

**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-100-2008-071

CASEFILE/ALLOTMENT NUMBER: 006971/04525, 04524

PROJECT NAME: Construction of a water delivery pipeline and troughs on the Earl Martin #04525 and Big Hole Gulch #04524 Allotments.

LEGAL DESCRIPTION: See project map, Attachment 1

T10N R93W Secs. 6, 7, 18, and 19

T11N R93W Sec. 31

T10N R94W Secs. 1 and 12

T11N R94W Secs. 26, 35, and 36

APPLICANT: John Raftopoulos

PLAN CONFORMANCE REVIEW: The Proposed Action and Alternatives are subject to the following plan:

Name of Plan: 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 March 11, 2008, the grazing permit on the Earl Martin Allotment #04525 was transferred to John and Steve Raftopoulos. This allotment is permitted for season-long use (May 1 through October 31) and is watered by three ponds. Typically these three ponds do not hold water throughout the grazing season and are generally insufficient for watering this allotment. In addition, this allotment will be incorporated with the Big Hole Gulch Allotment #04524 which lies to the west when the permit is renewed in 2009.

The Big Hole Gulch Allotment is managed under a deferred pasture grazing system where individual pastures are either rested year-long or used between four to eight weeks and rested the remainder of the year. Sufficient water availability in each pasture is essential to the success of

this type of grazing system. Presently, the Earl Martin Allotment only has three existing stock ponds that do not hold water well. Once water availability and distribution is improved on the Earl Martin Allotment, it will be incorporated into this system.

The overall management focus of the Big Hole Gulch Allotment is to improve riparian conditions along Big Hole Gulch by a combination of intensive pasture rotations and improving the availability of upland water to improve livestock distribution throughout the uplands. This project is intended to help fulfill both of these goals.

PUBLIC SCOPING PROCESS: Both of these allotments exist under different permits to the same permittee. Currently, livestock grazing on the Big Hole Gulch Allotment #04524 is under permit #0501017, expiring February 28, 2011. For the issuance of this permit, BLM sent out a Notice of Public Scoping on July 15, 1999 to determine the level of public interest or concern for continuing livestock grazing and related activities on this allotment, among others. No comments specific to this allotment were received.

Livestock grazing on the Earl Martin Allotment #04525 is under permit #0503676, expiring February 28, 2009. For the issuance of this permit, BLM sent out a Notice of Public Scoping on December 17, 2007 to determine the level of public interest or concern for continuing livestock grazing and related activities on this allotment, among others. No comments specific to this allotment were received.

BACKGROUND: The Earl Martin #04525 and Big Hole Gulch #04524 Allotments are located approximately 30 miles northwest of Craig, Colorado. Both allotments consist of rolling hills dissected by shallow drainages. Elevations in the vicinity of the proposed project range from 7,000 feet along the highest ridges to 6,400 feet along Big Hole Gulch. The dominant plant community is sagebrush-grass with a good diversity of seral stages throughout.

Much of this project would be located on private and State Land Board lands. These non-federal lands are used in conjunction with federal lands for livestock management and would also receive the benefits and impacts of the proposed project. This EA will focus on the direct, indirect, and cumulative impacts of the project to those portions that would directly serve public lands; the four segments that are shown on Attachment 1. For non-federal lands, only indirect and cumulative impacts will be discussed.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action

A water distribution system would be constructed for the purpose of livestock water on the Earl Martin #04525 and the Big Hole Gulch #04524. The water source for the system would be a well that would be drilled on private land in Sec. 19, T10N R93W. This well would be drilled adjacent to an existing well that serves a ranch house.

A two inch PVC pipe would be placed in a ditch averaging three feet deep made by a vibratory ripper. Where the line goes through sagebrush, a fifteen foot wide swath would be brushbeaten to

facilitate ditching. After placing the pipe in the ditch, the ditch would fill in on its own due to its narrowness. Due to the narrowness of disturbance created by the vibratory ripper, reseeding would not be necessary. Total length of buried pipeline would be approximately 44,822 feet (8.5 miles). A 15,000 gallon distribution tank would be placed above-ground at the highest point along the pipeline which is on private land. The tank would be filled with water and used to maintain and regulate pressure throughout the system. For water delivery, eleven tanks made from nine foot diameter heavy truck tires would be installed along the pipeline as shown in Attachment 1. Three tanks would be located on public lands in the Earl Martin Allotment and one tank would be located on public lands in the Big Hole Gulch Allotment. All tanks would include water level regulation devices and bird escape ramps.

