

U.S. Department of the Interior  
Bureau of Land Management  
Little Snake Field Office  
455 Emerson Street  
Craig, CO 81625-1129

## ENVIRONMENTAL ASSESSMENT

**EA NUMBER:** CO-100-2007-042 EA

**PROJECT (RIPS) NUMBERS:** 005205/005206/005207/005208

**PROJECT NAME:** Four Spitzie Draw Water Wells

**LEGAL DESCRIPTION:** see map, Attachment 1

Well #1: NE ¼ Sec. 6, T10N R103W (005205)

Well #2: SW ¼ Sec. 10 T10N R103W (005206)

Well #3: NE ¼ Sec. 14 T10N R103W (005207)

Well #4: NW ¼ Sec. 29 T10N R102W (005208)

**APPLICANT:** Vermillion Ranch

**PLAN CONFORMANCE REVIEW:** The Proposed Action is subject to the following plan:

Name of Plans: Little Snake Resource Management Plan and Record of Decision

Date Approved: April 26, 1989

Results: The Proposed Action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3).

**NEED FOR PROPOSED ACTION:** On the Spitzie Draw Allotment #04335, livestock have historically had access to the Green River through Browns Park National Wildlife Refuge (BPNWR) via water gaps. In 2006 these water gaps were removed by the U.S. Fish and Wildlife Service (FWS), effectively cutting off this important source of livestock water for the allotment. This loss of access to the Green River is necessitating a search for alternatives to provide livestock water in the central portion of the allotment. There are no natural water sources, man-made ponds, or other water improvements in the vicinity.

**BACKGROUND:** The Spitzie Draw Allotment #04335 is located approximately 75 miles northwest of Craig, Colorado. It is bisected east-west by Colorado Highway 318. Part of the allotment is located in Utah. The allotment consists of approximately 15,054 acres with 250 acres deeded, 218 acres Colorado Division of Wildlife, and 14,048 acres public land. On the

Utah side, there are a total of 6,460 acres, with 5,314 acres public land, 206 acres private, 867 acres state, and 73 acres of state wildlife reserve. This is a total of 24,838 acres of which 22,559 are public land.

The existing permit is for 371 cattle from 11/01 to 05/31, 95% PL, 2,457 AUMs. The current BLM stocking rate is 6 ac/AUM.

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

### **Proposed Action**

Drill up to four water wells at locations shown on Attachment 1. Water from each well would flow into a metal trough and overflow would be allowed to flow into a pond constructed adjacent to each well. The wells would be drilled with either a cable tool or rotary drilling rig. The drilling of each well would involve the disturbance of no more than 0.25 acres and no blading or removal of vegetation would be required. Water would be drawn from each well by submersible pump powered by either a diesel generator or solar array.

Each well would be drilled by a State of Colorado licensed and bonded contractor. The contractor would be responsible to conform to all applicable State standards for the drilling and completion of each well. Specifically, a 10 inch hole would be drilled with a minimum of 40 feet of 8 inch steel surface casing cement-grouted into the hole. PVC casing would be used below the steel surface casing utilizing a mill slot or Johnson screen design with a 20 foot tailpipe. Surface casing would protrude 18 inches above grade and the well platform would be either earthen or concrete. See Attachment 2 for specifications.

For the drilling and completion wells themselves, no grading or other earthwork would be necessary. Where drilling rig and vehicular access to the sites would be off of existing roads, all access would be along pre-identified routes, but no blading or other road construction would be done. This would necessarily result in the formation of a short “two-track” road that would be used for access for routine maintenance. Upon completion of each well, one to two round or rectangular metal or fiberglass troughs would be placed adjacent to each well (see Attachments 3a and b). Well water would flow into one trough with overflow being potentially routed to a second trough to provide additional accessible water. All trough overflow would flow into small pit ponds via buried pipelines. Buried pipelines would be placed in the ground with a vibratory ripper (see Attachment 4). This method would result in no need for trenching and no surface reclamation of the buried lines would be necessary.

Within approximately 75 yards of each well, a small pit pond would be constructed (see Attachment 5). Construction of each pond would entail mechanical clearing of brush and construction of a water retention pit by dozer. Pits would be lined with bentonite to improve water retention. For construction of each pond, total direct surface disturbance would be 0.1 acre or less.

