

**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-N010-2010-0139-EA

PERMIT/LEASE NUMBER: COC074618

PROJECT NAME: Moffat County Road 92 upgrade

LEGAL DESCRIPTION: T. 11N., R.94W., sec. 8, E $\frac{1}{2}$ E $\frac{1}{2}$, sec. 9, W $\frac{1}{2}$ NW $\frac{1}{4}$, sec. 17, NE $\frac{1}{4}$, S $\frac{1}{2}$, sec. 20, W $\frac{1}{2}$, 6th PM, Moffat County, Colorado

APPLICANT: Moffat County Commissioners

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

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

Date(s) Approved: April 26, 1989

Remarks: The proposed access road is located within Management Unit 6 (Little Snake Resource Management Plan). The management objectives of Management Unit 6 (Northern Great Divide) are to maintain and improve critical habitat for sage grouse, mule deer and pronghorn antelope. The development of other resource uses/values within this unit is allowed consistent with the management objectives for oil, gas, and forest resources. Special stipulations such as seasonal restrictions will be added to permits to prevent or mitigate impacts resulting from any resource development or use on public lands. Realty actions, such as rights-of-way, leases, and permits can occur, consistent with the management objectives of the units. The access road will be consistent with the objectives of Management Unit 6.

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

NEED FOR PROPOSED ACTION: The purpose of the proposed right-of-way on the road is to allow widening and upgrading approximately 4 miles of the existing road to accommodate heavy truck traffic for development of the existing Big Hole Gulch Oil & Gas Unit., 4 miles north/northeast of the MCR 7 intersection. Currently due to an incised roadway and dirt surface,

access by heavy equipment is limited to seasonal use. Providing safe year-round access on MCR 92 to accommodate heavy trucks for natural gas activity is necessary. Currently the road surface averages around 13 feet wide, an insufficient width for passing vehicles, especially equipment hauling trucks. The proposal widens the road surface to a minimal safe surface width of 24 feet. Despite the existing road not being accessible year-round, the general public uses 4-wheel drive vehicles at access public lands and drive off MCR 92 and cross country on public land increasing weed problems, rutting the ground and disturbing wildlife. The upgrade would provide safe wintertime and mud-season access for public land users and minimize trespass and damage on adjacent public land. In addition, dust pollution would be dramatically reduced as the existing road is an unpacked dirt surface hosting loose dirt that blows during high winds. The upgrade would result in re-vegetated borrow ditches and provide a solid road surface preventing additional erosion and fugitive dust. The upgrade would provide safe wintertime and mud-season access for public land users minimizing trespass and damage on adjacent public land. Although Moffat County will maintain MCR 92, the upgrade would be entirely paid for from private industry funds and construction would be subcontracted. Since a segment of the road traverses public land, a right-of-way authorization is required.

PUBLIC SCOPING PROCESS: The NEPA log is posted on the Little Snake Field Office web site 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 for construction, operation, maintenance and termination of an existing access road located on public land in T. 11N., R.94W., sections 8, 9, 17, 20, 6th PM, Moffat County, Colorado. The Moffat County Commissioners filed a right-of-way application requesting authorization to upgrade a 3 mile segment of an existing access road which has served as historical access on public land. Moffat County requests to preserve R.S. 2477 rights through the FLPMA Title V process. Mitigation not incorporated in a Plan of Development would be attached by BLM as stipulations to the ROW grant.

The project area on the existing road departs Moffat County Road (MCR) 7 across private land in section 29, T.11N., R.94W., traveling north/ northeast on MCR 94 to mile marker 4. The proposed travel width of the road is approximately 24'. A 60' right-of-way is requested. The standard physical specifications requested are:

- Pit run base 4-8"
- Road-base/gravel finished surface 2-6"
- Shoulder width and borrow ditch, depending on topography and drainage 3'-20'
- Crown on road surface 2-4%
- Borrow ditches on each side of road ranging from 1:1 to 3:1 slope depending on terrain and erosion potential
- Water cut-outs as needed
- Disturbance beyond road surface will be reclaimed with existing seed mix BLM has approved for reclaiming County Gravel Pits
- Turn around points for gravel trucks will be focused on existing gas well sites and road

intersections.