The construction of this project would be subject to the following terms and conditions:

1. A Cooperative Agreement for Range Improvements (Form 4120-8) must be signed by the applicant and approved by BLM prior to any construction activities, see Attachment 2. All aspects of the project would be built to BLM standards (see Attachment 3).
2. Sage grouse considerations: To protect nesting sage grouse, project construction will not occur between March 1 and June 30.
3. Cultural considerations: The following standard stipulations would apply for this project:

A Class III cultural resources survey will be conducted for prior to project implementation. The location of portions of the project may be modified and/or relocated depending on the results of this survey.

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.

4. Paleontological considerations: If fossils are discovered during construction or other

operations, all activity in the area will cease and the Field Office Manager will be notified immediately. An assessment of significance would be made within an agreed time frame. Operations would resume only upon written notification by the Authorized Officer.

5. Existing facility considerations: Prior to construction, the project proponent will

- Utilize the “One Call” system to locate and stake the centerline and limits of all underground facilities in the area at least two weeks prior to project initiation.
- Provide 48-hour notice to the owner/operator prior to performing any work near existing rights-of-way or other facilities.

No Action Alternative

The pipeline and delivery system would not be constructed.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: The project area does not lie within any specially designated or non-attaining airsheds.

Environmental Consequences, Proposed Action: Short term, local impacts to air quality resulting from diesel engine exhaust, other combustible engines and dust from surface disturbing operations would result from construction and maintenance activities. Emissions required to brush beat the water line routes, bury the water lines with the vibratory ripper and install the water troughs would be minimal. The emissions from these activities consist of both gaseous and particulate fractions. 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. Some localized dust may result from driving on unpaved roads, but this would be negligible compared to dust generated from all vehicle uses in the vicinity. The Proposed Action would not adversely affect the regional air quality.

Environmental Consequences, No Action: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 6/13/08

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Rob Schmitzer 6/13/08

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, An Isolated Empire, A History of Northwestern Colorado, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and Colorado Prehistory: A Context for the Northern Colorado River Basin, Colorado Council of Professional Archaeologists.

Environmental Consequences, Proposed Action: The proposed project has not undergone a Class III cultural resource survey. The project must have a Class III cultural resource survey and all historic properties must have adverse effects mitigated before ground disturbance may occur. Impacts to any identified cultural resources would, upon discovery, be avoided by project redesign or by excavation and removal of the resource.

Environmental Consequences, No Action: None

Mitigative 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.

Name of specialist and date: Robyn Watkins Morris 8/5/08

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed project is located in an area of isolated dwellings. Ranching, farming, and oil and gas exploration/development are the primary economic activities.

Environmental Consequences, all alternatives: The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of either alternative. Neither alternative would 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: Mike Andrews 6/12/08

FLOOD PLAINS

Affected Environment: No floodplains are present in the immediate vicinity of the proposed pipeline. There are floodplains along Bighole Gulch to the west.

Environmental Consequences, Proposed Action: Indirect beneficial impacts to floodplain areas along Bighole Gulch would result from less grazing pressure as water is developed in multiple upland locations to provide better grazing distribution.

Environmental Consequences, No Action: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 6/13/08

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive and noxious weeds are present in the affected area. Invasive annuals such as cheatgrass, halogeton, blue mustard, and yellow alyssum commonly

occur in the affected area and are occupying disturbed areas caused by oil and gas development and recently disturbed pipeline corridors. Invasive annual weeds are typically established in disturbed and high traffic areas, whereas, biennial, and perennial noxious weeds are less common in occurrence. Cheatgrass and halogeton are on the Colorado List C of noxious weeds. Colorado List B noxious weeds that are present within the Earl Martin and Bighole Gulch Allotments include Canada thistle and bull thistle. Other Colorado List B noxious weeds that are present in the vicinity and could potentially become established within these allotments include Russian knapweed, hoary cress (whitetop), houndstongue, dalmatian toadflax, and other biennial thistles. 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.

