

**U.S. Department of the Interior  
Bureau of Land Management  
White River Field Office  
220 E Market St  
Meeker, CO 81641**

## **ENVIRONMENTAL ASSESSMENT**

**NUMBER:** CO-110-2007-196-EA

**PROJECT NAME:** Hells Hole Allotment Transfer

**LEGAL DESCRIPTION:**

T 1 S. R 104 W. Sec. 36  
T 1 S. R 103 W. Sec. 31  
T 2 S. R 104 W. Sec.1, 2, 3, 10, 11, 12, 13, 14, 15  
T 2 S. R 103 W. Sec. 6, 7, 18

**APPLICANT:** Cripple Cowboy Cow Outfit (0501460)

**ISSUES AND CONCERNS:** None

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

**Background/Introduction:** The Hells Hole grazing allotment (060345) is a 32,423 acre grazing allotment located mainly in Utah with a few thousand acres coming into Colorado. The allotment is managed out of the Vernal Field Office in Utah and the current permit is outlined in the table below:

<b>Grazing Schedule for the Hells Hole Allotment</b>								
<b>Allotment</b>		<b>Livestock</b>		<b>Dates</b>		<b>Total AUMs</b>	<b>%PL</b>	<b>BLM AUM's</b>
<b>Number</b>	<b>Name</b>	<b>Kind</b>	<b>Number</b>	<b>On</b>	<b>Off</b>			
8819	Hells Hole	Sheep	4912	12/1	4/30	3999	82%	3280

In the spring of 2006, the Cripple Cowboy Cow Outfit (0501460) bought a portion of the Hells Hole allotment from the previous owner. The portion purchased is generally in Colorado and north of Hells Hole Canyon. In the transaction, Cripple Cowboy Cow Outfit received 5,940 acres, 445 active AUM's, and 88 of the suspended AUM's while previous owner will retain the rest. This portion of the allotment will now be managed out of the White River Field Office in Meeker, Colorado and seller will receive an altered permit with the new boundaries from the Vernal Field Office once the transfer to the Cripple Cowboy Cow Outfit is complete.

The allotment boundary for the portion of Hell’s Hole that Cripple Cowboy Cow Outfit bought is unfenced except for a poor fence along the state line. Cripple Cowboy Cow Outfit has agreed to make the allotment boundary cattle tight along the west boundary using a combination of fencing and natural barriers. The east boundary of the allotment is a common boundary between Twin Buttes Ranch and Cripple Cowboy Cow Outfit that will need to be fenced. Two alternatives have been proposed for that fence and will be analyzed in a separate EA.

**Proposed Action:** Cripple Cowboy Cow Outfit currently has a permit through the White River Field Office for the Evacuation Creek allotment (06357). This allotment is managed under an Allotment Management Plan as outlined below and will expire on February 15, 2015.

Allotment	Pasture	Number	Kind	Grazing Begin	Grazing End	%PL	Type Use	AUM's
Evacuation Creek	Park Canyon	400	Cattle	3/1	3/31	52	Active	212
	Texas Creek	400	Cattle	3/1	3/31	82	Active	334
	Park Canyon	800	Cattle	4/1	5/15	52	Active	615
	Evacuation Creek	400	Cattle	5/16	5/31	95	Active	200
	McAndrews	800	Cattle	6/1	7/15	55	Active	651
	Bitter Creek	800	Cattle	7/16	9/15	58	Active	946
	Whiskey Creek	800	Cattle	9/16	10/31	81	Active	980
	Evacuation Creek	400	Cattle	11/1	11/30	95	Active	375
	Park Canyon	400	Cattle	12/1	2/28	52	Active	615
Texas Creek	400	Cattle	12/1	2/28	82	Active	971	

This plan alternates between the Park Canyon (odd) and Texas Creek Pastures (even), and the McAndrews (odd) and Whiskey pastures (even). Cripple Cowboy Cow Outfit proposes to change the type of livestock from sheep to cattle and add the portion of the Hell’s Hole allotment they acquired to the Park Canyon pasture. There will be no increase in cattle numbers or change in the dates that are currently permitted for this pasture. It has been agreed that they will relinquish the AUM’s associated with the portion of the Hells Hole allotment they purchased. This proposal will simply add to the size of the pasture and alleviate some of the current grazing pressure by increasing the acres/AUM in the pasture.

**No Action Alternative:** The portion of the Hells Hole allotment that Cripple Cowboy Cow Outfit acquired would not be added to the Park Canyon pasture of the Evacuation Creek allotment and the transfer would not be completed.

**ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:** None

**NEED FOR THE ACTION:** Cripple Cowboy Cow Outfit purchased the AUM’s for this property and has a grazing preference right to receive the permit, if grazing is to continue. This permit is subject to renewal or transfer at the discretion of the Secretary of the Interior for a period of up to ten years. The BLM has the authority to renew the livestock grazing permit/lease consistent with the provision of the *Taylor Grazing Act*, *Public Rangelands Improvement Act*, *Federal Land Policy and Management Act*, and the *White River Resource Area Resource Management Plan (RMP)*. This Plan has been amended by the *Standards for Public Land Health in Colorado*. In order to graze livestock on public land, the livestock permittee must hold

a valid grazing permit. The White River ROD/RMP allows livestock grazing to continue on this allotment.

**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: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page:

Decision Language:

### **AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:**

**STANDARDS FOR PUBLIC LAND HEALTH:** In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

### **CRITICAL ELEMENTS**

#### **AIR QUALITY**

*Affected Environment:* The entire White River Resource area has been classified as either attainment or unclassified for all pollutants, and most of the area has been designated prevention of significant deterioration (PSD) class II. The proposed action is not located within a ten mile radius of any special designation air sheds or non-attainment areas. The air quality criteria pollutant likely to be most affected by the proposed actions is the level of inhalable particulate matter, specifically particles ten microns or less in diameter (PM<sub>10</sub>) associated with fugitive dust. Unfortunately, no air quality monitoring data is available for the survey area. However, it can be inferred that current air quality near the proposed location is good because only one location on the western slope (Grand Junction, CO) is monitoring for criteria pollutants other than PM<sub>10</sub>. Furthermore, the Colorado Air Pollution Control Division (APCD) estimates the maximum PM<sub>10</sub> levels (24-hour average) in rural portions of western Colorado to be near 50 micrograms per cubic meter (µg/m<sup>3</sup>). This estimate is well below the National Ambient Air Quality Standard (NAAQS) for PM<sub>10</sub> (24-hour average) of 150 µg/m<sup>3</sup>.

