

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

ENVIRONMENTAL ASSESSMENT

EA-NUMBER: CO-100-2007-076 EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER: COC71207

PROJECT NAME: Pioneer Gas Pipeline and Produced Water Pipeline ROW for Alpha State 1-16 Well

LEGAL DESCRIPTION: T7N, R93W, Sec. 14, S½NE¼, Sec. 15, Lot 4, sec. 16, Lot 4, sec. 21, Lot 1, 6th PM, Moffat County, CO

APPLICANT: Pioneer Natural Resources USA, Inc. (Pioneer)

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 natural gas transportation pipeline and produced water pipeline right-of-way would be located within Management Unit 1, Eastern Yampa River (Little Snake Resource Management Plan). The objectives of Management Unit 1 are to realize the potential for development of coal, oil and gas resources. Realty actions such as rights-of-way, leases and permits can be allowed on public land 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.

NEED FOR PROPOSED ACTION: The purpose of the proposed action is to allow Pioneer to construct, operate and maintain 6,328 linear feet of natural gas transportation pipeline and produced water pipeline from a state well.

PUBLIC SCOPING PROCESS: The NEPA log is posted on the Little Snake Field Office web site and published in the Craig Daily Press before the grant is issued to the applicant.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES: The proposed action is to issue a right-of-way grant, pursuant to the Mineral Leasing Act of 1920 and regulations found at 43 CFR 2880, to Pioneer for two segments of buried 4-inch natural gas transportation pipeline and 6-inch produced water pipeline across Federal land. The remainder of the pipelines would be constructed across private lands owned by Rio Ro Mo Land Company and 7-11 Ranch, Inc. The proposed action would parallel an existing natural gas pipeline, COC11970.

Overall length of the pipelines is 20,990 linear feet. The proposed right-of-way on Federal surface would be a total of 6,328 feet in length and 30 feet wide. A temporary construction width of 40 feet is requested, which would result in total surface disturbance of 5.81 acres on Federal surface. After three years, the permanent width of the ROW would be 30 feet.

All construction materials would be hauled to the job site by truck on existing roads. A trench 5 feet in depth would be dug for the pipelines. Topsoil would be conserved for reclamation purposes where possible. A pig launcher/receiver would be constructed within the right-of-way near the Apha State 1-16 Well. Construction time is estimated to be two weeks.

No wetlands would be crossed during construction. Any drainage crossings would be addressed under the provisions of US Army Corps of Engineers Nationwide Permit 12.

A Plan of Development (POD) was submitted with the application. The POD addresses construction methods. Pioneer states that no hazardous materials would be used, produced, transported or stored within the proposed right-of-way. Mitigation not included in the POD would be addressed by BLM as stipulations.

NO ACTION ALTERNATIVE: The “no action” alternative is that the right-of-way application would be denied. However, since the proposed action is consistent with the Little Snake Resource Management Plan and ROD, rejection of the ROW application was considered, but will not be analyzed further in this EA.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action.

Environmental Consequences: Short term, local impacts to air quality from dust would result during and after pipeline construction. Construction operations produce air emissions such as exhaust from diesel engines that power heavy equipment. Air pollutants could include nitrogen oxides, particulates, ozone, volatile organic compounds, and carbon monoxide. The proposed action would not adversely affect the regional air quality.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry, 06/12/2007

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Rob Schmitzer, 6/25/07

CULTURAL RESOURCES

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see *An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, *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 proposed project, Pioneer Natural Resources Alpha State Pipeline, has undergone a Class III cultural resource survey for the portions of BLM land effected:

Piontkowski, Michael

2007 Class III Cultural Resources Inventory of the Pioneer Natural Resources Alpha State 1-16 Lateral, Moffat County, Colorado (BLM #145.6.07)

The BLM-Little Snake Field Office has on file letters of denial access to private land for cultural resource survey from private landowner Rex Ross Walker (received June 29, 2007) and Rodney and Margaret Culverwell (received June 26, 2007).

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

Mitigative Measures: The following standard stipulations apply for this project:

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

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

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

Name of specialist and date: Robyn Watkins Morris, 07/06/07

ENVIRONMENTAL JUSTICE

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

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

Mitigative Measures: None.

Name of specialist and date: Mike Andrews, 05/21/2007

FLOOD PLAINS

Affected Environment: Active floodplains and flood prone zones are avoided.