- Magnesium chloride will be applied on the surface as necessary to lessen dust debris

The proposed ROW would consist of approximately 2.5 acres of new disturbance beyond the existing road on public lands.

The southern segment of the road would be upgraded to accommodate year-round public traffic. Approximately 14, 000 yards pit run and road base would be used on the 3 miles crossing public land. There is no plan for reclamation of the existing road.

Noise levels would increase proportionally with heavy truck hauling activity in the remote area of MCR 92.

A perpetual term is requested with a 20 year review period and 10 years thereafter.

The project area is located approximately 25 miles northeast of Maybell Colorado.

The duration of construction anticipated is 60 days between October and December 2010.

No alternative routes were analyzed or considered since this proposal regards upgrading an existing county road across Federal land.

NO ACTION ALTERNATIVE: The no action alternative is that the road work would not be authorized and there would be a trespass situation, continued additional erosion and fugitive dust on public lands

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: There are five federal Class I areas within 100 kilometers of the Little Snake Resource Management Area boundary, all of which occur in Colorado. There are no federal Class I areas in Utah or Wyoming within 100 km of the LS RMA boundary. There are no non-attainment areas nearby that would be affected by either alternative.

Environmental Consequences, Proposed Action: The proposed road upgrade would harden four miles of road surface that is currently an unpacked dirt surface that is a source of dust during wind events. Although the road in its current condition is a relatively small source of dust, at a regional scale atmospheric dust, caused by destabilization of soil as a result of land use changes coupled with drought conditions, is receiving increased public and scientific

attention for its ability to alter alpine environments. Dust covered snow melts faster because it can absorb more solar energy, which affects snowpack conditions and can result in earlier and faster spring runoff events. The Colorado Plateau has been identified as a primary dust source for several recent alpine dust events on the Western Slope of Colorado. Areas of relatively low annual precipitation, little to no vegetation cover, and an available supply of sediment are of primary concern for mitigation of expanding or new sources of dust. Although increased traffic can be expected as a result of the road improvement, less dust generation is expected.

Environmental Consequences, No Action: The proposed road upgrade would not be authorized and the existing road would continue to be a source of dust in the area.

Mitigative Measures: Retain as much vegetative cover as possible during the project and/or reclaiming and covering areas shortly following disturbance.

Name of specialist and date: Emily Spencer, 9/20/10

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not Present

Environmental Consequences: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: K. Shane Dittlinger 09/13/2010

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, Moffat County Road 92 upgrade, has undergone a Class III cultural resource survey:

Morton, Ethan

2010 A Class III Cultural Resource Inventory for the Moffat County Route 92 Improvement Project, BLM-Little Snake Field Office, Moffat County, Colorado (BLM 10.57.2010)

The survey identified no eligible cultural resources to the National Register of Historic Places. The proposed project may proceed as described 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 cultural resources, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. 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 09/16/10

ENVIRONMENTAL JUSTICE

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

Environmental Consequences, both alternatives: 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: Louise McMinn, 09/09/2010

FLOOD PLAINS

Affected Environment: There are no 100-year floodplains present on public lands within the proposed project area.

Environmental Consequences, both alternatives: None

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 9/20/10

Source: USDA-NRCS Soil Data Viewer version 5.2.0016: <http://soildataviewer.nrcs.usda.gov/>

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 and on other disturbed areas. Canada thistle, hoary cress (whitetop), and several species of biennial thistles are known to occur in this area. Halogeton is also present in the affected area, as well as other areas in the western portion of Moffat County. Other species of noxious weeds could be introduced by vehicle traffic, livestock and wildlife. 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. Additionally, the BLM is in cooperation with Moffat County's Cooperative Weed Management program to control noxious weeds on nearby public lands and transportation routes. Principals of Integrated Pest Management (IPM) are employed to control noxious weeds on public lands in the Little Snake Field Office.

Environmental Consequences, Proposed Action: Surface disturbing activities such as the proposed action provide an opportunity for weed spread and establishment. Reclamation with the proposed seed mix would be expected to provide the necessary control of invasive annual weeds within 2 or 3 years. The applicant would be responsible for controlling noxious weed species and restoring vegetation along the proposed right-of-way. The largest concern would be for biennial and perennial noxious weeds to establish and not be treated. Once an infestation is detected it could be controlled with various IPM techniques. Land practices by the applicant and their weed control efforts and awareness would largely

determine the establishment and treatment of weed infestations.

