (NRCS 2011). The Anvik soil is deep, well drained, and runoff for this soil is rapid and the water erosion hazard is moderate to severe (NRCS 2011).

Approximately 13% of the project area is described by the Cochetopa-Antrobus association, which is found on mountainsides and alluvial fans at elevations ranging from 8,500 to 10,500 feet and on slopes of 12 to 25 percent (NRCS 2011). The Cochetopa soil is deep, well drained and surface runoff is rapid and the water erosion hazard is moderate (NRCS 2011). The Antrobus soil is deep, well drained and surface runoff is rapid and the water erosion hazard is moderate (NRCS 2011).

Approximately 15% of the project area is described by the Cushool-Rentsac complex, found at elevations ranging from 6,200 to 7,600 feet and on slopes of 15 to 65 percent (NRCS 2011). The Cushool soil is moderately deep, well drained, with rapid surface runoff and severe erosion hazard (NRCS 2011). The Rentsac soil is shallow, well drained, with rapid surface runoff and severe erosion hazard (NRCS 2011).

Approximately 14% of the project area is described by the Gypsum land-Gypsiorthids complex, found on mountainsides, hills, and in drainageways on slopes of 12 to 65 percent (NRCS 2011). The Gypsum land is primarily exposed gypsum material while the Gypsiorthids are moderately deep, well drained and derived from colluvium with high gypsum content (NRCS 2011). Surface runoff for this unit is very rapid and the water erosion hazard is slight to severe (NRCS 2011).

Approximately 11% of the project area is described by Torriorthents-Camborthids-Rock outcrop complex, which occurs on south-facing mountainsides, hills, and ridges with slopes ranging from 6 to 65 percent (NRCS 2011). The Torriorthents are shallow to moderately deep, well drained with rapid surface runoff and severe water erosion hazard (NRCS 2011). The Camborthids are shallow to deep, well drained, and surface runoff is rapid and the water erosion hazard is severe (NRCS 2011).

Environmental Consequences/Mitigation:

Proposed Action: Grazing activities may result in 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. Based on existing soil conditions and generally good vegetative cover; the likelihood of excessive soil degradation and transport to nearby drainages is minimal. Implementation of the proposed action is not anticipated to degrade soil health from current conditions.

No Action Alternative: Impacts would be the same as the proposed action.

Analysis on the Public Land Health Standard 1 for Upland Soils: Land health summary reports for the project area indicate that soil standards are currently being met (BLM 2006 and 2008). It is assumed that the proposed action would not result in a failure to achieve this standard.

Vegetation (includes an analysis of Public Land Health Standard 3)

Affected Environment:

The Hack Creek allotment ranges in elevation from 7,000 to 11,000 feet with the bulk of the acreage occurring at the middle to upper elevations. The allotment receives moderate precipitation, producing an abundant growth of vegetation. Vegetation consists primarily of pinyon-juniper woodlands at the lowest elevations, oakbrush/mesic mountain shrubs at the middle elevations and aspen woodlands and spruce-fir forests at the upper elevations.

The Willow Creek allotment ranges in elevation from 6,400 to 9,000 feet with most of the acreage occurring at the lower elevations. The Ralph Place Pasture is at a higher elevation ranging from 8,800 to 9,700 feet. The lower elevations of the allotment consist of dry pinyon-juniper hillsides and sagebrush swales. The upper elevations consist of oakbrush/mesic mountain shrubs. The Ralph Place Pasture consists of mountain sagebrush/mesic mountain shrubs and aspen woodlands.

The land health assessment found vegetation on the Hack Creek allotment robust and diverse in composition with few noxious or invasive weeds noted. Sagebrush on the Willow Creek allotment was generally in good condition. Herbaceous forage was either dominated by Kentucky bluegrass, an introduced grass, or was less abundant than expected. Mesic mountain shrubs were mostly in good condition, but at some sites, oakbrush was top-killed and serviceberry was heavily hedged by big game.

Environmental Consequences:

Proposed Action:

The proposed actions are basically administrative changes that reflect the grazing use and management that is occurring on the allotments. The resulting changes in grazing use on permits would more accurately describe grazing use for both permittees. The actual on-the-ground impact to vegetation would be negligible. Grazing would begin on the Hack Creek allotment 10 days earlier than on the current permit. Grazing on the Ralph Place Pasture would extend 12 days longer in the fall than on the current permit, but spring grazing would be eliminated. This may result in a slight overall benefit to vegetation as the Ralph Place Pasture would be grazed only in the fall rather than in both the spring and fall. This would allow more rest from grazing during critical growth periods and improve vegetative health.

