

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

ENVIRONMENTAL ASSESSMENT

EA-NUMBER: CO-100-2006-016 EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER:

COC-57934: Chuck Strain Well #20-6
COC-57935: Chuck Strain Well #40-6
COC-57936: Chuck Strain Well #20-7
COC-69583: Access Road Right-of-Way

PROJECT NAME: Three Chuck Strain Wells

LEGAL DESCRIPTION: All three wells in Moffat County, Colorado

Chuck Strain Well #20-6: SWNE Section 6, T9N, R93W, 6th PM
Chuck Strain Well #40-6: SESW Section 6, T9N, R93W, 6th PM
Chuck Strain Well #20-7: Center NE Section 7, T9N, R93W, 6th PM

APPLICANT: Hunter Energy, LLC

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

Name of Plans: Little Snake Resource Management Plan and Record of Decision (ROD) approved on April 26, 1989; and the Colorado Oil and Gas Leasing & Development Environmental Impact Statement (EIS) and the ROD signed on November 5, 1991.

Remarks: The proposed Three Chuck Strain Wells would be located within Management Unit 2 (Little Snake Resource Management Plan). One of the objectives of Management Unit 2 is to provide for the development of the oil and gas resource. The development of other resource uses/values within this unit is allowed consistent with the management objectives for oil, gas, and forest resources.

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

NEED FOR PROPOSED ACTION: To provide for the development of oil and gas resources and to supply energy resources to the American public.

PUBLIC SCOPING PROCESS: The Notice of Staking is posted in the Little Snake Field Office for a minimum of 30 days before the Application for Permit to Drill is approved and issued to the applicant.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES: The proposed action is to approve three Applications for Permit to Drill (APDs) submitted by Hunter Energy, LLC. This oil and gas lease operator proposes to drill three natural gas wells near Great Divide, CO. APDs have been filed for Chuck Strain Well #20-6, Chuck Strain Well #40-6, and Chuck Strain Well #20-7 with the LSFO that include drilling and surface use plans. The APDs cover mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by Hunter Energy in the drilling and surface use plans would be attached by the BLM as Conditions of Approval (COAs) to an approved APD.

The proposed well pads would be located approximately 25 miles northwest of Craig, Colorado. The approximate date work would start is in the winter/spring of 2006 and the estimated duration of construction and drilling for each well is two months. Moffat County Roads #6, #7, and #99 would be used to access the well sites. Hunter Energy proposes to construct approximately 2011 feet of new road access. New road construction would conform to BLM specifications for a “resource road”, with a 16-foot wide running surface. In addition, approximately 3807 feet of existing two-track road would be upgraded. Total surface disturbance for access road construction would be approximately seven (7) acres. The Chuck Strain Well #20-7 and access road would be located on private land. The Chuck Strain Wells #20-6 and #40-6 would be located on federal surface. A federal right-of-way would be required for 1,400 feet of off-lease access road to the Chuck Strain Well #40-6.

The proposed well pads would be cleared of all vegetation and leveled for drilling. Topsoil and native vegetation would be stockpiled for use in reclamation. Approximately three (3) acres would be disturbed for construction of each well pad. This would include the 440’ by 275’ well pads, the topsoil piles, and subsoil piles to be constructed at the well sites. Unlined reserve pits would be constructed on the well pads to hold drill mud and cuttings. If the wells are producers, cut portions of the well sites would be backfilled and unused portions of the well sites would be stabilized and re-vegetated. If a gas well proves unproductive, the well would be properly plugged and the entire well pad and access road would be reclaimed.

Hunter Energy did not include plans for a gas sales pipeline with the APDs. A detailed written statement of work (Sundry Notice) would be filed with the BLM before pipeline installation. This Sundry Notice would be assessed, when it is received, for environmental impacts of a gas sales pipeline.