### *Construction Stipulations*

1. Access to and from each site will be on existing roads or trails. Where cross-country travel is mandatory, the same tracks will be used in and out. While traveling, the dozer blade will be kept up.
2. Top soil will be stockpiled and used to cover the disturbed area to the greatest extent possible.
3. Noxious weeds will be controlled by the permittee on any area disturbed as a result of these projects. Any spraying of weeds will need to be cleared through BLM prior to spraying.
4. No hazardous materials/hazardous waste or trash shall be disposed of on public lands. If a release does occur, it shall be reported to the Little Snake Field Office immediately at 970-826-5000.
5. All surface disturbance will be reseeded with native species adapted to the area.
6. Prior to construction, BLM will survey for the presence or absence of Gibben's beardtongue and ligulate feverfew along the specified cross-country access route(s) and within a 300 foot radius of each project site.
7. A bird escape ramp will be installed on each trough.
8. Well #1 will not be drilled, and no construction or surface disturbing activities will occur during greater sage-grouse nesting season, March 1<sup>st</sup> through June 30<sup>th</sup>.
9. None of the sites will be drilled, and no construction or surface disturbing activities will occur between December 1<sup>st</sup> and April 30<sup>th</sup> to protect wintering big game. Under mild winter conditions, the last 60 days of the seasonal limitation period may be suspended. Severity of the winter will be determined on the basis of snow depth, snow crusting, daily mean temperatures, and whether animals were concentrated on the crucial winter range during the winter months.
10. All four water wells, their associated troughs and pit ponds will be added to the Little Snake Field Offices Water Depletion Log and the appropriate mitigative funds will be paid to the U. S. Fish and Wildlife Service by BLM.

**No Action Alternative**

No wells or associated water developments would be implemented under this alternative.

**AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION**

## **MEASURES**

### **CRITICAL RESOURCES**

#### **AIR QUALITY**

Affected Environment: The Proposed Action does not lie within any special designation or EPA designated non-attainment airsheds.

Environmental Consequences: Short term, local impacts to air quality resulting from diesel engine exhaust and dust from surface disturbing operations would result during drilling and construction activities. The emissions from these activities would be both gaseous and particulate. Gaseous constituents from diesel engine exhaust include carbon dioxide, carbon monoxide, nitric oxide, nitric dioxide, oxides of sulfur, and hydrocarbons. Fine particulates of soot from diesel exhaust and fugitive dust from soils would be localized to the project area. The health effects of these emissions are largely from long-term and occupational exposure in confined areas. Neither the Proposed Action nor the No Action Alternative would affect regional air quality.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 2/17/07

#### **AREA OF CRITICAL ENVIRONMENTAL CONCERN**

Affected Environment: Not present.

Environmental Consequences: None for either alternative.

Mitigative Measures: None

Name of specialist and date: Jim McBrayer 2/12/07

#### **CULTURAL RESOURCES**

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see *An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, and *An Isolated Empire, A History of Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resource Series, Number 2.

Environmental Consequences: The proposed Spitzie Well locations have undergone a Class III cultural resource survey:

Collins, Gary 2006. Cultural Resource Inventory of the Proposed 4 Spitzie Well Locations (BLM# 10.20.06). M.S. on file at BLM-Little Snake Field Office.

The survey identified no eligible to the National Register of Historic Places cultural resources. The proposed project may proceed as described in this EA with the following mitigative measures in place.

#### Mitigative Measures:

The following standard stipulations apply for this project:

1. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

2. 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 costs. 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.

Name of specialist and date: Robyn Watkins Morris 2/21/07

## **ENVIRONMENTAL JUSTICE**

Affected Environment: The Proposed Action is located in an area nearly devoid of year-round human populations. Isolated dwellings do exist, including housing and working quarters for the nearby Browns Park National Wildlife Refuge, but none are near any of the four proposed water wells.

Environmental Consequences: The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts from the project. The project would not directly affect the social, cultural, or economic well being and health of Native American, minority, or low-income populations.

Mitigative Measures: None

Name of specialist and date: Louise McMinn 2/16/07

## **FLOOD PLAINS**

Affected Environment: None of the four wells are proposed to be placed within active floodplains. Small, non-riparian, ephemeral areas which infrequently carry surface runoff are more characteristic of the surface drainages in the areas affected by these proposed livestock watering developments. The soils along these drainages have loamy fine sand textures and exhibit moderately rapid to rapid infiltration rates with low runoff rates.