Environmental Consequences, No Action Alternative: This alternative would have no effect on current weed infestations or spread.

Mitigative Measures: None

Name of specialist and date: Christina Rhyne, 9/20/2010

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 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.

Native plant communities in the Big Hole Gulch area are comprised primarily of sagebrush stands with a healthy understory of native grasses and forbs. 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: golden eagle, Brewer's sparrow, sage sparrow, sage thrasher and loggerhead shrike. The closest golden eagle nest is a few miles away from the proposed road upgrade, but this species may hunt for prey in the general area.

Environmental Consequences: The Proposed Action would have minimal impacts to migratory bird species. Since CR 92 is already in existence, many species are likely already avoiding habitat immediately adjacent to the road. The road upgrade would remove an additional 2.5 acres of migratory bird habitat. Removal of habitat would be minor on a landscape level as it would be parallel to an existing disturbance. 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. Timing limitations to protect greater sage-grouse (see T&E Section) would cover most of the migratory bird nesting season, so the risk for these impacts would be low. 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 9/15/10

T&E ANIMAL SPECIES

Affected Environment: There are no ESA listed or proposed species that inhabit or derive important benefit from the project area. The general area provides habitat for greater sage-grouse, a BLM sensitive species and a candidate for ESA listing. Greater sage-grouse utilize sagebrush ecosystems in the Big Hole Gulch area for breeding and nesting. There are two active leks in the vicinity of CR 92.

Big Hole Gulch also provides habitat for one additional BLM sensitive species, Brewer's sparrow. 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, Proposed Action:

Greater sage-grouse

CR 92 has been in existence for many years with varying levels of traffic. Greater sage-grouse utilizing the Big Hole Gulch area have either acclimated to the road or are likely avoiding habitat immediately adjacent to this disturbance. The Proposed Action would remove an additional 2.5 acres of grouse habitat. This would be minimal on a landscape level, since it is widening a pre-existing disturbance. Overall, impacts to greater sage-grouse habitat would be minor.

Habitat effectiveness adjacent to the road would be reduced as a result of noise and human activity during construction. Construction activities associated with the upgrade and widening of the road should not be conducted from March 1 through June 30. This timing limitation would prevent accidental nest destruction, nest and lek abandonment and displacement into less suitable habitat.

Improvements to the road would be unlikely to result in increased use by the general public. The Big Hole Gulch area is seldom used for recreation except during the hunting season. Traffic associated with gas development in the area already exists and would not increase due to the road improvements.

Brewer's Sparrow

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

Environmental Consequences, No Action Alternative: None.

Mitigative Measures: No surface disturbance activities between the hours of 6:00 PM and 9:00 AM from March 1 to May 1. This timing restriction only applies to that portion of MC Rd 92 that boarder BLM surface.

Name of Specialist and Date: Desa Ausmus 9/17/10

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Eastern Shoshone, Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 26, 2009. The letter listed the FY2010 projects that the BLM would notify them on and projects that would not require notification. A follow-up phone call was performed on July 26, 2009. No comments were received (letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Ethan Morton 09/16/10

PRIME & UNIQUE FARMLANDS

Affected Environment: No Prime and/or Unique Farmlands are present in the vicinity of the proposed project.

Environmental Consequences, both alternatives: None

Mitigation Measures: None

Name of specialist and date: Emily Spencer, 9/20/10

Source: USDA-NRCS Soil Data Viewer version 5.2.0016: <http://soildataviewer.nrcs.usda.gov/>

T&E SPECIES - SENSITIVE PLANTS

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

Environmental Consequences, both alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 9/15/10

T&E SPECIES – PLANTS

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

Environmental Consequences, both alternatives: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 9/15/10

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 will be no environmental impact.

Environmental Consequences, Proposed Action: Consequences would be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences would occur, but they can be remedied, and long-term impacts would be minimal.

Environmental Consequences, No Action Alternative: None.