*Environmental Consequences of the Proposed Action:* The type of potential environmental consequences to air quality from the proposed action would be similar to potential consequences of the current grazing operation.

*Environmental Consequences of the No Action Alternative:* Impacts from the no-action alternative would be similar to the proposed action alternative.

*Mitigation:* None

## **CULTURAL RESOURCES**

*Affected Environment:* The 1998 BLM/Colorado SHPO Protocol agreement requires the BLM to identify all historic properties, prehistoric sites and sacred sites on all lands within Colorado that are within the APE of a BLM undertaking. A cultural resource assessment was completed for this allotment following the procedures outlined in IM-WO-99-039, IM-CO-99-007 and IM-CO-99-019.

Site records currently on file indicate a high cultural resource density. Sites were found in all ecological zones with concentrations characterized by availability of water, location of suitable agricultural land and availability of game. Sites represent a range from Paleo-Indian (8,000-10,000 years ago) to historic Ute occupation (to 1880). National Register or otherwise eligible cultural properties are known to be situated in this allotment. Subsequent cultural resource inventories and evaluations will be conducted in areas where livestock concentrations coincide with high potential for vulnerable sites.

There are approximately 41 cultural resources currently recorded on the proposed allotment. Of those 41 resources, four sites are unclassified as to type and have no formal determination of eligibility, two sites are listed by the Colorado SHPO as officially Needs Data, three sites are unspecified as to site eligibility and only two sites are listed as being eligible for nomination to or possible listing on the National Register of Historic Places. The remainder of the resources recorded on the allotment has either been officially determined to not be eligible for nomination to, or listing on the National Register of Historic Places or are Isolated Finds (IF) and are not eligible for nomination to the register by definition.

*Environmental Consequences of the Proposed Action:* Grazing may pose a severe threat to the two sites determined to be eligible, the sites that have potential (Need Data) and the sites that have not been completely classified or evaluated yet. Impacts may come in the form of trampling of horizontal surfaces causing breakage of artifacts and both horizontal and vertical displacement of artifacts. The displacement of artifacts is likely to be more extreme during wet weather when the ground is muddy causing artifacts to be displaced vertically and horizontally, especially as larger animals move through sites. Indirect impacts may include soil erosion, gullying and increased potential for unlawful collection and vandalism. On sites with standing elements such as cabins or wickiups or fences or horse traps or in rock shelters, especially rock shelters with granaries or rock art rubbing or scratching by livestock can dislodge elements

causing structures to collapse or obliteration of rock art figures at the level of the rubbing. In areas where cultural site presence coincides with areas of livestock concentration, continued grazing may contribute to substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to sites. Dispersing animals over a larger pasture may reduce impacts, except in areas of cattle concentration.

*Environmental Consequences of the No Action Alternative (current grazing alternative)*

Direct impacts that may occur where livestock concentrate include trampling, chiseling and churning of site soils, cultural features and artifacts, artifact breakage and impacts from standing, leaning and rubbing against above ground features and rock art. Indirect impacts may include soil erosion, gulying and increased potential for unlawful collection and vandalism. In areas where cultural site presence coincides with areas of livestock concentration, continued grazing may contribute to substantial ground disturbance and cause cumulative, long term, irreversible adverse effects to sites. Alteration of grazing patterns by rotating pastures should have the effect of decreasing any potential damage to existing cultural resources by decreasing the time frame for impacts on any given site.

*Mitigation:* 1. Appropriate mitigation measures may be identified in consultation with Colorado SHPO within the ten-year period of this permit. It is recommended that a renewal be issued for this permit subject to the allotment pasture specific stipulations.

2. The following mitigation measures will be followed during operation, and maintenance of the grazing permit renewal:

- All persons in the area who are associated with this permit must be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.
- The BLM authorized officer must be notified, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Activities must stop in the vicinity of the discovery and the discovery must be protected for 30 days or until notified to proceed by the authorized officer.
- If in connection with operations under this contract the project proponent, his contractors, subcontractors, or the employees of any of them, discovers, encounters or becomes aware of any objects or sites of cultural or paleontological value or scientific interest such as historic or prehistoric ruins, graves or grave markers, fossils, or artifacts, the proponent shall immediately suspend all operations in the vicinity of the cultural or paleontological resource and shall notify the BLM authorized officer of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

3. The following sites should be revisited, reevaluated and monitored over the ten year course of this permit: 5RB 790, 799, 809, 937, 1390, 2513, 2677, 2768, 2799, an 4202

## **INVASIVE, NON-NATIVE SPECIES**

*Affected Environment:* The invasive, non-native, annual cheatgrass (*Bromus tectorum*) is present to some extent in several areas involved with the proposed action. Its presence ranges from trace to moderate in the understory of the allotment. This species is most prominent in the Rolling Loam, clayey slope and the loamy slope plant communities. Generally its occurrence and distribution is a consequence of some type of disturbance such as historic long-term use during the critical growing season or fire. Canada thistle (*Cirsium arvense*) is a list B noxious weed that is also present in trace amounts within the portions of the Hells Hole allotment Cripple Cowboy Cow Outfit acquired.

*Environmental Consequences of the Proposed Action:* The change of livestock type from sheep to cattle and the addition of a portion of the Hells Hole Allotment to the Park Canyon Pasture will have no effect on the proliferation of invasive/non-native species within the Hells Hole allotment. By adding this portion of the Hells Hole allotment to the Park Canyon pasture and the even year odd year rotation that has been implemented in the current allotment management, there could potentially be a decrease in invasive species by allowing rangelands to recover during rest years and provide more competition to invasive species.

*Environmental Consequences of the No Action Alternative:* The transfer of a portion of the Hells Hole allotment to Cripple Cowboy Cow Outfit will not take place and sheep will continue to be authorized on this allotment.

*Mitigation:* None

## **MIGRATORY BIRDS**

*Affected Environment:* Nearly all of the newly acquired Hells Hole allotment is comprised of steep, rugged terrain dominated by pinyon-juniper woodlands (~5300 acres). The valley bottoms (~450 acres) are comprised mainly of early to mid seral mixed shrub/sagebrush and grasslands. These communities provide nesting habitat for a variety of migratory bird species during the breeding season (mid-May through mid-July). Birds of higher conservation interest (i.e., Partners in Flight program) associated with these habitats include: Brewer's sparrow (sagebrush communities), green-tailed towhee (mountain shrub communities), black-throated gray warbler, juniper titmouse, gray flycatcher, pinyon jay, and black-chinned hummingbird (pinyon-juniper woodlands).