Environmental Consequences, Proposed Action: Installing the water distribution system would cause concentrated use by livestock in the areas around each of the new water developments, but it is unlikely these areas would harbor vigorous populations of these species due to the physical trampling that would occur. Some increase in annual invasive plants would occur for a short distance radiating from the newly established water developments due to the diminished abundance of perennial plants from localized livestock concentration. Proposed brush beating along the proposed water line routes would cause an increase the perennial grass component which would decrease the potential for invasive plants and increase the detection of any noxious weeds that could become established.

Environmental Consequences, No Action: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 6/18/08

MIGRATORY BIRDS

Affected Environment: The project area provides both foraging and nesting habitat for a variety of migratory birds. Two sagebrush obligate species, sage sparrow and Brewer's sparrow are on USFWS's Bird of Conservation Concern List. Additional birds that may nest in the area include the vesper sparrow and sage thrasher.

Environmental Consequences, Proposed Action: The Proposed Action would have no adverse impacts to migratory birds. The construction of the pipeline has some potential for take if conducted during the nesting season (mid May – mid July). A few nests may be destroyed if brush beating occurs during this time. Mitigative measures for sage-grouse (no construction between March 1 and June 30) would adequately protect nesting migratory birds. The water tanks would not pose threats to migratory birds, as each tank would include a bird escape ramp.

Environmental Consequences, No Action: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 6/24/08

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 5, 2008. The letter listed the FY08 and FY09 projects that the BLM would notify them on and projects that would not require notification. A follow up phone call was performed on June 16, 2008. 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 8/5/08

PRIME & UNIQUE FARMLANDS

Affected Environment: There are no Prime and Unique Farmlands in the vicinity of the proposed project area.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 6/13/08

T&E AND SENSITIVE ANIMALS

Affected Environment: There are no threatened or endangered animal species or habitat for such species within or in the vicinity of the proposed project area. The water pipeline and associated troughs are within greater sage-grouse breeding and nesting habitat. Greater sage-grouse are a BLM special status species. There are two active sage-grouse leks within one mile of the proposed water pipeline.

Environmental Consequences, Proposed Action: The proposed water pipeline is not close enough to any active sage-grouse leks to adversely impact any leks in the area. The installation of the pipeline would require brush beating through sagebrush which would eliminate some potential nesting habitat for sage-grouse. This would have a slight negative impact on sage-grouse. The existence of more watering sources within these two grazing allotments would improve livestock distribution and lessen impacts of grazing on the uplands. This would result in improved nesting and early brood rearing habitat for greater sage-grouse. The benefits of the improved grazing system would more than offset the temporary loss of habitat resulting from the installation. The grazing system would also improve riparian habitat. This would benefit greater sage-grouse by improving late summer brood rearing habitat. The water tanks would not pose threats to greater sage-grouse, as each tank would include a bird escape ramp.

Environmental Consequences, No Action: This alternative would not have any impacts on

greater sage-grouse or their habitat, positive or negative.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 6/24/08

T&E AND SENSITIVE PLANTS

Affected Environment: There are no federally listed threatened or endangered or BLM sensitive plant species within the area affected by the proposed project.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 6/5/08

WASTES, HAZARDOUS OR SOLID

Affected Environment: 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.

Environmental Consequences, Proposed Action: 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.

Environmental Consequences, No Action: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 6/30/08

WATER QUALITY - GROUND

Affected Environment: Ground water associated with the Wasatch Formation is present.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Marilyn Wegweiser 7/1/08

WATER QUALITY - SURFACE

Affected Environment: Runoff water drainage from the public lands within the proposed project area flows to ephemeral draws that are tributaries of Bighole Gulch and Scandinavian Gulch. Bighole Gulch and Scandinavian Gulch are ephemeral tributaries of the Little Snake River. The water quality within all of these affected streams is currently supporting classified uses.

Environmental Consequences, Proposed Action: Very minimal and short term disturbance would be caused by installing the water line with the vibratory ripper. Increased sediments and nutrients would be carried from the areas surrounding the newly installed water tanks due to the initial surface disturbance and soil compaction resulting from concentrated livestock use. The adjacent soils on the uplands and within the drainages have moderate permeability and medium runoff rates. The adjacent soils and plant communities are capable of absorbing runoff waters from most precipitation events, reducing the transport of sediments and nutrients to Big Gulch or Scandinavian Gulch. Overall, slight benefits to the water quality of surface water runoff from the Earl Martin and Big Hole Gulch Allotments would be expected from the installation of the water distribution system due to the increased health of soils and vigor of forage resources. Additional opportunities for more intensive livestock management (rotation, distribution) would be available as a result of this project.