NO ACTION ALTERNATIVE: The “no action” alternative is that the wells would not be permitted and therefore no wells would be drilled. Hunter Energy holds a valid and current oil and gas lease for the area where the proposed three Chuck Strain Wells would be located. Under

leasing contracts, the BLM has an obligation to allow mineral development if the environmental consequences are not irreversible or too severe. The APD process is designed to overcome the no action situation of not accepting the APD through the mitigation of predicted environmental consequences. Since the proposed action is consistent with the ROD and the Oil and Gas Leasing EIS, rejecting the APDs for the wells was considered but will not be analyzed further in this EA.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

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

Environmental Consequences: Short term, local impacts to air quality from dust would result during and after well pad construction. Drilling operations produce air emissions such as exhaust from diesel engines that power drilling equipment. Air pollutants could include nitrogen oxides, particulates, ozone, volatile organic compounds, fugitive natural gas, and carbon monoxide. Gas flaring reduces the health and safety risks in the vicinity of the well by burning combustible and poisonous gases like methane and hydrogen sulfide. The proposed action will not adversely affect the regional air quality.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 01/04/06

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Jim McBrayer 01/12/06

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(s), three Hunter Energy well pads and access roads have undergone a Class III cultural resource survey:

Bedingfield, Krista

2005 Hunter Energy LLC, Chuck Strain 20-6 Well Pad, Access road, and Pipeline: A Class III Cultural Resource Inventory in Moffat County, Colorado. BLM 54.4.06.

Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

Bedingfield, Krista

2005 Hunter Energy Proposed Chuck Strain 20-7 Well Pad, Access road, and Pipeline: A Class III Cultural Resource Inventory in Moffat County, Colorado. BLM 54.6.06.

Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

Bedingfield, Krista

2005 Hunter Energy LLC, Chuck Strain 40-6 Well Pad, Access road, and Pipeline: A Class III Cultural Resource Inventory in Moffat County, Colorado. BLM 54.8.06.

Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

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

Mitigative Measures:

The following standard stipulations apply for this project:

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

- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43

CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

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

Name of specialist and date: Henry S. Keesling 01/04/06

ENVIRONMENTAL JUSTICE

Affected Environment: There will be no impact to minority or low-income populations.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Phillis A. Bowers 01/12/06

FLOOD PLAINS

Affected Environment: No large floodplains are affected. The active floodplain associated with an unnamed, intermittent tributary to Big Hole Gulch would be crossed utilizing an existing two-track road and replacing one existing culvert. The company has adequately addressed the installation of the new culvert in the APD.

Environmental Consequences: The access road to the Chuck Strain Well #40-6 will have very minimal effect on floodplain resources and floodplain function. No threat to human safety, life, welfare, and property will result from a properly constructed road crossing.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 01/04/06

INVASIVE, NONNATIVE SPECIES

Affected Environment: Cheatgrass, whitetop, halogeton, Canada thistle, and other biennial thistles are known to occur on these allotments. There is the potential for noxious weeds, such as dalmatian toadflax, knapweeds, and others, to exist and spread in these areas. Given an opportunity, these species are capable of out competing native vegetation communities, and becoming the dominant cover type without appropriate management.

Environmental Consequences: The surface disturbing activities and associated traffic involved with drilling three new wells and upgrading and constructing necessary access roads will create a favorable environment, and provide a mode of transport for invasive species and other noxious weeds to become established. Invasive species can be spread through a variety of means including vehicular travel, wind, water, and wildlife and livestock movement. Required mitigation attached as Conditions of Approval to minimize disturbance, and the utilization of interim reclamation techniques would facilitate control of invasive species and reduce the potential of long term infestation of annual and noxious weed species. All principles of Integrated Pest Management should be employed to control noxious weeds on public lands.

Mitigative Measures: None

Name of specialist and date: Curtis Bryan 01/12/06

MIGRATORY BIRDS

Affected Environment: The proposed project area for the three wells provides suitable nesting habitat for sage sparrow. The area may also provide foraging habitat for golden eagles although there are no known golden eagle nests near the project area.