*Environmental Consequences of the Proposed Action:* Grazing periods (12/01 – 05/15) would overlap with early portions of the nesting season, but likely would have no potential to directly influence migratory bird nesting activities in this portion of the Hells Hole allotment. Rugged terrain likely limits use by livestock throughout most of the allotment. Early spring use of the valley bottoms may slightly reduce ground cover in the early portions of the nesting season, but with ample regrowth opportunities most species would remain largely unaffected.

Under the proposed action, an additional 5900 acres and 445 AUMs will be added to the Park Canyon pasture with no increase in livestock numbers. Livestock type will change from sheep to

cattle with an alternate year rotation between the Park Canyon and the Texas Creek pastures. These changes, particularly alternate year use, would likely promote improvements in vegetation communities (namely mid seral) by decreasing grazing pressure and allowing for full herbaceous expression and increased effective height of ground cover. Although minimal concurrent use between livestock and migratory birds occurs (early May), enhanced ground cover conditions stemming from increased herbaceous vigor and density and diversity of perennial grasses and forbs likely provides an improved cover and forage source for nesting birds and their broods over time.

*Environmental Consequences of the No Action Alternative:* Current livestock use is largely asynchronous with the migratory bird nesting season. Winter and early spring use does not substantively influence nest site selection or nesting outcomes. Annual winter and early spring use (current schedule) likely results in a decrease in the amount of residual remaining as supplemental cover into the early weeks of the following nesting season which would be most evident in generalized ground nesting species such as meadowlark and dark-eyed junco.

*Mitigation:* None

#### **THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES** (includes a finding on Standard 4)

*Affected Environment:* There are no threatened or endangered animal species that are known to inhabit or derive important use from the allotment. The northern goshawk, a BLM-sensitive species, is an uncommon resident in the White River Resource Area. In general, this species prefers to nest in mature, contiguous stands of aspen or aspen/spruce/fir mix. Over the past several decades, a small number of nests (~half a dozen) have been found in mature pinyon-juniper stands throughout the Piceance Basin.

Although the allotment is dominated by pinyon-juniper woodlands (~5200 acres), there are no known documented goshawk nests west of Rangely, CO. Extensive surveys for nesting raptors conducted in 2006 failed to document any evidence of northern goshawk nest activity within similar habitats adjacent to the allotment. Although extremely rare, there is no reason to discount this area's woodland stands as functional nest habitat for goshawk.

*Environmental Consequences of the Proposed Action:* Potential goshawk nest habitat within the allotment is confined to steep, rugged terrain which likely experiences little livestock use. In general, livestock grazing practices tend to be compatible with raptor nesting as most use is concentrated in valley bottoms and/or areas in close proximity to water. The proposed grazing schedule is expected to have little to no direct influence on goshawk nesting outcomes. Increases in herbaceous ground cover (density and diversity) resulting from alternate year use may bolster small mammal (prey) populations in the short term; however it is unlikely this would prompt a measurable response in goshawk numbers due to the rarity of this species as a whole throughout the Resource Area.

*Environmental Consequences of the No Action Alternative:* Current grazing practices likely have little influence on nesting success of the northern goshawk. Livestock use may overlap with the early portions of the nesting season (egg-laying), however most livestock use tends to be concentrated in lower-elevation grass and shrublands – areas that do not provide suitable nesting substrate for northern goshawk. Current grazing may depress the amount of residual available as cover to small mammals (potential prey) however; this likely does not have any measurable influence on local goshawk populations.

*Mitigation:* None

*Finding on the Public Land Health Standard for Threatened & Endangered species:* The allotment generally meets the land health standards for special status species. There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive animal species habitat. Thus there would be no effect on achieving the land health standard. Livestock use, as proposed, appears fully consistent with the maintenance and continued development of those habitat features important to northern goshawk.

#### **THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES** (includes a finding on Standard 4)

*Affected Environment:* There are no known threatened or endangered plant species within the boundaries of the Hells Hole allotment. There is potential for *Penstemon scariosus* var. *albifluvis* (White River Beardtongue) to be present within the boundary of the Hells Hole allotment which is listed as a candidate species by the US Fish and Wildlife Service. There are several BLM sensitive species with potential to, or currently, inhabit white shale outcrops of the Parachute member of the Green River formation within the Hells Hole allotment including *Penstemon grahamii* (Graham's Penstemon), *Cryptantha rollinii* (Rollins Cryptanth), and *Eriogonum ephredoides* (Ephedra Buckwheat). The Ephedra Buckwheat and Rollins Cryptanth have been identified and mapped in small populations in the southwest corner of the allotment on steep shale outcrops and exposed road cuts and well pads. These same species have occupied, suitable and potential habitats present within the adjoining Park Canyon allotment.

*Environmental Consequences of the Proposed Action:* To date there have been no occupied habitats for White River Beardtongue identified within the Park Canyon pasture or Hells Hole allotment so the exposed Parachute Creek formations can best be described as potential or suitable habitat for the species. Currently the Park Canyon pasture is over allocated and the acquisition of the Hells Hole allotment by the Cripple Cow Boy will add 445 AUMs to the Park Canyon pasture without increasing livestock numbers. The habitats where BLM sensitive species and the candidate White River Beardtongue can be found are not currently being heavily influenced by livestock and the proposed action will result in a net decrease in disturbance associated with grazing in the Park Canyon pasture while not increasing grazing pressure on the Hells Hole allotment. Since the habitats associated with the sensitive species listed above are generally barren and associated with varying degrees of slope these habitats do



not typically see concentrated or extended grazing pressure particularly with relation to cattle. When grazing does occur within these habitats it is typically light in nature and the species listed above are not key species sought out by cattle. Casual grazing may occur but not above what could be expected by grazing wildlife. The greatest damage would result from trampling and soil disturbance associated with cattle trailing through these habitats. Monitoring data for Ephedra Buckwheat and Rollins Cryptanth do not indicate that livestock grazing is currently having an impact on these BLM sensitive species. Surveys conducted in July 2007 on known occupied habitats indicate stable populations in the context of population extent and distribution.