Environmental Consequences, No Action: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 6/13/08

WETLANDS/RIPARIAN ZONES

Affected Environment: No riparian areas are within the immediate vicinity of the proposed project. Wetland habitat is associated with Bighole Gulch.

Environmental Consequences, Proposed Action: Indirect beneficial impacts to wetlands along Bighole Gulch would result from less grazing pressure as water is developed on upland sites to provide better grazing distribution.

Environmental Consequences, No Action: Livestock would continue to place grazing pressure on riparian areas within Bighole Gulch due to the lack of upland water in the eastern portion of the Bighole Gulch Allotment.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 6/13/08

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Rob Schmitzer 6/13/08

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Not present.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Rob Schmitzer 6/13/08

NON-CRITICAL ELEMENTS

RANGE MANAGEMENT

Affected Environment: The proposed pipeline would be located in and service both the Earl Martin #04525 and Big Hole Gulch #04524 Allotments.

The Earl Martin Allotment is a season-long cattle allotment permitted for 55 AUMs of livestock use. The current permittee acquired the grazing preference on this allotment in 2008 and would like to the management of it with the Big Hole Gulch Allotment. Most of the public lands within this allotment are fenced from the adjacent private land, effectively creating four separate pastures. Presently, the only pasture containing useable water is the parcel of public land in the center of the allotment.

The Big Hole Gulch Allotment is permitted for cattle use all year except for February and the first half of March. Permitted use is 321 AUMs. The allotment is actually used primarily in the late spring through mid summer with lesser use occurring in the fall. The allotment is divided into five pastures and is managed under a deferred pasture grazing system. Most water is provided by ponds located along Big Hole Gulch, but there are additional upland water sources on the east and west sides of the allotment. The upland water sources have not been in sufficient quantities to keep cattle well distributed during mid-summer and fall grazing periods.

Environmental Consequences, Proposed Action: The proposed pipeline would facilitate the

incorporation of management of the Earl Martin Allotment with the five pasture rotation on the Big Hole Gulch Allotment. It would also make the fenced-off public land pastures within the Earl Martin Allotment useable and provide much needed water availability to the Earl Martin Allotment as a whole.

Environmental Consequences, No Action: The Earl Martin Allotment would only be marginally useable for livestock due to the lack of water and livestock management in the Big Hole Gulch Allotment would continue to be overly reliant on ponds in Big Hole Gulch.

Mitigative Measures: None

Name of specialist and date: Hunter Seim 7/1/08

REALTY AUTHORIZATIONS

Affected Environment: The proposed project area contains two existing realty authorizations: COC68054, Western Gas Resources compressor station and COC68055, Western Gas Resources pipeline. There are other buried pipelines within the proposed project area that were not granted as rights-of-way, but were authorized pursuant to oil and gas lease/unit operations or cross private surface. A north-south pipeline in Section 7, T10N, R93W is most likely coming from the Pilgrim Unit Federal 1-33-7 gas well in the NW¹/₄SE¹/₄ of Section 7 and connects to the Western Gas Resources pipeline right-of-way.

Environmental Consequences, Proposed Action: Existing pipelines could be accidentally damaged during project activities, unless avoided. Impacts would be temporary until any damage is repaired. The proponent would be required to use the "One Call" system to locate existing underground facilities prior to implementation.

Environmental Consequences, No Action: None

Mitigative Measures: None

Name of specialist and date: Mike Andrews 6/12/08

SOILS

Affected Environment: The primary soils within the proposed project area are the Maysprings coarse sandy loam, 3 to 12 percent slopes and the Maysprings-Gretdivid loamy coarse sands, 10 to 20 percent slopes. One of the tanks located in section 9 and some of the adjoining pipeline would be on the Berlake-Maysprings complex, 3 to 12 percent slopes, Berlake-Taffom-Gretdivid complex, 10 to 20 percent slopes and Weed sandy loam, 1 to 12 percent slopes. All of these soils exhibit moderate permeability and medium runoff rates. The erosion hazard after moderate disturbance is slight, increasing to moderate on the steeper soils.

