

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-N040-2011-0026-EA

**CASEFILE NUMBER:** 008552

**PROJECT NAME:** Catamount Fence Realignment

**LOCATION:** T3S R84W Sec 10. Refer to attached map.

**APPLICANT:** Bureau of Land Management (BLM) and Grazing Permittees

### **DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES**

**Proposed Action:** The proposed action is to realign an existing pasture fence on the Catamount Common allotment. This would require construction of approximately 0.4 mile of new 3-strand barbed wire fence and removal of 0.3 mile of barbed wire fence. The new fence would replace the section of fence that would be removed. The fence would be constructed as described on the attached drawing and construction specifications. Construction is anticipated to begin anytime from May 15 to November 30.

The BLM would provide materials required for fence construction. There may be other funding sources for the fence including the Habitat Partnership Program (HPP) and Grand Junction District Grazing Board of Advisors. Construction and future maintenance of the fence will be the responsibility of the grazing permittees as authorized under cooperative agreement as per 43 CFR 4120.3-2. In accordance with 43 CFR 4120.3-2(b), title of the range improvement shall be in the name of the United States.

Maintenance would be performed annually and would involve the following:

- Visual inspection
- Straightening posts that are off plumb
- Replacement of wood and/or steel posts as necessary
- Splicing and tightening of wire
- Re-attaching wire to posts with staples and/or wire clips, and
- Occasional clearing of shrub or tree re-growth that impairs fence maintenance using hand tools (chainsaw, brush cutter, axe, etc.).

Project Design Features:

- Fence construction and maintenance would be accomplished with hand tools only. No motorized vehicles would be used for construction or maintenance of the fence (i.e., fenceline clearing, post installation, wire installation). Motorized vehicles (pick-up,

ATV) would be authorized to transport personnel, materials to and from the project site. Motorized travel would be authorized on existing two-track trails (refer to attached map).

- The width of fenceline clearing will not exceed 5 feet for construction. Vegetation within 15 feet of the fence may be thinned for fence maintenance.
- All vegetation clearing methods should be monitored to avoid the creation or enhancement of linear features within the landscape.
- The clearing boundary shall be approved by the CRVFO's visual resource specialist prior to any ground disturbing activities to ensure that a natural appearance will be created. Irregular edges should be incorporated into areas being cleared of vegetation. Islands or pockets of vegetation should be left intermittently and in irregular patterns throughout the project area.
- Disturbed areas will be reseeded with a certified weed-free seed mixture of native species adapted to the site.
- The BLM will monitor the fenceline disturbance to detect the presence of any noxious weeds and will be responsible for promptly controlling any state-listed noxious weeds within the area disturbed from construction.
- 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.

**No Action Alternative:** Fence realignment would not occur and the fence would continue to be maintained in its current location. Routine maintenance and repair would not be sufficient to bring the fence to a functional standard in the long-term. The existing fence would likely remain in poor condition due its age and undesirable location.

**ALTERNATIVES CONSIDERED BUT ELIMINATED:** Realignment of the fence to the north so it's outside of the Wilderness Study Area (WSA) boundary was considered. This location would involve constructing the fence in through a dense stand of aspen trees and would result in greater impacts to vegetation and soils. The location would also be within an area prone to soil slumping and movement, and thus not a stable site for fence construction.

Reconstructing the fence in its current location was also considered. More vegetation clearing would be required because the density of trees is greater than the location of the proposed action. The location would also be within an area subject to soil slumping.

**PURPOSE AND NEED FOR THE ACTION:** The existing pasture fence is essential for the rotational grazing management practiced on the allotment. It divides two pastures (Upper Range and Lower Range Pastures) and controls the duration and amount of grazing use amongst the two pastures. The section of existing pasture fence that requires realignment traverses an area that is subject to soil slumping, crosses a riparian area with saturated soils (old beaver dams), and is located in a dense stand of aspen trees. The existing fence is also at least 50 years old and has surpassed its useful lifespan. Age of the fence and its poor location has jeopardized

fence integrity and has created maintenance issues. The section of fence is currently in poor condition causing livestock drift between two pastures. The proposed realignment would locate the fence further uphill to avoid the area subject to soil slumping and saturated soils. Tree density is much less at the proposed location compared to the existing location. This would reduce maintenance issues with the current fence, improve the functionality of the fence, and result in improved grazing management (i.e., maintain the rotational grazing management practiced on the allotment).

Maintaining the rotational grazing management on the allotment would help prevent over-utilization of forage, reduce the duration and frequency of grazing use, increase the opportunity for grazing rest or deferment, and increase recovery and re-growth periods. This improves conformance with Colorado Livestock Grazing Management Guidelines and maintenance/achievement of Colorado Public Land Health Standards 1 (upland soils), 2 (riparian systems), 3 (plant and animal communities), 4 (T&E species), and 5 (water quality).

**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 proposal implements land use plan decision LGM2 page 20.

Decision Language: LGM2 states "construct facilities such as springs, reservoirs, fences, corrals, and livestock trails where necessary to control and distribute livestock."

**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.

In 2006, a formal land health assessment was conducted in the Burns-to-State Bridge Landscape which included the Catamount Common allotment. The allotment was found to be meeting all 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.

**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 (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									
Critical Element	Present		Affected		Critical Element	Present		Affected	
	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

**Cultural Resources and Native American Religious Concerns**

Affected Environment: One Class III inventory (CRVFO#15811-2) was conducted specifically for this fence realignment. No historic properties eligible or potentially eligible for listing on the National Register of Historic Places were identified.

At present, there are no known areas of Native American Religious concern within the area of the fence realignment or within the Catamount Common allotment. 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 Americans.

### Environmental Consequences/Mitigation:

*Proposed Action:* No historic properties were identified during this inventory. Therefore, the BLM made a determination of “No Historic Properties Affected.” This determination was made in accordance with the 2001 revised regulations [36CFR 800.4(d)(1)] for Section 106 of the National Historic Preservation Act (16U.S.C 470f), the BLM/State Historic Preservation Officer (SHPO) Programmatic Agreement (1997) and Colorado Protocol (1998)]. As the BLM has determined that the Proposed Action would have no direct impacts to known “historic properties”, no formal consultation was initiated with the SHPO. The cultural resource Education/Discovery stipulation can be found under the Project Design Features.

*No Action Alternative:* Fence realignment would not occur and the fence would continue to be maintained in its current location. The existing fence would likely remain in poor condition due its undesirable location. There would be no adverse or beneficial effect to cultural resources.

### **Invasive, Non-native Species**

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

### Environmental Consequences/Mitigation:

*Proposed Action:* All surface disturbing activities provide a niche for invasion by noxious weeds and increase the potential for weeds to become established in an area. The Project Design Features of the Proposed Action (pg 1-2) has supplied adequate measures for the control of potential weed infestations at the project area; therefore, no other mitigation measures are needed. The Proposed Action will not significantly impact invasive, non-native species within the project area if project design features are followed.

*No Action Alternative:* Under the no action alternative no fence construction would take place. Livestock would likely continue to have unauthorized use. This will negatively impact current weed management actions. Over-utilization causes disturbances that would increase the likelihood of further noxious weed establishment.

### **Migratory Birds**

Affected Environment: 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 MBTA prohibits the “take” of a protected species. Under the Act, the term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in

any such conduct. The USFWS interprets “harm” and “kill” to include loss of eggs or nestlings due to abandonment or reduced attentiveness by one or both adults as a result of disturbance by human activity, as well as physical destruction of an occupied nest.

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the 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 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 was 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 are described in the table below.

2008 List of Birds of Conservation Concern within the CRVFO

Species	Habitat Description	Potential Occurrences in Project Area	Potentially Impacted
Gunnison Sage-Grouse ( <i>Centrocercus minimus</i> )	Sagebrush communities for hiding and thermal cover, food, 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.	Not Present	No
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.	Unlikely	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.	Unlikely	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.	Present	Yes
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.	Unlikely	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.	Unlikely	No

Species	Habitat Description	Potential Occurrences in Project Area	Potentially Impacted
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.	Not Present	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.	Possibly Present	Yes
Juniper Titmouse ( <i>Baeolophus ridgwayi</i> )	Pinyon-juniper woodlands, especially juniper; nests in tree cavities. Year-round resident, breeding.	Possibly Present	Yes
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.	Possibly Present	Yes
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.	Possibly Present	Yes
Brown-capped Rosy-Finch ( <i>Leucosticte australis</i> )	Alpine meadows, cliffs, and talus and high-elevation parks and valleys. Summer resident, breeding.	Possibly Present	Yes
Cassin's Finch ( <i>Carpodacus cassinii</i> ).	Open montane coniferous forests; breeds/ nests in coniferous forests. Year-round resident, breeding.	Not Present	No
Brewer's Sparrow	Summer resident that primarily breeds in sagebrush-grass	Addressed under Special Status	

Species	Habitat Description	Potential Occurrences in Project Area	Potentially Impacted
<i>(Spizella breweri)</i>	stands and shrublands. Migrant at low elevations.		Terrestrial Wildlife

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.

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 also could occur in the area. Raptor surveys have not been conducted in the area.

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.