Environmental Consequences: Well pad and road construction will result in the long term loss of approximately 16 acres of nesting habitat for sage sparrow. Suitable nesting habitat is located in the surrounding area that would be capable of supporting sage sparrows that choose to nest in the project area. Take of sage sparrows might occur if access road and well pad construction occur during their nesting period. The loss of this habitat would likely displace prey species for golden eagles as well. There is little chance of take of golden eagles to occur as a result of the development of these three wells.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 01/10/06

NATIVE AMERICAN RELIGIOUS CONCERNS

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

Name of specialist and date: Henry S. Keesling 01/04/06

PRIME & UNIQUE FARMLANDS

Affected Environment: Not Present

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 01/04/06

T&E SPECIES – ANIMALS

Affected Environment: The proposed project area is located within mapped bald eagle winter range. There are no known bald eagle winter roost sites any were near the proposed project area. Bald eagles are known to winter along portions of the Little Snake and Yampa Rivers, using adjacent upland habitat as scavenging areas primarily for winter or vehicle killed mule deer and elk. Any bald eagle in the project area would be opportunistically feeding on carrion.

The proposed Chuck Strain 20-6 well is located within 2.9 kilometers of the Big Hole Gulch Lek, an active sage-grouse lek. A lek is considered to be active if they have had any use by sage-grouse within the last five years. The Big Hole Gulch Lek has had a decrease in attendance over the last several years. CDOW personnel believe these birds may have moved their strutting grounds to the south. This has not been officially confirmed but would place the lek closer to the proposed project. A BLM staff wildlife biologist during the Onsite visit determined this well site contains suitable nesting habitat characteristics for greater sage-grouse. Greater sage-grouse are a BLM special status species.

Environmental Consequences: No Federally ESA listed animal species would be affected by the proposed action. There have not been any site specific observation of eagles in the project area and the well site does not contain any critical eagle habitat such as roosting or perching sites. Bald eagles would only be in the project area if they were opportunistically feeding on carrion during the winter months. The likelihood of a bald eagle occurring at the proposed well site is low, however if a bald eagle is observed in the immediate vicinity of the project site (well pad and new road site), construction should be delayed until the eagle has moved out of the area. This would ensure that eagles are not disturbed or impacted by the proposed action. Although the proposed action would alter sixteen acres of habitat, this would not impact bald eagle's ability to feed on carrion in upland habitats. With the mitigation below, the proposed action would have 'no effect' to bald eagles.

The proposed well site for the Chuck Strain 20-6 well is located within 2.9 kilometers of an active lek and provides quality nesting habitat for sage grouse. If drilling activities were to take place during the breeding or nesting season (March 1 to June 30), significant impacts to sage grouse using this habitat would be expected. Impacts to grouse species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include,

but are not limited to, displacement into less suitable habitat, nest abandonment, destruction of nests and loss of habitat. Other impacts, such as habitat fragmentation and the spread of exotic plants can also degrade sage grouse habitat (Connelly et al. 2004). Noise and increased human activity related to drilling can disrupt breeding and nesting (Connelly et al. 2004). Holloran and Anderson (2004) found a higher annual decline in male lek attendance at leks within 3.2km from drilling activity. To prevent significant impacts to sage grouse species, construction and drilling activities associated with the proposed access roads and well pads should not be permitted from March 1 to June 30. This timing limitation would prevent accidental nest destruction, nest and lek abandonment and displacement into less suitable habitat. Holloran (2005) recommends “At a minimum, all areas within 5 km of known leks meeting the breeding habitat shrub requirements outlined in the sage-grouse habitat management guidelines (Connelly et al. 2000b) should be considered suitable and protected from development.” Individual well pad construction would not have significant negative impacts on sage grouse habitat, however, the cumulative impacts of three new wells, their associated roads and the amount of gas development already existing in the area, will continue to degrade grouse habitat. Holloran (2005) found “that areas with relatively high well densities present within the area of interest during this study (i.e. 16 ha well spacing present in the Jonah Fields) contained well densities that were high enough to exclude nesting females.” Oil and gas development may lead to decreased sage grouse use of this area.