*Environmental Consequences of the No Action Alternative:* Grazing within the Park Canyon pasture while minimal in relation to special status plant species would continue above the carrying capacity for the ecological site. Long term this could potentially impact special status species by degrading ecological conditions to a point where the pasture could cross the threshold and type convert to annual rangeland. Repercussions could be increased grazing on formerly unutilized special status species occupied, suitable, or potential habitats resulting in the proliferation or expansion of invasive annuals that would directly compete with special status plants, increased direct grazing, and trampling and ultimately degraded habitat quality. For plant populations occurring within the Hells Hole allotment there would be essentially no impact from the no action alternative since livestock management is currently managed within the carrying capacity for the ecological site and the season of use is compatible with the reproductive period for all special status species occurring or potentially occurring within the allotment.

*Mitigation:* None

*Finding on the Public Land Health Standard for Threatened & Endangered species:* While the land health standard for special status plant species is currently being met, implementation of the proposed action would ensure long term achievement of the standard while also resulting in an upward trend for upland vegetation (public land health standard #3) which will indirectly aid in the continued maintenance of high quality special status plant habitats.

## **WASTES, HAZARDOUS OR SOLID**

*Affected Environment:* There are no known hazardous wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area. There are no known solid waste dump sites within the project area.

*Environmental Consequences of the Proposed Action:* No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be disposed of properly.

*Environmental Consequences of the No Action Alternative:* No hazardous or other solid wastes would be generated under the no-action alternative.

*Mitigation:* The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

A release of any chemical, oil, petroleum product, or sewage, etc, (regardless of quantity) must be reported to the Bureau of Land Management – WRFO Hazardous Materials Coordinator at (970) 878-3800. The Colorado Department of Public Health and Environment (CDPHE) should be notified, if applicable, through the 24-hour spill reporting line at 1 (877) 518-5608.

If the permittee encounters any waste dump sites, on or adjacent to the project area, they must be reported to the BLM.

### **WATER QUALITY, SURFACE AND GROUND** (includes a finding on Standard 5)

*Affected Environment:* Uplands, open water and any riparian or wetland areas within the new portion of the allotment (5,940 acres). Sheep use will change to cattle use and there will be a lighter cattle use on the rest of the allotment. The affected environment is in the Hells Hole Canyon watershed, which drains into Utah across the Colorado border.

*Environmental Consequences of the Proposed Action:* In general cattle use riparian, water sources and wetlands more than sheep do. Also, cattle often need more water sources within a pasture to graze successfully. The proposed permit change also includes a portion of the project area that will be used less by cattle and the grazing of this pasture will be every other year instead of the current every year by sheep. This action does not analyze new water sources; therefore any range improvement projects would be addressed in a separate analysis that could consider these impacts. The Hells Hole Allotment is in Pinion-Juniper woodlands, rock outcrops, brush land and some limited grass dominated areas. There is not open water, riparian or wetland areas that would likely be impacted by this change of use (see the Wetlands and Riparian Zones section).

*Environmental Consequences of the No Action Alternative:* No change from current use.

*Mitigation:* None recommended

*Finding on the Public Land Health Standard for water quality:* Not likely to cause or contribute to in exceedances of State water quality standards.

### **WETLANDS AND RIPARIAN ZONES** (includes a finding on Standard 2)

*Affected Environment:* The portion of the Hells Hole Allotment to be transferred to Cripple Cowboy Cow Outfit does not support riparian or wetland communities. Upland drainages and gullies near the project area are ephemeral and only have flow resulting from

overland flow events from rain and/or snow melt. These drainages lack sufficient moisture to support riparian communities. No riparian or wetland communities will be directly involved or potentially affected by the proposed action.

*Environmental Consequences of the Proposed Action:* The proposed action would have no direct influence on riparian or wetland communities.

*Environmental Consequences of the No Action Alternative:* There will be no change from the present situation.

*Mitigation:* None

*Finding on the Public Land Health Standard for riparian systems:* This action would have no effective influence on riparian or wetland communities in the allotment and would have no bearing on the status of Standard 2.

**CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:**

No Wilderness, ACECs, flood plains, prime and unique farmlands, or Wild and Scenic Rivers exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

**NON-CRITICAL ELEMENTS**

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

**SOILS** (includes a finding on Standard 1)

*Affected Environment:* The tables below are a breakdown of soil units and associated ecological sites for the Hells Hole Allotment. Soils analyzed in this document have been covered in the Rio Blanco County Soil Survey or the Uintah County Soil Survey. The Soil surveys delineate individual soil unit polygons and associated ecological sites.

<b>Hells Hole Allotment - Soil Summary</b>				
<b>Soil Unit Number</b>	<b>Soil Unit Name</b>	<b>Ecological Site</b>	<b>Acres</b>	<b>County</b>
5	Badland	None	61.06	Rio Blanco
10	Blazon, moist-Rentsac Complex, 6-65% slopes	Pinyon-Juniper woodland	500.09	Rio Blanco
13	Bulkley channery silty clay loam, 5-30% slopes	Pinyon-Juniper woodlands	306.13	Rio Blanco
29	Dollard silty clay loam, 3-8% slopes	Clayey Foothills	9.36	Rio Blanco
33	Forelle loam, 3-8% slopes	Rolling Loam	29.8	Rio Blanco

<b>Hells Hole Allotment - Soil Summary</b>				
<b>Soil Unit Number</b>	<b>Soil Unit Name</b>	<b>Ecological Site</b>	<b>Acres</b>	<b>County</b>
53	Moyerson stony clay loam, 15-65% slopes	Clayey Slopes	36.36	Rio Blanco
61	Patent loam, 3-8% slopes	Rolling Loam	96.34	Rio Blanco
67	Rabbitex flaggy loam, 10-65% slopes	Pinyon-Juniper woodland	1998.05	Rio Blanco
73	Rentsac channery loam, 5-50% slopes	Pinyon Juniper woodlands	657.27	Rio Blanco
74	Rentsac-Moyerson-Rock Outcrop, complex, 5-65% slopes	PJ Woodlands/Clayey Slopes	1276.84	Rio Blanco
75	Rentsac-Piceance complex, 2-30% slopes	PJ woodland/Rolling Loam	102.13	Rio Blanco
78	Rock Outcrop	None	46.11	Rio Blanco
82	Gompers very channery silt loam, 25-50% slopes	Upland shallow Loam (Utah PJ)	31.98	Uintah
91	Torriorhents-Rock Outcrop, complex, 15-90% slopes	Stoney Foothills	89.23	Rio Blanco
96	Veatch channery loam, 12-50% slopes	Loamy Slopes	124.36	Rio Blanco
104	Yamac Loam, 2-15% slope	Rolling Loam	5	Rio Blanco
137	Mikim loam, 3 to 15 percent slopes	Semidesert loam (Pinyon-Utah Juniper)	4.73	Uintah
151	Moonset-Whetrock association, 8-50% slopes	Upland shallow Loam (Utah Jun/Pin)	44.01	Uintah
179	Pherson-Hickerson complex, 1 to 8 Percent Slopes	Loamy Bottom (Basin Big Sagebrush)	11.64	Uintah
256	Walknolls extremely channery sandy loam 8-50% slopes	Semidesert Shallow Loam	32.52	Uintah
259	Walknolls-badland-Rock complex, 25-50 percent slopes	Semidesert shallow loam (Utah PJ)	342.54	Uintah
265	Walknolls-Rock outcrop complex, 50-70 percent slopes	Semidesert very steep shallow loam	74.62	Uintah
<b>Total Acres</b>			<b>5880.17</b>	