Mitigative Measures: None

Name of specialist and date: Louise McMinn 09/20/10

WATER QUALITY - GROUND

Affected Environment: The surface material consists mainly of Tertiary Age, Wasatch Cathedral Bluffs Tongue Formation. The closest active water well is in excess of one mile from the proposed action area. Water records show a level of 300 feet. The proposed action should not impact any strata that contain useable groundwater.

Environmental Consequences, both alternatives: None

Mitigative Measures: None

Name of specialist and date: Marty O'Mara, 9/21/10

WATER QUALITY - SURFACE

Affected Environment: CR 92 does not bisect any perennial stream and is at least 0.25 mile away from any ephemeral or intermittent tributary to the Little Snake River or Bighole Gulch. However, should any surface runoff from the proposed project area occur, it would flow primarily towards unnamed tributaries of the Little Snake River or Bighole Gulch. Water quality for all tributaries of the Little Snake River in this area (below the confluence with Fourmile Creek to the confluence with the Yampa River) is use protected and must support Aquatic Life Warm 2, Recreation N, and Agricultural uses. As of 2010 the Little Snake River downstream of its confluence with Powder Wash (from Powder Wash to the

Yampa River) is on the Colorado Department of Public Health and Environment's Monitoring and Evaluation List for a suspected sediment problem (CDPHE 2010).

Environmental Consequences, Proposed Action: The proposed project is located far enough away from ephemeral and perennial surface water sources so that impacts to water quality are not likely. The proposed road upgrade would harden four miles of road surface that is currently a source of sediment that can be mobilized off-road and potentially into drainages during spring or storm runoff. Over time this sedimentation may contribute to the degradation of water quality in perennial streams, such as the Little Snake River. The hardened road surface may generate greater surface runoff because of decreased infiltration of precipitation, but less sediment is expected to move offsite. Proposed road improvement specifications are standard and are designed to minimize erosion and therefore improve or maintain water quality.

Environmental Consequences, No Action: Road base erosion and washouts would continue. The potential for sedimentation over the long term is greatest in this alternative.

Mitigative Measures:

The design and construction of this road needs to comply with the road design and construction direction contained in the BLM publication: Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development – The Gold Book – Fourth Edition – 2006, for BLM Collector Roads. This will include requiring Moffat County to locate on the ground and in a plan and profile diagram all culvert locations and the size of the culverts prior to the BLM approving road construction activities. A pre-work field review of the culvert locations by BLM will be needed. All perennial and intermittent drainages must have erosion and sediment control filters or barriers installed below fill slopes on these drainages that will effectively trap eroded sediments from entering the water systems. These must function for a minimum of two years following construction or until re-vegetation is adequately established on cut and fill slopes. All drainage culvert outlets must have rock installed at the outlets of the culverts to provide water energy dissipation to reduce erosion at the culvert outlets, and sediment barriers installed below the rock to further trap sediments. After adequate re-vegetation is established, the county will be required to remove sediment fencing. Other BMPs from the Gold Book include: Reclamation measures should begin as soon as possible after the disturbance; Construction with saturated or frozen soils result in unstable roads and should be avoided; Berms should be flattened to blend with the surrounding landform and revegetated; and Keep water diversion structures operational and free of debris.

Name of specialist and date: Emily Spencer, 9/23/10

References:

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

WETLANDS/RIPARIAN ZONES

Affected Environment: There are no streams, wetlands, seeps, or springs on federal lands within or immediately adjacent to the proposed project site.

Environmental Consequences, both alternatives: None

Mitigative Measures: None

Name of specialist and date: Emily Spencer, 9/20/10

WILD & SCENIC RIVERS

Affected Environment: Not Present

Environmental Consequences, both alternatives: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: K. Shane Dittlinger, 09/13/2010

WILDERNESS, WSAs

Affected Environment: Not Present

Environmental Consequences, both alternatives: Not Applicable

Mitigative Measures: Not Applicable

Name of specialist and date: K. Shane Dittlinger, 09/13/2010

NON-CRITICAL ELEMENTS

PALEONTOLOGY

Affected Environment: The geologic formation at the surface 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, Proposed Action: 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.

Environmental Consequences, No Action Alternative: None.