Bureau of Land Management. 1991. Colorado Oil and Gas Leasing and Development. Final Environmental Impact Statement. U.S. Dept. of Interior.

Connelly, J.W., S.T. Knick, M.A. Schroeder and S.J. Stiver. 2004. Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats. Western Association of Fish and Wildlife Agencies. Unpublished Report. Cheyenne, Wyoming.

Holloran, M.J., and S.H. Anderson. 2004. Sage-grouse response to natural gas field development in northwestern Wyoming. Page 16 in Proceedings of the 24th Meeting of the Western Agencies Sage and Columbian Sharp-tailed Grouse Technical Committee. Wenatchee, Washington (Abstract).

Holloran, M.J. 2005. Sage-grouse Response to Natural Gas field Development in Northwestern Wyoming. A dissertation Submitted to the Department of Zoology and Physiology and the Graduate School of the University of Wyoming. Pg 52-60

Mitigative Measures: Bald eagle winter range – If a wintering bald eagle is observed in the immediate vicinity of the project site (well pad and new road site), the operator should contact the BLM, and construction should be delayed until BLM approves the continuance of construction activities. This delay would be relatively short term (1-7 days).

CO-30 Sage grouse leks will be avoided by 2 miles (3.2 Kilometers) between March 1 and June 30 to protect nesting sage grouse for the Chuck Strain Well #20-6.

Name of specialist and date: Timothy Novotny 01/10/06

T&E SPECIES – PLANTS

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

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 01/04/06

T&E SPECIES - SENSITIVE PLANTS

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

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 01/04/06

WASTES, HAZARDOUS OR SOLID

Affected Environment: If the 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 impact on the environment.

Environmental Consequences: Consequences will 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 will occur, but they can be remedied, and long-term impacts will be minimal.

Mitigative Measures: None

Name of specialist and date: Duane Johnson 01/04/06

WATER QUALITY – GROUND

Affected Environment: Fresh water within the Wasatch Formation may occur. The surface casing will be adequate to protect any fresh water zones within 900 feet of the surface, coupled with production casing and cement behind pipe from TD to approximately 4000' depth. This will leave an open annular space from 900' to 4000', all within the

Wasatch Formation. Waters within porous zones in this formation are of similar quality and can be allowed to commingle.

Environmental Consequences: With the use of proper construction practices, drilling practices, and with best management practices no significant adverse impact to groundwater aquifers and quality is anticipated to result from the proposed action. A geologic and engineering review was performed on the 8-point drilling plan to ensure that the cementing and casing programs adequately protect the downhole resources.

Mitigative Measures: None

Name of specialist and date: Fred Conrath 01/10/06

WATER QUALITY/HYDROLOGY – SURFACE

Affected Environment: The project areas are located on rolling hills near Great Divide, CO. Runoff water from the affected area would drain towards Big Hole Gulch, an intermittent tributary of the Little Snake River. This segment of the Little Snake River must have water quality sufficient to support Aquatic Life Cold 1, Recreation 1a, Water Supply, and Agriculture. All stream segments within the affected environment are presently supporting their classified uses.

Environmental Consequences: Existing improved roads have been surveyed and designed appropriately to adequately handle the surface water drainage that will be intercepted and channeled down road ditches. The well pad locations would require construction of two short access roads and upgrading to an existing two-track road. Hunter Energy has incorporated drainage features in the design of the new roads to handle the surface water drainage. The well pad designs for the wells were modified at the onsite to include erosion control devices along the well pad embankments. Construction of the roads, well pads, and installation of the specific drainage features should follow the recommendations provided in the Surface Operating Standards for Oil and Gas Development, 3rd Edition. Increased sedimentation to the Little Snake River during spring runoff or from high intensity summer/fall rainstorms would be the greatest potential impact to water quality. Although some sediment may be transported off site and eventually reach perennial waters, mitigation provided in the Surface Use Plan for the proposed action, as well as the surface mitigation contained in the Conditions of Approval, will reduce the potential to have excessive sediments and salts in runoff water from the site.