Environmental Consequences/Mitigation:

*Proposed Action:* Livestock grazing can alter vegetation structure, composition, and function. Effects on migratory birds are dependent on the species of interest and may be adverse or beneficial depending on grazing timing, frequency, and intensity. If livestock remain in a pasture too long, long-term carrying capacity for both livestock and wildlife may be severely reduced. Aerial, bark and canopy insectivores may be less influenced by grazing than species feeding on nectar, insects, or seeds in the understory or on the ground. Birds may be displaced as a result of fence and pond construction/maintenance and/or grazing. Trampling of nests, eggs, or young could occur.

Maintaining the rotational grazing management system on the allotment would: (1) help prevent over-utilization of forage, (2) reduce uneven grazing distribution, and (3) allow for plant rest and recovery; ensuring land health standards continue to be achieved in the future. The on-the-ground impacts would be negligible since the fence would replace an existing nonfunctional fence section. Migratory birds and their habitat would see some long-term, localized benefits under this alternative.

*No Action Alternative:* Maintaining a rotational grazing management involves the fencing of pastures within an allotment to control the duration and amount of grazing use in each pasture. Livestock drifting between two pastures causes uneven grazing distribution and may locally impact habitat conditions for migratory birds.

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

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

**Special Status Plant Species in Eagle County**

<b>Federally Listed, Proposed or Candidate Plant Species</b>		
<b>Species</b>	<b>Habitat</b>	<b>Habitat Potential Present / Absent</b>
Ute ladies'-tresses orchid ( <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.	<b>Absent:</b> Riparian and wetland habitat in the project area is above 8,900 feet, which is far beyond the known elevational range for this orchid.
<b>BLM Sensitive Plant Species</b>		
<b>Species</b>	<b>Habitat</b>	<b>Habitat Potential Present/Absent</b>
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.	<b>Present:</b> Harrington's penstemon is known to occur on Domantle Peak and is likely to occur on the open sagebrush ridge north and west of the project area.

Environmental Consequences/Mitigation:

*Proposed Action:* Harrington's penstemon is known to occur on Domantle Peak approximately one mile to the southeast of the project area and is likely to occur on the rocky sagebrush ridge to the northeast of the project area. The existing fence line traverses herbaceous wetland and aspen woodland habitat and the proposed realignment falls within aspen and mesic mountain shrub habitat; none of which are considered potential habitat for Harrington's penstemon. The proposed action would have no direct impact on special status species. Indirect impacts would include improved grazing distribution which would reduce the potential for overgrazing in any localized area.

*No Action Alternative:* In order to facilitate rotational grazing management within the Catamount Common allotment, pasture fences are needed. Fencing improves control over the duration and amount of grazing use in each pasture. Under the No Action alternative, the existing fence would not be realigned and maintaining an operational fence would be difficult due to the slumping soils underlying portions of the fence. Livestock would likely be able to breach the fence and drift between the two pastures, causing uneven grazing distribution. If livestock concentrate in habitat areas for special status plants, this may locally degrade habitat conditions for special status plants.

Analysis on the Public Land Health Standard 4 for Special Status Plant Species (partial, see also Special Status Terrestrial and Aquatic Wildlife Species): A formal land health assessment was conducted on the watershed which includes the Catamount Common allotment in 2006. The assessment found that the allotment was meeting Standard 4 for special status plants. The proposed fence realignment would reduce maintenance issues with the current fence, improve the functionality of the fence, and result in improved grazing management between the two pastures of the allotment. The proposed action would maintain the existing vegetative conditions throughout the allotment and would continue to meet Standard 4 for special status plants.

**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, gravelly 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 ( <i>Spea intermontana</i> ).	Great Basin spadefoot toads occupy arid grasslands and high sagebrush, desert shrub, and pinion-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 mostly below 6,000 feet in elevation. This represents the eastern extent (fringe) of the species overall range and populations are believed to be small and sporadic. This species is of concern in Colorado due to its limited occurrence and small range.	Absent /No
Boreal Toad ( <i>Bufo boreas boreas</i> )	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. The CRVFO has potential habitat but no known populations.	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:* Livestock have a tendency to concentrate their foraging use in riparian areas causing direct negative impacts on streams containing sediment-intolerant aquatic species. There are four general components of an aquatic system that can be affected by livestock grazing streamside vegetation, stream channel morphology, shape and quality of the water column and the structure of the soil portion of the streambank (Behnke, R. J., and R. F. Raleigh 1979).

No special status aquatic wildlife species have been documented in these pastures. Due to the absence of special status aquatic wildlife species there would be no effect on any federally listed aquatic wildlife species and no impacts to BLM sensitive aquatic wildlife species by implementing the proposed action.

*No Action Alternative:* The absence of special status aquatic wildlife species means there would be no effect on any federally listed aquatic wildlife species and no impacts to BLM sensitive aquatic wildlife species by selecting the no action alternative.

Analysis on the Public Land Health Standard 4 for Special Status Aquatic Wildlife Species: (partial, see also Special Status Plants and Terrestrial Wildlife): Suitable habitat is available for recovery of endemic and protected species. However, due to the absence of special status aquatic wildlife species on BLM lands within the allotment, an analysis of standard 4 is not applicable to this portion of the landscape.

**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

Federally Listed, Proposed or Candidate Terrestrial Wildlife Species		
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.	Possible /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. The Northern Eagle/Southern Routt population, while small (<500 birds), probably 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. Vegetation succession, weather, predation, habitat changes (amount and/or quality), fragmentation, land treatments, past grazing practices, unknowns about grouse population cycles, etc. all have had some effect on population numbers (NESRGSGWG 2004).	Present/Yes
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 acrocneema</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

Federally Listed, Proposed or Candidate Terrestrial Wildlife Species

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 (Gruber, J.C. and D.A. Keinath 2006).	Possible /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>Accipter 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.	Possible /Yes
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/Yes
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: Canada Lynx.* Four habitat linkage areas (Castle Peak, Glenwood, Egeria and State Bridge) have been identified and mapped within the CRVFO. This allotment overlaps with the Castle Peak linkage area. These linkages are comprised of public, private, state and USFS lands and serve as likely corridors in which lynx might travel during dispersal movements. These corridors link larger forested landscapes located on adjacent White River and Routt National Forest lands. Small portions of the each linkage offer the vegetative components

(summer forage, winter forage, and possibly some denning habitat) necessary to support and possibly sustain lynx. However, these linkages do not provide lynx habitat on BLM lands. The allotment provides habitat for alternative prey species and cover for possible lynx movement and dispersal.

The fence realignment would improve fence integrity and prevent livestock drift between the two pastures which would support maintaining local habitat for alternative prey species. The proposed action is so small and discrete it has no measurable impact on connectivity between LAUs. The proposed action basically revises a previously authorized fence and is determined to have no effect on Canada lynx.

*Greater Sage Grouse.* The proposed action basically revises a previously authorized fence. Proper pasture fencing is required to implement a rotational grazing management system. Fences prevent livestock from moving to new areas when the abundance of desired forage decreases. Unauthorized livestock grazing may affect sage-grouse habitat directly by altering structural habitat factors or plant community composition, or indirectly by altering abiotic processes (Crawford et al. 2004). The fence realignment would improve fence integrity and prevent livestock drift between the two pastures resulting in protection of sage-grouse habitat from unauthorized livestock grazing. If the new fence alignment maintains proper utilization levels and land health standards are achieved, there would be no direct or indirect effects of the proposed action on sage-grouse.

*Northern goshawk, Fringed Myotis and Townsend's Big-eared Bat, Brewer's sparrow.*

Healthy functioning riparian ecosystems and uplands provide habitat for a diverse and abundant plant community and in turn insect populations that attract numerous foraging bat species. The level of livestock grazing can affect habitat use (Holmes and Johnson 2005) with over-grazing reducing the amount of vegetation and lowering the amount of insect or small mammal prey and cover. Properly managed livestock grazing is generally compatible with these species. The proposed action basically revises a previously authorized fence. If the new fence alignment maintains proper utilization levels and land health standards are achieved, there would be no direct or indirect effects of the proposed action on these species that nest and forage in this allotment.

*No Action Alternative: All species.* Maintaining a rotational grazing management involves the fencing of pastures within an allotment to control the duration and amount of grazing use in each pasture. Livestock drifting between two pastures causes uneven grazing distribution and may locally impact habitat conditions for special status terrestrial wildlife.

Analysis on the Public Land Health Standard 4 for Special Status Terrestrial Wildlife Species: (partial, see also Special Status Plants and Aquatic Wildlife): The proposed action, as opposed to the no action alternative, would better sustain healthy plant and animal communities which in turn ensures that suitable habitat is available for recovery of special status terrestrial wildlife species thus achieving land health standard 4.

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

Affected Environment: The Catamount allotment is contained within the Big Alkali watershed (6<sup>th</sup> level HUC), which flows northerly into the Colorado River. Several perennial streams, such as Norman Creek, Catamount Creek and Big Alkali Creek, along with several intermittent

drainages exist across the allotment. A 2006 stream assessment noted that each of these perennial streams was rated as having ‘properly functioning condition’ (BLM 2006b).