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 9/21/10

RANGE MANAGEMENT

Affected Environment: The proposed four miles of road upgrade and widening would be located within the Piskwik grazing allotment. This allotment is permitted for cattle grazing from May through December. There is a water well approximately two miles to the south west of MCR 92 and there is an associated pipeline which runs adjacent to MCR92 for approximately 1.5 miles (BLM range improvement project #001241). The water well and pipeline were developed to deliver water for livestock grazing throughout the allotment and also to the neighboring allotment to the west.

Environmental Consequences, Proposed Action: The proposed road upgrade and widening would remove 2.5 acres of native vegetation. This loss of vegetation and associated disturbance from vehicle traffic, noise and human presence may cause the cattle to alter their distribution pattern. This may result in over utilization of the vegetative resources in other parts of the grazing allotment. Range improvement #001241 could be damaged during the

road construction.

Environmental Consequences, No Action Alternative: None.

Mitigative Measures: Locate and flag the water pipeline.

Name of specialist and date: Kathy McKinstry, 09/16/10

SOILS

Affected Environment: The proposed project occurs on the following soil types:

Table 1. Soil Summary for the Proposed Moffat County Refuge Pit Expansion

Soil Map Unit (MU) & Soil Name (Acres in Allot.)	Map Unit Setting	Description
MU 75 Fonce sandy loam, 1 to 8% slopes	<u>Elevation:</u> 6,000 to 6,600 feet <u>Mean annual precipitation:</u> 10 to 12" <u>Ecological Site:</u> Loamy 7-10" PPT	These plateau soils are well drained moderate permeability and medium runoff potential. Available water capacity is low and the soil profile is typically up to 60 inches deep, mostly composed of sandy clay loam, gravelly coarse sandy loam, and gravelly sand.
MU 128 Maybell sand, 3 to 12% slopes	<u>Elevation:</u> 6,000 to 6,800 feet <u>Mean annual precipitation:</u> 11 to 13" <u>Ecological Site:</u> Sandhills	These hill soils are excessively drained with rapid permeability and very low runoff potential. Available water capacity is low and the soil profile is typically up to 60 inches deep, mostly of sand and loamy sand.

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

Land capability classification states that both of these soils are limited to grazing, forestland, or wildlife habitat and the chief limitation is a climate that is very dry.

Environmental Consequences, Proposed Actions: The hardened road surface may generate greater surface runoff because of decreased infiltration of precipitation, but less sediment is expected to move offsite. Proposed road improvement specifications are standard and are designed to minimize erosion. Soils within the proposed project area are relatively stable and are composed mostly of deep loams and sands that are well drained and have moderate to low runoff potential. Erosion is not a stated hazard in these soil types. The project as proposed is likely to have little to no adverse effects on soil stability.

Environmental Consequences, No Action: The proposed road upgrade would not be authorized and no further impacts to soils would occur. However, road base erosion, washouts, and widening would likely continue. The potential for soil erosion over the long term is greatest in this alternative.

Mitigative Measures: See measures identified in Water Quality – Surface.

Name of specialist and date: Emily Spencer, 9/23/10

VEGETATION

Affected Environment: The upgrade and widening of MCR 92 would be located in a loamy 7-10" range site. This range site typically supports a vegetation community made up of Wyoming big sagebrush, Indian ricegrass, needleandthread grass, streambank wheatgrass, Sandberg's bluegrass, western wheatgrass and prairie junegrass. Species present on site included Wyoming big sagebrush, prickly pear cactus, long-leafed phlox, buckwheat, prickly phlox, aster, globemallow, Sandberg's bluegrass, Indian ricegrass needleandthread, bluebunch wheatgrass, western wheatgrass and prairie junegrass. The vegetation exhibits good density, diversity and vigor.

Environmental Consequences, Proposed Action: The Proposed Action would completely remove the vegetation from 2.5 acres on Federal surface. While this removal would be relatively minor in the larger landscape, it would be in addition to numerous other plant community intrusions such as several two-track roads, gas wells and associated pipelines, fences, water wells and associated pipelines. The surface disturbance caused by the road upgrade may result in an increase in undesirable plant species, such as cheatgrass (*Bromus tectorum*) and halogeton (*Halogeton glomeratus*). It would be imperative that all COAs regarding weed control and revegetation are followed to avoid increasing undesirable plant species on and in areas surrounding the proposed project area. As long as weeds are controlled and all disturbed areas are reseeded to prescribed mixes of native plant species, the negative impacts to the native plant communities would be effectively mitigated.