Mitigative Measures: Additional mitigative measures will be employed to prevent or reduce accelerated erosion if it begins to occur within or on constructed drainage and diversion ditches, surface drainages affected by the road, well pad, or well pad embankments.

Name of specialist and date: Barb Blackstun 01/04/06

WETLANDS/RIPARIAN ZONES

Affected Environment: An unnamed drainage which parallels the main access road for Chuck Strain wells contains cottonwood trees that indicate the presence of a riparian system. A developed spring within a fence enclosure is located within a tenth of a mile to the north of the access road for the Chuck Strain 40-6 well.

Environmental Consequences: A culvert in the unnamed drainage along the two track trail that will be upgraded for use as an access road to the Chuck Strain 40-6 well will be removed and replaced with a larger culvert to allow for the upgrade of the access road. This activity will result in a short term impact on the riparian system. It should not have any long term impact on the functioning condition of this system.

Mitigative Measures: If the fence enclosure has to be altered in any manner to accommodate the upgrading of the proposed access roads, the project proponent will be responsible for repairing or replacing the fence. If the original location of the fence needs to be altered, the project proponent must first receive written permission from the BLM.

Name of specialist and date: Timothy Novotny 01/10/06

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 01/12/06

WILDERNESS, WSAs

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 01/12/06

NON-CRITICAL ELEMENTS

FLUID MINERALS

Affected Environment: The proposed action is in favorability zone 4 (highest for oil and gas potential). This well will penetrate the Wasatch, Fort Union, Lance, Lewis Shale, and Mesaverde Formations. Bituminous coal seams with more than three thousand feet of overburden can be found throughout the Mesaverde (Almond) and Ft. Union Formations, and in a lesser amount the Lance Formation. Shallower thin beds of bituminous coal can be found in the Wasatch Formation as well. Their mineable value is low, but they may be valuable coal bed methane reservoirs and must be protected or isolated where encountered. It should be noted that the hydrology for coal bed methane production within the Sand Wash geologic basin is unfavorable even though the gas resource is large (Scott, et al., 1995). The Mesaverde (Almond) in this area is mainly coastal swamp and lagoon deposits with two transgressive shoreline deposits pinching out in a northwesterly direction near the top of the formation. Coal beds are non-existent in this area within the Ericson Formation. The top third (Canyon Creek Member) and bottom third (Trail Creek Member) of the Ericson Sandstone are coastal-plain fluvial deposits of crossbedded sandstones.

Environmental Consequences: The proposed casing and cementing program appears to be adequate to protect and/or isolate all resources identified above with casing and cement behind pipe from TD to the surface.

Mitigative Measures: None

Name of specialist and date: Fred Conrath 01/19/06

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

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

Mitigative Measures: "Standard Discovery Stip", i.e., "If fossils are discovered during construction or other operations, all activity in the area will cease and the Field Office Manager will be notified immediately. An assessment of significance will be made within an agreed time frame. Operations will resume only upon written notification by the Authorized Officer."

References

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

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

Name of specialist and date: Robert Ernst 01/10/06

RANGE MANAGEMENT

Affected Environment: Well 40-6 is located within the College Station Allotment. This allotment is not permitted to any specific permittee, but is used instead as a reserve allotment for permittees whose allotment is under a vegetation treatment that requires rest. The well pad, as proposed currently, lies across an existing two-track road, which is the only access to the remainder of the allotment.

Environmental Consequences: If the existing road is blocked, the permittee will no longer have access to the west side of the allotment. If management activities and maintenance of range improvements are to be continued, then another road must be constructed to provide access to the west side of the allotment. The surface use plan includes a re-alignment of the existing road around the east side of the well pad to continue to provide access along the existing two-track road.