Environmental Consequences, Proposed Action: The vibratory ripper would cause minor

and highly localized soil and vegetation disturbance that would quickly recover. The small 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 but 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 watering sites, but moderate permeability and medium runoff rates on the adjacent undisturbed soils would result in the absorption of the additional runoff within a short distance from each development. Minor soil erosion would occur for a very small area around each development.

Environmental Consequences, No Action: None

Mitigative Measures: None

Name of specialist and date: Ole Olsen 6/18/08

UPLAND VEGETATION

Affected Environment: The Proposed Action lies within a sagebrush-grass plant community. Dominant plants present include Wyoming big sagebrush (*Artemisia tridentata wyomingensis*), Hood's phlox (*Phlox hoodii*), needle-and-thread grass (*Stipa comata*), Indian ricegrass (*Oryzopsis hymenoides*), western wheatgrass (*Agropyron smithii*), squirreltail (*Sitanion hystrix*), and blue grama (*Bouteloua gracilis*). Vigor, abundance, and diversity are good throughout the plant community surrounding the Proposed Action.

Environmental Consequences, Proposed Action: Brush beating and ripping would cause direct mortality to Wyoming big sagebrush and other woody plants, but would be very limited in scope. Wyoming big sagebrush would be most impacted due to the brush beating. Minimal impacts would occur to graminoids and forbs from all activities. No follow-up seeding is recommended due to the limited amount of surface disturbance that is created by a vibratory ripper. Vibratory rippers create a narrow trench, only three to five inches wide that is able to fill back on its own. The narrowness of this disturbance leaves enough of the adjacent plant community intact to eliminate the need for seeding. Impacts to the plant community would also occur in areas adjacent to the water delivery sites. As livestock congregate around the water tanks, the surrounding vegetation is eaten and beat out by hooves. This is an expected impact common to any artificial water developments, but these impacts are highly localized and do not threaten the larger plant community.

The end result of the project would be increased distribution of livestock throughout the uplands of the Earl Martin and Big Hole Gulch Allotments. Grazing during the active growth period of April through June would be enhanced due to the enhanced ability of livestock to more evenly graze across the uplands because travels between water sources would be shortened. During summer dormancy, when livestock can unduly pressure the still-green riparian areas, additional water provided in the uplands can alleviate grazing pressure on riparian and floodplain areas. The Proposed Action would have an overall beneficial effect on the plant communities within both allotments due to increased livestock distribution and decreased livestock dependence on

developed water and green forage in Big Hole Gulch during summer dormancy.

Environmental Consequences, No Action: This alternative would result in continuation of higher utilization of forage plants to the west near Big Hole Gulch while areas to the east would continue to receive little or no livestock utilization. Uneven utilization can result in shifts in plant community composition and suppressed vigor in areas of higher use. This alternative would be detrimental to those areas near natural water and negatively impact the larger plant community if improved livestock distribution is not attained by other means.

Mitigative Measures: None

Name of specialist and date: Hunter Seim 6/30/08

WILDLIFE, AQUATIC

Affected Environment: There is no aquatic wildlife habitat present within or in the vicinity of the proposed project.

Environmental Consequences, all alternatives: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 6/24/08

WILDLIFE, TERRESTRIAL

Affected Environment: The proposed project area provides productive year round habitat for mule deer, pronghorn antelope and elk. The project area does not provide severe winter habitat for big game animals but is capable of supporting these animals during average winters. A variety of small mammals, reptiles and song birds may be found throughout the project area as well.

Environmental Consequences, Proposed Action: The Proposed Action would have no negative impacts to terrestrial wildlife species or their habitat. The proposed pipeline would distribute livestock more evenly throughout the Big Hole Gulch and Earl Martin Allotments, improving vegetative conditions in the uplands and in riparian areas along Big Hole Gulch. The watering system would also aid in the distribution of wildlife species, alleviating grazing and browsing pressures in concentration areas. Vegetation surrounding the proposed water tanks would likely be eaten and trampled by livestock, but this would not be an adverse impact within the larger landscape.

