

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:** DOI-BLM-CO-N010-2011-0034-EA

**CASEFILE/PROJECT NUMBER/LEASE NUMBER:** COC074752, COC074365

**PROJECT NAME:** Powder Wash High Pressure Natural Gas Pipelines

**LEGAL DESCRIPTION:** SENW, NWSW, Sec. 4; SESW, NESE, SWSE, SESE, Sec. 5;  
NENW, Sec. 8; T11N, R97W, 6<sup>th</sup> PM, Moffat County, Colorado

**APPLICANT:** QEP Field Services Company

**PLAN CONFORMANCE REVIEW:** The proposed action is subject to the following plan:

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

Date(s) Approved: April 26, 1989

Remarks: The proposed buried natural gas pipelines would be located within Management Unit 2 (Little Snake Resource Management Plan). The objectives of Management Unit 2 are to provide for the development of the oil and gas resource. Realty actions such as rights-of-way, leases, and permits, can occur, consistent with the management objectives for this unit.

Results: The proposed action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed action is in conformance with the objectives for this management unit.

### Other Documents

Applicable NEPA documents and other documents that cover the Proposed Action include the following:

- Rights-of-way are allowable on BLM-administered lands per Title V of the Federal Land Policy and Management Act of 1976 and the BLM regulations (43 CFR 2800), at the discretion of the Secretary of the Interior or his/her delegated officer.

- *Colorado Public Land Health Standards, Decision Record & Finding of No Significant Impact and Environmental Assessment.* March 1997.
- *DOI-BLM-CO-N010-2010-0011-EA, Powder Wash and Jacks Draw Unit Wells.*

**PURPOSE OF AND NEED FOR PROPOSED ACTION:** The purpose of the proposed action is to allow for transportation of gas resources from producing natural gas wells to an existing compressor site. The action is needed because no high pressure gas pipeline exists and the Federal Land Policy Management Act (FLPMA) allows for use of public land for rights-of-way for oil and gas infrastructure, with appropriate consideration of other public resources.

**PUBLIC SCOPING PROCESS:** The action in this EA is included in the NEPA log posted on the LSFO web site: [http://www.blm.gov/co/st/en/BLM\\_Information/nepa/lsfo.html](http://www.blm.gov/co/st/en/BLM_Information/nepa/lsfo.html).

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:** The proposed action is to issue two right-of-way (ROW) grants for two buried high pressure natural gas pipelines to QEP Field Services Company (QEP). QEP filed ROW applications in December 2010 for buried pipelines to transport gas from the Powder Wash Government #15, 16, 17 and Musser #34 & 42 Wells and Musser #35, 72, & 73 Wells to an existing compressor site in the Powder Wash O&G Field. Mitigation not incorporated by QEP in the ROW application plans of development would be attached by the BLM to the ROW as stipulations (see Exhibit A).

QEP plans to install two 4½ to 6-inch steel, Grade X-42/X-52 natural gas buried pipelines. ROW COC074752 would begin in the NENW Section 8 at the multi-well pad for the Powder Wash Government # 15, 16, & 17 and Musser #34 & 42 Wells, and then head in a northeasterly direction approximately 7,286 feet to a tie-in point with the nearest collector pipeline at the Musser Compressor site in the SWNW Section 4. ROW COC074365 would begin in the NESE Section at a multi-well pad for the Musser #35, 72, & 73 Wells, and then head in an easterly direction approximately 300 feet and tie into the proposed COC074752. The entire length of both pipelines would be installed on public land and rights-of-way are required.

The approximate date work would start is the spring of 2011 and the estimated duration of construction is one week. The construction work force is expected to number 20 at the peak of construction. Workers will commute daily to the project. Moffat County Roads #4 and #75 would be used to access the pipeline corridor.

A 50-foot wide corridor (8.71 acres) is requested for construction which would contract to a 30-foot corridor for operations and maintenance purposes (5.22 acres). The proposed route parallels an existing pipeline for about two-thirds of the length and then parallels an oil field road for the rest of the length. There would be no construction or routine maintenance activities during periods when soil is too wet to adequately support construction equipment.

A 30-foot wide corridor would be cleared of vegetation and obstacles. Topsoil would be separated by means of windrowing or side casting. The first 6-inches of topsoil would be saved along the edge of the bladed corridor. During rehabilitation, the topsoil would be evenly spread over the disturbed areas. The pipeline trench would be 24 inches wide and centered on the

flagged survey line. The trench soil would be kept separate from the topsoil. The pipeline would be buried with a minimum cover of 48 inches. All disturbed areas would be recontoured and seeded. All permanent above ground facilities, piping, and valving would be painted with a flat, shale green color harmonious with the surrounding landscape. QEP would be responsible for weed control on the disturbed areas and would obtain all necessary permits.

**NO ACTION ALTERNATIVE:** The No Action Alternative would be to deny the rights-of-way as proposed. With this alternative BLM would not approve the high pressure natural gas pipelines and the applicant would not be allowed to transport gas from the multi-well pads. BLM’s authority to implement the No Action Alternative may be limited because FLPMA allows for use of public land for rights-of-way for oil and gas infrastructure, with appropriate consideration of other public resources. BLM can deny a right-of-way if the proposal would violate applicable laws and/or regulations.

**AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES**

For the following resources and issues, those brought forward for analysis will be addressed below.

| <b>Resource/Issue</b>                   | <b>N/A or Not Present</b> | <b>Applicable or Present, No Impact</b> | <b>Applicable &amp; Present and Brought Forward for Analysis</b> |
|---|---------------------------|---|--|
| Air Quality                             |                           |   | ELS 05/5/11  |
| Areas of Critical Environmental Concern | KSD 05/9/11               |   |  |
| Environmental Justice/ Socio-Economics  |                           |   | BB 04/28/11  |
| Flood Plains                            | ELS 05/5/11               |   |  |
| Fluid Minerals                          |                           | EMO 05/03/11                            |  |
| Forest Management                       | BB 04/28/11               |   |  |
| Hydrology/Ground                        |                           | EMO 05/03/11                            |  |
| Hydrology/Surface                       |                           |   | See Soils / Surface Water Quality                                |
| Paleontology                            |                           |   | See Paleontology   |
| Prime and Unique Farmland               | ELS 05/5/11               |   |  |
| Range Management                        |                           |   | See Range Mgmt   |
| Realty Authorizations                   |                           |   | BB 04/28/11  |
| Recreation/Transportation               |                           | KSD 05/9/11                             |  |
| Soils                                   |                           |   | ELS 05/5/11  |
| Solid Minerals                          |                           | JAM 05/10/11                            |  |
| Upland Vegetation                       |                           |   | See Upland Vegetation  |

|                                  |              |              |                            |
|----------------------------------|--------------|--------------|----------------------------|
| Visual Resources                 |              | KSD 05/9/11  |                            |
| Water Quality - Ground           |              | EMO 05/03/11 |                            |
| Water Quality - Surface          |              |              | ELS 05/05/11               |
| Wetlands/Riparian Zones          | ELS 05/05/11 |              |                            |
| Wild and Scenic Rivers           | KSD 05/09/11 |              |                            |
| Wild Horse & Burro Mgmt          | BB 05/09/11  |              |                            |
| Wilderness Characteristics/WSA's | KSD 05/09/11 |              |                            |
| Wildlife - Aquatic               | DA 05/10/11  |              |                            |
| Wildlife - Terrestrial           |              |              | See Wildlife - Terrestrial |

## AIR QUALITY

**Affected Environment:** There are five Federal Class I areas within 100 kilometers or adjacent to the Little Snake Resource Management Area (LSRMA) boundary, all of which occur in Colorado. The Class I areas are Rocky Mountain National Park and the Mount Zirkel, Flat Tops, Rawah, and Eagles Nest Wilderness areas. There are no federal Class I areas in Utah or Wyoming within 100 km of the LSRMA boundary. There are no non-attainment areas nearby that would be affected by either alternative.