The State of Colorado has developed *Stream Classifications and Water Quality Standards* (CDPHE 2011a, 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 Catamount allotment are tributary to the Upper Colorado River Basin (Region 12, segment 7a) and have water use classifications described as Aquatic Life Cold 1, Recreation N, Water supply, and Agriculture (CDPHE 2011a). The State of Colorado has developed a *303(d) List of Water Quality Limited Segments Requiring TMDLS* (CDPHE 2011b, Water Quality Control Commission, Regulation No. 93) that identifies stream segments that are not currently meeting water quality standards with technology based controls alone. None of the drainages within the allotment are considered to have impaired water quality.

Many springs, small natural ponds, and wetlands/boggy areas are scattered throughout the Catamount allotment. Groundwater flow is seasonal but often saturates low lying areas in and around the proposed fence realignment. No water quality data exists for these groundwater sources.

Environmental Consequences/Mitigation:

*Proposed Action:* Direct impacts to water quality resulting from fence building activities could be short-term sediment displacement. However, it is likely that any disturbed soils would be captured by the existing vegetation and ground cover, and would not contribute to nearby water sources. Long term benefits to water quality may be expected by maintaining the fence and rotational grazing, by allowing proper rest and vegetative growth to occur.

*No Action:* Proper rest in the rotational grazing schedule would be jeopardized as cattle drift between pastures and could result in reduced water quality if cattle concentrate in areas near water sources. Direct impacts to water quality from grazing could be elevated nutrient levels (i.e. fecal coliform), surface compaction, stream bank shearing, elevated erosion rates and subsequent deterioration of water quality.

Analysis on the Public Land Health Standard 5 for Water Quality:

During the Land Health Assessment, BLM staff determined that site specific conditions were meeting Standard 5 for water quality (BLM 2006b). The proposed action would maintain overall water quality.

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

Affected Environment: The proposed action would realign a fence that separates the Lower Range and Upper Pastures. The table below summarizes riparian areas that have been assessed within the two pastures.

Riparian Area Name	Miles/Acres	Year Assessed	Condition Rating
Catamount Creek	1.0 mile	2006	Proper Functioning Condition
Big Alkali Creek	5.8 mile	2006	Proper Functioning Condition
Edges Lake	0.3 acres	2006	Proper Functioning Condition

In addition to the above, riparian areas also exist along numerous springs, seeps, ponds, and wetlands.

#### Environmental Consequences/Mitigation:

*Proposed Action:* The proposed action would help maintain the rotational grazing management practiced on the allotment. Rotational grazing management would help prevent over-utilization of forage, reduce the duration and frequency of grazing use, increase the opportunity for grazing rest or deferment, and increase recovery and re-growth periods. As a result, the condition of riparian areas would be maintained and/or improved.

*No Action Alternative:* Under the no action alternative, the fence would not be realigned. The existing fence would likely remain in poor condition due its age and undesirable location. Rotational grazing management would be jeopardized and could result in excessive utilization, soil compaction or repeated defoliations that do not allow sufficient time for rest and recovery of plant species. Reduced vigor or death of plant species may result as well as increased potential for weed invasion or other undesirable vegetation. Excess herbivory or trampling damage can lead to greater erosion or deposition, changes in channel geomorphology, and less soil moisture. There may be a decline in riparian area conditions resulting in a functioning at-risk rating.

#### Analysis on the Public Land Health Standard for Riparian Systems:

*Proposed Action:* Land health conditions for riparian systems would be maintained and/or improved.

*No Action Alternative:* Land health conditions for riparian systems may deteriorate.

### **Wilderness**

Affected Environment: The proposed project is not within a designated wilderness area, but is within the Castle Peak Wilderness Study Area (WSA). This unit 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 17,500 acres of federal land bounded by private lands to the west and south and a mixture of private and public lands to the north and east. Following the intensive inventory field work and a boundary adjustment, the unit of 11,940 acres was proposed as a WSA. However, after completion of the study process, no acres were "recommended" for wilderness as documented in the Final Wilderness Study Report in 1991. The Castle Peak WSA was recommended as "non-suitable" for wilderness designation because it would "add little to the diversity of the National Preservation System." It was stated that the area was very similar ecologically to existing wildernesses both locally and state-wide. 12,237 acres, (change in acreage due to more accurate GIS information) in the Castle Peak WSA is currently being managed under guidance provided by the Interim Management Policy and Guidelines for Lands Under Wilderness Review, H-8550-1, until Congress designates the area or releases it for other uses.

It is important to note that the Castle Peak WSA is identified to be managed as a wilderness area in a discussion draft released by Congresswoman Diana DeGette (DeGette 2011) and in the draft House Bill 6280 – Eagle and Summit County Wilderness Preservation Act released by Congressman Jared Polis (Polis 2011).

## Environmental Consequences/Mitigation:

*Proposed Action:* The removal of a fence on the boundary of the Castle Peak WSA and the construction of a new fence within the Castle Peak WSA protects the land's wilderness values as shown below:

*Solitude.* The best opportunities for solitude are away from the northeast boundary of the WSA, the location of the proposed action. There will be short-term negative impacts during the project timeframe along the northeast boundary when fence construction and removal is occurring. The proposed action does not affect the varied topography of the unit containing several peaks about 10,000' in elevation, the dense spruce-fir forest and aspen stands that cover most of the unit and provide an excellent barrier to other sights and sounds within and outside of the unit, or the size and blocked configuration that further enhance opportunities for solitude.

*Naturalness.* The removal and construction of a fence along or near the northeast boundary of the Castle Peak WSA will have an impact to naturalness. The current condition of the pasture fence is resulting in increased amount and duration of grazing use within the Upper Pasture of the allotment. Most of this pasture is located within the WSA. Increased amount and duration of grazing use reduces opportunity for grazing rest, increases forage utilization, and results in repeated defoliations that do not allow sufficient time for rest and recovery of plant species. Reduced vigor or death of plant species may result as well as increased potential for invasion of weeds or other undesirable vegetation. In riparian areas, excess herbivory or trampling damage can lead to greater erosion or deposition, changes in channel geomorphology, and less soil moisture. The proposed action would maintain the rotational grazing management on the allotment, would help prevent over-utilization of forage, reduce the duration and frequency of grazing use, increase the opportunity for grazing rest or deferment, and increase recovery and re-growth periods. This improves conformance with Colorado Livestock Grazing Management Guidelines, maintenance/achievement of Colorado Public Land Health Standards 1 (upland soils), 2 (riparian systems), 3 (plant and animal communities), 4 (T&E species), and 5 (water quality), and maintains and protects the naturalness value. The fence is intended to correct and mitigate a situation which could result in declining naturalness. The visual impacts of the fence will be mitigated as to make the impacts negligible by the inclusion of project design features to clear vegetation for the fence and reducing the level of change to the characteristic landscape to be very limited. This .4 mile of constructed fence within the WSA boundary would not detract from the overall naturalness of the WSA because of the dense timber, vegetation, and topography that provide an excellent barrier over most of the WSA. Therefore, the fence will be substantially unnoticeable in the overall WSA area. Any negative impacts to naturalness created by this fence would be offset by the positive benefits of protecting the naturalness value.

*Primitive and Unconfined Recreation.* Primitive and unconfined recreation activities (e.g., hiking, horseback riding and backpacking) would benefit from the proposed action because improved grazing distribution would reduce the potential for overgrazing in any localized area. Overgrazing may negatively affect a person's recreation setting and experience. The best opportunities for primitive recreational activities are away from this part of the WSA. A person seeking to recreate within the Castle Peak WSA could utilize BLM lands during and after the proposed action.

*Supplemental Values.* The diverse topography and vegetation provide ecologic values. Fences prevent livestock from moving to new areas when the abundance of desired forage decreases. Unauthorized livestock grazing may affect sage-grouse habitat directly by altering structural habitat factors or plant community composition, or indirectly by altering abiotic processes. Livestock drifting between two pastures causes uneven grazing distribution and may locally impact habitat conditions for special status terrestrial wildlife and plants.

In conclusion, the proposed action has negative impacts to naturalness that would be offset by the positive benefits of protecting the naturalness value. Primitive and unconfined recreation activities would have beneficial impacts through improved grazing distribution. The proposed action also has positive impacts to the supplemental ecologic values. Thus, this action would not preclude any legislative actions for wilderness designation.

*No Action Alternative:* The no action alternative would negatively impact naturalness and primitive and unconfined recreation activities by allowing unauthorized livestock grazing and localized overgrazing.

### **Other Affected Resources**

In addition to the critical elements, the resources presented in Table 2 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.

<b>Table 2. Other Resources Considered in the Analysis.</b>			
<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: The proposed fence realignment is within the Catamount Common allotments. Permitted grazing use is as follows:

<b>Allotment Name/No.</b>	<b>Livestock No./Kind</b>	<b>Period of Use</b>	<b>% PL</b>	<b>AUMS</b>
Catamount Common 08619	126 Cattle	06/12 – 10/15	100	522
	165 Cattle	07/18 – 10/15	100	488

Environmental Consequences/Mitigation:

*Proposed Action:* Realignment of the fence will make it more effective in controlling livestock, improve grazing management, and improve conformance with Colorado Livestock Grazing Management Guidelines:

- Periodic rest or deferment from grazing during critical growth periods,
- Adequate recovery and regrowth periods,
- Opportunity for seed disseminating and seedling establishment.