No Action Alternative:

Vegetative conditions on the Hack Creek allotment and Ralph Place Pasture are currently in good condition; therefore the current grazing system seems to be maintaining vegetative health. Impacts would be similar to the proposed action.

Analysis on the Public Land Health Standard for Plant and Animal Communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial):

The land health assessment reports that encompass the project area indicated that the standard for special status plants was being met at the time of the assessment. Neither the proposed action nor the no action alternative would be expected to result in a failure to achieve this standard.

Wildlife, Aquatic (includes an analysis of Public Land Health Standard 3):

Affected Environment: *Fish.* Hack Creek, Horse Creek, Willow Creek and Hack Lake support nonnative brook trout (*Salvelinus fontinalis*). In addition, the streams and lakes contain abundant populations of aquatic insects including a diverse array for stoneflies, caddis flies, and mayflies.

Amphibians. Several amphibians of interest are found within the CRVFO, the Boreal Toad (*Bufo boreas boreas*) and the Great Basin spadefoot toad (*Spea intermontana*). The distribution of the boreal toad is restricted to areas with suitable breeding habitat in spruce-fir forests and alpine meadows generally between 7,500 and 12,000 feet elevation. Breeding habitat includes lakes, marshes, ponds, and bogs with sunny exposures and quiet shallow water. Great Basin spadefoot toads occupy arid grasslands and high sagebrush, desert shrub, and piñon-juniper woodlands. Great Basin spadefoot toad has been documented in the western third of the field office from the town of Rifle west to the boundary with the Grand Junction Field Office. This represents the eastern extent (fringe) of the species overall range and populations are believed to be small and sporadic.

Environmental Consequences/Mitigation:

Proposed Action: The proposed actions are basically administrative changes that reflect the grazing use and management that is occurring on the allotments. The resulting changes in grazing use on permits would more accurately describe grazing use for both permittees. The actual on-the-ground impact to aquatic wildlife would be negligible.

No Action Alternative: Impacts would be the same as the proposed action.

Analysis on the Public Land Health Standard 3 for Aquatic Animal Communities (partial, see also Vegetation and Wildlife, Terrestrial): The proposed action as well as the no action alternative would maintain current land health standards for aquatic wildlife species. Neither action would have a bearing on the watershed's ability to continue to meet Standard 3 for aquatic wildlife species.

Wildlife, Terrestrial (includes an analysis of Public Land Health Standard 3)

Affected Environment: The CRVFO supports a wide variety of terrestrial wildlife species that summer, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, aspen, piñon-juniper woodlands, other types of coniferous forests, and riparian/wetland areas support many species. The current condition of wildlife habitats varies across the landscape. Some habitat is altered by power lines, pipelines, fences, public recreation use, residential and commercial development, vegetative treatments, livestock and wild ungulate grazing, oil and gas development, and roads/trails. These factors have contributed to some degradation/fragmentation of habitat as well as causing disturbance to some species.

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*).

Birds. Passerine (perching) birds commonly found in the area include the: American robin (*Turdus migratorius*), Pinyon jay (*Gymnorhinus cyanocephalus*) western scrub-jay (*Aphelocoma californica*), and black-billed magpie (*Pica pica*). Two gallinaceous species, the wild turkey (*Meleagris gallopavo*) and the Dusky grouse (*Dendragapus obscurus*), are found here.

Birds of prey (eagles, falcons, hawks, and owls) may migrate through the area or nest in cottonwoods, conifers, or very tall oaks, while the numerous songbirds and small mammal populations provide the primary prey base. Common raptor species in the area include the: red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chrysaetos*) American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), Cooper's hawk (*Accipiter cooperii*), and sharp-shinned hawk (*A. striatus*).

Numerous streams, rivers, reservoirs, ponds, and associated riparian vegetation provide habitat for a wide variety of waterfowl and shorebirds. Common species include: great blue herons (*Ardea Herodias*), Canada geese (*Branta canadensis*), mallards (*Anas platyrhynchos*), pintails (*A. acuta*), gadwalls (*A. strepera*), and American wigeon (*A. americana*) are common.