Mitigating Measures: None

Name of specialist and date: Andrea Minor 01/09/06

REALTY AUTHORIZATIONS

Affected Environment: R/W COC69583 is an access road for the Chuck Strain Well #40-6 that will be granted at the time the APD is issued.

Environmental Consequences: The access road will be 40 feet wide and 1,400 feet long, consisting of 1.29 acres. When this well is plugged and abandoned, reclamation of this access road will be accomplished as per the R/W grant.

Mitigative Measures: None

Name of specialist and date: Phillis A. Bowers 02/07/06

SOILS

Affected Environment: The proposed three Chuck Strain Wells are found within the Maysprings coarse sandy loam, the Ironsprings-Maysprings-Gretdivid complex, and Berlake-Taffom-Gretdivid complex soil-mapping units. Slopes within this unit average 3 to 20 percent. These soils are derived from sandstone and are found on hillslopes. They are generally deep and well drained. The runoff class is rated as medium for these soils.

Environmental Consequences: Increased soil erosion from wind and water would occur during construction of the well pads and access roads. Erosion would continue throughout the operational life of the wells. Loss of topsoil, soil compaction, and possible increases in sediment loads to drainages are impacts most likely to occur. The well pad designs for all three wells were modified at the onsite to include erosion control devices along the well pad embankments. Chuck Strain Well # 20-6 is staked on a moderate slope and will have a cut measuring nineteen (19) feet on the SE corner. This corner would be rounded off and additional soil erosion control devices would be placed on the well pad embankments. Soil erosion would be reduced by mitigation described in the Surface Use Plan and Conditions of Approval in the approved APD.

Mitigative Measures: Additional mitigative measures will be employed to prevent or reduce accelerated erosion if it begins to occur within or on constructed drainage and diversion ditches, surface drainages affected by the road, well pad, or well pad embankments.

Name of specialist and date: Barb Blackstun 01/04/06

TRANSPORTATION

Affected Environment: The access road to well 40-6 is along an existing two-track road. The first half of this road follows an intermittent drainage and is within about 100 to 150 feet of this drainage.

Environmental Consequences: Reconstruction of this road along the existing two track road will have the potential to introduce sediments into the downstream drainage system.

Mitigative Measures: The reconstructed road needs to be shifted uphill to where the centerline of the new road is along the top of the cut of the existing two-track road for the

first half of the road length. This will allow the fill material from the road reconstruction to be sidecast onto the existing two track road, thus decreasing the fill height and improving fill settling. In addition, all culverts will need to be a minimum of 18 inch diameter corrugated metal. A cattleguard that meets vehicle weight support and a gate will need to be installed at the fenceline at the access road entrance of the Chuck Strain Well #20-6.

Name of specialist and date: Rob Schmitzer 01/17/06

VEGETATION

Affected Environment: The vegetation at wells 20-7 and 20-6 is predominantly Wyoming big sagebrush, with some antelope bitterbrush in the shrub overstory. The understory consists of bluebunch wheatgrass, western wheatgrass, needle-and-thread, bottlebrush squirreltail, and small amounts of cheatgrass. Undoubtedly there is an herbaceous forb component as well, which was not visible at the time of the field visit due to snow cover. The vegetation at well 40-6 is composed of Wyoming big sagebrush and crested wheatgrass. Other native vegetation is also likely present on the site.

Environmental Consequences: The Proposed Action would completely remove native vegetation from an approximately 3.0 acre area for each well. This removal would be insignificant in the larger landscape, but would be in addition to the approximately 7 miles of roads within a one-mile radius of the Proposed Action. As long as reseeding and subsequent reestablishment of recommended native plants occurs upon well completion, the Proposed Action would not adversely affect the surrounding plant community. These sites are susceptible to further invasion by cheatgrass and introduced species of thistles. It will be imperative that all COAs regarding weed control and revegetation are followed to avoid increasing cheatgrass presence on and in areas surrounding the Proposed Action.