Environmental Consequences: No threat to human safety, life, welfare, or property would result from the proposed action.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry, 07/09/07

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive species and noxious weeds occur within the affected area. Downy brome (cheatgrass), yellow alyssum, blue mustard and other annual weeds are common along roadsides, on well pads and on other disturbed areas; halogeton is also present and increasing in this area. Canada thistle and several species of biennial thistles are known to occur in this area. Russian knapweed, dalmation toadflax and hoary cress (whitetop) exist in the vicinity of these proposed well pads. Other species of noxious weeds are not known to be a problem in this area, but could be introduced from other areas. The BLM, Moffat County, livestock operators, pipeline companies and oil and gas operators have formed the Northwest Colorado Weed Partnership to collaborate their efforts on controlling weeds and finding the best integrated approaches to achieve these results.

Environmental Consequences: The surface disturbing activities and associated traffic involved with installing the pipelines and other subsequent activities would create a favorable environment and provide a mode of transport for noxious weeds to be introduced and become established. These weeds can be spread through a variety of means including by vehicular travel, construction equipment, wind, water, wildlife and livestock movement. The annual invasive weed species (yellow alyssum, blue mustard and other annual weeds) occur on adjacent rangelands 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 can 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 have failed. Halogeton is not common on adjacent rangelands and is being introduced to new areas with development of oil and gas resources. This annual weed needs to be aggressively controlled if it is found on these new disturbances.

Mitigative Measures: None.

Name of specialist and date: Ole Olsen, 06/25/07

MIGRATORY BIRDS

Affected Environment: The project area contains potential nesting and/or foraging habitat for the following USFWS 2002 Birds of Conservation Concern: Brewer's sparrow, sage sparrow, golden eagle, ferruginous hawk, northern harrier, and loggerhead shrike. Golden eagle nests are present but are outside the ¼ mile protection buffer. Three ferruginous hawk nests occur within one mile to the south of the proposed ROW (Sec.22, 23, and 24 of T.7N R.93W). No nests have been recorded for the other species.

Environmental Consequences: Granting the ROW would result in a short-term loss of 5.8 acres of big sagebrush shrubland habitat on public land and an estimated total of 19.27 acres for the entire route. Potential impacts for the above species include habitat degradation, fragmentation, and loss; individual displacement; and reduced fitness. Unintentional destruction of nests and eggs may occur. Since no trees would be removed during construction, tree-nesting species would not be directly impacted. However, take of fledglings or understory and ground nests may occur. Given the scale of disturbance, the proposed action would not have a measurable impact on migratory bird populations.

Mitigative Measures: To minimize impacts on migratory bird habitat and nests, no trees would be cut or removed during construction. No surface disturbing activities will occur from February 1 to August 15 to protect ferruginous hawk nesting. Alternatively, biological surveys may be conducted on or after May 15 to ascertain nest status; if nests are found to be inactive, an exception to this timing restriction may be granted upon request. If a raptor returns to a nest and rebuilds or reoccupies the location during the time of construction or drilling, the operator will immediately cease activities and notify a BLM biologist.

Name of specialist and date: Charlie Sharp, 06/25/07

NATIVE AMERICAN RELIGIOUS CONCERNS

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

Name of specialist and date: Robyn Watkins Morris, 07/06/07

PRIME & UNIQUE FARMLANDS

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry, 07/09/07

T&E SPECIES – ANIMALS

Affected Environment: The proposed action would occur within the general winter range for the federally threatened bald eagle. There is no record of site-specific observation of bald eagles or bald eagle nests in the project area. No bald eagle crucial habitat such as roosts or forage areas is present.

Environmental Consequences: Bald eagle use of upland habitats is limited primarily to foraging during the winter for vehicle-killed animals along roadways. Individuals would only be in the project area if they were opportunistically feeding or were en-route to other areas. Although the proposed action would temporarily alter 19.27 acres of habitat, it would not impede the bald eagle's ability to forage in this area. With mitigation as stated below, the proposed action would have "no effect" on the bald eagle.

Mitigative Measures: To ensure the bald eagle is not impacted by this action, if a bald eagle is observed in the immediate vicinity of the project, construction will be delayed until the eagle has moved out of the area.

Name of specialist and date: Charlie Sharp 06/25/07

T&E SPECIES – PLANTS

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

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Hunter Seim, 06/22/07

T&E SPECIES - SENSITIVE PLANTS

Affected Environment: There are no BLM sensitive plant species within or in the vicinity of the proposed action.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Hunter Seim, 06/22/07

WASTES, HAZARDOUS OR SOLID

Affected Environment: 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 environmental impact.