Environmental Consequences: Neither alternative would impact floodplains.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 2/21/07

## **INVASIVE, NONNATIVE SPECIES**

Affected Environment: Invasive and noxious weeds occur in the vicinity of the four proposed wells. Cheatgrass is the most common invasive plant species taking advantage of surface disturbing activities in these areas. Where native plant communities have been suppressed by heavy grazing, cheatgrass has moved into disturbed areas lacking in perennial grasses and forbs. Canada thistle and other biennial thistles are fairly common on the adjacent Browns Park National Wildlife Refuge. Black henbane, spotted knapweed, Russian knapweed, whitetop, and diffuse knapweed have been reported in the area on the refuge.

Environmental Consequences: Although surface disturbance generally favors the introduction of cheatgrass, it is unlikely these areas would harbor vigorous populations of this species due to the concentrated use by livestock. It would be more likely that some increase in this invasive annual would occur for a short distance radiating from the water developments due to the diminished character of the native plant community, but this would be highly localized and not result in widespread invasion of larger areas.

These projects, like most livestock water developments, are partially intended to foster improved livestock distribution throughout the allotment and minimize large-scale areas of concentration while leaving other large-scale areas relatively ungrazed. This contribution to sound range management practices is intended to maintain and/or improve the health and vigor of the native

forage component, thereby fostering plant community resistance to noxious weed invasion.

The No Action Alternative would result in very little livestock use south of Highway 318 within the allotment and would foster community resistance to weed invasion in this area.

A program of detection and rapid treatments for noxious weeds is in place for this part of Moffat County under the Northwest Weed Management Area project. The BLM is in cooperation with the Moffat County Cooperative Weed Management program to employ the principals of Integrated Pest Management to control noxious weeds on public lands.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 2/21/07

### **MIGRATORY BIRDS**

Affected Environment: Brewers sparrow and sage sparrow are the birds listed on the USFWS's 2002 Birds of Conservation Concern List that have potential to be found in the project area. Of the four proposed well locations, Wells #1 and #2 have potential to support these birds.

Environmental Consequences: Construction and drilling of these wells could result in nest destruction or abandonment if conducted during the nesting season (June and July). If conducted outside of this time period, these species are not likely to be impacted. Entrapment of these birds in water troughs could occur. This would likely result in drowning. Installation of escape ramps would minimize the potential for this to occur. Potential for take to occur is low.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 2/16/07

### **NATIVE AMERICAN RELIGIOUS CONCERNS**

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council, and the Colorado Commission of Indian Affairs on January 21, 1999. The letter listed the projects that the BLM would notify them on and projects that would not require notification. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris 2/21/07

### **PRIME & UNIQUE FARMLANDS**

Affected Environment: Not present.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 2/16/07

### **T&E SPECIES - SENSITIVE PLANTS**

Affected Environment: The four proposed projects are located in the vicinity of known populations of two BLM sensitive plant species: Gibben's beardtongue (*Penstemon gibbensii*) and ligulate feverfew (*Bolophyta ligulata*).

Gibben's beardtongue is a forb that averages from 10 to 20 centimeters in height. It has blue-purple flowers in a glandular hairy inflorescence. The flowering/fruitlet period is from June through September. This plant grows in sparsely vegetated shale or sandy-clay slopes of the Brown's Park Formation and is associated with pinyon-juniper woodland, sagebrush, or greasewood-saltbush.

Ligulate feverfew is an inconspicuous, mat-forming forb. A member of the composite family, it has extremely short, inconspicuous ray flowers and the flower heads are typically hidden among the leaf bases. It flowers and fruits from May through June. It is restricted to barren shale knolls.

Environmental Consequences: While existing populations are not known at or in the immediate vicinity of any of the proposed project locations, the habitat does exist for these plants throughout the vicinity of each of the four locations. If present, individual plants of either of these species could be injured or destroyed either directly through physical destruction from construction activities or indirectly through trampling or grazing by livestock concentrated around the water source. The Proposed Action requires each proposed project area to be surveyed for the presence of either species. If an occurrence of either species is found, the project area would be moved so that direct impacts due to project construction or indirect impacts caused by livestock concentration does not impact any populations of either species. Surveying the area around each project site for the presence of these plants would ensure that occurrences of either species would be avoided and direct and indirect impacts would not occur.