Soils that are occupied with plant communities rated as a mid seral, late seral, or PNC (Potential Natural Community) have sufficient cover of desirable plant species to produce adequate litter and ground cover to minimize runoff and provide for soil protection. These soils are meeting the Colorado Public Land Health Standard for upland soils. Soils that have sites rated as early seral plant communities do not have sufficient diversity and/or cover of native plant species to provide effective ground cover to prevent overland flow, runoff, and general soil degradation. These soils are experiencing a certain degree of pedestaling and minor expression of rills. Erosion is most evident within communities little vegetative understory to provide soil protection. The early seral sites have soils that are typically within drainage bottoms and toe slopes that are

found on soil units in the Hells Hole allotment such as Dollard silty clay loam, 3-8% slopes (Clayey Foothills) and Moyerson stony clay loam, 15-65% slopes (Clayey Slopes). These early seral sites are not meeting land health standards.

*Environmental Consequences of the Proposed Action:* On most mid seral sites and some limited early seral rangelands there would be an increase in surface litter accumulation, canopy cover, and ground cover due to the reduced grazing intensity (AUMs) provided by livestock management under the proposed action. Ground cover of native perennial plant species and litter are imperative in the protection and stabilization of soils.

On soils with late seral or PNC plant communities, little change from the current status is expected in regards to plant cover that provides soil protection. These sites are already at full potential and meeting health standards and will not be appreciably influenced by the proposal.

Soils with early seral plant communities will improve in some areas where annual plants are not totally dominating the landscape and have not crossed a threshold where grazing management will not instigate a change. Other portions of the allotment will continue at their current state because they have crossed a threshold of annual plant domination (cheatgrass) that provides little soil protection. This situation is nearly irreversible regardless of the livestock management without some form of disturbing agent such as fire, chemical, or drill seeding. Historical grazing practices (spring use, over utilization, etc.) created the situation in which most of the early seral plant communities will not meet the rangeland health standards for soils.

*Environmental Consequences of the No Action Alternative:* There would be a slightly negative impact to maintaining the current grazing situation because areas not meeting standards and that have not crossed the threshold of total annual plant domination would eventually cross the threshold. Once these areas have crossed a threshold of total of annual plant domination, more intensive management, such as mechanical or chemical methods would be needed to restore these areas to meet land health standards.

*Mitigation:* None

*Finding on the Public Land Health Standard for upland soils:* Soils that occupy early seral communities are mostly not meeting the Standards due to the lack of soil protection caused from a significant composition of cheatgrass, an invasive annual grass. All other seral communities (Mid – PNC) are currently meeting standards and make up the bulk of acres on all allotments. Implementation of the proposed action will enhance the ability of the rangelands to meet the Standards in the future.

## **VEGETATION** (includes a finding on Standard 3)

*Affected Environment:* The following table lists the plant community appearance for the ecological sites or woodland types on allotments associated with the proposed action, along with the predominant plant species comprising the composition of each community. Forb species, though important to the diversity of a community and making up 25 to 30% of the composition

of several of the plant communities listed, are not presented in the following table because they generally are not contributors to the appearance or the dominance of the community. Dominate ecological sites within the Hells Hole Allotment are Pinyon Juniper Woodlands, Loamy Slopes, and Rolling Loam Ecological Sites.

Acres	Ecological Site	Plant Community Appearance	Predominant Plant Species in the Plant Community
5263.77	Pinyon Juniper woodlands	Pinyon Juniper	Pinyon pine, Utah juniper, mountain mahogany, bitterbrush, serviceberry, Wyoming big sagebrush, beardless bluebunch wheatgrass, elk sedge, western wheatgrass, June grass, Indian rice grass
89.23	Stoney Foothills	Grass / Open Shrub Shrubland	Beardless bluebunch wheatgrass, western wheatgrass, needle-and-thread, June grass, Indian rice grass, fringed sage, Wyoming big sagebrush, black sage, serviceberry, pinyon and juniper
107.17	None	Badland/Rock Outcrop	None
131.14	Rolling Loam	Sagebrush/grass Shrubland	Wyoming big sagebrush, winterfat, low rabbitbrush, horsebrush, bitterbrush, western wheat grass, Indian rice grass, squirreltail, June grass, Nevada and Sandberg bluegrass
36.36	Clayey Slopes	Grassland	Salina wildrye, western wheatgrass, Sandberg bluegrass, June grass, squirreltail, shadscale
9.36	Clayey Foothills	Grass / Open Shrub Shrubland	Western wheatgrass, mutton grass, Indian rice grass, squirreltail, June grass, Wyoming big sagebrush, black sagebrush
124.36	Loamy Slopes	Mix Shrub / Grass Shrubland	Mountain mahogany, bitterbrush, serviceberry, mountain big sagebrush, western wheatgrass, June grass, Indian rice grass
11.64	Loamy Bottom (Basin Big Sagebrush)	Mix Shrub / Grass Shrubland	Basin Wildrye, Basin big sagebrush, Muttongrass, Needleandthread, Western wheatgrass, Indian ricegrass, Rubber rabbitbrush
74.62	Semidesert very steep shallow loam	Utah Juniper-Pinyon	Black sagebrush, Salina wildrye, Bluebunch wheatgrass, Mormon tea, Galleta
32.52	Semidesert Shallow Loam	Utah Juniper-Pinyon	Black sagebrush, Salina wildrye, Bluebunch wheatgrass, Mormon tea, Galleta
<b>5880.17</b>			

The Hells Hole Allotment is dominated by Pinyon-Juniper woodlands followed by Rolling Loam and Loamy slopes ecological sites. The Pinyon-Juniper woodlands are mainly in a late seral or Potential Natural Community (PNC) classification while the Rolling Loam and Loamy Slopes ecological sites are either early seral or mid seral.