**Environmental Consequences:** Activities associated with the proposed project that may affect air quality, namely dust from excavation and exhaust emissions from heavy equipment, fall below regulated EPA emission standards for the six criteria pollutants of concern (sulfur dioxide, nitrogen oxide, ground-level ozone, carbon monoxide, particulate matter [both PM2.5 and PM10], and lead) and is not a significant source of these pollutant emissions that do occur in Moffat County. Impacts to air quality caused by the proposed action are considered minimal.

**Mitigative Measures:** None

Name of specialist and date: Emily Spencer 02/14/11

## 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:** The issuance of two right-of-way grants and the installation of a buried high pressure natural gas pipeline are considered an undertaking under Section 106 of the

National Historic Preservation Act. The proposed project, Powder Wash Govt. #15, 17, 17 Musser 34, 42 Pipeline, has undergone a Class III cultural resource survey:

Johnson, David

2011 *Class III Cultural Resource Inventory for the QEP Field Services Powder Wash Government #15, #16, #17 and Musser 34 and 42 Pipeline.* 10-WAS-460. OAHP # MF.LM.NR1132. BLM LSFO #12.19.2011. Western Archaeological Services. Rock Springs, Wyoming.

This study did not identify any archaeological or historical sites eligible for the National Register. The proposed project may proceed as described with the following mitigative measures in place.

**Mitigative Measures:**

1. Archaeological monitoring of the undertaking will be conducted as directed by the Powder Wash Memorandum of Agreement (2010) and a treatment plan developed by Western Archaeological Services (2009).
2. Any cultural and/or paleontological (fossil) resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and the authorized officer will make any decision as to proper mitigation measures after consulting with the holder.
3. 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. 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: Ethan Morton 05/04/11

## **ENVIRONMENTAL JUSTICE and SOCIOECONOMICS**

Affected Environment: Executive Order 12898 (20) requires federal agencies to assess projects to ensure there is no disproportionately high or adverse environmental, health, or safety effects on minority and low-income populations. Minorities comprise a small proportion of the population residing inside the boundaries of the Little Snake Field Office.

Environmental Consequences: No minority or low income populations would be directly affected in the vicinity of the proposed action. Indirect effects could include effects due to overall employment opportunities related to the oil and gas and service support industry in the region as well as the economic benefits to state and county governments related to royalty payments and severance taxes. Other effects could include a small increase in activity and noise disturbance in areas used for grazing or hunting. Public land users would not be affected since all proposed activity occurs on private surface.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 04/28/11

## **INVASIVE, NONNATIVE SPECIES**

Affected Environment: Invasive and noxious weeds are present in the area. Invasive annuals such as downy brome (cheatgrass), halogeton, blue mustard and yellow alyssum are common, occupying disturbed areas. Invasive annual weeds are typically established on disturbed and high traffic areas whereas biennial and perennial noxious weeds are less common in occurrence. Downy brome and halogeton are on the Colorado List C of noxious weeds and efforts to control halogeton are intensifying in this area. Colorado List B noxious weeds that are present within the surrounding areas include Russian knapweed, hoary cress (whiteweed), Canada thistle and 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. Additionally, the BLM, Moffat County, livestock operators, pipeline companies and oil and gas operators have formed the Northwest Colorado Weed Partnership to collaborate efforts on controlling weeds and finding the best integrated approaches to achieve results.

Environmental Consequences: The surface disturbing activities and associated traffic involved with construction of the pipeline and subsequent activities would create an environment and provide a mode of transport for invasive species and other noxious weeds to become established. Construction equipment and any other vehicles brought onto the site can introduce weed species. Wind, water, recreation vehicles, livestock and wildlife would also assist with the distribution of weed seed into the newly disturbed areas. The annual invasive weed species (downy brome, yellow alyssum, blue mustard and other annual weeds) occur on adjacent areas and would occupy the disturbed areas. The bare soils and the lack of competition from a perennial plant community would allow these weed species to grow unchecked and could affect the establishment of seeded plant species. Establishment of perennial grasses and other seeded plants is expected to provide the necessary control of invasive annual weeds within 2 or 3 years. Additional seeding treatments of the disturbed areas may be required in subsequent years if initial seeding efforts are not successful.

The perennial and biennial noxious weeds in the area are less frequently established on the uplands but some potential exists for their establishment in draws and swales or areas that would collect additional water. The largest concern in the project area would be for these species to become established and not be detected, providing seed which can be moved onto adjacent rangelands. The operator would be required to control any invasive and/or noxious weeds that become established within the disturbed areas involved with drilling and operating the well.

Mitigation attached as stipulations to minimize disturbance and obtain successful reclamation of the disturbed areas, as well as weed control utilizing integrated practices, including herbicide applications, would help to control the noxious weed species. All principles of Integrated Pest Management should be employed to control noxious and invasive weeds on public lands.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne 05/06/11

## **MIGRATORY BIRDS**

Affected Environment: BLM Instruction Memorandum No. 2008-050 provides guidance towards meeting BLM's responsibilities under the Migratory Bird Treaty Act (MBTA) and the Executive Order (EO) 13186. The guidance emphasizes management of habitat for species of conservation concern by avoiding or minimizing negative impacts and restoring and enhancing habitat quality. The LSFO provides both foraging and nesting habitat for a variety of migratory bird species. Several species on the USFWS's Birds of Conservation Concern (BCC) List occupy these habitats within the LSFO. The project is located in the Northern Rockies Bird Conservation Region.

Native plant communities in the Powderwash area are comprised primarily of sagebrush and saltbush with an understory of grasses and forbs. The pipeline will also cross a small stand of junipers. A variety of migratory birds may utilize these vegetation communities within the project area during the nesting period (May through July) or during spring and fall migrations. The project area contains potential nesting and/or foraging habitat for the following USFWS 2008 Birds of Conservation Concern: ferruginous hawk, Brewer's sparrow, sage sparrow, sage thrasher and loggerhead shrike.

Environmental Consequences: The Proposed Action would disturb a little over eight acres of migratory bird habitat. Although this disturbance would be minimal on a landscape level, it would decrease patch size and may degrade habitat on a small scale. Since the proposed route parallels existing disturbances and several roads and natural gas facilities already exist in the area, habitat quality for migratory birds is already marginal. If construction activities occur during the nesting season, there could be negative impacts to migratory bird species through nest destruction or increased stress leading to nest abandonment. Since habitat is marginal and only eight acres of habitat would be influenced, impacts to migratory bird and their habitat would be minor. Overall, the project is not expected to have a measurable influence on the abundance or distribution of migratory birds at a regional scale.

Mitigative Measures: None

Name of specialist and date: Desa Ausmus 05/05/11

## **NATIVE AMERICAN RELIGIOUS CONCERNS**

Letters were sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Utes Tribal Council, Shoshoni Tribal Historic Preservation Officer, and the Colorado Commission of Indian Affairs in the spring of 2010 discussing upcoming projects the BLM would be working on in FY10 and FY11. Letters were followed up with phone calls. No comments were received (Letters on file at the Little Snake Field Office, Craig, Colorado). If geocaching events and caches are later determined to impact Native American Religious sites then the cache locations will be relocated.

Name of specialist and date: Ethan Morton 05/04/11

## **PALEONTOLOGY**

Affected Environment: Two geologic formations exist at the surface of the proposed action. One is the Tertiary Age formation, Wasatch Formation, Cathedral Bluffs Tongue (Twc), a variegated claystone, mudstone and sandstone formation. This formation has been classified a Class II formation for the potential for occurrence of scientifically significant fossils. The second is the Tertiary Age formation, Wasatch Formation, Cathedral Bluffs Tongue (Twc), a variegated claystone, mudstone and sandstone formation. This formation has been classified a Class II formation for the potential for occurrence of scientifically significant fossils.

Environmental Consequences: Scientifically significant fossils are occasionally found within this formation (Armstrong & Wolney, 1989). The potential for discovery of significant fossils on this location is considered to be moderate. If any such fossils are located here, construction activities could damage the fossils and the information that could have been gained from them would be lost. The significance of this impact would depend upon the significance of the fossil. Ceasing operations and notifying the Field Office Manager immediately upon discovery of a fossil during construction activities can effectively mitigate this impact. An assessment of the significance is made and a plan to retrieve the fossil or the information from the fossil is developed.

The proposed action could also constitute a beneficial impact to paleontological resources by increasing the chances for discovery of scientifically significant fossils.

Mitigative Measures: "Standard Discovery Stip", i.e., "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 will be made within an agreed time frame. Operations will resume only upon written notification by the Authorized Officer."

References: Armstrong, Harley J. and Wolney, David G., 1989, Paleontological Resources of Northwest Colorado: A Regional Analysis, Museum of Western Colorado, Grand Junction, CO, prepared for Bur. Land Management, Vol. I of V.

Miller, A.E., 1977, Geology of Moffat County, Colorado, Colo. Geol. Surv. Map Series 3, 1:126,720.

Name of specialist and date: Marty O'Mara 05/03/11

## **RANGE MANAGEMENT**

Affected Environment: The proposed pipelines fall within the Nipple Rim Allotment which is permitted for sheep grazing March through May and October through February for a total of 1,989 AUMs.

Environmental Consequences: The proposed pipelines would remove approximately 8.70 acres of native vegetation. This loss of vegetation and associated disturbance from vehicle traffic, noise and human presence may cause livestock to alter their distribution pattern. This may result in over utilization of the vegetative resources in some areas of the allotments and under utilization in areas with the most noise and activity. Gates leading into the allotments could be left open by the drilling crew and other personnel, which could lead to possible livestock trespass situations. The presence of livestock may hinder reclamation efforts.

Mitigative Measures: Installation of cattleguards at gate locations would prevent livestock from leaving the allotments through an open gate. Fencing of the pipeline corridor during reclamation efforts may help the establishment of native vegetation.

Name of specialist and date: Kathy McKinstry 01/25/11

**REALTY AUTHORIZATIONS**

Affected Environment: The proposed project area is a developed oil and gas field and contains numerous buried pipeline rights-of-way and other realty authorizations.

Environmental Consequences: Existing buried pipelines or other facilities could be accidentally damaged during project activities. Impacts would be temporary until any damage is repaired.

Mitigative Measures: Potential damage to existing rights-of-way would be minimized by the following actions:

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

Name of specialist and date: Barb Blackstun 04/28/11

**SOILS**

Affected Environment: The proposed Powder Wash Government 15, 16, 17 & Musser 34 & 42 pipeline would be located within the Torriorthents and Tresano-Hiatha-Kandaly association soil mapping units. The proposed Musser 35, 72, & 73 pipeline would be located within the Tresano-Hiatha-Kandaly association soil mapping unit. The proposed project occurs on the following soil types:

**Table 1. Soil Summary for the Proposed Pipeline Right of Way**

| Soil Map Unit (MU) & Soil Name                | Map Unit Setting  | Description  |
|---|---|--|
| MU 195<br><br>Torriorthents, 12 to 25% slopes | <u>Elevation:</u> 6,000 – 7,000 feet<br><br><u>Mean annual precipitation:</u> 9-12”<br><br><u>Ecological Site:</u> none | These breaks soils are well drained with very slow to moderate permeability and medium potential for runoff. Available water capacity is very low and the typical profile is up to 12” deep of stony loam soils to weathered bedrock. These soils are limited mainly because they are shallow, stony, or droughty. |
| MU 201  | <u>Elevation:</u> 6,000 – 6,800 feet  | Soil characteristics vary widely. Soils are well to excessively drained with very slow to rapid  |

|   |   |   |
|---|---|---|
| Tresano-Hiatha-Kandaly association, 2 to 20% slopes | <u>Mean annual precipitation:</u> 9-11”<br><u>Ecological Site:</u> Clayey 9-11" P.Z./ Alkali Upland/Dry Sandy | permeability and very low to very high runoff potential. Available water capacity ranges from very low to very high & the soil profile is typically from 18 to 60 inches deep, composed of a variety of soils from loam, clay loam, silty clay, and loamy sand. |
|---|---|---|

Data taken from *Soil Survey of Moffat County Area, Colorado (2004)*.

Environmental Consequences: Vegetation and soil would initially be removed from approximately 8.7 acres of land between the two pipeline sites. Soil productivity would decline due to reduced soil microbial activity, impaired water infiltration, mixing of soil horizons, top soil loss, and introduction of weeds. Soil loss from construction would be greatest shortly after project start and would decrease in time as a result of the proposed stabilization through revegetation and reclamation of disturbed areas. Per applicant specifications, there would be no construction or routine maintenance activities during periods when soil is too wet to adequately support construction equipment, which would reduce soil compaction.

Mitigative Measures: None

Name of specialist and date: Emily Spencer 02/14/11

## T&E AND SENSITIVE ANIMALS

Affected Environment: There are no ESA listed or proposed species that inhabit or derive important benefit from the project area. Critical habitat for the razorback sucker, Colorado pikeminnow, bonytail chub and humpback chub is located downstream of the project area.

The general area provides habitat for greater sage-grouse, a BLM sensitive species and a candidate for ESA listing. A small section of the pipeline is within a 4 mile radius of a sage-grouse lek. Most of the vegetation in this area consists primarily of juniper woodlands with a very small sagebrush stand (less than 30 acres). Due to the lack of suitable nesting habitat, it is unlikely that sage-grouse utilize this area for nesting and any other use is likely incidental.

Habitat for one additional BLM sensitive species, the Brewer’s sparrow, occurs in the project area. Brewer’s sparrows are a summer resident in Colorado and nest in sagebrush stands. Nests are constructed in sagebrush and other shrubs in denser patches of shrubs. This species would likely be nesting in the project area from mid-May through mid-July.

Environmental Consequences: Colorado River Fish

In May 2008, BLM prepared a Programmatic Biological Assessment (PBA) that addresses water depleting activities associated with BLM’s fluid minerals program in the Colorado River Basin in Colorado. In response to BLM’s PBA, the FWS issued a Programmatic Biological Opinion (PBO) (ES/GJ-6-CO-08-F-0006) on December 19, 2008, which determined that BLM water depletions from the Colorado River Basin are not likely to

jeopardize the continued existence of the Colorado pike minnow, humpback chub, bonytail, or razorback sucker, and that BLM water depletions are not likely to destroy or adversely modify designated critical habitat.

A Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin was initiated in January 1988. The Recovery Program serves as the reasonable and prudent alternative to avoid jeopardy and provide recovery to the endangered fishes by depletions from the Colorado River Basin. The PBO addresses water depletions associated with fluid minerals development on BLM lands, including water used for well drilling, hydrostatic testing of pipelines, and dust abatement on roads. The PBO includes reasonable and prudent alternatives developed by the FWS which allow BLM to authorize oil and gas wells that result in water depletion while avoiding the likelihood of jeopardy to the endangered fishes and avoiding destruction or adverse modification of their critical habitat. As a reasonable and prudent alternative in the PBO, FWS authorized BLM to solicit a one-time contribution to the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (Recovery Program) in the amount equal to the average annual acre-feet depleted by fluid minerals activities on BLM lands.

This project has been entered into the Little Snake Field Office fluid minerals water depletion log which will be submitted to the Colorado State Office at the end of the Fiscal Year.

#### Greater Sage-grouse

The Proposed Action area provides limited habitat for grouse during non-critical times of the year or when moving to and from winter or nesting habitat. Impacts to grouse species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, direct loss of habitat, displacement due to disturbances, noise and an increase in human activity and habitat fragmentation. A little over eight acres of sage grouse habitat would be altered with the proposed action. Disturbing eight acres would have minimal impacts to sage grouse habitat on a landscape level, however, sustained development and the proliferation of roads, well pads, pipelines, compressor stations and other surface facilities will continue to reduce habitat patch size and affect both habitat quality and quantity. It is likely that sage grouse use of the area will decrease as disturbances and habitat fragmentation continue.

#### Brewer's Sparrow

Impacts to Brewer's sparrows are described in the Migratory Bird section of this EA.

Mitigative Measures: None

Name of specialist and date: Desa Ausmus 05/05/11

## **T&E AND SENSITIVE PLANTS**

Affected Environment: There are no federally listed threatened or endangered or BLM sensitive plant species present within the proposed rights-of-way.

Environmental Consequences, both alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 01/25/11

**UPLAND VEGETATION**

Affected Environment: The proposed pipelines would be located in three different range sites that occur in association with three soil mapping units as shown on the table below:

| <b>Soil Map Unit</b> | <b>Range Site</b> | <b>Potential Native Vegetation</b>   | <b>Actual Vegetation Present</b>   |
|----------------------|-------------------|--|--|
| 207                  | Loamy 7-10"       | Wyoming big sagebrush, streambank wheatgrass, streambank wheatgrass, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush, Nevada bluegrass, needleandthread, western wheatgrass | Western wheatgrass, Indian ricegrass, Gardner's saltbush, needleand thread, Wyoming big sagebrush, juniper streambank wheatgrass |
| 195                  | n/a               | Wyoming big sagebrush, Indian ricegrass, bottlebrush squirreltail, saltbush, needleandthread, shadscale, bud sagebrush, western wheatgrass   | Wyoming big sagebrush, bottlebrush squirreltail, saltbush, needleandthread, western wheatgrass                                   |
| 04                   | Rolling Loam      | western wheatgrass, Wyoming big sagebrush, prairie Junegrass, Indian ricegrass, bluebunch wheatgrass, needleandthread  | Western wheatgrass, Indian ricegrass, needleandthread  |

The pipelines would be running through range sites that were previously in good ecological condition with no signs of previous disturbance or over-utilization by livestock.

**Environmental Consequences:** The Proposed Action would completely remove approximately 8.70 acres of vegetation on Federal surface. This removal of vegetation would be relatively minor in the larger landscape, but becomes a larger action when considered in addition to numerous other plant community intrusions such as the dense road network, other wells, and the Powder Wash Camp. As evidenced by the high levels of halogeton and cheatgrass within the undisturbed plant community, any disturbance at these locations has the potential to greatly increase the presence of these non-native species if required weed management practices are not followed. As required, the pipelines would be reclaimed according to the COAs. Aridity, highly saline soils, and weed competition would result in very slow re-establishment of the native species that are reseeded. Careful adherence to required reclamation practices would be vital to ensuring that the direct impacts of the Proposed Action do not have long-term adverse impacts to the plant community.

**Mitigative Measures:** Adherence to COAs.

Name of specialist and date: Kathy McKinstry 01/25/11

## **WASTES, HAZARDOUS OR SOLID**

**Affected Environment:** The Resource Conservation and Recovery Act (RCRA) of 1976 established a comprehensive program for managing hazardous wastes from the time they are produced until their disposal. U.S. Environmental Protection Agency (EPA) regulations define solid wastes as any “discarded materials” subject to a number of exclusions. The Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980 regulates mitigation of the release of hazardous substances (spillage, leaking, dumping, accumulation, etc.) or threat of a release of hazardous substances into the environment. Civil and criminal penalties may be imposed if the hazardous waste is not managed in a safe manner and according to regulations. The Colorado Department of Public Health & Environment (CDPHE) administers hazardous waste regulations for oil and gas activities in Colorado.

**Environmental Consequences, Proposed Action:** The pipelines would fall under environmental regulations that impact disposal practices and impose responsibility and liability for protection of human health and the environment from harmful waste management practices or discharges. The direct impact would be if a solid waste or hazardous material is discarded and contaminates land surface either by solid, semi-solid, liquid, or contained gaseous material. Hazardous, civil, and criminal penalties may be imposed if the waste is not managed in a safe manner, and according to EPA regulations.

**Mitigative Measures:** The pipelines would be regulated under the Resource Conservation and Recovery Act (RCRA) Subtitle C regulations, which are extremely stringent, as well as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

that provides for the definition of hazardous substance, pollutant, and contaminant. The mitigation would include the stringent regulation of waste containment within the project area.

Name of specialist and date: Barb Blackstun 04/28/11

## **WATER QUALITY - SURFACE**

**Affected Environment:** There are no perennial surface waters in or near the proposed project area. Any surface runoff from the proposed project area would drain into Ace in the Hole Draw, an ephemeral tributary to Powder Wash, which is an ephemeral tributary to the Little Snake River. Water quality for all Powder Wash (and all tributaries of the Little Snake River from a point immediately below the confluence with Fourmile Creek to the confluence with the Yampa River) are use protected and must support Aquatic Life Warm 2, Recreation N, and Agricultural uses. There are no water quality impairments or suspected water quality issues for waters influenced by the project area considered in the proposed action.

**Environmental Consequences:** Increased sedimentation from disturbed soils along the pipeline corridor towards Ace in the Hole Draw during spring runoff or from high intensity rainstorms is the most likely environmental consequence from the proposed action. However, it is unlikely that large quantities of sediment would be transported off site and eventually reach perennial waters. According to the ROW application, all disturbed areas would be recontoured and seeded, which would reduce the potential impacts caused by surface runoff.

**Mitigative Measures:** None

Name of specialist and date: Emily Spencer 02/14/11

Reference: Colorado Department of Public Health and Environment Water Quality Control Commission. 2010. Regulations #33, 37, and 93. <http://www.cdphe.state.co.us/regulations/wqcregs/index.html>

## **WILDLIFE, TERRESTRIAL**

The Powder Wash Area provides marginal habitat for mule deer and pronghorn antelope. Occasionally, elk will utilize the area although this is primarily for migration purposes. This area does not provide critical winter habitat for any of these species. Much of the project area has been impacted by previous oil and gas development. Most big game animals avoid the project area due to heavy human activity associated with the active gas field. Although there are no known raptor nests within a half mile of the proposed pipeline, Powder Wash provides hunting opportunities for golden eagles, red-tailed hawks and ferruginous hawks.

**Environmental Consequences:** A little over eight acres of wildlife habitat would be altered from construction of the pipeline. Impacts to wildlife species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat, increased stress and loss of habitat. These impacts are more significant during critical seasons, such as winter or reproduction. Although the

project area does not provide critical habitat for wildlife species, some impacts to wildlife would still be expected from this project. Impacts would mostly occur from habitat modification or displacement during construction activities.

Mitigative Measures: None

Name of specialist and date: Desa Ausmus 05/05/11

**CUMULATIVE IMPACTS SUMMARY:** Cumulative impacts may result from the development of the Powder Wash high pressure natural gas pipelines when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. The potential exists for future oil and gas development throughout the Powder Wash O&G Field. Currently numerous producing wells exist within a one-mile radius of the proposed wells. Other past or existing actions near the project area that have influence on the landscape are wildfire, recreation, hunting, grazing, and ranching activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Displacement of hunters and recreationists during the short-term construction and drilling periods would occur. Contrasts in line, form, color, and texture from development would impact the visual qualities on the landscape.

Cumulative impacts to the plant communities within the gas lease and adjacent areas include an incremental reduction of continuity in the plant communities in terms of acreages that remain undisturbed. Loss of continuity results in smaller and smaller areas of undisturbed native vegetation and the potential for loss of integrity within the larger plant community. Fragmented plant communities can lose resilience to natural and man-made disturbance due to isolation of areas from seed sources necessary for proper age class distribution of plants, and subsequently, a greater opportunity for stressors such as drought to have a more severe impact on the plant community as a whole. The increased disturbance also makes native plant communities more susceptible to invasion by annual weeds as vectors for increasing weeds. Even with weed control measures applied, the potential for weeds to move further into undisturbed remnant areas increases as these remnants become smaller and more isolated from larger undisturbed areas.

Cumulative impacts to the livestock grazing operations in the area are also increased through the proposed action. The grazing allotment in which these wells are proposed is primarily a winter sheep allotment. The growth in wells, roads, and human activity has reduced the availability of forage in this area far beyond direct impacts caused by construction. Halogeton which has increased among the new roads and well pads is toxic to sheep. The resulting impact to grazing activities permitted in the area is a loss of available Animal Unit Months (AUMs), i.e. a loss of the amount of livestock that the allotment can reasonably carry. Due to recent years of drought, the livestock operators have only lightly used these allotments, so direct impacts to grazing activities have not been fully felt.

Habitat fragmentation from well pad construction and the associated roads have likely decreased the nesting suitability for migratory birds in Powder Wash. Ingelfinger (2001) found that roads

associated with oil and gas development have a negative impact on passerines bird species. Bird densities were reduced within 100m of each road. Due to the amount of new road construction and an increase in traffic on these roads, passerine populations in the area are likely decreasing.

The cumulative impacts of additional wells, pipelines, and roads in the Powder Wash O&G field will continue to degrade habitat for the greater sage grouse. Fragmentation, mostly due to road construction, is an important factor contributing to a decrease in habitat quality. Disturbances such as higher traffic volume and other human activities also contribute to degradation of habitat quality. However, as the area is not used for nesting, brood rearing, or wintering, these impacts would be less severe. Continued oil and gas development would lead to decreased sage grouse use of the habitat.

Although big game species are able to adapt to disturbances better than other wildlife, increased development would still have impacts to mule deer and antelope. Timing stipulations adequately protect big game species during critical times of the year; however, continued oil and gas development would lead to decreased use of the habitat due to increased human activity. A significant amount of vehicle traffic occurs with oil and gas development. Impacts to big game may be vehicle-animal collisions, as these are a major cause of mortality for big game species.

*References:*

Ingelfinger, F. 2001. *The Effects of Natural Gas Development on Sagebrush Steppe Passerines in Sublette County, Wyoming*. University of Wyoming, Laramie, WY

**STANDARDS:**

**PLANT AND ANIMAL COMMUNITY (animal) STANDARD:** The project area provides habitat for a variety of wildlife species. The proposed action would disturb nine acres of terrestrial wildlife habitat and would have minimal impacts to terrestrial wildlife. Although the contribution of the proposed action is small, continued development in the Powderwash area would further trend the area away from meeting this standard.

Name of specialist and date: Desa Ausmus 05/05/11

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD:** The project area provides marginal habitat for greater sage grouse. Large portions of the Powderwash landscape are being fragmented due to extensive natural gas development. Sustained development and the proliferation of roads, well pads, pipelines, compressor stations and other surface facilities will continue to reduce habitat patch size and affect both habitat quality and quantity. Although the contribution of the proposed action is in itself small, it may further trend the area away from meeting Standard 4 for greater sage-grouse.

Name of specialist and date: Desa Ausmus 05/05/11

**PLANT AND ANIMAL COMMUNITY (plant) STANDARD:** The Proposed Action would completely remove approximately 8.70 acres of native vegetation. As long as required weed control and reclamation practices are followed, the Proposed Action would meet this standard as negative impacts to the larger plant community would be minimized and the disturbance would be essentially temporary.

Name of specialist and date: Kathy McKinstry 01/25/11

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

Name of specialist and date: Hunter Seim 01/25/11

**RIPARIAN SYSTEMS STANDARD:** There are no riparian or wetland resources identified on federal lands within the proposed project area. This standard does not apply.

Name of specialist and date: Emily Spencer 02/08/11

**WATER QUALITY STANDARD:** The proposed action would meet the public land health standard for water quality. When the pipeline is installed the disturbed corridor would be reclaimed to approximate original contours, topsoil would be redistributed, and adapted plant species would be reseeded. These Best Management Practices would help to reduce accelerated erosion of the sites. There are no water quality impairments or suspected water quality issues for waters influenced by the project area.

Name of specialist and date: Emily Spencer 02/14/11

**UPLAND SOILS STANDARD:** The proposed action would not meet the upland soil standard for land health during and/or in the short term after pipeline construction. Upland soil health is expected to improve after reclamation practices have been successfully achieved.

Name of specialist and date: Emily Spencer 02/14/11

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

**SIGNATURE OF PREPARER: /s/ Barbara S. Blackstun**

**DATE SIGNED: 05/10/11**

**SIGNATURE OF ENVIRONMENTAL REVIEWER: /s/ Shawn Wiser**

**DATE SIGNED: 05/10/11**

**Attachments: Exhibit A, Stipulations; Exhibit B-1 & B-2, Maps**

Exhibit A  
Stipulations  
COC074752 & COC074365 - Powder Wash High Pressure Pipelines

1. The holder shall construct, operate, and maintain the facilities, improvements, and structures within the permit in strict conformity with the plan(s) of development identified with the application. Any relocation, additional construction, or use that is not in accord with the approved plan(s) of development, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete permit, including all stipulations and approved plan(s) of development, shall be made available on the permit area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.
2. This right-of-way shall terminate without further action or notice on the part of this Bureau if at any time subsequent to its effective date, the pipeline facilities authorized are no longer necessary for the holder to service an active oil and gas well.
3. The Little Snake Field Office will be given 48-hour notification prior to commencing construction and/or reclamation work. Contact the Little Snake Field Office (970) 826-5000 to report when work will commence.
4. Archaeological monitoring will be completed after excavation of the pipeline trench as directed in a Memorandum of Agreement (2010) and a treatment plan developed by Western Archaeological Services (2009).
5. Any cultural and/or paleontological (fossil) resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and the authorized officer will make any decision as to proper mitigation measures after consulting with the holder.
6. 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) (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;
  - 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.
7. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the authorized officer, by telephone, 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.
8. The grant does not relieve you of your responsibility to obtain other required federal, state, or local permits.

9. The holder(s) shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

10. The holder of Right-of-Way No. COC074752 & COC074635 agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C 9601, et.seq. or the Resource Conservation and Recovery Act of 1976, 42 U.S.C. 6901, et. seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

11. If during any phase of the construction, operation, or termination of the pipeline or related facilities any oil or other pollutant should be discharged from the pipeline system, or from containers or vehicles impacting Federal lands, the control and total removal, disposal, and cleanup of such oil or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of holder to control, cleanup, or dispose of such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the authorized officer may take such measures as he deems necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the authorized officer shall not relieve the holder of any liability or responsibility.

12. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. 'Waste' means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment. No hazardous materials/waste or trash shall be disposed of on the public lands. If a release does occur, it shall be reported to the Little Snake Field Office immediately (970) 826-5000.

13. Utilize the "One Call" system to locate and stake the centerline and limits of all underground facilities in the area of proposed excavations.

14. Provide 48 hour notification to the owner/operator of facilities prior to performing any work within 10 feet of buried or above ground pipelines.

14. Construction or other surface-disturbing activities will not be allowed when the soils are saturated to a depth of more than 3 inches. Construction activities will not be allowed to commence if the topsoil cannot be separated from the subsoil during adverse environmental conditions (i.e. when soils are frozen or muddy). During periods of adverse conditions such as thawing, heavy rains, snow, or flooding, all construction activities off existing maintained roads that create excessive surface rutting will be suspended.

15. Pipeline route will be brush beat prior to stripping of topsoil.

15. All pipelines shall be buried and trenches shall be compacted during back-filling. Compact backfilled soil material in the first few feet above the pipeline sufficiently to prevent excessive settling of soil and channelization of surface water, but not to the extent to significantly inhibit percolation of water. The backfilled surface soil should be firm and allow good infiltration of water. Pipeline trenches will be maintained in order to correct settlement and prevent erosion.

16. Surface soil material will be stockpiled to the side of the pipeline routes during pipeline construction.

Surface soil material will be segregated and will not be mixed or covered with subsurface material. Surface disturbance will be minimized to the maximum extent possible.

17. Pipeline routes will be graded to conform to the adjacent terrain, waterbarred, and seeded.

18. In the event that topsoil cannot be properly distributed during reclamation, additional precautions will be taken to minimize erosion of subsoil. Periodic monitoring to assess site specific environmental conditions, timing of operations and use of mulches and/or barriers may be required to ensure that erosion is not significant within the pipeline easement.

19. After pipeline construction is completed, pipeline markers will be installed for identifying the pipe's location. Install pipeline warning signs indicating location of buried pipeline, company name, and telephone number.

20. All permanent (on-site for six months or longer), above-ground structures constructed or installed within the pipeline corridor will be painted shale green. All structures will be painted within six months of installation. Structures required to comply with OSHA (Occupational Safety and Health Act) will be excluded.

21. Additional mitigative measures will be employed to prevent or reduce accelerated erosion if it begins to occur within or on constructed drainage and diversion ditches or surface drainages affected by the pipeline corridor.

22. All construction and maintenance activities will be contained within the 30-foot easement, vehicular access for reclamation, maintenance and emergencies is authorized, but the easement will not be used as a road after construction is completed.

23. Control of noxious weeds will be required through successful vegetation establishment and/or herbicide application. It is the responsibility of the lease operator to insure compliance with all local, state, and federal laws and regulations, as well as labeling directions specific to the use of any given herbicide.

24. A Pesticide Use Proposal (PUP) will be approved prior to application of herbicides and/or other pesticides on Federal surface; contact the Little Snake Field Office to obtain a PUP form to request this authorization. Submit the PUP two (2) months in advance of planned application. In the event you elect to apply herbicide or other pesticide as described and authorized on the approved PUP, you must report this use within 24 hours on Bureau of Land Management form titled Pesticide Application Record.

25. The holder shall seed all disturbed areas, using an agreed upon method suitable for the location. Seeding shall be repeated if a satisfactory stand is not obtained after the second growing season.

26. RECLAMATION:

The holder is required to use the reclamation practices necessary to reclaim all disturbed areas. Reclamation will ensure surface and subsurface stability, growth of self-generating, permanent, vegetative cover and compatibility with post land use. The vegetation will be diverse and of the same seasonal growth as adjoining vegetation. Post land use will be determined by the authorized officer but normally will be the same as adjoining uses.

The holder is required to use the reclamation practices necessary to reclaim all disturbed areas. Reclamation will ensure surface and subsurface stability, growth of a self-regenerating permanent vegetative cover and compatibility with post land use. The vegetation will be diverse and of the same seasonal growth as adjoining vegetation. Post land use will be determined by the Authorized Officer but normally will be the same as adjoining uses.

Reclamation practices which must be applied or accomplished are: re-grading to the approximate original contour, effectively controlling noxious weeds, separating, storing and protecting topsoil for redistribution during final abandonment, seeding and controlling erosion. If topsoil is not present, or quantities are insufficient to achieve

reclamation goals, a suitable plant growth media will be separated, stored and protected for later use. Reclamation will begin with the salvaging of topsoil and continue until the required standards are met. If use of the disturbed area is for a short time (less than one year), practices, which ensure stability, will be used as necessary during the project, and practices needed to achieve final abandonment will commence immediately upon completion of the approved activity use and be completed, with the exception of vegetative establishment, within one year.

If use of the area is for longer periods of time (greater than one year), interim reclamation is required on the unused areas. Interim reclamation of the unused areas will begin immediately upon completion of the permanent facility(s) and be completed, with exception of vegetative establishment, within one year. For both short and long term projects vegetative establishment will be monitored annually. If the desired vegetation is not established by the end of the second growing season, cultural practices necessary for establishment will be implemented prior to the beginning of the next growing season. Interim reclamation, unless otherwise approved, will require meeting the same standards as final abandonment with the exception of original contour, which may be only partially achievable.

Annual reports consisting of reclamation practices completed and the effectiveness of the reclamation will be provided to the Little Snake Field Office. The first report will be due in January following initiation of reclamation practices and annually thereafter until final abandonment is approved.

There are numerous reclamation practices and techniques that increase the success rate of reclamation and stabilization. With the exception of those stated above, it is the lessee's prerogative to use those (s)he chooses to accomplish the objective. However, it is recommended that state-of-the-art reclamation, stabilization, and management practices be used to achieve the desired objective in a timely and cost-effective manner.

The following definitions and measurements will be used to accomplish and determine if reclamation has been achieved:

Permanent vegetative cover will be accomplished if the basal cover of perennial species, adapted to the area, is at least ninety (90) percent of the basal cover of the undisturbed vegetation of adjoining land or the potential basal cover as defined in the Soil Conservation Service Range Site(s) for the area.

Diverse will be accomplished if at least two (2) perennial genera and three (3) perennial species, adapted to the area, make up the basal cover of the reclaimed area in precipitation zones thirteen (13) inches or less and three (3) perennial genera and four (4) perennial species in precipitation zones greater than thirteen (13) inches. One species will not make up more than fifty (50) percent of the perennial vegetation by basal cover.

Self-regenerating and adapted to the area will be evident if the plant community is in good vigor, there is evidence of successful reproduction, and the species are those commonly used and accepted in the area.

Surface stability will be accomplished if soil movement, as measured by deposits around obstacles, depths of truncated areas, and height of pedestalling, is not greater than three tenths (0.3) of an inch and if erosion channels (rills, gullies, etc.) are less than one (1) inch in depth and at intervals greater than ten (10) feet.

If this standard is not met by the end of the second growing season, two alternatives exist depending on the severity of the erosion:

If erosion were greater than two (2) times the allowable amount, corrective action would have to be taken by the responsible company at that time.

If erosion is less than or equal to two (2) times the allowable amount, and it is determined the erosion occurred during vegetative establishment and the site may become stable, no corrective action would be required at that time. Another check (and measurement) would be performed a year later to determine if stability standards had been met. If the original measurements have not increased by more than the allowed standard, the standard would be considered met. However, if the increase were greater than the allowed standard, corrective action would be required.

Subsurface stability (mass wasting event) is of concern if disturbance has included excavation over four (4) feet in depth and greater than 10,000 square feet in area on slopes thirty five (35) percent and greater, or on any erosion-prone slope (Danforth Hills, Vermillion Bluffs, and badland areas). When these conditions occur, length of liability for reclamation and final abandonment will continue for ten (10) years following re-contouring to original contour or for such time that climatic patterns provide two (2) consecutive years in which measurable precipitation totals at least 120 percent of average from October 1 through September 30, as measured by data averaged from nearby regional weather stations.

The Authorized Officer may waive this stipulation, or portions of it. Such waiver will be documented and justified when not applicable, or when objectives are accomplished through another method.

27. Prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a pretermination conference. This conference will be held to review the termination provisions of the permit.

Exhibit B-1: DOI-BLM-CO-N010- 2011-0034-EA

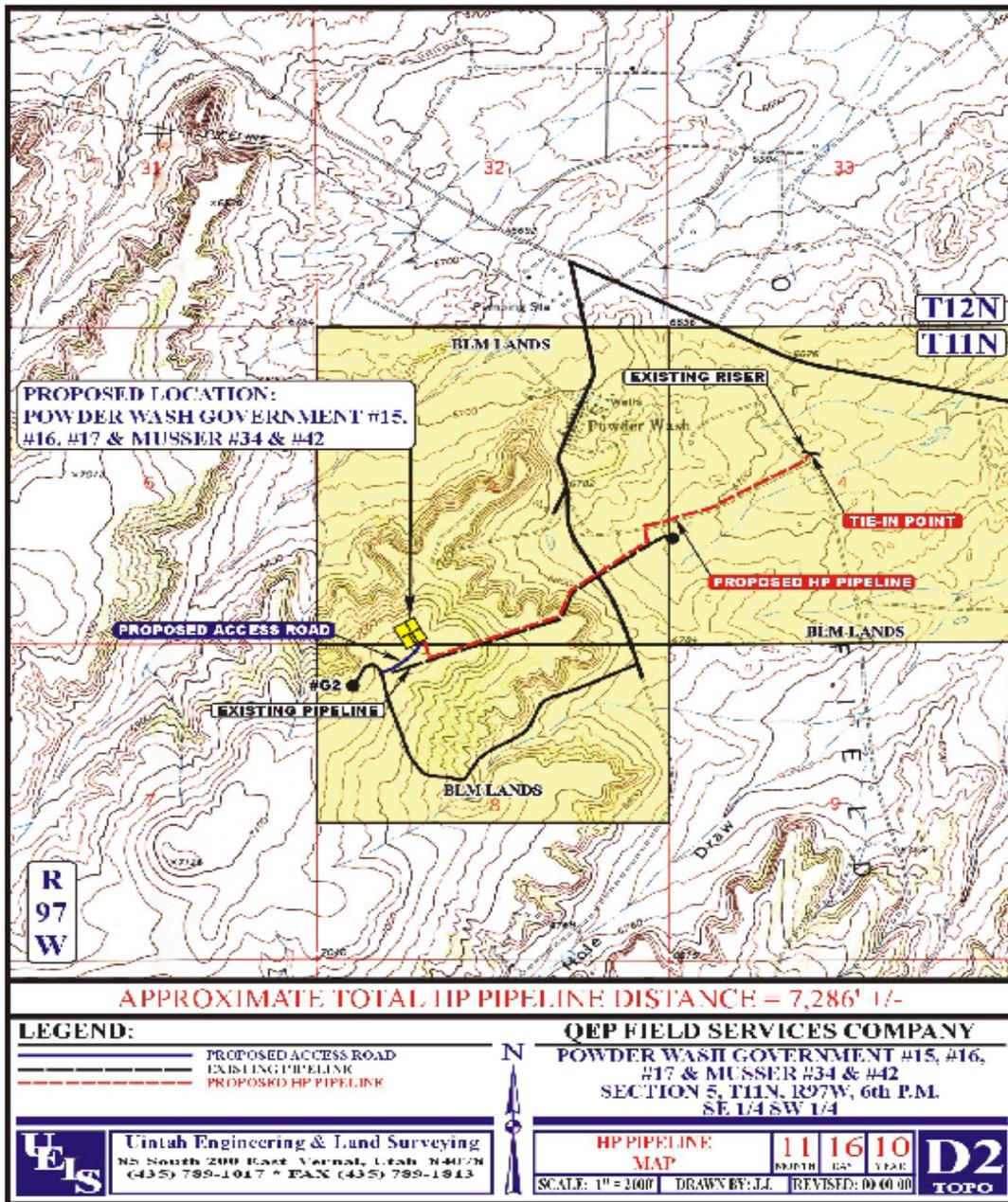
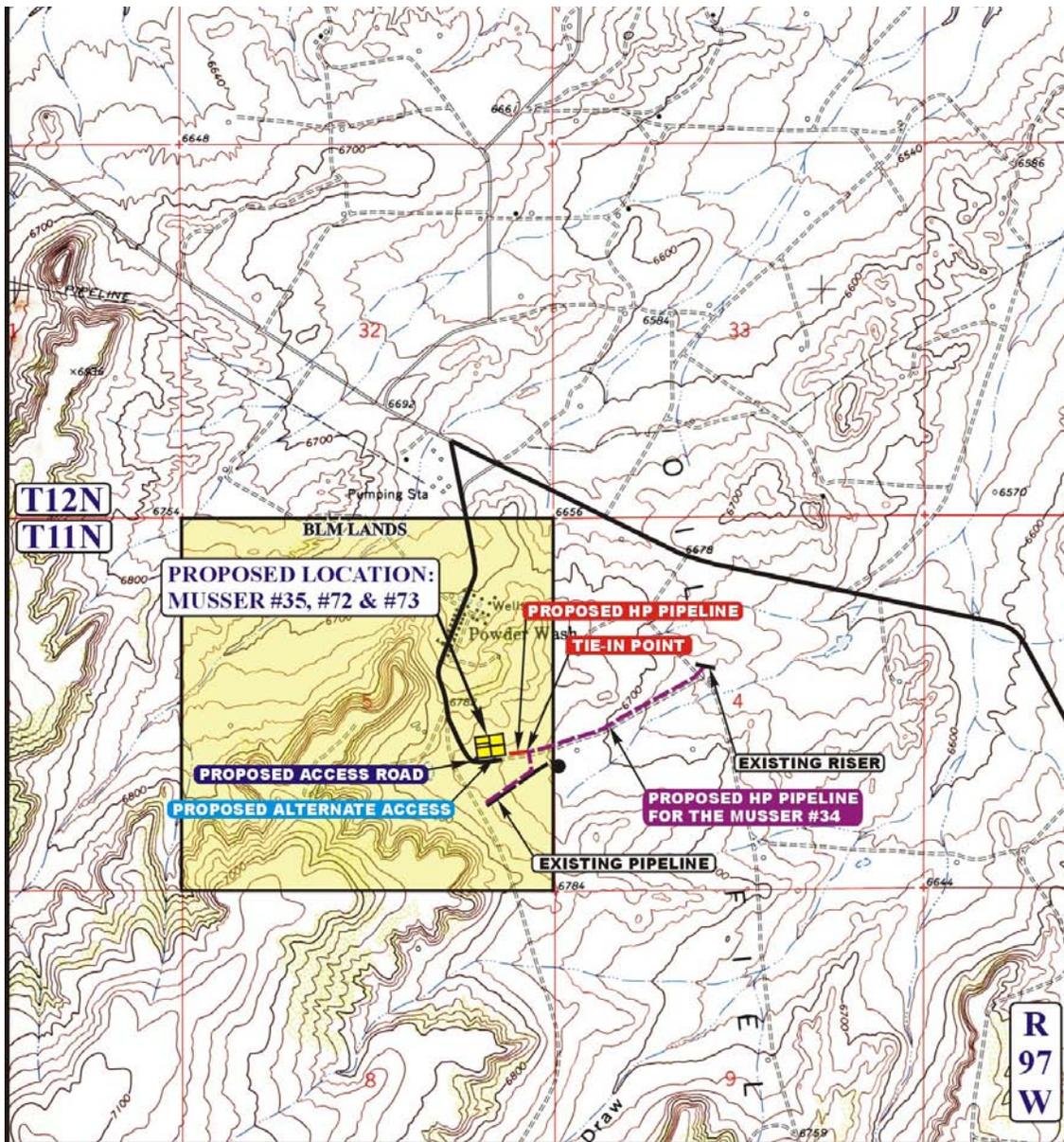


Exhibit B-2: DOI-BLM-CO-N010- 2011-0034-EA



APPROXIMATE TOTAL HP PIPELINE DISTANCE = 300' +/-

**LEGEND:**

- PROPOSED ACCESS ROAD
- PROPOSED ALTERNATE ACCESS
- EXISTING PIPELINE
- - - - - PROPOSED HP PIPELINE



**QEP FIELD SERVICES COMPANY**

MUSSER #35, #72 & #73  
 SECTION 5, T11N, R97W, 6th P.M.  
 NE 1/4 SE 1/4  
 MOFFAT COUNTY, COLORADO



Utah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**HP PIPELINE MAP**  
 SCALE: 1" = 2000' DRAWN BY: J.J. REVISED: 00-00-00

11 16 10  
 MONTH DAY YEAR



**FINDING OF NO SIGNIFICANT IMPACT (FONSI)**  
 DOI-BLM-CO-N010-2011-0034-EA

Based on the analysis of potential environmental impacts contained in the EA and all other available information, I have determined that the proposal and the alternatives analyzed do not constitute a major Federal action that would adversely impact the quality of the human environment. Therefore, an EIS is unnecessary and will not be prepared. This determination is based on the following factors:

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.

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)**  
DOI-BLM-CO-N010- 2011-0034-EA

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

I have reviewed the direct, indirect and cumulative effects of the proposed activities documented in the Powder Wash High Pressure Natural Gas Pipelines EA, No. DOI-BLM-CO-N010-2011-0034-EA. I have also reviewed the project record for this analysis and the impacts of the proposed action and alternatives as disclosed in the Alternatives and Environmental Impacts sections of the EA. Based upon a review of the EA and the supporting documents, I have determined that the project is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. Because there would not be any significant impact, an environmental impact statement is not required.

**SIGNATURE OF AUTHORIZED OFFICIAL: /s/ Jennifer Maiolo**

**DATE SIGNED: 05/19/11**

**Decision Record**  
DOI-BLM-CO-N010- 2011-0034-EA

**DECISION AND RATIONALE:** I have determined that construction of the Powder Wash High Pressure Pipelines is in conformance with the approved land use plan. It is my decision to issue the right-of-way (ROW) grants with the mitigation measures to QEP Field Services Company. The grants are for construction, operation, maintenance, and termination of buried natural gas pipelines located on public land in SENW, NWSW, Sec. 4; SESW, NESE, SWSE, SESE, Sec. 5; NENW, Sec. 8; T11N, R97W, 6<sup>th</sup> P.M., Moffat County, Colorado. ROW grant COC074752 is 7,286 feet long and 30 feet wide. ROW grant COC074365 is 300 feet long and 30 feet wide. The ROW grants are issued for 30 years with the right of renewal. The ROW grants are subject to rental pursuant to 43 CFR 2803.1-2. The project will be monitored as stated in the Compliance Plan outlined below.

It is the policy of the Bureau of Land Management to grant ROWs to occupy and use public land where such is consistent with resource values; the Bureau's planning system, and local government concerns. To this effect, no conflicts were found; the action does not result in any undue or unnecessary environmental degradation. The action is consistent with the Little Snake Resource Management Plan. The proposed use, as planned and mitigated, is a suitable use of the land, which will not conflict with the present or known future use of the area. The action is consistent with Section 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 185) or Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761) and the regulations authorizing use of federal land under 43 CFR 2800.

**MITIGATION MEASURES:** See Exhibit A, Stipulations

**COMPLIANCE PLAN(S):**

**Compliance Schedule:** Compliance will be conducted during the construction phase and reclamation phase to insure that all terms and conditions specified in the right-of-way grants and stipulations are followed. The Powder Wash High Pressure Pipeline will be on a five-year compliance schedule after completion of the project.

**Monitoring Plan:** The Powder Wash High Pressure Pipeline location will be monitored during the term of the right-of-way for compliance with the grant, stipulations, plan of development, and pertinent regulations; monitoring will help determine the effectiveness of mitigation and document the need for additional mitigative measures.

**Assignment of Responsibility:** Responsibility for implementation of the compliance schedule and monitoring plan will be assigned to the Realty staff in the Little Snake Field Office. The primary inspector will be the Realty Specialist.

**Protest/Appeal Language:** This decision shall take effect immediately upon issuance of a Grant Issued decision signed by the Authorized Officer and shall remain in effect while any appeal is pending unless the Interior Board of Land Appeals issues a stay. (43 CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10) Any appeal of this decision must follow the procedures set forth in 43 CFR Part 4. Within 30 days of the decision, a notice of appeal must be filed in the office of the Authorized Officer at 455 Emerson Street, Craig, Colorado 81625. If a statement of reasons

for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the Authorized Officer.

If you wish to file a petition for stay pursuant to 43 CFR Part 4.21(b), the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards:

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

If a petition for stay is submitted with the notice of appeal, a copy of the notice of appeal and petition for stay must be served on each party named in the decision from which the appeal is taken, and with the IBLA at the same time it is filed with the Authorized Officer.

A copy of the notice of appeal, any statement of reasons and all pertinent documents must be served on each adverse party named in the decision from which the appeal is taken and on the Rocky Mountain Regional Solicitor, U.S. Department of the Interior, 755 Parfet Street, Suite 151, Lakewood, Colorado 80215, not later than 15 days after filing the document with the authorized officer and/or IBLA.

/s/ Jennifer Maiolo for

05/19/11

---

Field Manager  
Little Snake Field Office

---

Date

**Attachments: Exhibit A, Stipulations**