Mitigative Measures: None

Name of specialist and date: Hunter Seim 2/13/07

### **T&E SPECIES – ANIMALS**

Affected Environment: The proposed well locations are not within habitat for any threatened or endangered species. Four endangered fish species are known to occur within Moffat County and might be impacted by water depletions. These species are the Colorado pikeminnow, razorback sucker, humpback chub, and the bonytail. Proposed Well #1 is located within greater sage-grouse nesting habitat. Greater sage-grouse are a BLM special status species.

Environmental Consequences: Minor water depletions associated with the development of the four water wells and their associated troughs and pit ponds would impact the four endangered fish species. Minor water depletions have been consulted upon with the USFWS under a statewide programmatic biological assessment. The USFWS's biological opinion concurred that these water depletions are an adverse impact. A mitigation fund was established to offset these impacts.

Impacts associated with this project, which would be conducted outside of the nesting season, would be limited to decreased sage-grouse nesting habitat around the water troughs and ponds. These impacts would be offset by providing water developments that would be accessible to sage-grouse.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 2/16/07

### **T&E SPECIES – PLANTS**

Affected Environment: There are no federally listed threatened or endangered plant species within or in the vicinity of any of the three proposed projects.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 2/12/07

### **WASTES, HAZARDOUS OR SOLID**

Affected Environment: The areas proposed for project construction are remote areas that have little influence from human activity. Currently, there are no hazardous materials present within or in the vicinity of any of the four proposed project areas.

Environmental Consequences: Heavy equipment, pickup trucks, ATVs, and other support vehicles would be present during project activities. Fuel, oil, and coolant are potential hazardous materials that could be introduced to the project vicinity. Materials such as drilling mud are used

in the course of drilling activities, but, per Colorado state law, all fluids used in drilling water wells are natural and biodegradable. Per Colorado state law, all drilling activities, including those related to hazardous materials, are regulated by the State of Colorado and each drilling operation will be inspected by the state during drilling. If a release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there would be no impact on the environment. Consequences would be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences would occur, but they can be remedied, and long-term impacts would be minimal.

There would be no impact under the No Action Alternative as no construction activities would occur.

Mitigative Measures: None

Name of specialist and date: Hunter Seim 2/14/07

## **WATER QUALITY - GROUND**

**Affected Environment:** The surface formation is the Tertiary Browns Park Formation. This formation is a local aquifer and may contain fresh water of good quality. The depth of this formation can be up to 2,000 ft. thick.

**Environmental Consequences:** With the use of proper drilling practices and construction practices, the impact on the groundwater aquifers should be minimal. Per State of Colorado requirements, the top 40 feet of the holes would be cased and grouted so the ground water would be protected.

Mitigative Measures: None

Name of specialist and date: Jennifer Maiolo 2/15/07

## **WATER QUALITY - SURFACE**

**Affected Environment:** The ephemeral draws within the Spitzie Draw Allotment where these livestock water development projects would occur are tributaries to the Green River. Water quality of the Green River needs to support Aquatic Life Cold 1, Recreation 1a, Water Supply, and Agriculture. Tributary waters to this segment of the Green River need to support Aquatic Life Warm 2, Recreation 1a, and Agriculture. These tributaries are designated as Use Protected. The Green River was last assessed Feb. 22, 2002 and it was determined that the water quality of the river is fully supporting all designated uses.

**Environmental Consequences:** Increased sediments and nutrients would be carried from the areas developed for livestock water due to the initial surface disturbance and soil compaction

resulting from concentrated livestock use. The soils on the adjacent uplands and within the drainages have moderately rapid to rapid infiltration rates which would absorb runoff waters and reduce transport of these pollutants by runoff waters. Due to the small spatial and temporal ground disturbance caused by the Proposed Action, there would be no appreciable negative impacts to water quality in the Green River or immediately affected tributaries.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 2/22/07

### **WETLANDS/RIPARIAN ZONES**

Affected Environment: There are no wetlands or riparian zones within the proposed project area.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 2/16/07

### **WILD & SCENIC RIVERS**

Affected Environment: Not present.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Jim McBrayer 2/12/07