The No Action Alternative would not impact the native plant community as no disturbance would occur.

Mitigative Measures: None

Name of specialist and date: Andrea Minor 01/09/06

WILDLIFE, AQUATIC

Affected Environment: There is no aquatic wildlife habitat in or near the three proposed well sites.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 01/10/06

WILDLIFE, TERRESTRIAL

Affected Environment: The proposed project area contains year round habitat for elk, pronghorn antelope, and mule deer in all but the most severe winters. A variety of small mammal species are also likely to use the project area.

Environmental Consequences: Construction activities associated with the development of the three wells and their associated access roads will likely displace wildlife from the project area. Sixteen acres of habitat will be lost as a result of this project although surrounding areas that will not be disturbed are sufficient to support displaced animals. Many animals that are displaced from the project area will return once construction activities have been completed.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 01/13/06

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			See Fluid Minerals
Forest Management		BB 01/17/06	
Hydrology/Ground		FC 01/10/06	
Hydrology/Surface		BB 01/04/06	
Paleontology			See Paleontology
Range Management			See Range
Realty Authorizations			See Realty
Recreation/Travel Mgmt			See Transportation
Socio-Economics		PB 01/12/06	
Solid Minerals		RE 01/10/06	
Visual Resources		JM 01/12/06	
Wild Horse & Burro Mgmt	VMD 12/27/05		

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts may result from the development of the three Chuck Strain Wells when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. The potential exists for future oil and gas development throughout the area. Currently no producing wells exist within a one-mile radius of the proposed well. Past or existing actions near the project area that would influence the landscape include wildfire, recreation, hunting, grazing, and ranching activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Only a small reduction in available forage would be anticipated. Some wildlife species may be temporarily displaced by construction at the well site and access road, but should return once construction is completed. Displacement of hunters and recreationists during the short-term construction and drilling periods would occur. Contrasts in line, form, color, and texture from development would impact the visual qualities on the landscape.

The cumulative effects of projected oil and gas development are minimized through Best Management Practices identified in the Surface Use Plan of the APD and the BLM required mitigation in the Conditions of Approval for the APD. Proper construction and drilling practices must comply with federal and state environmental regulations. All oil and gas wells in the area would be completed in accordance with Onshore Order No. 2. Reasonably foreseeable mineral development would occur under the guidelines of the Little Snake Resource Management Plan and the Colorado Oil and Gas Leasing and Development EIS.

STANDARDS:

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The proposed project area provides productive habitat for a variety of big game, special status species, and small mammals. Habitat conditions at the three well pad locations are considered good and are currently capable of supporting healthy wildlife populations. The disturbance associated with the development of these three wells will likely result in a short term displacement of wildlife from the project area. Once construction is complete, many will return to the project area but may avoid use of the well pad area. Surrounding habitat that will remain undisturbed should be sufficient to support displaced wildlife. This standard is currently being met and will continue to be met in the future.

Name of specialist and date: Timothy Novotny 01/13/06

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: The proposed project area is mapped as bald eagle winter range. There are no known bald eagle winter roost sites any were near the proposed project area. Bald eagles are known to winter along portions of the Little Snake and Yampa Rivers, using adjacent upland habitat as scavenging areas primarily for winter or vehicle killed mule deer and elk. Any bald eagle in the project area would be opportunistically feeding on carrion.

The Chuck Strain 20-6 well also contains suitable nesting habitat for greater sage grouse. The development of one well within nesting habitat should not prevent this areas ability to meet this standard provided that the project proponent follows recommended mitigation to protect nesting sage grouse. Future developments within this area would likely result in cumulative impacts that could preclude greater sage grouse from nesting in the area and ultimately lead to severe population declines.

Name of specialist and date: Timothy Novotny 01/17/06

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: The Proposed Action would completely remove existing vegetation. As long as the COAs concerning revegetation and weed control are adhered to, the native plant community would eventually return, and weeds would be kept in check and thus meet this standard. The No Action Alternative would meet this standard as no disturbance would occur.