*No Action:* The existing fence would likely remain in poor condition due its undesirable location. Rotational grazing management would be jeopardized as well as conformance with Colorado Livestock Grazing Management Guidelines.

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

Affected Environment: A review of the soil survey by NRCS in the *Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield and Pitkin Counties* indicate one affected soil map unit within the fence realignment area (NRCS 1992). This soil map unit consists of the Anvik-Skylick-Sligting association (10-25% slopes), which is commonly found on fans and mountainsides (NRCS 2011). It is comprised of about 30% Anvik, 30% Skylick and 30% Sligting soils, and the parent material consists of mixed alluvium and/or mixed colluviums (NRCS 2011). The entire association is described as well drained soils (NRCS 2011). Typical uses for this unit include wildlife habitat, non-irrigated land capability, and grazing.

Based on field observations, the soils around the proposed fence realignment are often seasonally saturated (via springs and intermittent streams) and prone to soil movement and slumping (Kinser 2011). Slumped soils are more prone to erosion and surface runoff.

Environmental Consequences/Mitigation:

*Proposed Action:* Building new fence and removing old fence pieces will have short term direct impacts to soils when digging and placing post holes. Approximately 40-50 post holes will be dug 10in diameter by 2.5ft deep. Any excess soil will be scattered thinly across the disturbed area and re-seeded. Long term impacts are beneficial to soils, as the newly aligned fence will provide for a sufficient rest-rotation schedule, allowing areas prone to erosion proper time to re-vegetate and stabilize.

*No Action Alternative:* Livestock would continue to breach the fence and drift between the two pastures, not allowing for proper rest-rotation. Increased erosion and surface compaction may occur in areas where cattle congregate or trail. Fence maintenance across slumping soils will continue to be problematic and may accelerate erosion.

Analysis on the Public Land Health Standard 1 for Upland Soils: Soil and site stability indicators evaluated during the land health assessment received departure from expected ratings of ‘none to slight’ for all sites in the Catamount allotment (BLM 2006a). Thus, Bureau of Land Management staff concluded that Standard 1 for Upland Soils was being achieved (BLM 2006b). The proposed action would maintain the existing soil conditions throughout the allotment and would continue to meet Standard 1.

**Vegetation (includes an analysis of Public Land Health Standard 3; partial see also Aquatic Wildlife, Terrestrial Wildlife):**

Affected Environment: The existing fence alignment traverses aspen woodland and herbaceous wetland vegetation. The proposed fence realignment would traverse aspen and mesic mountain shrubland vegetation.

Environmental Consequences/Mitigation:

*Proposed Action:* The Proposed Action would involve construction of approximately 0.4 mile of new barbed wire fence and removal of 0.3 mile of barbed wire fence. Some surface disturbance would occur as a result of clearing the fenceline and digging postholes for the new fence and removing the posts and wire from the existing fence. These disturbances would be temporary in nature, but may increase the risk of invasion of noxious weeds and other invasive plant species. The disturbed areas will be seeded with a mixture of certified weed-seed free native grasses (and possibly forbs) adapted to the site. The BLM will monitor the project area for the presence of weeds and will be responsible for controlling any noxious weeds resulting from construction activities.

*No Action Alternative:* Pasture fences facilitate rotational grazing management within the Catamount Common allotment. Fencing improves control over the duration and intensity of grazing use in each pasture. Under the No Action alternative, the existing fence would not be realigned and maintaining an operational fence would be difficult due to the slumping soils underlying portions of the fence. Livestock would likely be able to breach the fence and drift between the two pastures, causing uneven grazing distribution. An increase in the amount and duration of grazing use may cause localized areas of excessive grazing utilization or repeated defoliations that would not leave sufficient residual vegetation or allow sufficient time for rest and recovery of plant species to maintain plant health. Reduced vigor or mortality of palatable plant species may result in increases of noxious weeds and other less palatable vegetation.

Analysis on the Public Land Health Standard 3 for Plant and Animal Communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): A formal land health assessment was conducted on the watershed which includes the Catamount Common allotment in 2006. The allotment was found to be meeting Standard 3 for plant communities at the time of the assessment. The proposed fence realignment would reduce maintenance issues with the current fence, improve the functionality of the fence, and result in improved grazing management between the two pastures of the allotment. The proposed action would maintain the existing vegetative conditions throughout the allotment and would continue to meet Standard 3 for plant communities.

**Wildlife, Aquatic (includes an analysis of Public Land Health Standard 3; partial, see also Vegetation, Terrestrial Wildlife):**

Affected Environment. *Fish.* Small populations of fish species including trout (*Oncorhynchus spp.*) are known or occur on BLM lands in the upper reaches of Catamount and Big Alkali Creeks.

*Amphibians.* Amphibian populations in Colorado as well as globally, are in decline. Amphibians are very sensitive to their terrestrial and aquatic environments, changes in either can affect their survival and propagation. Habitat loss and alteration are considered the most significant drivers of declines, but additional causes include infectious disease, introduced species, and changes in climate patterns (TJL 2011). Amphibian populations within the CRVFO are greatest in ponds, wetlands and in perennial streams. Tiger salamander (*Ambystoma tigrinum*), Western toad (*Bufo boreas*), and Bullfrog (*Rana catesbeiana*) are some of the more common amphibians found in the CRVFO.

Environmental Consequences/Mitigation:

*Proposed Action: Fish and Amphibians.* Livestock have a tendency to concentrate their foraging use in riparian areas causing direct negative impacts on streams containing sediment-intolerant aquatic species. The primary impacts on aquatic species and their habitats are habitat alteration, increased water temperatures, macroinvertebrate productivity and increased sedimentation and turbidity.

The proposed action basically revises a previously authorized fence. If the new fence alignment maintains proper livestock utilization levels and land health standards are achieved, there would be no direct or indirect effects of the proposed action.

*No Action Alternative: Fish and Amphibians.* Maintaining a rotational grazing management involves the fencing of pastures within an allotment to control the duration and amount of grazing use in each pasture. Livestock drifting between two pastures causes uneven grazing distribution and may cause localized impacts to habitat conditions for aquatic wildlife.

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 opposed to the no action alternative, would better support aquatic wildlife species at viable population levels commensurate with local habitat potential.

**Wildlife, Terrestrial (includes an analysis of Public Land Health Standard 3; partial, see also Vegetation, Aquatic Wildlife):**

Affected Environment: The CRVFO supports a wide variety of terrestrial wildlife species that summer, winter, or migrate through BLM lands. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, aspen, pinyon-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:* Livestock grazing can alter vegetation structure, composition, and function. On the other hand, livestock grazing can have a beneficial effect on forage quality by removing the rough or dried seedheads and stems, while leaving or creating the more palatable leaves for deer or elk to graze later in the season. Effects on terrestrial wildlife are dependent on the species of interest and may be adverse or beneficial depending on grazing numbers, timing, frequency, and intensity.

Since the livestock AUMs authorized are estimated to remove 50% or less of the annual vegetative component - thereby leaving no less than 50 of the vegetative resource for use by wildlife - the proposed action would help ensure that adequate amounts of herbaceous vegetation is available for terrestrial wildlife species. The proposed fence would be built to BLM specifications which minimize wildlife impacts of the fence itself. Also see the vegetation and riparian sections.

*No Action Alternative:* Maintaining a rotational grazing management involves the fencing of pastures within an allotment to control the duration and amount of grazing use in each pasture. Livestock drifting between two pastures causes uneven grazing distribution and could, negatively impact local habitat conditions for terrestrial wildlife.

In addition loose, angled and dysfunctional fencing can directly impact wildlife. Wildlife, especially big game can: become snagged, tangle legs or antlers or just be cut by wire barbs.

Analysis on the Public Land Health Standard for Terrestrial Animal Communities (partial, see also Vegetation and Wildlife, Aquatic): The proposed action, as opposed to the no action alternative, would better support terrestrial wildlife species at viable population levels commensurate with local habitat potential.

## **Visual Resources**

Affected Environment: The proposed project area is located in an area classified as Visual Resource Management (VRM) Class I. The objective of Class I is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activities. The level of change to the characteristic landscape should be very low and should not attract attention.

### Environmental Consequences/Mitigation:

*Proposed Action:* In areas where vegetation would need to be thinned, the proposed action could make contrasts to the existing landscape's form, line, color and texture. With the inclusion of project design features to clear vegetation for the fence, the level of change to the characteristic landscape would be very limited. Therefore the proposed action meets the objective of VRM Class I.

*No Action Alternative:* The existing natural landscape would be maintained and VRM Class I objectives would be met.