### **WILDERNESS, WSAs**

Affected Environment: Not present.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Jim McBrayer 2/12/07

## **NON-CRITICAL ELEMENTS**

### **SOILS**

**Affected Environment:** The soils in the project areas are primarily derived from eolian deposits and alluvium derived from sandstone. Soils in the project areas for Wells #1 and #2 are Tipperary loamy fine sands with 3 to 12 percent slopes. The soils in the project area for Well #3 are the Willwood-Tipperary, cobbly substratum complex with 1 to 12 percent slopes. This soil type developed from alluvium from mixed sources with eolian deposited material on the surface. The substratum is likely the remnants of older pediment surfaces. Well #4 would be located on Eghelm loamy fine sand, 0 to 3 percent slopes. The Tipperary and Eghelm soils have very low runoff and rapid infiltration rates and the Willwood-Tipperary, cobbly substratum complex soils have a low runoff rate with moderately rapid infiltration. The soils on the adjacent uplands and draws also exhibit very low to low runoff and rapid to moderately rapid infiltration.

Each of these soil types have some limitations identified for pond and reservoir areas and embankments or excavated ponds, mainly due to seepage, although the Willwood soils also identify large stone content as a limitation for excavated ponds and embankment material.

The Eghelm soil is rated as a good source for topsoil with no limitations. The Tipperary soil is rated as a fair source for topsoil with a limitation of too sandy to consider. The Willwood-Tipperary complex soils are rated as a poor source for topsoil due to too sandy and hard to reclaim.

**Environmental Consequences:** The soils in the project area have some limitations identified for use as ponds. Seepage is the main limitation identified for each soil type. Where seepage is the only identified limitation, periodic sealing of the ponds with bentonite would alleviate this problem. Pit pond construction at Well #3, the site having soils containing large stones, does not rely entirely on the embankment to impound water as much of the storage capacity is in the pit that is excavated to impound water. The embankment would not be used to impede or impound surface runoff flowing through the primary draw, but the pond would collect runoff from a small tributary swale. Pit ponds do not rely on the embankments for impounding water and the embankments that will be present are more characteristic of a spoil storage pile.

Each of the areas to be developed for livestock watering would receive concentrated use by livestock. After the initial disturbance, these areas would be more susceptible to wind erosion. As the soils become more compacted and organic matter begins to accumulate, this erosion hazard would diminish. Increased soil compaction would lead to additional runoff from the site, but the rapid to moderately rapid infiltration rates on the adjacent undisturbed soils and within the adjacent drainages would limit the area of impact to a short distance from these developments.

Improved distribution would alleviate the potential for large-scale areas of excessive livestock concentration elsewhere in the allotment and would serve to maintain soil quality elsewhere in

the allotment. Avoidance of large-scale areas of excessive use would help maintain sufficient plant cover to minimize soil loss to wind and water erosion. Under the No Action Alternative, the impacts resulting from large-scale excessive use (soil compaction and loss of soil-holding perennial grasses and biological crusts) would be increased unless the current preference on the allotment was reduced to a level reflecting unavailable forage due to lack of water.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 2/22/07

## **VEGETATION**

**Affected Environment:** The four proposed wells and their associated access routes, troughs, and ponds are located in sagebrush-grass and saltbush plant communities associated with the Sandy Cold Desert and Saltdesert Overflow Ecological Sites. These sites are dominated by Wyoming big sagebrush (*Artemisia tridentata wyomingensis*), shadscale saltbush (*Atriplex confertifolia*), greasewood (*Sarcobatus vermiculatus*), galleta (*Hilaria jamesii*), Indian ricegrass (*Oryzopsis hymenoides*), needle-and-thread (*Stipa comata*), and squirreltail (*Sitanion hystrix*). All drainages in which ponds would be built are ephemeral and exhibit no riparian development.

**Environmental Consequences:** Vegetation at each site would be subject to trampling and crushing from cross-country vehicular access, well drilling activities, placement of troughs, and earthwork required for the ponds. As is the case with any water development, the area immediately surrounding the development would be subject to trampling and soil compaction from livestock concentration. This indirect impact would result in greatly reduced density and abundance of vegetation within a radius of approximately 300 feet around each development with impacts gradually lessening with increasing distance. Development of livestock trails radiating out from each development would also be expected. As is evidenced from numerous other livestock water developments in similar plant communities throughout the region, this overall reduction in native plant cover and abundance would be highly concentrated and result in a minimal adverse impact within the larger plant community.