Environmental Consequences, No Action Alternative: Erosion and washouts would continue. The potential for impacts to vegetation over the long term is greatest in this alternative.

Mitigative Measures: None.

Name of specialist and date: Kathy McKinstry, 09/15/10

WILDLIFE, AQUATIC

Affected Environment: No habitat for aquatic wildlife exists in the project area.

Environmental Consequences: None

Mitigative Measures: None

Name of Specialist and Date: Desa Ausmus 9/17/10

WILDLIFE, TERRESTRIAL

Affected Environment: Native plant communities in the Big Hole Gulch area are comprised primarily of sagebrush stands with a healthy understory of native grasses and forbs. This plant community provides habitat for a variety of big game, small mammals, birds and reptiles. Common species, such as coyotes, cottontail rabbits and ground squirrels likely use these habitats. The project area provides winter habitat for mule deer, pronghorn and elk, however, none of this habitat is mapped as “critical or severe winter” by the CDOW.

Environmental Consequences, Proposed Action: Since CR 92 has been in existence for many years, wildlife in the area have either acclimated to the road or are likely avoiding habitat immediately adjacent to this disturbance. The Proposed Action would remove an additional 2.5 acres of wildlife habitat. This would be minimal on a landscape level, since it is widening a pre-existing disturbance.

Wildlife species in the immediate area would be displaced from the project area during construction activities. The surrounding habitat should be sufficient to support displaced animals during construction. Once construction is completed, displaced wildlife would likely move back into the area.

Vehicle collisions are a major cause of mortality for many wildlife species. Improvements to the road would be unlikely to result in increased use by the general public since this area is used primarily during the hunting season. Traffic associated with gas development in the area already exists and would not increase due to the road improvements. Due to the above reasons, collision mortalities are not expected to increase as a result of the road upgrade.

Environmental Consequences, Proposed Action: Erosion would continue, which would impact wildlife habitat over the long term.

Mitigative Measures: None

Name of Specialist and Date: Desa Ausmus 9/17/10

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	EMO 9/21/10		
Forest Management	LM 09/17/10		
Hydrology/Ground			See Water Quality

			Ground
Hydrology/Surface			See Water Quality Surface
Range Management			KLM 09/16/2010
Realty Authorizations		LM 09/15/2010	
Recreation/Travel Mgmt		KSD 09/13/10	
Socio-Economics		LM 09/15/10	
Solid Minerals		JAM 9/23/2010	
Visual Resources		KSD 09/13/10	
Wild Horse & Burro Mgmt	KLM 09/16/2010		

CUMULATIVE IMPACTS SUMMARY:

Cumulative impacts may result from the construction and routine maintenance of the access road when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. 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 the project has the potential for an increase of erosion and sedimentation. Only a small reduction in forage would be anticipated. Some wildlife species may be temporarily displaced by construction, but should return upon completion of the project. Contrasts in line, form, color, and texture from the project would impact the visual qualities on the landscape.

STANDARDS

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The Proposed Action area was found to be meeting this standard when assessed in 2003. The road widening and upgrade would have minimal impacts to wildlife and their habitat. The Proposed Action would not preclude this standard from being met.

Name of specialist and date: Desa Ausmus 9/17/10

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: The Proposed Action is located in the Piskwik Allotment. A formal land health assessment was completed for this allotment in 2003. The allotment was found to be meeting all standards and providing suitable and productive habitat for greater sage-grouse. The Proposed Action would not preclude this standard from being met.

Name of specialist and date: Desa Ausmus 9/17/10

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: The Proposed Action would completely remove 2.5 acres of native vegetation. As long as the weeds are controlled, the native

plant community would eventually return and weeds such as halogeton and cheatgrass would be kept under control, and thus meet this standard.

Name of specialist and date: Kathy McKinstry, 09/16/10

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 right of way. This standard does not apply.

Name of specialist and date: Hunter Seim 9/15/10

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

Name of specialist and date: Emily Spencer, 9/20/10

WATER QUALITY STANDARD: The proposed project is located far enough away from ephemeral and perennial surface water sources so that impacts to water quality are not likely. Proposed road improvement specifications are standard and are designed to minimize erosion and therefore improve or maintain water quality. The Proposed Action would not preclude this standard from being met.