## **SUMMARY OF CUMULATIVE IMPACTS**

**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.

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

**PERSONS AND AGENCIES CONSULTED:**

Grazing Permittees  
Colorado Wilderness Network

**INTERDISCIPLINARY REVIEW:**

<i>Name</i>	<i>Title</i>	<i>Responsibility</i>
Michael Kinser	Rangeland Management Specialist	NEPA Lead, Wetlands and Riparian Zones, Range Management
Pauline Adams	Hydrologist	Air Quality, Water Quality, Soils
Carole Huey	Realty Specialist	Lands & Realty Authorizations
Carla DeYoung	Ecologist	ACEC, Vegetation, T/E/S Plants, Land Health Stds
Greg Wolfgang	Outdoor Recreation Planner	VRM, Travel Management
Kimberly Miller	Outdoor Recreation Planner	Wild and Scenic Rivers, Wilderness, Recreation
Cheryl Harrison	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

**REFERENCES:**

Bureau of Land Management (BLM). 1997. Standards and Guidelines. Website: [http://www.blm.gov/co/st/en/BLM\\_Programs/grazing/rm\\_stds\\_guidelines.html](http://www.blm.gov/co/st/en/BLM_Programs/grazing/rm_stds_guidelines.html). Accessed on 2-23-11.

Bureau of Land Management (BLM). 2006a. Evaluation Sheet for Catamount Common Allotment: Interpreting Indicators of Rangeland Health. Unpublished data. Colorado River Valley Field Office, Silt, CO.

- Bureau of Land Management (BLM). 2006b. Burns to State Bridge Watershed- Land Health Assessment Final Report. Unpublished. Colorado River Valley Field Office. Silt, CO.
- Bureau of Land Management (BLM). 2009. Information Bulletin No. CO-2010-007. State Director's Sensitive Species List, December 15, 2009.
- Colorado Department of Health and the Environment (CDPHE). 2011a. Regulation No. 33, Classifications and Numeric Standards for Upper Colorado River Basin and North Platte River (5 CCR 1002-33). Water Quality Control Commission. Available online: <http://www.cdphe.state.co.us/regulations/wqccregs/>
- Colorado Department of Health and the Environment (CDPHE). 2011b. Regulation No. 93, Colorado's 303 (d) List of Impaired Waters and Monitoring and Evaluation List, (5 CCR 1002-93). Water Quality Control Commission. Available online: <http://www.cdphe.state.co.us/regulations/wqccregs/>
- Colorado Division of Wildlife (CDOW). 2009. Website: <http://wildlife.state.co.us/Research/Birds/GreaterSageGrouse/>. Accessed on 5-3-2010.
- Crawford, J.A., R.A. Olson, N.E. West, J.C. Mosley, M.A. Shroeder, T.D. Whitson, R.F. Miller, M.A. Gregg, and C.S. Boyd. 2004. Synthesis Paper: Ecology and management of sage-grouse and sage-grouse habitat. *J. Range Manage.* 57: 2-19.
- DeGette, Diana. 2011. Wilderness. Website: [http://degette.house.gov/index.php?option=com\\_content&view=article&id=844&Itemid=189](http://degette.house.gov/index.php?option=com_content&view=article&id=844&Itemid=189). Accessed on 2-18-11.
- Gillihan, S. W. 2006. Sharing the land with pinyon-juniper birds. Partners in Flight Western Working Group. Website: <http://www.pwrc.usgs.gov/pif/pubs/PJ%20manual%20Nov%2008%20low-res.pdf>. Accessed on 5-3-2010. Salt Lake City, Utah.
- Great Basin Bird Observatory (GBBO). 2011. Website: [http://www.gbbo.org/pdf/bcp/73\\_Brewers\\_Sparrow.pdf](http://www.gbbo.org/pdf/bcp/73_Brewers_Sparrow.pdf). Accessed on 2-18-11.
- Gruver, J.C. and D.A. Keinath. 2006. Townsend's Big-eared Bat (*Corynorhinus townsendii*): a technical conservation assessment. [Online]. USDA Forest Service, Rocky Mountain Region. Available: <http://www.fs.fed.us/r2/projects/scp/assessments/townsendbig-earedbat.pdf>. Accessed on 12-22-2009.
- Jensen N. E. 1972. Pinyon-Juniper Woodland Management for Multiple Use Benefits. Journal of Range Management Vol. 25, No. 3 (May, 1972), pp. 231-234. Published by: Allen Press and Society for Range Management. Stable URL: <http://www.jstor.org/stable/3897064>.
- Kinser, M. 2011. Personal communication. Range Management Specialist. BLM, Colorado River Valley Field Office, Silt, CO.
- Miller, R.E, T.J. Svejcar, and N.E. West. 1994. Implications of livestock grazing in the Intermountain sagebrush region: plant composition. Pages 101-146 in M. Vavra, W.A. Laycock, and R.o' Pieper, editors, Ecological implications of livestock herbivory in the West. Society for Range Management, Denver, CO.

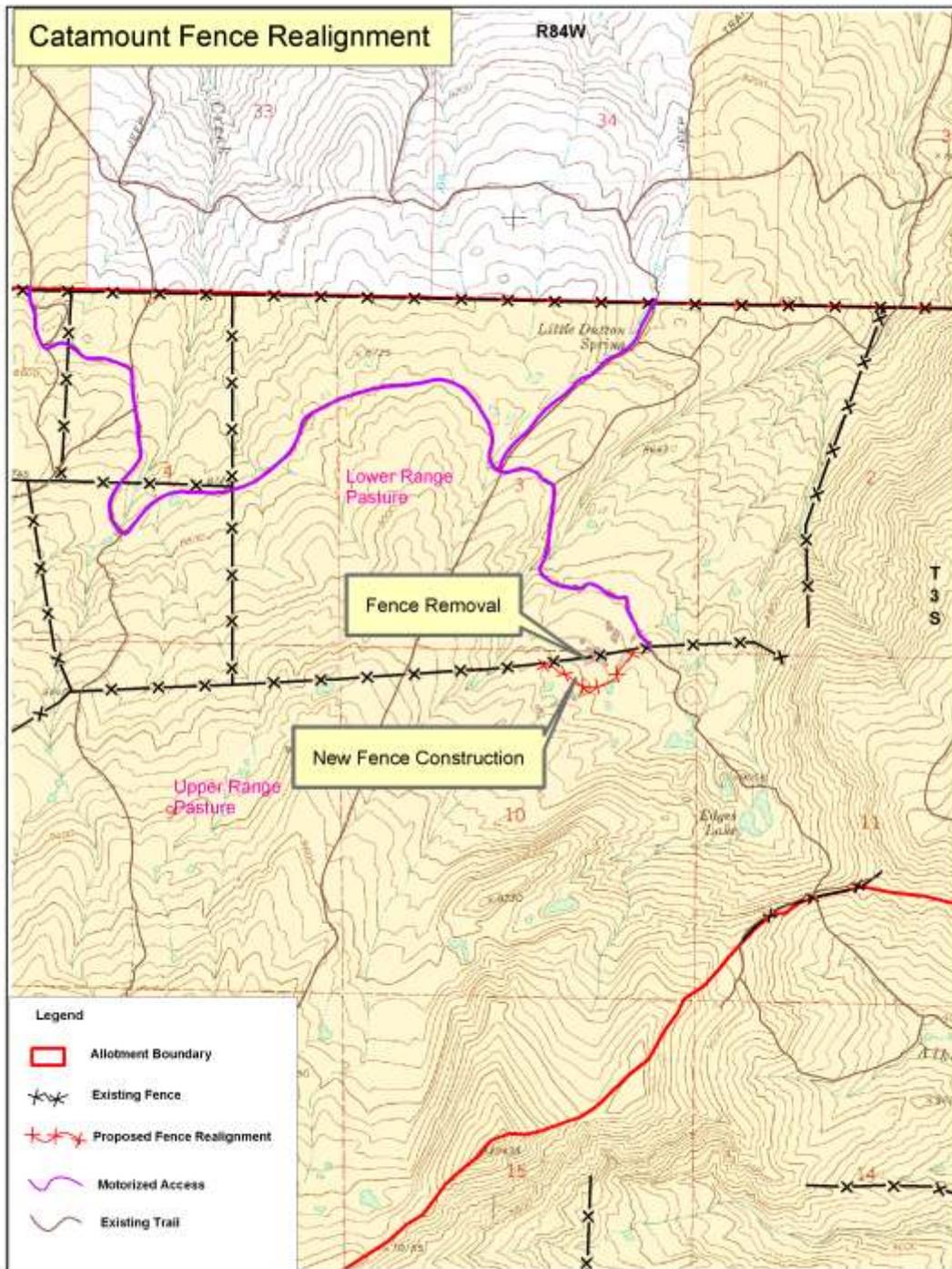
- Nicholoff, S.H. (Compiler). 2003. Wyoming Bird Conservation Plan, Version 2.0. Wyoming Partners In Flight. Wyoming Game and Fish Department, Lander, Wyoming.
- Natural Resource Conservation Service (NRCS). 1992. Soil Survey of Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield and Pitkin Counties. Available online: [http://soils.usda.gov/survey/online\\_surveys/colorado/](http://soils.usda.gov/survey/online_surveys/colorado/)
- Natural Resource Conservation Service (NRCS). 2011. Map Unit Descriptions for *Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield, and Pitkin Counties*. Soil Data Viewer application. Available online: <http://soils.usda.gov/sdv/>.
- Polis, Jared. 2011. Congressman Jared Polis, 2<sup>nd</sup> District of Colorado. Website: <http://polis.house.gov/Wilderness/>. Accessed on 2-18-11.
- The Johnson Lab - University of Boulder (TJL). 2011. Amphibian Population Declines in Colorado. Website: <http://www.colorado.edu/eeb/facultysites/pieter/amphibiandecline.html>. Accessed on 2-23-2011.
- U.S. Fish and Wildlife Service (USFWS). 2010. [Online]. Website: <http://www.fws.gov/mountain-prairie/endspp/countylists/colorado.pdf>. [Accessed on 11-23-2010].
- U.S. Fish and Wildlife Service (USFWS). 2010a. Endangered Species - Greater Sage Grouse. Website: <http://www.fws.gov/mountain-prairie/species/birds/sagegrouse/>. Accessed on 10-25-2010.
- U.S. Fish and Wildlife Service (USFWS). 2009a. [Online]. Website: [http://ecos.fws.gov/docs/recovery\\_plan/940317.pdf](http://ecos.fws.gov/docs/recovery_plan/940317.pdf). [Accessed on 12-22-2009].
- U.S. Fish and Wildlife Service (USFWS). 2009b. [Online]. Website: [http://ecos.fws.gov/docs/candforms\\_pdf/r8/B06R\\_V01.pdf](http://ecos.fws.gov/docs/candforms_pdf/r8/B06R_V01.pdf). [Accessed on 12-27-2009]. Attachment 1.
- U.S. Fish and Wildlife Service (USFWS). 2008. Birds of Conservation Concern 2008. United States Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, Virginia. 85 pp. [Online version available at <<http://www.fws.gov/migratorybirds/>>].