Positive impacts to the plant community would be indirect in nature. Without these projects, lack of water throughout this portion of the allotment would result in increased livestock use of forage plants in more well-watered portions of the allotment, specifically those areas north of Highway 318 and in the Utah portion of the allotment unless the current preference of the allotment was greatly reduced to reflect the lack of water. One key to proper management of livestock grazing is to ensure that animals are distributed across the available forage base as evenly as possible. Adequate availability of water at strategically placed locations ensures that the livestock forage base is utilized evenly resulting in maintenance of forage plant vigor and desirable species composition while avoiding excessive utilization and soil compaction.

Mitigative Measures: None

Name of specialist and date: Hunter Seim 2/14/07

**WILDLIFE, TERRESTRIAL**

Affected Environment: The proposed project area is within year round habitat for pronghorn antelope, mule deer, elk, and moose. This habitat includes severe winter range for mule deer and elk. A variety of small mammals, songbirds, and reptiles are found within the project area.

Environmental Consequences: The development of the proposed wells would benefit all big game species by providing accessible clean water sources. A short term displacement of big game animals would be expected during construction and drilling. Once these activities are completed, any displaced animals would return to the project areas.

Most small mammals, reptiles, and birds would not be impacted by the development and construction of these wells. Water troughs associated with the development of these wells could lead to entrapment and drowning of small mammals, songbirds, and reptiles. In order to minimize the potential for this to occur, escape ramps would be installed on all water troughs.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 2/16/07

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, those brought forward for analysis will be formatted as shown above.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Fluid Minerals	JAM 2/16/07		
Forest Management	JHS 2/13/07		
Hydrology/Ground	JAM 2/16/07		
Hydrology/Surface		OO 2/22/07	
Paleontology		JAM 2/16/07	
Range Management			JHS 2/14/07 (see Vegetation section)
Realty Authorizations		LM 2/16/07	
Recreation/Travel Mgmt		RS 2/20/07	
Socio-Economics		LM 2/16/07	
Solid Minerals	JAM 2/16/07		
Visual Resources		JM 2/12/07	

Wild Horse & Burro Mgmt	JHS 2/13/07		
Wildlife, Aquatic	TMN 2/16/07		

**CUMULATIVE IMPACTS SUMMARY:** The four proposed water developments are scattered across Browns Park. Browns Park is remote, even by Intermountain West standards, and is only minimally impacted by human activities. Several improved and unimproved roads, including State Highway 318, cross Browns Park, but the overall density of roads is light. South of each of the four proposed wells lie the Browns Park National Wildlife Refuge. The refuge represents the single largest impact by humans within Browns Park. Administration and visitor facilities, powerlines, boundary fencing, and vehicular travel by visitors and refuge staff result in the year-round production of noise, dust, and visual intrusions. BLM maintains housing and work facilities for the breeding of black-footed ferrets at two locations within Browns Park. The former Browns Park School is located there near one of these facilities. There are also structures such as corrals, dwellings, and ranch buildings on private lands scattered throughout the area.

Throughout Browns Park, historic livestock use was extremely heavy for many years due to its lower elevation and relatively little winter snow cover. This has resulted in very large areas that are dominated, or nearly dominated, by cheatgrass. More recent livestock management has greatly reduced the numbers of cattle using the area. The introduction of improved management practices such as rotational grazing have improved range conditions, but the effects of past abuses remain in many portions of the plant community. There are very few range improvements associated with livestock management in Browns Park, and the impacts (direct and indirect) of these proposed water developments would be only in addition to mostly non-livestock related facilities and impacts.

**STANDARDS**

**PLANT AND ANIMAL COMMUNITY (animal) STANDARD:** The proposed project area provides healthy productive habitats for a variety of big game, small mammal, songbirds, and reptiles. The development of the four water wells along with their associated troughs and pit ponds would not have a negative impact on overall habitat within the project area. These developments would not have a negative impact on any animal populations. This standard is currently being met and would continue to be met in the future under either alternative.