Environmental Consequences, No Action: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 6/24/08

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		JHS 7/7/08	
Forest Management	JHS 6/30/08		
Hydrology/Ground		MDW 7/1/08	
Hydrology/Surface		OO 6/18/08	
Paleontology		MDW 7/1/08	
Range Management			JHS 6/30/08
Realty Authorizations			MAA 6/12/08
Recreation/Travel Mgmt		RS 6/13/08	
Socio-Economics		MAA 6/12/08	
Solid Minerals		JHS 7/7/08	
Visual Resources		RS 6/13/08	
Wild Horse & Burro Mgmt	JHS 6/30/08		

CUMULATIVE IMPACTS SUMMARY: Human uses in the vicinity of the project area are livestock grazing, oil & gas exploration and production, and hunting. Impacts present from these uses include both maintained and unmaintained roads, livestock fencing, active and reclaimed gas well pads, and linear soil and vegetation impacts resulting from past seismic surveys. Approximately 5 miles to the west of the Proposed Action, two major natural gas transportation pipelines, both running adjacent and parallel with each other, are present. These pipelines include a large compressor station on private land approximately five miles northwesterly of the Proposed Action. Impacts from the Proposed Action would be in addition to past and currently impacting activities in the area, but would not present a significant addition to impacts already present in the area.

STANDARDS

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The Proposed Action would distribute grazing more evenly throughout both allotments. This would be beneficial to the plant communities, improving habitat for aquatic and terrestrial wildlife species. The Proposed Action would meet this standard. The area is currently meeting this standard. While the No Action Alternative would not improve livestock distribution, it would not preclude this standard from continuing to be met.

Name of specialist and date: Timothy Novotny 6/24/08

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal)

STANDARD: There are no threatened or endangered animal species or habitat for such present in the project area. The project area provides habitat for the greater sage-grouse, a BLM sensitive species. The Proposed Action would distribute grazing more evenly throughout both allotments. This would be beneficial to the plant communities, improving habitat for sage-grouse, especially brood rearing habitat in riparian areas. The Proposed Action would continue to meet this standard. The area is currently meeting this standard. While the No Action Alternative would not improve livestock distribution, it would not preclude this standard from continuing to be met.

Name of specialist and date: Timothy Novotny 6/24/08

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: The Proposed Action would have minimal direct impacts on the plant community. Plant disturbance from ripping, burying the distribution tank, brushbeating, and delivery tank installation would be localized and minimal in the larger plant community. The project would improve livestock distribution throughout the upland areas on the Big Hole Gulch and Earl Martin Allotments promoting even utilization of forage and alleviating pressure on riparian areas along Big Hole Gulch. The Proposed Action would meet this standard.

The No Action Alternative would also meet this standard because no surface disturbance would occur. The benefits of improved livestock distribution would not be realized, but this would not necessarily preclude this standard from being met.

Name of specialist and date: Hunter Seim 6/30/08

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant) STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the proposed project. This standard does not apply.

Name of specialist and date: Hunter Seim 6/5/08

RIPARIAN SYSTEMS STANDARD: The riparian standard for healthy rangelands would be met with implementation of the Proposed Action. Indirect beneficial impacts to wetlands in Big Hole Gulch would result from installing the water distribution system.

Selecting the No Action Alternative would not affect the wetlands in Bighole Gulch. This standard does not apply.

Name of specialist and date: Ole Olsen 6/13/08

WATER QUALITY STANDARD: The water quality standard for healthy rangelands would be met with implementation of either alternative. Runoff from snowmelt and summer storms drains from the Earl Martin and Big Hole Gulch Allotments into stream segments that are presently supporting classified uses. No stream segments are listed as impaired.

Name of specialist and date: Ole Olsen 6/13/08

UPLAND SOILS STANDARD: The upland soils present are capable of supporting the Proposed Action. The water distribution system would improve livestock management on these public lands and concentrated livestock use around the individual water tanks would be limited. The minimal and short term disturbance caused by the vibratory ripper burying the water line would quickly heal and would not affect upland soil health. The water distribution system would promote better grazing distribution in the Earl Martin and Big Hole Gulch Allotments and it would reduce the concentration of livestock near the existing water sources. The proposed action would meet the upland soils standard.

The No Action Alternative would preclude this standard from being met.

Name of specialist and date: Ole Olsen 6/13/08

PERSONS/AGENCIES CONSULTED: Colorado State Historic Preservation Office, John Raftopoulos.

ATTACHMENTS: Attachment 1, Project Map
Attachment 2, Cooperative Agreement for Range Improvements, Form 4120-8
Attachment 3, BLM Construction Standards

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: