ENVIRONMENTAL ASSESSMENT

Doc Holliday 3-30 Road

DOI-BLM-WY-R010-2012-0011-EA

BLM

Worland Field Office, Wind River/Bighorn Basin District, Wyoming

December 2011

The BLM's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

DOI-BLM-WY-R010-2012-0011-EA

Doc Holliday 3-30 Road
DOI-BLM-WY-R010-2012-0011-EA

***Type of Project**:*
Sundry Action/Right-of-Way Amendment

General Location of Proposed Action:
T43N ,R91W, Sec 8
T44N, R92W, Sec 24,25

***Name and Location of Preparing Office**:*
Worland Field Office
101 S. 23rd St.
Worland, WY 82401

***Lease/Serial/Case File Number**:*
WYW172481
Right Of Way Amendment #1, WYW-165118

Applicant Name:
Legacy Reserves,Operating, LP

INTRODUCTION

Legacy Reserves Operating LP has submitted a proposal to reopen an abandoned road and cross a wetlands area which was created in Murphy draw after the road had been previously abandoned. It will end at the Doc Holliday 3-30 Well. The road will allow upgraded access to leases held by Legacy Reserves LP and allow service to their wellsites.

Purpose and Need for the Proposed Action

The need of this action is to allow the operator to provide upgraded access to their lease holdings.

The purpose of this action is to respond to the operators request and analyze the effects of re-opening an abandoned road and crossing a wetland area to access the lease.

Decision to be Made

The Authorized Officer (AO) must determine whether or not to approve both the Sundry Action and Right-Of-Way amendment and thus grant access across public lands. The AO could decide not to issue a permit if it would cause unnecessary or undue degradation to the public lands, or if it would threaten to violate another Federal law.

If it is decided to issue the permits, the AO must decide what Conditions of Approval would apply to the permit. Conditions of Approval could include specification of construction, design, mitigation measures, and abandonment/reclamation activities for the proposed project area.

Finally, the AO must determine whether or not the proposed action could result in significant impact to the human environment. If not, this determination would be documented in a Finding

of No Significant Impact (FONSI.) If the impacts could be significant, an environmental impact statement would be necessary.

Conformance

The proposed action conforms to the Record of Decision and Approved Resource Management Plan for the Washakie Resource Area dated 1988. The decisions in the Washakie Resource Management Plan provide general management direction and allocation of uses and resources on the public lands in the area.

This plan has been reviewed to determine if the proposed action conforms to the land use plan as required by 43 CFR 1610.5. The Washakie RMP provides that the entire planning area (about 1.6 million acres of BLM-administered mineral estate) is open to oil and gas leasing consideration. About 86,100 acres of BLM-administered mineral estate are open to leasing consideration with a "no surface occupancy" stipulation. The rest of the Planning area is subject to standard lease terms and conditions, and seasonal or other requirements

The RMP delineates preferred right-of-way corridors, right-of-way avoidance areas, right-of-way exclusion areas, and area available for right-of-way under certain circumstances. This proposal would be within an area available for linear right-of-way generally open to rights-of-way, and thus it would be in conformance with the land use plan.

Relationship to Statutes, Regulations, Plans or Other Environmental Analyses

This Environmental Assessment (EA) is prepared in accordance with the National Environmental Policy Act of 1969, as amended (NEPA) and complies with applicable regulations and laws passed subsequent to the Act. In addition, this EA is prepared utilizing the stipulations and format outlined in the BLM NEPA Handbook H-1790-1 (BLM 1988). The Proposed Action and alternatives will comply with relevant federal, state, and local regulations, plans, and policies.

This action would allow the lessee to exercise their legal right to drill, explore, and produce hydrocarbons from the lease under regulations and policy derived from the Mineral Leasing Act. The Secretary of the Interior has entered into a lease agreement with the proponent that gives them the "exclusive right to drill for, mine, extract, remove and dispose of the oil and gas resources within the lease area." The applicant has submitted a proposed action to the BLM to at least partially exercise their rights under this agreement, in accordance with 43 CFR 3162.3-1 and Onshore Oil and Gas Order No. 1.

This project does not fit any of the specified criteria allowing for Categorical Exclusion from NEPA analysis under Section 390 of the Energy Policy Act of 2005 and is therefore being analyzed herein.

Title V of FLPMA, Sec. 501. [43 U.S.C. 1761] (a) The Secretary, with respect to the public lands (*including public lands, as defined in section 103(e) of this Act, which are reserved from entry pursuant of section 24 of the Federal Power Act (16 U.S.C. 818))* [P.L. 102-486, 1992] and, the Secretary of Agriculture, with respect to lands within the National Forest System (except in each case land designated as wilderness), are authorized to grant, issue or renew rights-of-way over, upon, under, or through such lands for-(5) systems for transmission or reception of radio,

television, telephone, telegraph, and other electronic signals, and other means of communications.

43 Code of Federal Regulations § 2800. It is BLM's objective to grant rights-of-way under the regulations in this part to any qualified individual, business, or government entity and to direct and control the use of rights-of-way on public lands in a manner that:

(a) Protects the natural resources associated with public lands and adjacent lands, whether private or administered by a government entity;
(b) Prevents unnecessary or undue degradation to public lands;
(c) Promotes the use of rights-of-way in common considering engineering and technological compatibility, national security, and land use plans; and
(d) Coordinates, to the fullest extent possible, all BLM actions under the regulations in this part with state and local governments, interested individuals, and appropriate quasi-public entities.

The area was assessed as per the Wyoming Instruction Memorandum (IM) WY-IM-2010-012 (Greater Sage-grouse Habitat Management Policy on Wyoming Bureau of Land Management (BLM) Administered Lands including the Federal Mineral Estate). The IM directs the BLM to analyze Greater Sage-grouse habitat out to a minimum of four miles from the project location. This analysis is to occur both within and outside of the Greater Sage-grouse core areas (core areas as designated by the Wyoming Governor's Executive Order EO 2010-4).

The BLM Land Use Planning Handbook (H.1601-1) states that the BLM must consider the management of lands with wilderness characteristics during the land use planning process. The criteria used to identify these lands are essentially the same criteria used for determining wilderness characteristics for wilderness study areas (WSA). However, the authority set forth in Section 603(a) of FLPMA to complete the three part wilderness review process (inventory, study, and report to Congress) expired on October 21, 1993; therefore, FLPMA does not apply to new WSA proposals and consideration of new WSA proposals on BLM-administered public lands is no longer valid. As required by FLPMA, Section 201, the alternatives were evaluated and screened in accordance with the Draft Manuals.

Executive Order 11990, "Protection of Wetlands," requires all federal agencies to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. The Environmental Protection Agency (EPA) has delegated to the U.S. Army Corps of Engineers (USACE) and the Wyoming Department of Environmental Quality (DEQ) the authority to issue Nationwide Permit 14's for construction in riparian areas or wetlands as required by Section 404 of the Clean Water Act. Legacy Reserves Operating LP has received a Nationwide Permit 14 to construct a road across the Murphy Draw wetland area.

Scoping, Public Involvement and Issues

The proposed action was reviewed by an interdisciplinary team. The Sundry Notice and right-of-way was received by the Worland Field Office October 14, 2011. Notification of preparation of this EA was also provided on the Wyoming BLM internet NEPA register (http://www.wy.blm.gov/nepa/search/index.php) on October 27, 2011.

In accordance with E.O. 11990, sec. 2(b) and E.O. 11990, sec. 2(b) and E.O. 11988, sec. 2(a)(4)) the BLM will allow a period of public review of the FONSI since the proposed action involves the construction in a wetland.

Issues identified by the interdisciplinary team:

Will there be weed infestation from construction activities?
Will the road or construction activities affect sage-grouse core areas, winter big game use, or big game habitat?
Will there be an effect to livestock?
Will there be blind hills and corners that would be unsafe?
Will the wetland crossing be of concern by causing channelization of water downstream?

PROPOSED ACTION AND ALTERNATIVES

Project Description

The operator has proposed to reopen an abandoned road and cross wetlands which were created in Murphy draw after the road had been abandoned. While the road had been abandoned, it had not been fully reclaimed and will be improved. The portion of the road across public lands to be inproved is approximately 7925 feet long. The public portion of this road and an additional portion of an existing improved road that links to this road, which also needs a ROW, totals approximately 9,975 feet. With a 40 foot ROW width, this totals approximately 9.16 acres.

State and private portions of this road, off lease, total an additional 7490 feet. They are considered contected actions and analyzed in this document, but would not be part of a federal approval.

Alternatives Considered

Alternative 1: Proposed Action

Permit the project, as submitted, with no additional constraints, modifications, or stipulations. The operator proposes to upgrade the abandoned road by pulling material from the filled in ditches, and crown and blade the road as necessary. The proposed width of the road would be 40' total width with a running surface of 14'. The access would be improved per Gold Book Standards to accommodate all-weather travel. The maximum grade would be 8.33%. Road base would be applied as necessary.

Vegetation would be cleared from the roadbed to a depth of approximately 3". The topsoil material would be temporarily stored in windrows on either side of the alignment. The topsoil would be replaced on the road backslopes after construction. Ditches would be constructed, as necessary. Five culverts and two cattleguards would be installed during the construction of the road.

The road would be constructed across 0.31 acres of wetlands. Geotextile material separation fabric would be installed after the topsoil is removed to provide for roadbed stability. Pit run gravel would be placed below the 60 inch culvert to insure road stability. Vegetation removed

from the wetland area would be stockpiled adjacent to the borrow area. Materials encountered within the borrow area which are unsuitable for embakement would be stockpiled and allowed to dry. That material and vegetation would be graded on the perimeter of the borrow area.

Per the Army Core of Engineers nationwide section 404 permit; 0.31 acres of wetland would be created to mitigate the loss.

Should the road be no longer needed, and required by the BLM; the road would be closed, the culverts and wetland crossing would be removed. Gravel would be removed and salvaged for use on other lease holdings and the road would be reclaimed and seeded.

Alternative 2: Proposed Action W/Stipulations/Modifications
Permit the project, as submitted, with stipulations and modifications.

The BLM can set forth design features that are necessary for the protection of the surface resources, uses and the environment; and for the reclamation of the disturbed lands. Design features are those specific means, measures, or practices that make up the proposed action and alternatives. Additional design features are added as needed to the proposed action or alternatives. Regulations, standard operating procedures, stipulations, operator committed measures, and best management practices are usually considered design features.

For the purpose of this analysis, the design features for the Sundry Notice are considered part of Alternative 2 and attached in Conditions of Approval.

Alternative 3: No Action.
No action implies that on-going development and activities would be allowed to continue in the area, but the proposed action would be disallowed. Additional actions would be considered by the BLM on a case-by-case basis.

AFFECTED ENVIRONMENT

Resources and features not present, and not discussed in this EA, include: Environmental Justice, Prime or Unique Farmlands, Flood Plains, Native American Religious Concerns, Class I visual management areas, Class I Airsheds, Wild and Scenic Rivers, Wilderness Values or Inventoried Lands with Wilderness Characteristics.

Land Use

Other than livestock grazing, oil and gas production, and wildlife use, there are no known land uses.

Cultural Resources, Traditional Cultural Properties, Native American Religious Concerns

Project area is within existing disturbance previously inventoried at the Class III level (BLM cultural project #1583054N). No historic properties were identified.

Vegetation

Native Vegetation

The road is within the 10-14 inch precipitation zone and the majority of the Range Sites crossed are Loamy and Saline Upland. These plant communities typically consist of cool-season grasses, Gardner's saltbush, and Big Sagebrush as the major components, while short warm-season grasses and miscellaneous forbs account for the balance of the understory. In addition the allotment is located within the boundary of the East Black Mountain Fire of 1996 which has cheatgrass as the main component of the plant communities in some areas. There are remnants of sagebrush that escaped the fire.

Invasive, Non Native Species Noxious Weeds

Several noxious weed species occur in the vicinity of the project, including Russian knapweed, Canada thistle, tamarisk (saltcedar) and hoary cress (whitetop).

Livestock Grazing

This project is located within the North Murphy Dome Allotment #00080 and operated by Denis Ranch LTD. The Allotment consists of 10,375 total acres in which 6,644 acres are federal land. The grazing permit authorizes a total of 877 AUMs in the grazing year with use occurring during the growing season and non-growing season or dormant season. The authorization schedule is shown below:

75 Cattle 04/15 to 08/14 5% P.L. 196 AUMs
72 Cattle 08/15 to 12/21 65% P.L. 198 AUMs
353 Cattle 10/19 to 12/21 65% P.L. 483 AUMs

Recreation and Visual Resource Management; Special Designations Including ACECs, Wild and Scenic Rivers, Lands with Wilderness Characteristics

Recreation

The project area is located in BLM-administered public lands that are not managed under either special or extensive recreation management areas (RMA). Public lands that are not designated as RMAs are managed to meet basic recreation and visitor services and resource stewardship needs.

Recreation is not emphasized within this area, but is recognized that recreational activities occur, such as hunting, motorized touring, and other dispersed recreational activities. Activities within the project area are very limited due to the private inholdings and the current high level of oil and gas development which inhibit recreational opportunities. Recreational users will use Mud Creek Road (BLM Road 1409) to access other areas to attain their desired settings, activities, and experiences.

Recreational settings within the project area are identified as middle country, which can be described as:

• Within 1/2 mile of four-wheel drive vehicle, ATV and motorcycle routes.
• Character of the natural landscape is retained. A few modifications contrast with the character of the landcape (e.g. fences, primitive roads).
• Social component of the project area is back country, where 3-6 encounters/day off travel routes can be expected.
• Four-wheel drives, all-terrain vehicles, dirt bikes are observed in most of the area, whereas other portions of the project area, the predominantly observed vehicles are two wheel drive.
•Travel and transportation management currently limits motorized use to existing roads and trails until a travel management plan is completed and implemented.

Lands with Wilderness Characteristics
As mandated by FLPMA, Section 201, the BLM is required to maintain an inventory of BLM-administered public lands to determine whether they possess wilderness characteristics. Recent inventories have found BLM-administered public lands that are within project area absent of wilderness characteristics.

VRM
The project area is located on BLM-administered public lands identified as visual resource inventory (VRI) Class IV. The area is within a scenic quality rating unit (SQRU) inventoried and scored with a scenic quality B rating, low sensitivity levels, and is within the front country distance zone. The landscape is identified as an arid "badlands" type of landscape, characteristic of rolling hills, desert shrub, and flat lands. The sensitivity ratings are scored as low due to current accepted land uses, as well as management objectives allocating this area for multiple uses which may include major surface disturbing activities. BLM manages the project area as VRM Class IV.

Soils

The majority of the proposed road would be constructed in an upland position on fine textured soils with depth ranging from shallow to deep (10-60 inches). Soil textures consist of clay loams, silty clay loams and loams throughout the profile. The majority of the road route would be on Loamy and Shallow Loamy 10-14 inch pz. ecological sites. The Saline Upland ecological site is intricately mixed into the vegetation mosaic on the landscape. Slopes are 3 to 45 percent, though the majority of the road would be restricted to slopes less than 4 percent.

The wetland soils located in Murphy Dome Draw are deep and poorly drained, and support a Saline Lowland 10-14 inch pz. ecological site.

Surface disturbance would be restricted to an area previously disturbed and reclaimed. Soil horizons have already been altered and mixed, and as a result there is minimal native topsoil available for reclamation.

The upland soils offer few limitations for road construction. Without a gravel road base, the road would be virtually impassable when wet and would be susceptible to rutting. The wetland soils have severe limitations for road development by virtue of the high water table.

The reclamation potential of the upland soils is moderate. Soil reaction (pH 7.4-8.8) and salinity (<8 mmhos/cm3) would not inhibit successful reclamation. The wetland soils have a good reclamation potential due to adequate soil depth and favorable soil chemistry, most notably soil pH and salinity.

The soils are ranked in Hydrologic Group C and D indicating that they have slow to very slow rates of infiltration. Nonetheless, when the native vegetation is intact, they are not susceptible to runoff and erosion, as confirmed by the US Forest Service web based Water Erosion Prediction Project (WEPP), Disturbed WEPP Model. WEPP predicts a 6 percent probability of runoff and a 4 percent probability of erosion for undisturbed soils. When calculated over a 50-year period, average erosion is virtually none. Erosion is only predicted for 25-year and 50-year storm cycles.

Hydrology (Water Quality and Prime or Sole Source of Drinking Water, Wetlands and Riparian Zones)

The project is located in the level 6 Nowater Creek-Mud Creek subwatershed USGS HUC # 100800070803. The affected environment includes the surface disturbance from 17.7 acres from re-opening on an old access road and well pad with surface disturbance to the surrounding watershed. The nearest downstream drainage is Mud Creek that flows in a northerly direction east of the project area. The access route will also cross Mud Creek in section 3 adjacent to the well pad. Mud Creek is a naturally occuring intermittent drainage located in the upper reaches of the watershed. Mud Creek however has received produced water from oil and gas facilities upstream of the area since the development of the field has occurred in the past century.
The area has developed extensive riparian vegeation consisiting of sedges, rushes, and cattails that are present along the swale of Mud Creek due in part to the disposal of the produced water. Mud Creek is a first order tributary to Nowater Creek that has an intermittent flow regime throughout lower reaches below the project. The drainage receives augmented amounts of additional storm water runoff following storm events but is perennial due to produced water. Riparian and wetland areas were delineated using the 1987 Army Corp of Engineers Manual and it was determined that 0.31 acres of jurisdictional wetland would likely be impacted from the project. The riparian area above and below the wetland crossing in section 3 would likely experience a change in flow pattern. The drainage area above the culvert is 6,360 acres of upland plant communites and undisturbed rangeland.

Wildlife

The wildlife habitat within the proposed project area consists of gently rolling topography and shallow drainages with the primary vegetative community being a mixture of sage brush, perennial grasses, cheat grass, prickly pear, and various forbs. The area provides habitat for numerous wildlife species including pronghorn antelope, mule deer, numerous small mammals, predators, passerines, and raptors. The proposed project area lies within crucial big game winter

habitat. The proposed project area lies within an area designated as a sage grouse core breeding area. No known threatened or endangered animal species are known to inhabit this area.

Socioeconomic

The lease for the Doc Holliday 3-30 well, which this road will service, was issued in 2006. In compliance with the Mineral Leasing Act, the lessee has the right to explore, drill, and extract hydrocarbons from their lease. The oil and gas sector plays an important role, generating tax revenues and vendor/employment incomes. Oil and gas exploration and development in the region has been part of the economic base for Washakie County since the early 1900's.

Hazardous or Solid Wastes

The construction of the road would use various vehicles and heavy earth moving machinery that use a variety of fuels, lubricants, coolants, and hydraulic or other fluids. These could be hazardous if spilled or disposed of improperly.

Public Health and Safety

The construction of the road would use various vehicles and machinery that could pose a hazard to public safety through collisions if the public were to attempt to drive the road while construction was occurring.

ENVIRONMENTAL EFFECTS

Land Use

Alternative 1:

There would be 7.3 acres of public land and 6.8 acres of other land ownership disturbance associated with the proposed action. Under the proposed action the operator does not address reclamation of the disturbed areas.

As part of BLM approval, compliance with mitigation for the project as outlined in the Army Corps of Engineers approval of Nationwide Permit 14 is required:

"1. Creation of a wetland area in a swale nearby adjacent to existing wetlands as described in the PCN and shown on Exhibit IV-B4 is required to compensate for wetland losses. At least 0.31 acre of wetland must be created by grading the area to within 6 inches of the water table and placing sod salvaged from the wetland area to be filled. Implementation of these mitigation measures must be completed concurrent with road construction activities that result in wetland losses.

2. Monitoring must be conducted annually for a period of four years based on wetland delineation methods in accordance with the Corps of Engineers Wetland Delineation Manual. The first report documenting monitoring results is due on September 30, 2013.

3. Mitigation measures must be successful to satisfy this requirement. Success is defined as approximately 80% aerial coverage in the herbaceous layer with a dominance of hydrophilic plant species. Additional mitigation measures could be required if success is not achieved within four years after construction.

4. Wetlands will not be reseeded. Noxious weeds in the wetlands will be controlled."

Alternative 2:

Under this alternative design features would be incorporated into the proposed action to address reclaiming disturbed areas to meet predisturbance land uses.

Alternative 3:
Under this alternative the sundry notice and right-of-way would not be approved. No resulting effects on current land uses would be expected to occur beyond the current situation.

Climate and Air Quality

Alternative 1:
Under the Proposed Action, impact to air resources would occur primarily from vehicle emissions and dust. Air quality could deteriorate due to emissions from vehicles and dust from vehicular traffic and construction of the location. These emissions are temporary. Loose dust could also cause some temporary effects on air quality in the project area. Dust could be dispersed locally by prevailing winds. Impacts to air quality and vegetation through increased dust are unknown and unquantified at this time.

It is anticipated that air quality would be restored to pre-construction levels when construction is completed.

Alternative 2:
Due to the few number of roads being constructed within the area, impacts are not anticipated to substantially differ from those described under the Proposed Action.

Dust control would be implemented, such as road watering, to reduce dust if conditions dictate. The effects on air quality through increased particulates would be minimized through the application of dust abatement practices.

Alternative 3:
Potential air quality impacts would be less than those described under the Proposed Action, with impacts from existing sources remaining at the current levels.

Cultural Resources, Traditional Cultural Properties, Native American Religious Concerns

Alternative 1:
Project area is within existing disturbance previously inventoried at the Class III level. No historic properties were identified.

Alternative 2:
No additional consequences would be expected under this alternative. The project authorization is recommended with standard stipulations included in the conditions of approval.

Alternative 3:
Under the No Action Alternative, the development of the proposed Action would not occur. No resulting effects on cultural resources would be expected to occur beyond the current situation.

Vegetation

Native Vegetation

Alternative 1:

There would be approximately 7.3 acres of public land and 6.8 acres of other land ownership affected by the proposed action, including the area available for vehicle travel. The operator does not make provisions for reclamation of disturbed areas in the proposed action.

As part of BLM approval, compliance with mitigation for the project as outlined in the Army Corps of Engineers approval of Nationwide Permit 14 is required:
"1. Creation of a wetland area in a swale nearby adjacent to existing wetlands as described in the PCN and shown on Exhibit IV-B4 is required to compensate for wetland losses. At least 0.31 acre of wetland must be created by grading the area to within 6 inches of the water table and placing sod salvaged from the wetland area to be filled. Implementation of these mitigation measures must be completed concurrent with road construction activities that result in wetland losses.
2. Monitoring must be conducted annually for a period of four years based on wetland delineation methods in accordance with the Corps of Engineers Wetland Delineation Manual. The first report documenting monitoring results is due on September 30, 2013.
3. Mitigation measures must be successful to satisfy this requirement. Success is defined as approximately 80% aerial coverage in the herbaceous layer with a dominance of hydrophilic plant species. Additional mitigation measures could be required if success is not achieved within four years after construction.
4. Wetlands will not be reseeded. Noxious weeds in the wetlands will be controlled."

Alternative 2:
Design features would be implemented under this alternative. The appropriate seed mix would be prescribed and once construction of the road is complete seeding would occur on the upland disturbed areas. No seeding would be done in the wetland areas. Impacts would not be significant.

Alternative 3:
Under the No Action Alternative, the development of the proposed Action would not occur. No resulting effects on vegetation would be expected to occur beyond the current situation.

Invasive, Non Native Species Noxious Weeds

Alternative 1:
Greatest risk for introduction of noxious weeds to the site is from construction equipment. Newly disturbed areas will be most at risk for weed germination and growth. Hydrological conditions in the wetland area will increase the risk for new weed introduction.

Alternative 2:
Risk for weed spread is reduced and new infestations are detected and treated sooner when a weed management plan is in place prior to construction. Under this alternative a weed management plan would be required to identify the detection and treatments of invasive and non-native species.

Alternative 3:
Risk of new noxious weed infestation at the site remains at current level.

Livestock Grazing

Alternative 1:

Under the Proposed Action, livestock grazing management on the North Murphy Dome Allotment would occur in the same manner as in the past. The project's amount of disturbance in upgrading the access road and adding a wetland area will not significantly reduce any AUMs or upland vegetation. Construction of the road and new wetland will not have any major displacement effects on livestock. It is possible that hoof impact could destroy vegetation, prevent establishment of new vegetation and cause increased soil erosion in the softer soils created by the new wetland area.

Alternative 2:
Under the Modified Action, livestock grazing would occur in the same manner as in the past and the project would still occur as planned. The effects would be the same as in Alternative One except mitigation measures would be set to prevent any adverse effects caused by livestock.

Alternative 3:
If no action is taken grazing would occur as it has in the past.

Recreation and Visual Resource Management; Special Designations Including ACECs, Wild and Scenic Rivers, Lands with Wilderness Characteristics

Alternative 1:
Current activities within the project area are very limited due to the private inholdings and the current high level of oil and gas development which inhibit recreational opportunities. Under the proposed action, this would not change. There are no Lands with Wilderness Characteristics within the project area, and the visual resource inventory (VRI) Class IV will not change.

Alternative 2:
No additional consequences or benefits would be expected under this alternative.

Alternative 3:
If no action is taken the present situation would remain unchanged.

Soils

Alternative 1:
The road is anticipated to be a long term feature on the landscape. Surface disturbance would be restricted to an area previously disturbed and reclaimed. Surface disturbance adjacent to the road would revegetate within 3 to 5 years following construction.

The road surface would be a minor source of runoff and sediment during its time of service. For the upland portion of the road, the US Forest Service web based Water Erosion Prediction Project (WEPP) Road Model predicts predicts 66.40 pounds of sediment would be generated for every 200 feet of road surface with 16.67 pounds of sediment per 200 feet of road surface available for off-site transport. Where the road crosses Murphy Dome Draw, the model predicts 100.77 pounds of sediment for every 200 feet of road surface with 21.29 pounds of sediment for every 200 feet of road potentially entering the wetland.

As part of BLM approval, compliance with mitigation for the project as outlined in the Army Corp of Engineers approval of Nationwide Permit 14 is required.

Alternative 2:
Additional mitigations are being proposed to protect the soil resource in the attached Conditions of Approval, such as no construction with frozen or saturated soils, requiring a National Pollution Discharge Elimination System (NPDES) Storm Water Permit from the Wyoming DEQ, and other road, construction, and rehabilitation mitigations. Other impacts would be the same as those described under the Proposed Action.

Alternative 3.
Under this alternative the road would not be reconstructed. Reclamation activities previously conducted would continue to stabilize as vegetation becomes better established.

Hydrology (Water Quality and Prime or Sole Source of Drinking Water, Wetlands and Riparian Zones)

Alternative 1:
The project involves the construction of 15,415 feet of road of a previously reclaimed road in the watershed. The area surrounding the road would be converted from rangeland to an semi impervious road base with a likely decrease in infiltration and increase in storm water runoff from the ditches along the road area as proposed in the design. The amount of sediment and erosion from stormwater runoff is analyzed in the soils section. The changes in sediment input would be in Mud Creek following storm events. Areas that are in close proximity with a nexus to drainages and perennial water are more likely to be impacted as a result of road construction.

The proposed action also would authorize the placement of 3870 cubic yards of fill into the channel crossing of Mud Creek for the placement of the road. The area was delineated to displace 0.31 acres of wetland from the placement of the fill for the crossing. The channel would also be sub-excavated at a 2 foot depth to allow for passage of water through the installation of four 60 inch culverts at the road crossing (Exhibit IV-B4). The crossing is designed to provide the safe passage of flows from a 25 year storm event for Mud Creek. This would alter the flow regime in the channel by constricting flow through the culverts. The width of the riparian area would be altered and potential downcutting of the channel from the disturbance could occur. This alternative also provides for 0.31 acres of newly created wetland that would be adjacent to the road crossing. This would involve excavation of the channel to a sufficient grade to allow water to infiltrate an adjacent upland area and convert it to a riparian area. This is a requirement for a no net loss of wetland and constructed according the the Army Corp of Engineers Nationwide Permit #14 for transportation projects in wetland areas. The newly created wetland would likely take several years to establish as the proper wetland characteristics for soil, vegetation, and hydrology develop from the introduction of permanent water to a previous upland site.

Alternative 2:
As Alternative 1 contains stipulations imposed by the Army Corps of Engineers for wetland mitigation, no additional stipulations are necessary.

Alternative3:
Under this alternative the road would not be reconstructed. The wetland would not be disturbed or mitigation needed.

Wildlife

Alternative 1:
The proposed project site lies within a designated sage grouse core breeding area, thus the Density and Disturbance Calculating Tool (DDCT) was required for this project proposal. This method of calculating disturbance is a requirement to implement BLM Information Memorandum No. WY-2012-019, dated February 10, 2012.

The results of the density/disturbance calculation indicate a disturbance of approximately 0.26% within the DDCT analysis area, which is well below the threshold of 5%. The DDCT calculation took into consideration primarily roads and oil wells, and to a lesser extent man-made structures such as livestock catchments, wildlife guzzlers, and buildings associated with oil wells and an abandoned mine. The undisturbed area within the DDCT analysis area was calculated at approximately 99.74%.

In addition to the DDCT results noted above, an on-site evaluation was performed in response to the sundry action/right of way amendment submitted by the proponent, determined that habitat in the general area of the proposed project was not suitable for sage grouse breeding, nesting, or early brood-rearing activity due to its vegetation characteristics. Large portions of this area were burned by wildfire in 1996, which destroyed a large percentage of the native sage brush, making it highly unlikely that sage grouse would utilize the area. That portion of the DDCT area which is considered unsuitable habitat for sage grouse, whether due to wildfire or other natural or causative factors, is far from uniform in its vegetation characteristics and no active management is underway to restore it to a minimum of 5% sage brush canopy cover. Since that portion of the area does not meet the definition of suitable or transitional habitat outlined in the IM, we did not include it in the analysis. (DDCT Process Manual, Page 2, item 3)

The proposed project site also lies within an area designated as crucial winter range for mule deer and antelope; however the proposed project would be implemented outside the timing restrictions for crucial winter range. No stipulations concerning big game wildlife resources are recommended.

Alternative 2:
No modifications or stipulations regarding wildlife resources are recommended.

Alternative 3:
No environmental effects would be introduced in the project area because the proposed action would not take place.

Socioeconomic

Alternative 1:
There would be a positive socioeconomic benefit. The Proposed Action would incrementally increase local and regional economic conditions and could result in the generation of local, state and federal government tax and royalty revenues. The relatively small, short-term construction workforce employment would not generate noticeable population effects or demand for temporary housing or local government services.

The Proposed Action would involve some capital investment. Expenditures by the proponent for these goods and services, coupled with increased employee and contractor spending, would

generate increased economic effects for the Big Horn Basin, and Wyoming. Federal mineral royalties would potentially be gained from this Proposed Action.

Alternative 2:
No additional consequences or benefits would be expected under this alternative.

Alternative 3:
Under the No Action Alternative, the development of the proposed Action would not occur. No resulting effects on socioeconomics would be expected to occur beyond the current situation.

Public Health and Safety

Alternative 1:
As with any construction activity, there is a risk to public health and safety. These risks may include increased traffic to the location.

Alternative 2:
No addition or reduction of risk would occur.

Alternative 3:
Under the No Action Alternative, the development of the proposed Action would not occur. No resulting effects on Public Health and Safety would be expected to occur beyond the current situation.

Cumulative Effects

Past – Past actions in the project area include livestock grazing and oil & gas exploration and development. The proposed action is to reopen an abandoned road and cross new wetlands which were created in Murphy draw after the road had been abandoned.

Present – There is one reactivated well, one well about to be drilled, and one additional well tentatively planned that would be served by this proposed road. This proposed action reopening an abandoned road would cause surface re-disturbance of 7.3 acres of public land and 6.8 acres of other land ownership. As the only alternative to construction of this road would be the continuation of the use of the other, longer, and poor condition road that currently serves the well(s) locations; present cumulative effects would be less under either Alternative 1 or 2 than under Alternative 3.

Livestock grazing would continue to cause impacts that are similar to those caused in the past, unless the numbers, season of use, duration of livestock grazing, or some other variable is changed.

Reasonably Foreseeable Future – The new well to be drilled and the probability of additional wells if the new one(s) are productive, would add unknown additional acres of temporary or long term surface disturbances and related impacts.

Livestock grazing would continue and it would cause the same kind, amount, and trends of impact that it has in the past unless the livestock numbers and/or kind, season of use, or duration of grazing or some other variable is changed.

TRIBES, INDIVIDUALS, ORGANIZATIONS, or AGENCIES CONSULTED

Agency/Tribe/Organization
SHPO notified 11/3/2011
U. S. Army Core of Engineers
Wyoming DEQ, WQD

LIST OF PREPARERS

The following Worland Field Office personnel reviewed or have been contacted with regard to this EA.

List of Reviewers

Resource	Name	Title
Cultural Resources	Marit Bovee	Archaeologist
Wildlife, T&E animal	Ted Igleheart	Wildlife Biologist
Recreation/VRM/Travel Management/Special Designations	Paul Rau	Recreation/Visual Specialist
Livestock Grazing	Mike Peck	Range Management Specialist
T&E Plants	Karen A. Hepp	Range Management Specialist (T&E/Sensitive Plants)
Engineering	Monica Goepferd	Civil Engineer
Soils/Haz. Mat.	Stephen Kiracofe	Soils Scientist
Invasive Species	CJ Grimes	NRS/Weeds
Lands	Carol Sheaff	Realty Specialist
Water resources	Jared Dalebout	Hydrologist
Paleontology	Marit Bovee	Archaeologist

_____

Planning & Environmental Coordinator

Conditions of Approval

Doc Holliday 3-30 Road, Sundry Action
Right-of-Way WYW-165118 Amendment #1

Site specific Conditions of Approval

Weeds

Develop a weed management plan for the entire field, which includes at a minimum the following items: Standards for equipment cleaning; inventory, treatment and monitoring protocols; and use of certified weed-free seeds and materials (i.e. gravel, straw).

Wetlands

The new wetland area may be permanently or temporarily fenced off if it is found that livestock is preventing establishment of new vegetation or causing erosion problems.

As part of BLM approval, compliance with mitigation for the project as outlined in the Army Corps of Engineers approval of Nationwide Permit 14 is required.
1. Creation of a wetland area in a swale nearby adjacent to existing wetlands as described in the PCN and shown on Exhibit IV-B4 is required to compensate for wetland losses. At least 0.31 acre of wetland must be created by grading the area to within 6 inches of the water table and placing sod salvaged from the wetland area to be filled. Implementation of these mitigation measures must be completed concurrent with road construction activities that result in wetland losses.
2. Monitoring must be conducted annually for a period of four years based on wetland delineation methods in accordance with the Corps of Engineers Wetland Delineation Manual. The first report documenting monitoring results is due on September 30, 2013.
3. Mitigation measures must be successful to satisfy this requirement. Success is defined as approximately 80% aerial coverage in the herbaceous layer with a dominance of hydrophilic plant species. Additional mitigation measures could be required if success is not achieved within four years after construction.
4. Wetlands will not be reseeded. Noxious weeds in the wetlands will be controlled.

Standard Conditions of Approval

1. The operator shall contact the authorized officer a minimum of 5 days prior to beginning any construction activities.

Right-of-Way/Road

2. No surface disturbance or construction activity shall occur outside the approved right-of-way (approximately 20’ from center). All vehicle traffic shall be kept within the approved right-of-way.

3. No flat-blading will be permitted.

4. Runoff and erosion control shall be implemented on slopes in excess of 10 percent.

5. The identified access route shall be constructed as submitted, insofar as it pertains to that portion of the route that is off - lease.

6. The access road and drainage controls (culverts, drainage dips, ditching, crowing, wing ditches, surfacing, etc.) shall be maintained to prevent soil erosion and accommodate safe, environmentally-sound access. A regular maintenance program will include, but is not limited to blading, ditching, culvert installation and surfacing.

7. For the purpose of determining joint road maintenance responsibilities, the holder shall make road use plans known to all other authorized users of the road. Holder shall provide the authorized officer, within 30 days from the date of the grant, with the names and addresses of all parties notified, dates of notification, and method of notification. Failure of the holder to share proportionate maintenance costs on the common use access road in dollars, equipment, materials, or manpower with other authorized users may be adequate grounds to terminate the right-of-way grant. The determination as to whether this has occurred and the decision to terminate shall rest with the authorized officer. Upon request, the authorized officer shall be provided with copies of any maintenance agreement entered into.

Construction

8. Construction activity will not be conducted using frozen or saturated soil material or during periods when watershed damage or excessive rutting is likely to occur.

9. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 4 inches deep, the soil shall be deemed too wet to adequately support construction equipment.

10. All design, material, and construction, operation, maintenance, and termination practices shall be in accordance with safe and proven engineering practices.

11. Topsoil shall be removed at a depth of 4-6inches from all areas of surface disturbance. Topsoil shall be clearly segregated from spoil material.

12. Following construction all disturbed areas shall be restored, topsoil replaced and areas reseeded as prescribed. To prevent erosion, waterbars, mulching, or other protective measures may be required. Backfill shall be thoroughly compacted. Topsoil shall be spread evenly over all areas to be reclaimed.

13. Operators are required to obtain a National Pollution Discharge Elimination System (NPDES) Storm Water Permit from the Wyoming DEQ for any projects that disturb one acre or more. This general construction storm water permit must be obtained from the WDEQ prior to any surface disturbing activities and can be obtained by following direction on the WDEQ website at http://deq.state.wy.us. Further information can be obtained by contacting the NPDES coordinator at (307) 775-7570.

14. The Operator shall ensure all appropriate measures are taken to control erosion. Upon completion of construction the operator shall initiate the approved Storm Water Discharge Plans on the location and associated access**.**

15. The Operator is responsible for inspection of the construction area for the presence of both surface and subsurface utility facilities and shall notify the Wyoming One-Call System (1-800-849-2476, www.onecallofwyoming.com) before construction activities begin. The Operator will use extra safety precautions when working near or around pipelines, power lines, underground cables, or other utility installations.

16. The Operator and their contractors shall comply with all applicable federal and state laws and regulations as they relate to hazardous materials. Hazardous materials being those chemicals listed in Title III List of Lists, EPA's Consolidated List of Chemicals Subject to Emergency Planning and the Community Right to Know Act (EPCRA) and Section 112(r) of the Clean Air Act, as amended, or the 40CFR 302.4 Table-List of Hazardous Substances and Reportable Quantities, as amended. In the event any hazardous materials are used, they would be handled in an appropriate manner to prevent environmental contamination. Any release of hazardous materials of reportable quantities, would be reported both to the National Response Center (NRC), as required in the National Oil and Hazardous Materials Contingency Plan (40 CFR 300), and the Worland Field Office, as per the Hazardous Materials Contingency Plan.

17. All Undesirable Events shall be reported in compliance with NTL-3A. If during any phase of the construction, drilling, production, or reclamation of the approved actions any oil or other pollutant should be discharged from the approved area, containers or vehicles impacting Federal lands, the control and total removal, disposal, and cleanup of such oil or other pollutant, wherever found, shall be the responsibility of the operator, regardless of fault. Upon failure of the operator to control, cleanup, or dispose of such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the authorized officer may take such measures as he deems necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the operator. Such action by the authorized officer shall not relieve the operator of any liability or responsibility.

18. 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.

Cultural

19. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials and contact the authorized officer (AO). 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 site can be used (assuming in situ preservation is not necessary); and,

-a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

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.

Rehabilitation

20. All disturbed areas shall be drill seeded. Where drilling is impractical, seed shall be broadcast and the area raked or chained to cover seed. If broadcast seeding is used, the approved seed mix shall be doubled.

21. All disturbed areas shall be reseeded with the prescribed seed mixture of all Pure Live Seed. Fall seeding shall be completed after September 1, and prior to ground frost. Spring seeding shall be completed after the frost has left the ground and prior to May 15. Seeding shall be repeated if a satisfactory stand is not obtained.

Species	Lbs. /Acre PLS
Indian Ricegrass	1.0
Bottlebrush Squirreltail	1.0
Sandberg Bluegrass	1.0
Wyoming Big Sagebrush	0.25
Winterfat	1.0
Wild Onion	0.5

22. Prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surface material, contouring, top soiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.

23. The authorized Officer may add additional conditions of approval to protect the resources, if conditions require it. The operator shall comply with all applicable laws and regulations.