APPENDICES: None

ATTACHMENTS: Project Location Map, Project Specifications and Drawings

PREPARER: Michael R. Kinser

DATE: June 1, 2011



## Project Specifications

02834  
WORK DATA SHEET  
for  
SECTION 02834 - WIRE FENCES AND GATES

Fence type: Three strand barbed

Type of top wire: Barbed

Type of intermediate wire: Barbed

Type of bottom wire: Barbed

Wire locations/dimensions in inches (spacing):

F: \_\_\_\_\_

E:

D:

C: 12

B: 10

A: 16

Line post spacing (L): 14 ft 0 inches

Type of Stays: Wood or wire twist

Stay spacing (l): 5 ft 6 inches

Length of wood posts ( $H_1$ ): 8 or 7 ft \_\_\_\_\_ inches

Depth of wood posts in ground ( $h_1$ ): 3 ft \_\_\_\_\_ inches

Length of steel posts ( $H_2$ ): 5 ft 6 inches

Depth of steel posts in ground ( $h_2$ ): To top of anchor plate

Ratio of Wood to Steel Line Posts: 1:5 to 1:3

Fence Drainage Crossing: None

Number of mechanical gate closers: None

DIVISION 2  
 SITEWORK  
 Rev. 01-93

SECTION 02834  
 WIRE FENCES AND GATES

PART 1: GENERAL

1.01 SUMMARY:

A. Section Includes: Furnishing and installing wire fences.

PART 2: PRODUCTS

2.01 MATERIALS:

- A. Barbed Wire: A strand of two 12-1/2-ga galvanized wires twisted together with 2-point barbs of 14-ga wire spaced 4 inches apart. Wire and barbs shall be zinc-coated steel, with a zinc coating of at least 0.3 oz/ft<sup>2</sup> of coated surface area. The minimum breaking strength of each wire shall be 950 lb-force. The barbed wire shall conform to ASTM A 121.
- B. Wire Fence Stays shall be twisted wire fence stays manufactured from smooth galvanized 9-ga wire.
- C. Wood Fence Stays: Shall be sound and straight pieces, 2-1/2- to 3-1/2-inch diameter or 2x2-inch rough sawn of the species listed under wood posts and braces. Stays shall be of uniform length sufficient to extend a minimum of 3 inches above the top fence wire and touch the ground. Total length shall be 4 ft-0 inches.
- D. Staples: Shall be 9-ga, bright-finish or galvanized 1-1/2 inches long.
- E. Nails: Shall be 40d or larger as required.
- F. Steel Fence Posts: Shall be painted green with white or silver tops "T" or "U" (channel) bar type, with a welded or riveted anchor plate and shall be furnished with clip-type wire fasteners (punched tabs for fastening wires are not acceptable). Steel posts shall be manufactured from wrought, rail, or new billet steel, and shall have a minimum weight of 1.33 lb/lin ft exclusive of the anchor plate, which shall weigh a minimum of 0.67 lb  $\pm$ 5%, and shall be a minimum of 18 inch<sup>2</sup> in area. Steel fence posts and fasteners shall be according to ASTM A 702.
- G. Wood Posts and Braces:
1. Acceptable Wood Posts and Braces: Shall be sound single-stem members. A slight bend in one plane is acceptable. Posts and brace rails may be full stem members, sawed members of square cross section, or split members (western redcedar only). Line posts and brace rails shall be 4 inches minimum diameter at the small end. Sawed members shall be 4 x 4 rough sawn. Minimum cross sectional area at the small end for split members shall be 10 in<sup>2</sup>. Honey locust, western redcedar (full stem with bark removed), juniper, osage orange, and white oak are acceptable without treatment.
  2. Basis for Rejection: Posts are not acceptable when sweep causes a straight line joining the center of the top to the center of the butt to fall outside the body of the post, or at a point 2 inches or more from the center of the post. Posts that are charred, twisted, rotted, or excessively bent are not acceptable. Seasoning checks, single or

opposite each other with a sum total equal to or more than 1/2 the thickness of the post are not acceptable.

- H. Steel Gates: Shall be steel frame and shall be fabricated according to the drawings. Fasteners, bolts, nuts and other accessories shall be galvanized or cadmium-plated.
- I. Wire Gates: Shall have the same type wire and wire spacing as the fence. Wood stays for wire gates shall be sound and straight pieces, 3-inch minimum diameter, and of the species listed under posts and braces.
- J. Mechanical Gate Closers: Assembly must include the following salient features:
  - 1. A rigid steel strap or 9-ga smooth wire loop 6 inches from the ground securely connected to the gate post and shaped so the gate stay shall be securely held in place.
  - 2. An adjustable cable or chain, or rigid steel strap fastened to a cam lever device located 6 inches from the top of the gate post. The closer shall be capable of securely holding the gate stay in place.
- K. Brace Wires: Shall be 4 wires of 9-ga smooth, galvanized wire or 2 wires of galvanized, 12-1/2-ga barbless wire. The minimum weight of zinc coating for 9-ga wire shall be at least 0.4 oz of zinc/ft<sup>2</sup> of coated surface area; for 12-1/2-ga wire at least 0.3 oz of zinc/ft<sup>2</sup> of coated surface area.
- L. Miscellaneous Wire: Wire for ties, gate loops and fastening wood stays shall be 9 or 12-1/2-ga galvanized wire.

### PART 3: EXECUTION

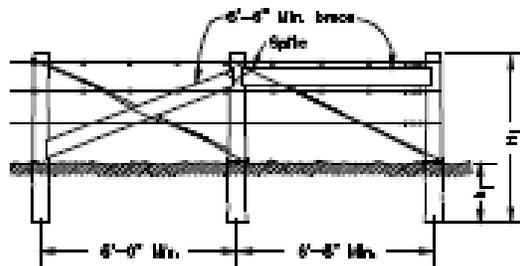
#### 3.01 PREPARATION:

- A. Clearing: Maximum clearing width is 5 feet. Provide minimum disturbance to existing grass and sod. Clearing shall be accomplished by hand tools (including chain saws) only.

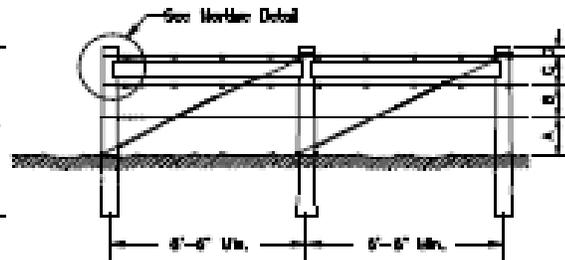
#### 3.02 INSTALLATION:

- A. General: Steel posts shall not be used for end-panel, corner-panel, gate-panel, or stress-panel posts. Set wood posts in dug or drilled holes unless written authorization is obtained for driving line posts. Drive steel posts. When treated members must be bored or cut during construction, thoroughly swab untreated surfaces with approved preservative.
- B. Ratio of Wood to Steel Line Posts: 1:5 to 1:3
- C. Setting Posts: Dig holes for setting wood posts to the depth as shown on the Work Data Sheet. Set posts plumb and to the spacing and grades as shown on the drawings, unless staked otherwise. Space within 6 inches of that dimension shown on the drawings or in the Work Data Sheet. Holes shall provide adequate open space around the post so backfill can be tamped the full depth around the post. Backfill gradually and uniformly with soil around each post. Compact backfill firmly from the bottom of the hole to the ground surface.
- D. Driving Posts:

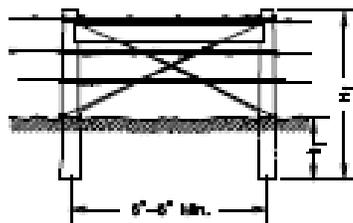
1. Wood Posts: Drive only when approved by the Contracting Officer. Wood posts to be driven shall be machine-pointed or have a tapered end driven into ground. Posts shall be driven plumb. Posts that are split, bent or broomed, will not be accepted.
  2. Steel Posts: Drive into the ground to the depth shown on the drawings or until the anchor plate is slightly below the ground surface. Posts shall be driven plumb. When rock formations prevent driving remove anchor plate and excavate or drill holes a minimum of 18 inches deep and slightly larger than the diameter of the post. Place posts in the holes and grout the post solidly in position with cement grout or mortar.
- E. Corner Post, Gate Post, Corner Panel, Brace, and End Panel (Stress Panel) Assemblies: Construct as shown on the drawings or as staked in the field. Rock jacks shall not be substituted for these items. Construct stress panels on crests of hills, a maximum of 660 ft center-to-center for woven wire fence sections, and a maximum of 1320 ft center-to-center for barbed wire sections. In addition, stress panels are required at points between which wire is to be stretched. Construct end panels at the end of fence runs unless shown otherwise on the drawings. When rock or unusual conditions make the construction of wood-post panels impractical, steel pipe panel may be constructed according to Drawing No. 02834-13 or Steel panels (tubular) may be constructed according to manufacturer's recommendations and Drawing No. 02834-14.
- F. Figure Fours and Rock Jacks: N/A
- G. Wire: Stretch tightly and staple to wood posts or securely attach to steel posts with standard wire clips or tie wire twisted tight. Wire is properly stretched when it is springy to the touch. Drive staples into wood until the staple comes in contact with the wire against the post, but not so tight as to crimp the wire or prevent movement of the wire. Do not drive staples parallel to the grain of the wood. Terminate wire at each end post, gate post, corner post, or stress panel. Wrap wire around the post two times and tie off by wrapping around the incoming wire a minimum of four times.
- H. Brace Wire: Shall be double-looped and twisted tight with a stick. For steel pipe panels, each wrap shall be looped once around the post. Leave one end of the stick long enough to fasten behind the horizontal brace to prevent wire from unwinding.
- I. Gates: Installed according to the Work Data Sheet, the drawings, and as recommended by the manufacturer when applicable.
- J. Mechanical Gate Closers: N/A
- K. Spiking: For spikes larger than 40d, predrilled lead holes shall be used. The hole diameter shall be three-fourths the diameter of the spike and drilled to a depth no greater than 1/2 the length of the spike.



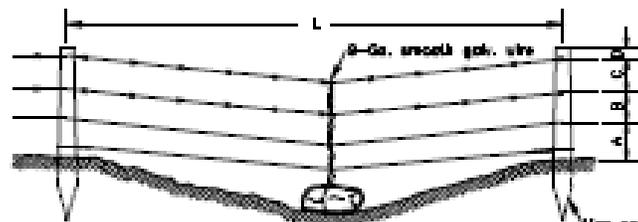
END PANEL-TYPE I



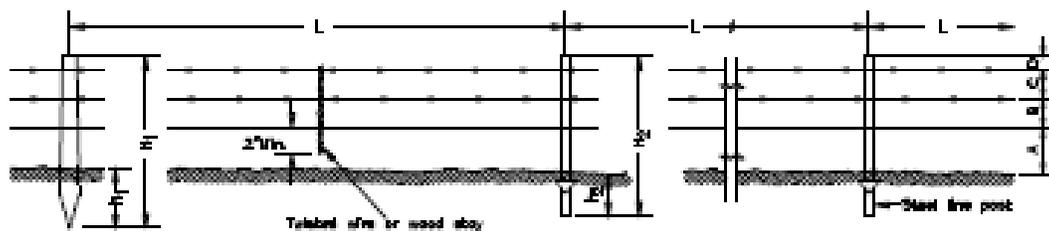
END PANEL-TYPE II



STRESS PANEL



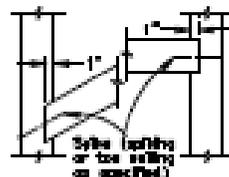
PANEL AT MINOR DEPRESSION



LINE PANELS

**NOTE:**

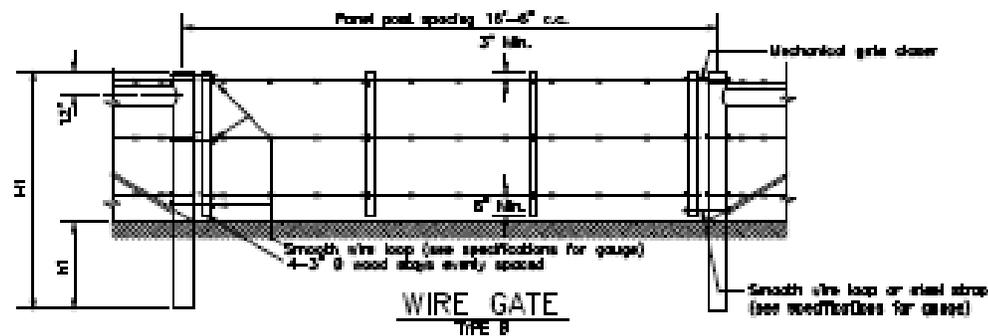
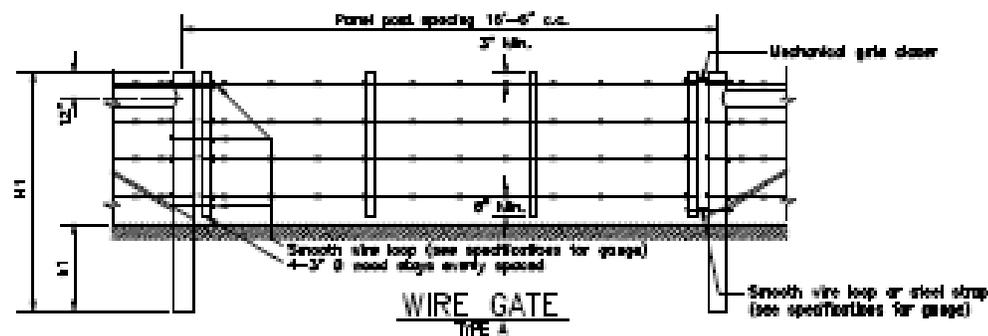
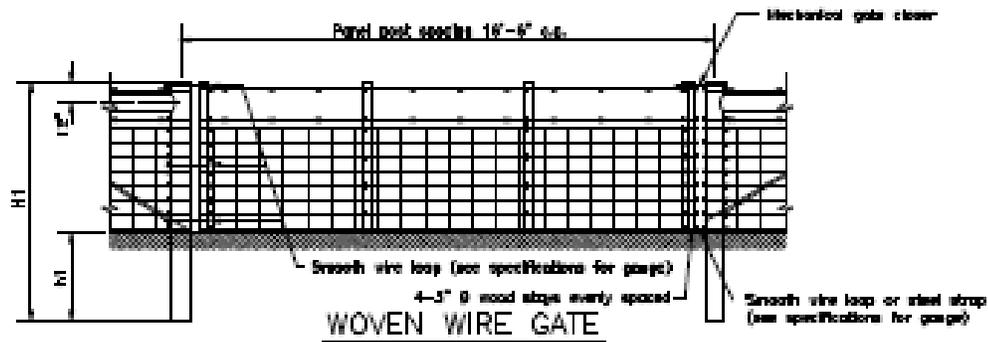
1. See specifications for the following:
  - a. Ratio of steel to wood line posts.
  - b. Post spacing, length, and depth in ground.
  - c. Type of end panel to be used.
  - d. Type of wire to be used.
  - e. Spacing between wires.
  - f. Number of stays per span (L).



MORTISE DETAIL

ALWAYS THINK SAFETY

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF TECHNICAL SERVICES SERVICE CENTER	
TYPICAL <b>BARBED WIRE FENCE</b> (3-WIRE)	
DESIGNED	by others
REVIEWED	
APPROVED	
DRAWN	SCALE NONE
DATE FEBRUARY 25, 1961	SHEET 07
DRAWING NO. 00994-2	

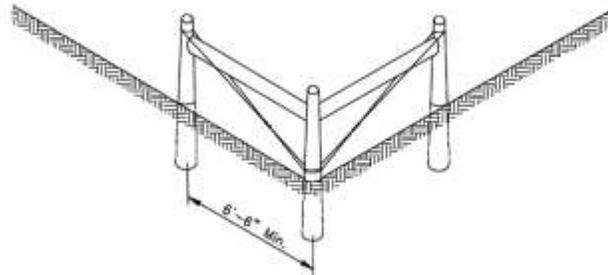


**NOTES:**

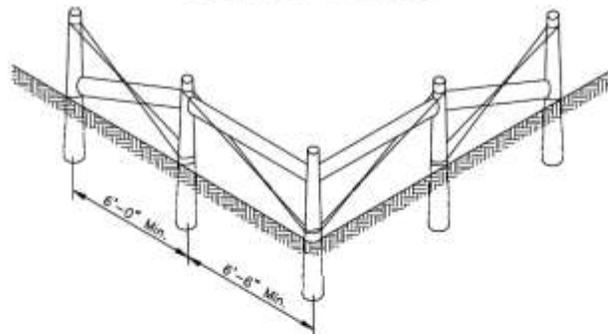
1. The opening end of gate shall be provided with smooth wire loop at bottom of end stags as is common practice for fastening wire gap gates or as modified for gates with mechanical gate closers.
2. Construct an end or stress post on each side of type required in the specifications.