Name of specialist and date: Emily Spencer, 9/23/10

UPLAND SOILS STANDARD: Soils within the proposed project area are relatively stable and are composed mostly of deep loams and sands that are well drained and have moderate to low runoff potential. Erosion is not a stated hazard in these soil types. The project as proposed is likely to have little to no adverse effects on soil stability. The Proposed Action would not meet standards for soils under the road itself because of increased soil compaction and decreased infiltration capacity; however it should not preclude this standard from being met for soils influenced by the proposed project area.

Name of specialist and date: Emily Spencer, 9/23/10

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

FONSI

The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. With the implementation of the attached mitigation measures there is a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects are limited to the Little Snake Field 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 authorization of the access road upgrade is in conformance with the approved land use plan. It is my decision to issue the right-of-way grant with mitigation measures to Moffat County Commissioners. The grant is for construction, operation, maintenance and termination of an existing access road located on public land in T. 11N., R.94W., sections 8, 9, 17, 20, 6th PM, Moffat County, Colorado. The access road ROW on public land is 3 miles long and 60 feet wide. The ROW grant is perpetual. The access road ROW is rental exempt pursuant to 43 CFR 2806.14. 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 ROW 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 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 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 grants and stipulations are followed. The access road will be on a five-year compliance schedule after completion of the project.

Monitoring Plan: The access road will be monitored during the term of the right-of-way for compliance with the grants, stipulations, PODs and pertinent regulations until final reclamation is approved or the ROW's are relinquished; 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 schedules and monitoring plans 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:

ATTACHMENTS: Exhibit A, Map
Exhibit B, Stipulations

EXHIBIT B
Stipulations
COC074618

1. The holder shall construct, operate, and maintain the facilities, improvements, and structures within the right-of-way 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 right-of-way grant, including all stipulations and approved plan(s) of development, shall be made available on the right-of-way 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. Retain as much vegetative cover as possible during the project and/or reclaiming and covering areas shortly following disturbance.
3. 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 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.
4. 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) 826-5087. 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.
5. 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.
 6. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with cultural resources, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.
 7. 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.
 8. No surface disturbance activities between the hours of 6:00 PM and 9:00 AM from March 1 to May 1. This timing restriction only applies to that portion of MC Rd 92 that border BLM surface.
 9. The design and construction of this road needs to comply with the road design and construction direction contained in the BLM publication: Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development – The Gold Book – Fourth Edition – 2006, for BLM Collector Roads. This will include requiring Moffat County to locate on the ground and in a plan and profile diagram all culvert locations and the size of the culverts prior to the BLM approving road construction activities. A pre-work field review of the culvert locations by BLM will be needed. All perennial and intermittent drainages must have erosion and sediment control filters or barriers installed below fill slopes on these drainages that will effectively trap eroded sediments from entering the water systems. These must function for a minimum of two years following construction or until re-vegetation is adequately established on cut and fill slopes. All drainage culvert outlets must have rock installed at the outlets of the culverts to provide water energy dissipation to reduce erosion at the culvert outlets, and sediment barriers installed below the rock to further trap sediments. After adequate re-vegetation is established, the county will be required to remove sediment fencing. Other BMPs from the Gold Book include: Reclamation measures should begin as soon as possible after the disturbance; Construction with saturated or frozen soils result in unstable roads and should be avoided; Berms should be flattened to blend with the surrounding landform and revegetated; Keep

water diversion structures operational and free of debris.

10. Locate and flag the water pipeline that runs from a range improvement water well along the road in the project area to avoid damage during construction.
11. All road signing, including any required safety signing, must comply with direction contained in the U.S. Department of Transportation Manual of Uniform Traffic Control Devices.
12. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the authorized officer and the respective installing authority if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. The holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder shall be responsible for the survey cost.
13. 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.
14. Holder shall maintain the right-of-way in a safe, usable condition, as directed by the authorized officer. (A regular maintenance program shall include, but is not limited to, blading, ditching, culvert installation and surfacing).
15. 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.

16. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way.