Mid seral are typically on a threshold for improvement or decline of rangeland health, dependant on livestock management practices, and are frequently found in Rolling Loam ecological sites. These mid seral sites still contain the basic structural plant communities, yet individual species occur at varying levels within the overall vegetative composition.

Early seral sites are generally not meeting Colorado Public Land Health Standards principally due to a lack of appreciable perennial plant cover and excessive erosion rates. These sites generally have altered structural/functional plant communities with the plant community

understory dominated by invasive, non-native plant species (e.g., cheatgrass, *Bromus tectorum*) and/or noxious weeds that are highly competitive with native vegetation.

*Environmental Consequences of the Proposed Action:* Historical livestock grazing practices such as heavy/severe use during the critical growing period created many of the early seral ecological sites that presently have a significant amount of cheatgrass in their composition. Other sites classified as early seral are dominated by cheatgrass, basin big sagebrush/greasewood or various mixtures thereof. These early seral sites are unlikely to change over the long term. Without a substantial stand altering change such as burning or selective herbicidal treatment followed by remedial revegetation. The action is not expected to increase or decrease the plant species diversity or production of these sites.

The proposed transfer could however improve rangeland health on mid-seral sites due to an increased canopy cover, ground cover, and litter accumulation of desired perennial species and a decrease in invasive annuals. By allowing a 1:2 year rest rotation, native vegetation will be allowed to recover from the previous years grazing with increased vigor and seed production, and it will increase competition with weedy annual species. Native perennial plant species provide stability to soils against overland flow, wind scouring, and erosion.

*Environmental Consequences of the No Action Alternative:* Annual winter use by sheep would continue and could potentially have detrimental effects on mid-seral sites. These sites are at risk for crossing the threshold to invasive annual domination. Once these sites have crossed a threshold, intensive management would be needed to restore these sites.

Continuation of current grazing would have no effect on early-seral, late seral, or PNC sites. Most early seral sites have already crossed a threshold where undesirable annuals dominate the site. Soils with late seral or PNC plant communities are already at full potential and meeting health standards and will not be appreciably influenced by the proposal

*Mitigation:* None

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The early seral communities are mostly not meeting the Standards due to the significant composition of cheatgrass, an invasive annual grass. All other seral communities (Mid – PNC) are currently meeting standards and make up the bulk of acres on all allotments. Implementation of the proposed action will enhance the ability of the rangelands to meet the Standards in the future.

## **WILDLIFE, AQUATIC** (includes a finding on Standard 3)

*Affected Environment:* There are no aquatic systems which are capable of supporting simple invertebrate or higher order aquatic habitats within this pasture of the Hells Hole allotment.

*Environmental Consequences of the Proposed Action:* The proposed action would have no conceivable influence on aquatic wildlife or associated habitats.

*Environmental Consequences of the No Action Alternative:* The no action alternative would affect aquatic wildlife in the same manner as the proposed action.

*Mitigation:* None

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Terrestrial): The proposed and no action alternatives would have no conceivable potential for influencing aquatic attributes addressed in the Standards.

### **WILDLIFE, TERRESTRIAL** (includes a finding on Standard 3)

*Affected Environment:* The pinyon-juniper woodlands and sagebrush/grassland habitats within the allotment are categorized by the Colorado Division of Wildlife as big game general winter range. These ranges are generally occupied from November through April. These ranges generally do not support substantial big game numbers. Herbaceous vegetation forms the primary forage base for big game during the spring months, with woody forages used increasingly through the fall and winter months.

Breeding raptor use of the project area is represented largely by woodland accipitrine species. Mature pinyon-juniper woodlands likely support a small number of breeding sharp-shinned hawk, Cooper's hawk and long-eared owl. Other raptors (e.g., red-tailed hawk) may opportunistically forage in the allotments open grasslands.

Nongame mammals and birds using the allotment's habitats are typical and widely distributed in extensive like habitats across the Resource Area and northwest Colorado. There are no narrowly endemic or highly specialized species known to inhabit those lands potentially influenced by this action. Non-game bird and small mammal communities generally respond positively to increasing vegetation diversity, volume, and structural complexity. Particularly in the case of small mammals and shrub and ground-nesting passerine birds, increasing height and density of persistent herbaceous ground cover as a source of cover, forage (e.g., herbage, seed), and forage substrate (e.g., invertebrates) can be expected to allow for more continuously and extensively occupied habitat, increased density of breeding pairs, improved reproductive performance, and enhanced over winter survival (mammals).

*Environmental Consequences of the Proposed Action:* Acquisition of an additional 5900 acres coupled with a 1:2 year rest rotation would decrease grazing intensity throughout the Park Canyon pasture and allow adequate recovery time for native vegetation. Increases in herbaceous vegetation (e.g., density and diversity) would provide a greater forage source for big game during the early spring months. Collective use by livestock and big game during the winter months likely has little impact on forage availability for big game as cattle tend to make use of herbaceous groundcover rather than woody forage.



The proposed action is likely to have minimal impacts on woodland raptors as most species nest in habitats that typically experience little to no livestock use. Improvements in ground cover conditions (effective height and density) may bolster small mammal populations (as prey species) in the short term, however this is not expected to have any measurable influence on woodland raptor populations (see discussion in TES section).

The proposed action would continue to be compatible with non-game wildlife populations and habitat. The proposed action would allow for increases in density and variety of herbaceous groundcover which would be particularly beneficial for small mammal populations better suited to heavier ground cover expression.

*Environmental Consequences of the No Action Alternative:* Although sheep tend to utilize woody forage more readily than cattle, particularly during the winter months, current grazing practices are largely compatible with big game wildlife populations. There are no extensive or chronic big game-livestock forage competition issues known to occur on the permit area. Annual winter use may decrease the amount of residual ground cover available during early spring as forage and cover for small mammals and non-game birds

*Mitigation:* None

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Aquatic): The allotment generally meets the Land Health Standard for terrestrial wildlife at the landscape level. The proposed action would not impede continued maintenance of these standards. There is no evidence to suggest that current grazing practices are aggravating deficiencies in the utility or available extent of wildlife habitat.