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.

Big Game. The mule deer (*Odocoileus hemionus*) is a recreationally important species that are common throughout suitable habitats in the region. 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 CRVFO's Resource Management Plan (RMP) allocated existing forage proportionately to livestock and big game, the criterion being active preference for livestock and 5-year average demand for big game.

Environmental Consequences/Mitigation:

Proposed Action: The proposed actions are basically administrative changes that reflect the grazing use and management that is occurring on the allotments. The resulting changes in grazing use on permits would more accurately describe grazing use for both permittees. The actual on-the-ground impact to terrestrial wildlife would be negligible.

No Action Alternative: Impacts would be the same as the proposed action.

Analysis on the Public Land Health Standard for Terrestrial Animal Communities (partial, see also Vegetation and Wildlife, Aquatic): The proposed action as well as the no action alternative would maintain current land health standards for terrestrial wildlife species. Neither action

would have a bearing on the watershed’s ability to continue to meet Standard 3 for terrestrial wildlife species.

SUMMARY OF CUMULATIVE IMPACTS

Cumulative impacts are the incremental effects caused by management actions considering all past, present, and reasonably foreseeable future actions affecting a resource. These can result from individually minor but collectively significant actions taken over time and the effects can be either additive or subtract from the effects of other actions.

Wildlife (including special status species). 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.

Cumulative impacts to soil and water resources can occur from existing roads and trails throughout the allotments. 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 allotments, it is assumed that cumulative effects to soil and water are minor and unmeasurable.

Cumulative impacts on vegetative resources can occur from a variety of land management activities including vegetative treatment projects, wildfire and planned fire, and increases in roads and trails. Fire and vegetative treatment projects set back succession to earlier seral stages favoring growth of grasses and forbs and at least a short term decrease in the cover and density of shrubs and trees. Vegetative treatments can also result in an increase in noxious weeds and other undesirable species as the treatments create ground disturbances and, in the case of fire, increase nitrogen in the soil which favors weeds. Roads and trails create long-term losses of vegetation. Based on limited land management activities occurring across these allotments, it is assumed that the proposed action in conjunction with other activities in these allotments would result in cumulative effects to vegetation that would be minor and unmeasurable.

PERSONS AND AGENCIES CONSULTED:

INTERDISCIPLINARY REVIEW:

<i>Name</i>	<i>Title</i>	<i>Responsibility</i>
Michael Kinser	Rangeland Management Specialist	NEPA Lead, Wetlands and Riparian Zones, Range Management
Carole Huey	Realty Specialist	Lands & Realty Authorizations
Pauline Adams	Hydrologist	Air Quality, Water Quality, Soils

Carla DeYoung	Ecologist	ACEC, Vegetation, T/E/S Plants, Land Health Stds
Greg Wolfgang	Outdoor Recreation Planner	VRM, Recreation, Travel Management
Kimberly Miller	Outdoor Recreation Planner	WSR, Wilderness, Recreation
John Brogan	Archaeologist	Cultural Resources and Native American Concerns
Brian Hopkins	Wildlife Biologist	Migratory Birds, Terrestrial Wildlife and T/E/S Terrestrial Wildlife, Aquatic Wildlife and T/E/S Aquatic Wildlife
Monte Senor	Rangeland Management Specialist	Invasive, Non-native Species