ALWAYS THIN SAFETY

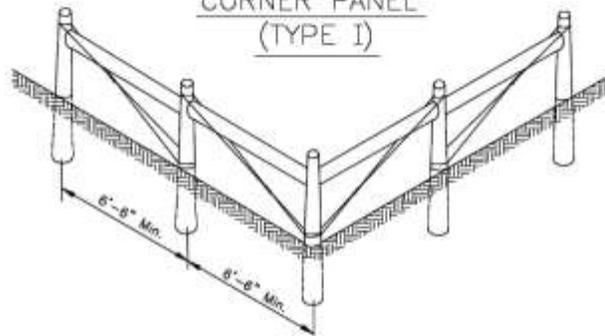
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF TECHNICAL SERVICES SERVICE CENTER	
TYPICAL <b>WIRE GATES</b>	
DESIGNED <u>by others</u>	
REVIEWED _____	
APPROVED _____	
DRAWN _____	SCALE NONE
DATE FEBRUARY 25, 1981	SHEET OF
DRAWING NO. 22815-2	



3-POST  
CORNER PANEL



5-POST  
CORNER PANEL  
(TYPE I)



5-POST  
CORNER PANEL  
(TYPE II)

**NOTES:**

1. Refer to the specifications for type of corner panels to use.
2. Number of wires, type of wire, and wire spacing same as for fence. Posts shall be set 6 inches deeper than line posts.
3. Use spikes at junctures and mortise 1" deep at junctures of posts and braces.
4. Maximum spacing between posts shall be 8'-3" c.c.

ALWAYS THINK SAFETY

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF TECHNICAL SERVICES      SERVICE CENTER	
<h2 style="margin: 0;">CORNER PANELS</h2>	
DESIGNED	by others _____
REVIEWED	_____
APPROVED	_____
DRAWN	SCALE NONE
DATE FEBRUARY 25, 1991	SHEET OF
DRAWING NO. 02834-9	





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



IN REPLY REFER TO:  
ON 0500015  
CON040

June 16, 2011

**CERTIFIED MAIL 7010 2780 0001 3922 3126**  
**RETURN RECEIPT REQUESTED**

Rodney K. Schlegel  
Schlegel Ranch Partnership, LTD  
PO Box 54  
Burns, CO 80426

**NOTICE OF PROPOSED DECISION**

Dear Mr. Schlegel:

**Introduction:**

In 2009 the Bureau of Land Management (BLM) and you indentified the need to realign an existing pasture fence on the Catamount Common allotment. The existing pasture fence is essential for the rotational grazing management practiced on the allotment. It divides two pastures (Upper Range and Lower Range Pastures) and controls the duration and amount of grazing use amongst the two pastures. The section of existing pasture fence that requires realignment traverses an area that is subject to soil slumping, crosses a riparian area with saturated soils (old beaver dams), and is located in a dense stand of aspen trees. The existing fence is also at least 50 years old and has surpassed its useful lifespan. Age of the fence and its poor location has jeopardized fence integrity and has created maintenance issues. The section of fence is currently in poor condition causing livestock drift between two pastures. The proposed realignment would locate the fence further uphill to avoid the area subject to soil slumping and saturated soils. Tree density is much less at the proposed location compared to the existing location. This would reduce maintenance issues with the current fence, improve the functionality of the fence, and result in improved grazing management (i.e., maintain the rotational grazing management practiced on the allotment).

The proposed project has undergone review for conformance with the land use plan and compliance with the National Environmental Policy Act (NEPA). The review and NEPA compliance has been completed as documented in Environmental Assessment (EA) No. CO-140-2011-0026.

**Finding Of No Significant Impact (FONSI):**

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

Rationale: The analysis of the proposed action including project design features did not identify any impacts that would be significant in nature

either in context or intensity. In addition, there is nothing to indicate the action is highly controversial or that it is related to other actions with individually insignificant but cumulatively significant actions.

**Proposed Decision:**

Under authority of 43 CFR 4120.3-1(f), 43 CFR 4120.3-2(a), 43 CFR 4120.3-4 and 43 CFR 4160.1(a), it is my proposed decision to adopt the "Proposed Action" of the EA which would authorize the realignment of an existing pasture fence on the Catamount Common allotment. This would require construction of approximately 0.4 mile of new 3-strand barbed wire fence and removal of 0.3 mile of barbed wire fence. The project will be authorized under the enclosed Cooperative Range Improvement Agreement. The agreement specifies how the costs for labor, equipment, and materials shall be divided between the United States and cooperator as well as special conditions and specifications for construction. The agreement also specifies maintenance criteria for the new fence.

**Rationale for the Proposed Decision**

Construction and maintenance of range improvements is in conformance with the Glenwood Springs Resource Management Plan (RMP), approved January, 1984, revised 1988, amended in November 1991 - Oil and Gas Leasing and Development - Final Supplemental Environmental Impact Statement; amended Nov. 1996 - Colorado Standards and Guidelines; amended in August 1997 - Castle Peak Travel Management Plan; amended in March 1999 - Oil and Gas Leasing & Development Final Supplemental Environmental Impact Statement; amended in November 1999 - Red Hill Plan Amendment; amended in September 2002 - Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance; amended in 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.

The action is in conformance with Livestock Grazing Management, Planned Management Actions (pg. 20) of the RMP which states, "construct facilities such as springs, reservoirs, fences, corrals, and livestock trails where necessary to control and distribute livestock."

An interdisciplinary team prepared EA No. CO-140-2011-0026 for the proposed project. My proposed decision is based on the findings of the analyses contained in the EA. The analysis of the proposed action indicated that the proposed range improvement would reduce maintenance issues with the current fence, improve the functionality of the fence, and result in improved grazing management (i.e., maintain the rotational grazing management practiced on the allotment). Maintaining the rotational grazing management on the allotment would help prevent over-utilization of forage, reduce the duration and frequency of grazing use, increase the opportunity for grazing rest or deferment, and increase recovery and re-growth periods. This improves conformance with Colorado Livestock Grazing Management Guidelines and maintenance/achievement of Colorado Public Land Health Standards 1 (upland soils), 2 (riparian systems), 3 (plant and animal communities), 4 (T&E species), and 5 (water quality).

## **Authority**

43 4120.3-1(f) states: "Proposed range improvement projects shall be reviewed in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4371 et seq.). The decision document following the environmental analysis shall be considered the proposed decision under subpart 4160 of this part."

43 CFR 4120.3-2(a) states: "The Bureau of Land Management may enter into a cooperative range improvement agreement with any person, organization, or other government entity for the installation, use, maintenance, and/or modification of permanent range improvements or rangeland developments to achieve management or resource condition objectives. The cooperative range improvement agreement shall specify how the costs or labor, or both, shall be divided between the United States and cooperator(s)."

43 CFR 4120.3-4 states: "Range improvement permits and cooperative range improvement agreements shall specify the standards, design, construction and maintenance criteria for the range improvements and other additional conditions and stipulations or modifications deemed necessary by the authorized officer."

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

## **Protest and/or Appeal**

Any applicant, permittee, lessee or other interested public may protest a proposed decision under Sec. 43 CFR 4160.1 and 4160.2, in person or in writing to Matthew G. Thorburn, Supervisory Natural Resource Specialist, Bureau of Land Management, 2300 River Frontage Road, Silt, Colorado 81652 within 15 days after receipt of such decision. The protest, if filed, should clearly and concisely state the reason(s) as to why the proposed decision is in error.

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

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

Any applicant, permittee, lessee or other person whose interest is adversely affected by the final decision may file an appeal in accordance with 43 CFR 4.470 and 43 CFR 4160.3 and 4160 .4. The appeal must be filed within 30 days following receipt of the final decision, or within 30 days after the date the proposed decision becomes final. The appeal may be accompanied by a petition for a stay of the decision in accordance with 43 CFR 4.471 and 4.479, pending final determination on appeal. The appeal and petition for a stay must be filed in the office of the authorized officer, as noted above. The person/party must also serve a copy of the appeal on any person named [43 CFR

4.421(h)] in the decision and the Office of the Solicitor, United States Department of Interior, 755 Parfet Street, Suite 151, Lakewood, Colorado 80215.

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

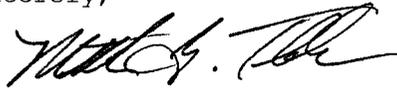
Should you wish to file a petition for a stay, see 43 CFR 4.471 (a) and (b). In accordance with 43 CFR 4.471(c), a petition for a stay must show sufficient justification based on the following standards:

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

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

If you have any questions, feel free to contact either Mike Kinser of my range staff at (970)876-9074, or myself at (970)876-9003.

Sincerely,



Matthew G. Thorburn  
Supervisory Natural Resource Specialist

Enclosure

Cooperative Range Improvement Agreement (BLM Form 4120-6)