Name of specialist and date: Timothy Novotny 2/16/07

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD:** The proposed project has the potential to have an adverse impact on Colorado pikeminnow, razorback sucker, bonytail, and humpback chub. All four of these species are federally endangered species. To mitigate impacts associated with minor water depletions, the wells, troughs, and pit ponds would be added to the LSFO water depletion log and mitigative fees would be paid into the mitigation fund.

As mitigated, the projects are not likely to have an impact on nesting greater sage-grouse, a BLM special status species.

This standard is currently being met. The Proposed Action would allow this standard to continue to be met in the future.

The No Action Alternative would meet this standard as no impact from facility development would occur and no water depletions would be implemented.

Name of specialist and date: Timothy Novotny 2/16/07

**PLANT AND ANIMAL COMMUNITY (plant) STANDARD:** The Proposed Action would result in adverse impacts to native vegetation in the immediate vicinity of each project but would lead to improved livestock distribution and more even use of forage resources throughout the allotment. These water projects would benefit the larger plant community throughout the allotment by alleviating the potential for large areas to be over utilized because of poor water distribution. The Proposed Action would meet this standard.

Since livestock on this allotment no longer have access to water on the Green River, the No Action Alternative would result in greatly under utilized forage of areas south of Highway 318. This would result in greatly over utilized areas in areas of the allotment, harming the ability of those affected plant communities to maintain desirable vigor, cover, and composition *unless* active preference on the allotment was greatly reduced to reflect the amount of unavailable forage due to lack of water. The No Action Alternative would not meet this standard.

Name of specialist and date: Hunter Seim 2/14/07

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant) STANDARD:** The Proposed Action is located in the vicinity of two BLM sensitive plant species, ligulate feverfew and Gibben's beardtongue. While there are no known populations of these species at the proposed project sites, habitat for these plants does exist around each site. It is BLM policy to not approve actions that would result in reductions in populations of sensitive species. As required in the Proposed Action, this project would adhere to a policy of survey for and avoidance of either of these species. This provision would avoid all impacts to sensitive species and thus meet this standard. There are no federally listed threatened or endangered plant species within or in the vicinity of the proposed wells.

The No Action Alternative would meet this standard as no impacts related to these water developments would occur.

Name of specialist and date: Hunter Seim 2/13/07

**RIPARIAN SYSTEMS STANDARD:** There are no wetlands or riparian zones within the

project area. This standard does not apply.

Name of specialist and date: Timothy Novotny 2/16/07

**WATER QUALITY STANDARD:** The water quality standard for healthy rangelands would be met with implementation of either the Proposed Action or No Action Alternatives. Runoff from snowmelt and summer storms drains from the Spitzie Draw Allotment into ephemeral stream segments that are presently supporting classified uses. These stream drainages are tributary to the Green River. No stream segments are listed as impaired.

Name of specialist and date: Ole Olsen 2/22/07

**UPLAND SOILS STANDARD:** The Proposed Action would require a small area of the upland soil resource to support a different activity that is not consistent with the characteristics of a healthy soil. The upland soil is capable of supporting the Proposed Action with traditional amendments. The water developments are necessary for livestock management on these public lands and the area involved for each development would be highly localized. Multiple developments would allow better distribution of livestock and would reduce the potential for livestock to concentrate near one water source. The upland soils within the Spitzie Draw Allotment would continue to meet this standard. The No Action Alternative would have no effect on this standard.

Name of specialist and date: Ole Olsen 2/22/07

#### **MITIGATION MEASURES:**

1. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

2. 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 costs. 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.

**PERSONS/AGENCIES CONSULTED:** Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office, Marc Dickinson.

**ATTACHMENTS:** Attachment 1, Project Location Map  
Attachment 2, Well Construction Details  
Attachment 3a, Steel Water Trough  
Attachment 3b, Round Water Trough Installation  
Attachment 4, Pipeline Installation Types  
Attachment 5, Typical Water Retention Pit

**SIGNATURE OF PREPARER:**

**DATE SIGNED:**

**SIGNATURE OF ENVIRONMENTAL REVIEWER:**

**DATE SIGNED:**

### **Finding of No Significant Impact**

The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. With the implementation of the attached mitigation measures there is 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.

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.
2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.
3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern.
4. There are no highly controversial effects on the environment.
5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.
6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State or local natural resource related plans, policies or programs.
7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.
8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.
9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.
10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

**SIGNATURE OF AUTHORIZED OFFICIAL:**

**DATE SIGNED:**