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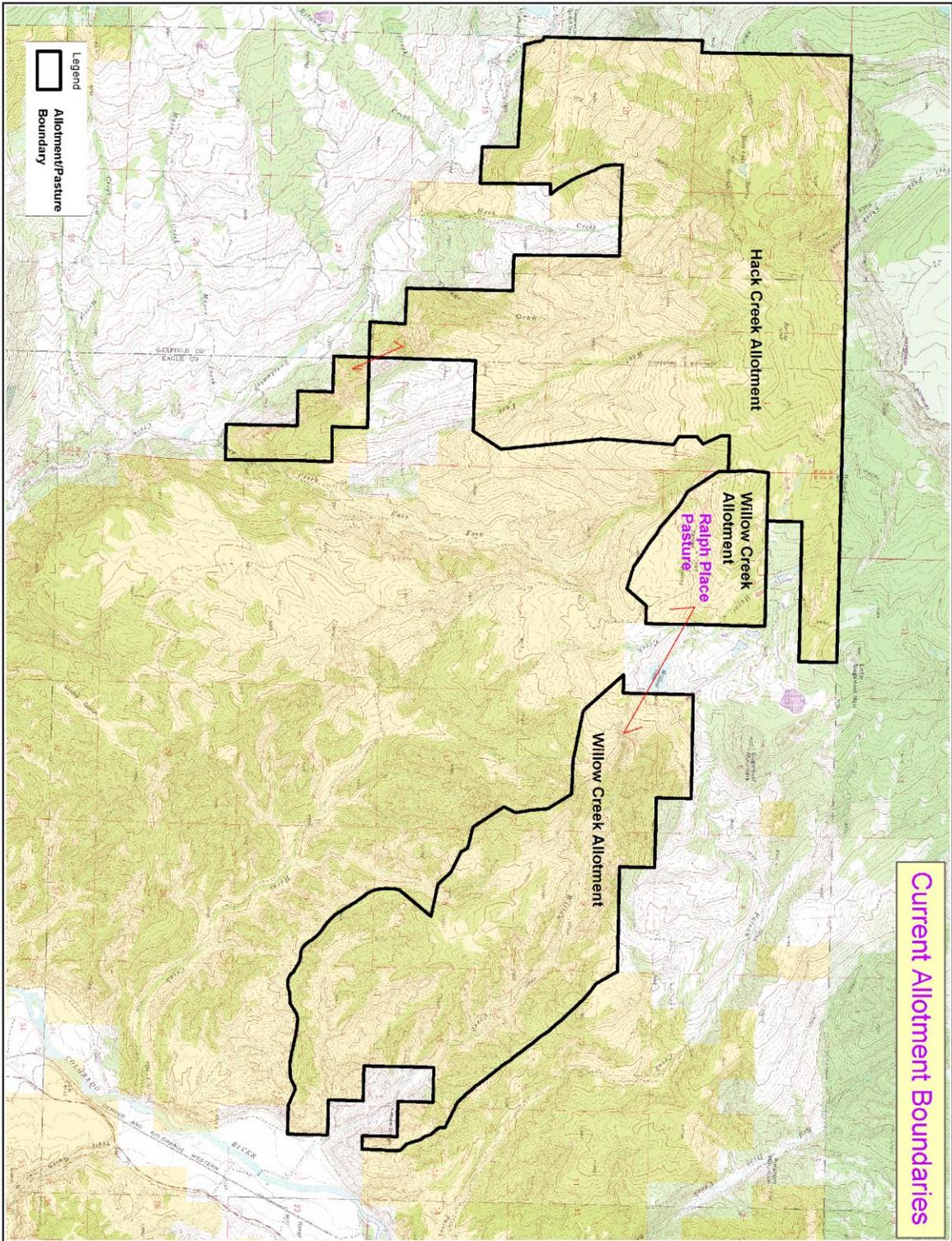
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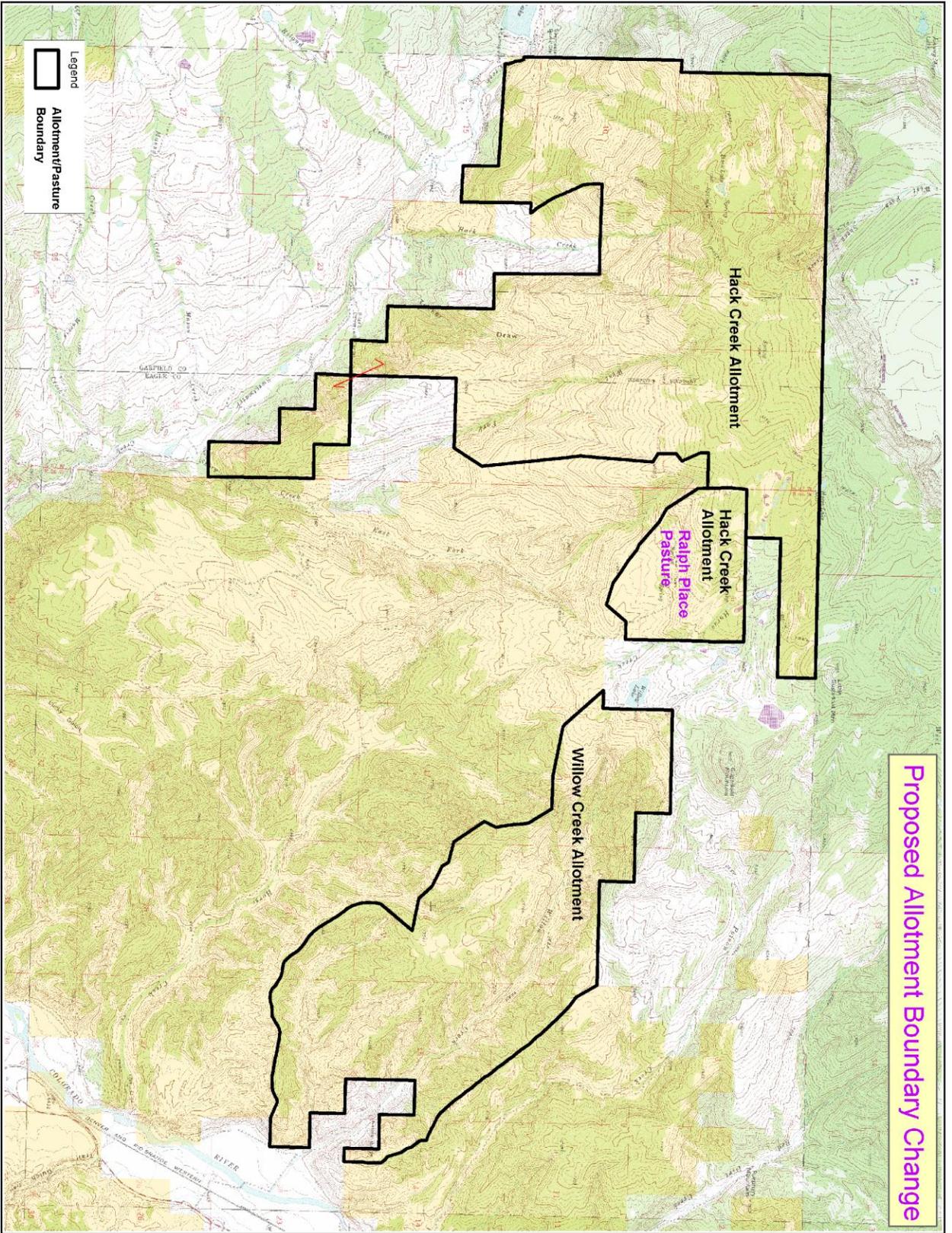
APPENDICES:

ATTACHMENTS: Allotment Maps

PREPARER: Monte Senior

DATE: 8/4/11





UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Colorado River Valley FIELD OFFICE
FINDING OF NO SIGNIFICANT IMPACT

DOI-BLM-N040-2011-0064-EA

Finding of No Significant Impact

I have reviewed the direct, indirect and cumulative effects of the proposed action documented in the EA. The effects of the proposed action are disclosed in the Alternatives and Environmental Impacts 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):

The disclosure of effects in the EA found the actions limited in context. The planning area is limited in size and activities limited in potential. Effects are local in nature and are not likely to significantly affect regional or national resources.

(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 the livestock allotment boundary adjustment are identified and discussed in the Affected Environment and Environmental Consequences section of the EA. The proposed action will not have any significant beneficial or adverse impacts on the resources identified and described in the EA.

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

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

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

The Hack Creek Allotment includes the Hack Creek WSA and encompasses Hack Creek that was found to be eligible under a Wild and Scenic Eligibility Study in 2007

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

The analysis did not identify any effects that are 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 Willow Creek and Hack Creek Allotments. It is not expected to set precedent for future actions with significant effects or represent a decision in principle about a future management consideration in or outside of this allotment.

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

The EA discloses that 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.

Historic properties have been identified within this allotment. The EA discloses the adverse impacts that could occur to cultural resources from livestock grazing. With implementation of mitigation measures that reduce risk of impact, a determination of a Conditional No Adverse Effect has been made for historic properties that may occur in the allotment.

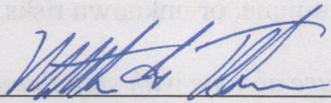
9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

There is no designated critical habitat for any listed Threatened or Endangered species within the project area. The EA discloses that the proposed action would have no adverse effects to species listed as threatened or endangered.

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

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

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



Authorized Official
Colorado River Valley Field Office

2-16-2012

Date