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation		X	
Cadastral Survey	X		
Fire Management	X		
Forest Management	X		
Geology and Minerals	X		
Hydrology/Water Rights		X	
Law Enforcement		X	
Noise	X		
Paleontology			X
Rangeland Management			X
Realty Authorizations		X	
Recreation		X	
Socio-Economics		X	

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Visual Resources		X	
Wild Horses		X	

## PALEONTOLOGY

*Affected Environment:* The proposed allotment overlays three significant fossil bearing formations, the Wasatch, which the BLM, WRFO has classified as PFYC 5 (formerly condition I), the Douglas Creek, which the BLM, WRFO has classified as PFYC 4 (formerly Condition I) and the Parachute Creek, PFYC 4 (formerly Condition I) (Tweto, 1979).

The Wasatch formation is particularly know for Lysitean age fossils including some 30+ fossil primates such as procolemur sp. and omomydia sp. as well as several species of Hyracotherium (early horse), Coryphodon and a small carnivore called hyopsodis.

The Douglas Creek is only recently being analyzed but to date has produced fish and reptiles such as crocodilian scutes and teeth.

The Parachute Creek Formation is world renowned for the fine preservation of invertebrates and plants and occasional vertebrate fossils such as bats and snakes.

*Environmental Consequences of the Proposed Action:* Grazing has the potential to adversely impact scientifically important fossil resources in two ways. On exposed outcrops where livestock trail or concentrate materials can be crushed and displaces causing a total loss of scientific data. Crushing is of particular concern for the smaller fossil remains such as insects, small mammals and small reptile bones. Larger bones from larger specimens can also b e broken and badly distorted but there is some potential for data recovery if the localities re identified soon after the fossil material is exposed.

Keeping the number of AUMs consistent but changing from sheep to cattle results in fewer animals on the landscape. The proposed larger pasture with fewer animals over all has the potential to reduce impacts to some extent though cattle are larger and heavier than sheep and on an individual basis can cause slightly more impacts from crushing and displacement of fossil materials. Dispersing animals over a larger area may reduce concentrations, except around mineral licks and water sources, and reduce some impacts from trampling.

Individual range improvement projects that require disturbance of underlying rock strata also have the potential to disturb or destroy fossil remains.

*Environmental Consequences of the No Action Alternative:* there would be no change in the current rate or extent of impacts to fossil resources under the no action alternative.

*Mitigation:* 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing

paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Individual range improvement projects must be examined for fossil resources if outcrops are exposed in the area of the proposed project. Monitoring for fossils may be required if the project involves excavation into the underlying rock for ponds, pit reservoirs or other open excavations.

## **RANGELAND MANAGEMENT**

*Affected Environment:* The 5,940 acres Cripple Cowboy Cow Outfit purchased had an associated 445 active Animal Unit Months (AUM's) and 88 suspended AUM's. The following tables show the carrying capacity of livestock for the portion of the Hells Hole Allotment acquired by the Cripple Cowboy Cow Outfit. An AUM is the amount of forage necessary for the sustenance of 5 sheep (1 cow) for a period of 1 month. The Cripple Cowboy Cow Outfit has agreed to relinquish these AUM's and just add the land acquired to the Park Canyon Pasture of the Evacuation Creek Allotment. The table is broken down by acres within an ecological site and acres per AUM, which determines AUMs for those acres when divided:

Soil Unit	Ecological Site	Acres	Acres/AUM	AUM's
Badland	None	61	0	0
Blazon, moist-Rentsac Complex, 6-65% slopes	PJ woodlands	500.090	15	33
Bulkley channery silty clay loam, 5-30% slopes	PJ woodlands	306.130	15	20
Dollard silty clay loam, 3-8% slopes	Clayey Foothills	9.360	4	2
Forelle loam, 3-8% slopes	Rolling Loam	29.8	4	7
Moyerson stony clay loam, 15-65% slopes	Clayey Slopes	36.360	5	7
Patent loam, 3-8% slopes	Rolling Loam	96.34	6	16
Rabbitex flaggy loam, 10-65% slopes	PJ woodlands	1998.050	15	133
Rentsac channery loam, 5-50% slopes	PJ woodlands	657.27	15	44
Rentsac-Moyerson-Rock Outcrop, complex, 5-65% slopes	PJ Woodlands/Clayey Slopes	1276.840	15	85
Rentsac-Piceance complex, 2-30% slopes	PJ woodlands	102.13	15	7
Rock Outcrop	None	46.110	0	0
Torriorhents-Rock Outcrop, complex, 15-90% slopes	Stoney Foothills	89.230	5	18
Veatch channery loam, 12-50% slopes	Loamy Slopes	124.36	4	31
Yamac Loam, 2-15% slopes	Rolling Loam	5.000	5	1
Pherson-Hickerson complex, 1 to 8 Percent Slopes	Brushy Loam	11.64	3	4
Walknolls-badland-Rock complex, 25-50 percent	Dry Shallow Loam	4.68	15	0
Walknolls-Rock outcrop complex, 50-70 percent slopes	Dry Shallow Loam	44.54	15	3
Mikim loam, 3 to 15 percent slopes	PJ woodlands/PJ woodlands	4.73	15	0
Walknolls extremely channery sandy loam 8-50% slopes	Dry Shallow Loam	32.52	10	3
Walknolls-Rock outcrop complex, 50-70 percent slopes	Dry Shallow Loam	30.08	10	3
Walknolls-badland-Rock complex, 25-50 percent slopes	PJ woodlands/PJ woodlands	337.86	15	23
Gompers very channery silt loam, 25-50% slopes	PJ woodlands/PJ woodlands	31.98	15	2
Moonset-Whetrock association, 8-50% slopes	PJ woodlands/PJ woodlands	44.01	15	3
<b>Total</b>				<b>445</b>

Currently the Hells Hole Allotment is permitted for 4912 sheep from 12/1 to 4/30 for a total of 3,280 AUM's. Use takes place in mid-winter until early spring and then livestock is removed due to lack of water and the desire to minimize spring use/use during the critical growing season.