Environmental Consequences: Consequences would be dependent on the volume and nature of the material released. In most situations 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.

Mitigative Measures: None.

Name of specialist and date: Mike Andrews, 05/21/07

WATER QUALITY - GROUND

Affected Environment: No ground water resources will be affected by the proposed action

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Jennifer Maiolo, 06/25/07

WATER QUALITY - SURFACE

Affected Environment: The proposed pipeline would cross five ephemeral drainages and the perennial North Fork drainage. All of these drainages are tributaries to Big Gulch which is a tributary to the Yampa River.

Environmental Consequences: Increased sedimentation to Big Gulch and the Yampa River during spring runoff or from high intensity summer/fall rainstorms would be the greatest potential impact to water quality. Although some sediment may be transported off site and eventually reach perennial waters, the mitigation provided in the Plan of Development and grant stipulations would reduce the potential impacts caused by surface runoff.

Mitigative Measures: The proposed pipeline would cross perennial and ephemeral stream channels. The pipeline would be constructed to withstand floods of extreme magnitude to prevent rupture and accidental contamination of runoff during high flow events. Where the pipeline crosses these channels the pipeline would be buried deep enough to remain undisturbed by scour and fill processes typically associated with passage of peak flows. A hydraulic analysis should be completed during the pipeline design phase to avoid repeated maintenance of such crossings and eliminate the potential environmental degradation associated with potential pipeline breaks at stream crossings.

Name of specialist and date: Roy McKinstry, 06/12/2007

WETLANDS/RIPARIAN ZONES

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Charlie Sharp, 06/25/07

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Rob Schmitzer, 06/25/07

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Rob Schmitzer, 06/25/07

NON-CRITICAL ELEMENTS

HYDROLOGY – SURFACE

Affected Environment: The project area would cross tributary drainages of Big Gulch, a tributary of Lay Creek which drains into the Yampa River. All stream segments within the affected environment are presently supporting their classified uses.

Environmental Consequences: No substantial increase in sediment would be expected in Big Gulch resulting from the proposed project. Impacts from construction would be greatest shortly after project start and would decrease in time as a result of stabilization through revegetation and reclamation of disturbed areas. Increased sedimentation to the Yampa River during spring runoff or from high intensity summer/fall rainstorms would be

the greatest potential impact to water quality. Although some sediment may be transported off site, much of the increase in sediment would be redeposited in floodplains of Big Gulch, prior to entering the Yampa River.

Mitigative Measures: Utilize Best Management Practices for all drainage crossings.

Name of specialist and date: Roy McKinstry, 07/09/07

PALEONTOLOGY

Affected Environment: Paleontological resources are comprised of the Brown's Park Formation, overlain by Quaternary alluvium. The Brown's Park formation is of the Tertiary Age, consisting of white tuffaceous cross-bedded sandstone. Invertebrate ichnofossils are found in outcrops in the project area.

Environmental Consequences: *PYFC: Class 3b* – Unknown Potential. Units exhibit geologic features and preservational conditions that suggest significant fossils could be present, but little information about the paleontological resources of the unit or the area is known. This may indicate the unit or area is poorly studied, and field surveys may uncover significant finds. It is the intent that the units in this Class will eventually be placed in another Class when sufficient survey and research is conducted. The unknown potential of the units in this Class should be carefully considered when developing any mitigation or management approaches.

(1) Management concern for paleontological resources is moderate; or cannot be determined from existing data.

(2) Surface-disturbing activities may require field assessment to determine appropriate course of action.

Mitigative Measures: Unusual occurrences of plant and invertebrate fossils should be recorded, and representative examples may be collected if appropriate. Concentrations of common plant or invertebrate fossils that may be suitable for public hobby collection areas should also be noted and reported to the Field Office paleontology program coordinator or paleontology program lead. Additional mitigation measures may be appropriate in some cases for these types of localities.

If vertebrate fossil material is discovered during construction activities, surface disturbing actions shall halt until an assessment of the find is completed and appropriate protection measures taken. The Authorized Officer should be notified as soon as possible of the discovery and any mitigation efforts that were undertaken. If the find cannot be mitigated within a reasonable time, the concurrence of the Authorized Officer or official representative for a longer work stoppage must be obtained. Work may not resume until approval is granted from both the PI or Field Agent and the Authorized Officer.

During operations, if any vertebrate paleontological resources are discovered, in accordance with Section 6 of Form 3100-11 and 43 CFR 3162.1, all operations affecting such sites shall be immediately suspended, and all discoveries shall be left intact until authorized to proceed by the Authorized Officer. The appropriate Authorized Officer of the Little Snake BLM office shall be notified within 48 hrs of the discovery and a decision as to the preferred alternative/course of action will be rendered.

Name of specialist and date: Marilyn D. Wegweiser, 06/25/07

REALTY AUTHORIZATIONS

Affected Environment: The proposed action would parallel an existing part-surface, part-buried natural gas pipeline, COC11970.

Environmental Consequences: The existing pipeline could be accidentally damaged during construction. Impacts would be temporary until the damage is repaired.

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

Name of specialist and date: Mike Andrews, 05/21/07

SOILS

Affected Environment: The proposed pipeline is found within the Rock River sandy loam soil-mapping unit. Slopes within this unit average 3 to 12 percent. These soils are very deep, well drained, and formed in eolian deposits and residuum derived from sandstone. They are found on alluvial fans, benches, and slopes. Runoff is rated as medium and the hazard of water erosion is moderate. The hazard of soil blowing is moderate.

Environmental Consequences: Increased soil erosion from wind and water would occur during construction of the pipeline. Erosion would continue throughout the operational life of the pipeline. Loss of topsoil, soil compaction, and possible increases in sediment loads to drainages are impacts most likely to occur.

Erosion control measures would be utilized along the pipeline near the ephemeral drainages adjacent to the pipeline. Soil erosion would be reduced by mitigation described in the Plan of Development for the approved pipeline.

Mitigative Measures: Construction or other surface-disturbing activities would not be allowed when the soils are saturated to a depth of more than 3 inches. Vehicle use would be limited to existing roads.

Name of specialist and date: Roy McKinstry, 07/09/07

VEGETATION

Affected Environment: The proposed natural gas transportation pipeline and produced water pipeline right-of-way would be located within a sandy foothills range site. This range site typically supports an open stand of sagebrush and bitterbrush mixed with an abundance of grasses such as Indian ricegrass, needle-and-thread, Junegrass, squirreltail, native bluegrass, western wheatgrass and basin wildrye. Forbs include arrowleaf balsamroot, lupine, wild buckwheat, globemallow yarrow and cactus. The proposed pipeline crosses areas of dense cheatgrass infestations.

Environmental Consequences: The proposed action would remove approximately 5.81 acres of native vegetation for the proposed pipelines. Initially, the disturbance would be 40 feet wide along 6,328 feet of Federal surface lands. This removal would be minor in the larger plant community. Once the pipeline is installed, the area would be reclaimed and reseeded to native vegetation, using a preferred seed mix.

Mitigative Measures: It is imperative that all stipulations regarding weed control and revegetation are followed to avoid increasing cheatgrass and halogeton on and in areas surrounding the proposed action. As long as weeds are controlled and all disturbed areas are reseeded to prescribed mixes of native plant species and establishment is ensured as required, negative impacts to native plant communities would be effectively mitigated.

Name of specialist and date: Kathy McKinstry, 06/25/07

WILDLIFE, AQUATIC

Affected Environment: Intermittent, seasonal waterways may be crossed by the proposed ROW. Ephemeral pools may provide habitat for amphibians and aquatic invertebrates.

Environmental Consequences: Sedimentation may occur as a result of this action, particularly during construction. No riparian habitat would be impacted.

Mitigative Measures: In order to reduce sedimentation load and to avoid impeding seasonal water flows, culvert installation and similar practices will be applied where appropriate according to Gold Book standards.

Name of specialist and date: Charlie Sharp, 06/25/07

WILDLIFE, TERRESTRIAL

Affected Environment: The big sagebrush community provides habitat for a variety of species including deer, elk, pronghorn, small mammals, and birds. The area provides severe winter habitat for mule deer and elk. Greater sage grouse brooding habitat and winter range occur in the vicinity but not in the immediate project area. Also, several leks occur within 2 miles of the project area .

Environmental Consequences: Approximately 19.27 acres of elk and deer winter range would be temporarily degraded as a result of this action. Granting the ROW would have “no effect” on the BLM-sensitive species greater sage grouse. General impacts for other species include habitat degradation, fragmentation, and loss; individual displacement; and reduced fitness. Such impacts are more significant during critical seasons, such as winter or reproduction. Wildlife using the area are likely to be temporarily displaced during construction and may find the area unsuitable once construction is complete. Most small mammals using the project area would be capable of avoiding construction activities and should not be directly harmed by these activities, although some burrowing animals may be killed by construction equipment. Given the scale of disturbance, the proposed action would be unlikely to have measurable impacts to wildlife populations.