All White River Field Office (WRFO) grazing allotments have been placed in one of three management categories that define the intensity of management: (1) improve, (2) custodial and

(3) maintain. These categories broadly define rangeland management objectives in response to an analysis of an allotment's resource characteristics, potential, opportunities, and needs. The Evacuation Creek allotment is (06357) classified as an "improve" allotment. The Park Canyon Pasture is a 32,164 acre pasture currently permitted for 1,442 AUM's. Use takes place from 12/1 to 3/31 with 400 cows and from 4/1 to 5/15 with 800 cows on odd years. The area of use is once again permitted for the winter and early spring due to lack of water in the area and the need to limit spring use.

*Environmental Consequences of the Proposed Action:* The proposed action would have no significant negative impacts on rangeland management/conditions on the portions of Hells Hole to be transferred. By implementing a one and two year rotation, rangeland conditions would in fact improve during the term of the permit by allowing increased foliar and seed production and during rest years.

Rangeland conditions would be expected to improve on the Park Canyon Pasture of the Evacuation Creek allotment. By increasing the acreage of the pasture, cattle dispersal would improve and alleviate grazing pressure during periods of use. This would result in improved rangeland conditions and aid in meeting Colorado Standards for Public Land Health.

*Environmental Consequences of the No Action Alternative:* Winter sheep use would continue to be authorized on the Hells Hole allotment and the transfer would not take place. There would also be no increase in pasture size of the Park Canyon Pasture of the Evacuation Creek allotment to alleviate current grazing pressure.

*Mitigation:* None

**CUMULATIVE IMPACTS SUMMARY:** Cumulative impacts from the proposed action and other land uses would not exceed those discussed in the White River ROD/RMP and/or White River Resource Area Grazing Management Environmental Impact Statement (EIS).

#### **REFERENCES CITED:**

Kuntz, David w., Harley J. Armstrong and Frederic J Athearn, eds.

1989 Faults, Fossil, and Canyons: Significant geologic Features on Public Lands In Colorado. Geologic Advisory Group, Bureau of Land Management. Cultural Resource Series Number 25, Bureau of Land Management, Lakewood, Colorado.

Tweto, Ogden

1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

**PERSONS / AGENCIES CONSULTED:**

Cripple Cowboy Cow Outfit

**INTERDISCIPLINARY REVIEW:**

<b>Name</b>	<b>Title</b>	<b>Area of Responsibility</b>
Bob Lange	Hydrologist	Air Quality, Water Quality, Surface and Ground Hydrology and Water Rights
Ken Holsinger	Natural Resource Specialist	Areas of Critical Environmental Concern, Threatened and Endangered Plant Species
Michael Selle	Archeologist	Cultural Resources, Paleontological Resources
Matthew Dupire	Rangeland Management Specialist	Invasive, Non-Native Species, Vegetation , Rangeland Management, Soils, Wetlands Riparian Zones
Lisa Belmonte	Wildlife Biologist	Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Wildlife, Wildlife Terrestrial and Aquatic
Bob Lange	Hydrologist	Wastes, Hazardous or Solid
Chris Ham	Outdoor Recreation Planner	Wilderness, Access and Transportation, Recreation,
Ken Holsinger	Natural Resource Specialist	Fire Management
Ken Holsinger	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Penny Brown	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Visual Resources
Melissa J. Kindall	Range Technician	Wild Horses

# **Finding of No Significant Impact/Decision Record (FONSI/DR)**

## **CO-110-2007-196-EA**

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE:** The environmental assessment and analysis of the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) 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.

**DECISION/RATIONALE:** It is my decision to issue a proposed decision in accordance with 43 CFR 4160.1 offering a grazing permit based on the grazing schedule analyzed in the proposed action to the applicant.

### **MITIGATION MEASURES:**

1. Appropriate mitigation measures may be identified in consultation with Colorado SHPO within the ten-year period of this permit. It is recommended that a renewal be issued for this permit subject to the allotment pasture specific stipulations.
2. The following mitigation measures will be followed during operation, and maintenance of the grazing permit renewal:
  - All persons in the area who are associated with this permit must be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.
  - The BLM authorized officer must be notified, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Activities must stop in the vicinity of the discovery and the discovery must be protected for 30 days or until notified to proceed by the authorized officer.
  - If in connection with operations under this contract the project proponent, his contractors, subcontractors, or the employees of any of them, discovers, encounters or becomes aware of any objects or sites of cultural or paleontological value or scientific interest such as historic or prehistoric ruins, graves or grave markers, fossils, or artifacts, the proponent shall immediately suspend all operations in the vicinity of the cultural or paleontological resource and shall notify the BLM authorized officer of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.
3. The following sites should be revisited, reevaluated and monitored over the ten year course of this permit: 5RB 790, 799, 809, 937, 1390, 2513, 2677, 2768, 2799, an 4202

4. The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.
5. A release of any chemical, oil, petroleum product, or sewage, etc, (regardless of quantity) must be reported to the Bureau of Land Management – WRFO Hazardous Materials Coordinator at (970) 878-3800. The Colorado Department of Public Health and Environment (CDPHE) should be notified, if applicable, through the 24-hour spill reporting line at 1 (877) 518-5608.
6. If the permittee encounters any waste dump sites, on or adjacent to the project area, they must be reported to the BLM.
7. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
  - whether the materials appear to be of noteworthy scientific interest
  - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)
8. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.
9. Individual range improvement projects must be examined for fossil resources if outcrops are exposed in the area of the proposed project. Monitoring for fossils may be required if the project involves excavation into the underlying rock for ponds, pit reservoirs or other open excavations.

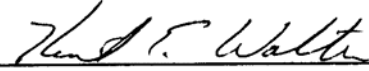
**COMPLIANCE/MONITORING:** There is currently no monitoring data currently in the White River Field Office for the Hells Hole allotment due to the fact it was previously managed out of the Vernal Field Office in Vernal Utah. The Vernal Field Office will be contacted to retrieve any historic monitoring data for the Hells Hole allotment and new long-term monitoring plots will be established if determined necessary. There are currently two long-term trend plots established in the Park Canyon Pasture of the Evacuation Creek allotment, and data will continue to be collected out of the White River Field Office to determine if the addition of acres to the pasture is having a positive effect on the rangeland trend.



**NAME OF PREPARER:** Matthew Dupire

**NAME OF ENVIRONMENTAL COORDINATOR:** Caroline Hollowed

**SIGNATURE OF AUTHORIZED OFFICIAL:**



Field Manager

**DATE SIGNED:** 12-18-07

**ATTACHMENTS:** General location map of the proposed action.

# Hells Hole Allotment