Mitigative Measures: In order to reduce impacts on elk and deer, no surface disturbing activities would occur between December 1 and April 30.

Name of specialist and date: Charlie Sharp, 06/25/07

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

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Fluid Minerals			
Forest Management	MAA 05/21/07		
Hydrology/Ground		JAM 06/25/07	
Hydrology/Surface			RM 06/25/07
Paleontology			MDW 06/25/07
Range Management		KM 06/26/07	
Realty Authorizations			MAA 05/21/07
Recreation/Travel Mgmt		RS 06/25/07	
Socio-Economics	MAA 05/21/07		
Solid Minerals		JAM 06/25/07	
Visual Resources		RS 6/25/07	
Wild Horse & Burro Mgmt	MAA 05/21/07		

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts may result from the development of the pipeline 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 Lay, CO area. Other past or existing actions near the project area that have influence on the landscape are wildfire, hunting, grazing, and ranching activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Only a small reduction in available forage would be anticipated. Some wildlife species may be temporarily displaced by construction of the pipeline, but should return once construction is completed. Contrasts in line, form, color, and texture from development would impact the visual qualities on the landscape.

The cumulative effects of projected oil and gas development are minimized through Best Management Practices identified in the Surface Use Plans and stipulations required by the BLM. Reasonably foreseeable mineral development would occur under the guidelines of the Little Snake Resource Management Plan and the Colorado Oil and Gas Leasing and Development EIS.

STANDARDS:

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: Wildlife using the area are likely to be temporarily displaced during construction and may find the project unsuitable once construction is complete. Mule deer and elk severe winter range occurs in the project area. The proposed action would not result in diminished animal production, diversity, or resilience. With timing stipulations and successful reclamation, the proposed action would not preclude this landscape from meeting this standard.

Name of specialist and date: Charlie Sharp, 06/25/07

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: The project area provides winter range for the bald eagle. The proposed action would temporarily alter upland habitat but would not impede the bald eagle's ability to forage in this area. Therefore, the proposed action would have 'no effect' on the bald eagle. The proposed action may result in a minimal, short-term loss of habitat but would not appreciably impact the stability or growth of special status species' populations. Therefore, the proposed action would not preclude this landscape from meeting this standard.

Name of specialist and date: Charlie Sharp, 06/25/07

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: The proposed action would completely remove 5.81 acres of native vegetation. As long as the stipulations concerning revegetation and weed control are faithfully adhered to, the native plant community would eventually return and weeds such as halogeton would be kept in check, and thus meet this standard.

Name of specialist and date: Kathy McKinstry, 06/26/07

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 action. This standard does not apply.

Name of specialist and date: Hunter Seim, 06/22/07

RIPARIAN SYSTEMS STANDARD: No riparian systems occur in the project area. The riparian standard for healthy public lands would not be affected by the proposed action.

Name of specialist and date: Charlie Sharp, 06/25/07

WATER QUALITY STANDARD: The proposed action would meet the public land health standard for water quality. Reclamation of the utility trenches would occur shortly after utility line installation to minimize sheet and rill erosion from the corridors. After the pipeline is constructed the disturbed areas 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 site. No stream segments near this project are listed as impaired.

Name of specialist and date: Roy McKinstry, 07/09/07

UPLAND SOILS STANDARD: The proposed action would not meet the upland soil standard for land health, and it is not expected to while this pipeline is being constructed. The pipeline will not exhibit the characteristics of a healthy soil. Several Best Management Practices have been designed into the project or would be attached as mitigating measures that would reduce impacts to and conserve soil materials. The pipeline corridor would exhibit unhealthy upland soil characteristics initially, but within one to two years following reclamation the soil health will be moving toward the upland soil standard. Upland soil health would return to the pipeline after abandonment and reclamation practices have been successfully achieved.

Name of specialist and date: Roy McKinstry, 07/09/07

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

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
EA CO-100-2007-076

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.

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

DECISION AND RATIONALE: I have determined that construction of the buried natural gas and produced water pipelines is in conformance with the approved land use plan. It is my decision to issue the right-of-way grant with the mitigation measures to Pioneer Natural Resources USA, Inc. The grant is for construction, operation, maintenance, and termination of a buried 4-inch natural gas transportation pipeline and a buried 6-inch produced water pipeline located on public land in T7N, R93W, Sec. 14, S½NE¼; Sec. 15, Lot 4; Sec. 16, Lot 4; Sec. 21, Lot 1, 6th P.M., Moffat County, Colorado. The R/W is 6,328 feet long and 30 feet wide (40 feet wide during construction). The R/W grant is issued for 30 years with the right of renewal. The R/W is subject to rental pursuant to 43 CFR 2806.10. 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 R/W 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) and the regulations authorizing use of federal land under 43 CFR 2800.

MITIGATION MEASURES: See Exhibit B, 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 grant and stipulations are followed. The right-of-way will be on a five-year compliance schedule after completion of the project.

Monitoring Plan: The natural gas and water pipelines will be monitored during the term of the right-of-way for compliance with the grant, stipulations, POD, and pertinent regulations until final abandonment is approved; 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.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED:

Exhibit B Stipulations
CO-100-2007-076 EA
COC71207 Gas Pipeline ROW

1. The holder shall construct, operate and maintain the facilities, improvements and structures within this right-of-way in strict conformity with the plan of development (POD), which was approved and made part of this grant. Any relocation, additional construction or use that is not in accordance with the POD shall not be initiated without prior approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations regarding construction, operation, approved POD and termination shall be made available on the right-of-way area during construction, operation and termination to the Authorized Officer (AO). Noncompliance with the terms above will be grounds for an immediate suspension of activities, if it constitutes a threat to public health and safety or the environment.
2. 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.
3. No hazardous materials/waste or trash shall be disposed of on public lands. If a release does occur, it shall be reported immediately to the AO at (970) 826-5000. Any spills shall be cleaned up to applicable standards and in accordance with federal, state and local laws.
4. Topsoil shall be salvaged and stockpiled during excavation and construction and replaced over the trench.
5. Backfilled soil shall be compacted 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 soil should be firm and allow good infiltration of water.
6. All construction activities shall be conducted within the limits of the right-of-way as granted.
7. No surface-disturbing activities allowed when soils are saturated to a depth of 3 inches or more. All vehicle use shall be limited to existing roads and the right-of-way corridor.
8. Holder shall provide 48 hour notification to the owner/operator of adjacent facilities prior to performing any work within 10 feet of buried or above-ground pipelines.
9. Holder shall design and construct adequate water-control structures in all drainage crossings to prevent excessive erosion along the pipeline and protect the pipeline from the natural erosion process within the drainages.
10. No surface disturbing activities allowed between December 1 and April 30 in order to protect wintering big game animals.

11. No surface disturbing activities allowed between February 1 and August 15 in order to protect nesting ferruginous hawks. Biological surveys may be conducted after May 15 to ascertain nest status; if nests are found to be inactive, an exception will be granted upon request. If a raptor returns and reoccupies or rebuilds a nest during construction, holder shall cease operations and notify a Little Snake Field Office biologist.

12. If bald eagle(s) are observed in the immediate vicinity of the project, construction shall be delayed until any eagle(s) have moved out of the area.

13. Any cultural and/or paleontological 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 AO. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the AO. An evaluation of the discovery will be made by the AO 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 any decision as to proper mitigation measures will be made by the AO after consulting with the holder.

14. 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.

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.

15. If vertebrate fossil material is discovered during construction activities, all surface disturbance shall halt until an assessment of the find is completed and appropriate protective

measures are taken. The AO shall be notified as soon as possible of the discovery and any mitigation efforts that were undertaken. If the find cannot be mitigated within a reasonable time, the concurrence of the AO or official representative must be obtained. Work may not resume until approval is granted by the AO or official representative.

16. The holder shall be responsible for weed control on disturbed areas with the limits of the right-of-way. The holder is responsible for consultation with the AO and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations).

17. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the holder shall obtain from the AO written approval of the plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the AO. Emergency use of pesticides shall be approved in writing by the authorized officer prior to such use.

18. 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: regrading 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 Resource Area. 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 which increase the success rate of reclamation and stabilization. With the exception of those stated above, it is the lessees 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 no 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:

- a. If erosion is greater than two (2) times the allowable amount, correctional action would have to be taken by the responsible company at that time.
- b. 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 correctional 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 is 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 recontouring 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.

This stipulation, or portions of it, may be waived by the AO. Such waiver will be documented and justified when not applicable or objectives are accomplished through another method.

19. Prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a pre-termination conference. The conference will be held to review the termination provision of the grant.