Name of specialist and date: Andrea Minor 01/09/06

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

Name of specialist and date: Hunter Seim 01/04/06

RIPARIAN SYSTEMS STANDARD: The proposed project will not have any long term impacts on the riparian system in the project area. There will be a short term disturbance to the riparian system at the spot where the Chuck Strain 40-6 well access road departs from county road 99. This will not affect this riparian systems ability to meet this standard in the future.

Name of specialist and date: Timothy Novotny 01/10/06

WATER QUALITY STANDARD: The proposed action would meet the public land health standard for water quality. Interim reclamation of the unused area on the well pads will be completed to minimize sheet and rill erosion from the well site. When the well pads are no longer needed for production operations, the disturbed area would be reclaimed to approximate original contours, topsoil would be redistributed, and adapted plant species would be reseeded. These Best Management Practices would help to reduce accelerated erosion of the sites. No stream segments near this project are listed as impaired.

Name of specialist and date: Barb Blackstun 01/04/06

UPLAND SOILS STANDARD: The proposed action will not meet the upland soil standard for land health, but it is not expected to while these well locations and access roads are used for operations. The well pad sites and access roads will not exhibit the characteristics of a healthy soil. Several Best Management Practices have been designed into the project or are attached as mitigating measures that will reduce impacts to and conserve soil materials. Upland soil health will return to the well pads, pipeline corridors, and access road disturbances after well abandonment and reclamation practices have been successfully achieved.

Name of specialist and date: Barb Blackstun 01/04/06

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

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
EA CO-100-2006-016

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

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.
2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.
3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas, or designated Areas of Critical Environmental Concern.
4. There are no highly controversial effects on the environment.
5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.
6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State, or local natural resource related plans, policies, or programs.
7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.
8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

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

DECISION AND RATIONALE:

I have determined that approving the APDs for the Three Chuck Strain Wells is in conformance with the approved land use plan. It is my decision to implement the project with the mitigation measures provided in the Applications for Permit to Drill and the Conditions of Approval. Right-of-Way Grant COC69583 will be issued to Hunter Energy (See Attachment 1). The project will be monitored as stated in the Compliance Plan outlined below.

MITIGATION MEASURES: The mitigation measures for this project are found in the file room of the Little Snake Field Office. The APD's 13-point surface use plan, well location maps, and the Conditions of Approval are found in the well's case file labeled COC57934, Well #20-6; COC57935, Well #40-6, and COC57936, Well #20-7. ROW stipulations and maps for Grant COC6953 issued to Hunter Energy are in the serialized case files.

COMPLIANCE PLAN(S):

Compliance Schedule

Compliance will be conducted during the construction phase and drilling phase to insure that all terms and conditions specified in the lease and the approved APD are followed. In the event a producing well is established, periodic inspections as identified through the Inspection and Enforcement Strategy and independent well observations will be conducted. File inspections will include a review of all required reports and the Monthly Report of Operations will be evaluated for accuracy.

Monitoring Plan

The well location and access road will be monitored during the term of the lease for compliance with pertinent Regulations, Onshore Orders, Notices to Lessees, or subsequent COAs until final abandonment is granted; monitoring will help determine the effectiveness of mitigation and document the need for additional mitigative measures.

Assignment of Responsibility

Responsibility for implementation of the compliance schedule and monitoring plan will be assigned to the Fluid Mineral staff in the Little Snake Field Office. The primary inspector will be the Petroleum Engineering Technician, but the Petroleum Engineer, Natural Resource Specialist, Realty Specialist, and Legal Instruments Examiner will also be involved.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED:

**ATTACHMENT 1
RECOMMENDATION AND RATIONALE
COC69583**

RECOMMENDATION

I recommend the right-of-way (R/W) grant COC69583 be issued to Hunter Energy LLC pursuant to Title V of the Federal Land Policy and Management Act (FLPMA) of 1976, (43 U.S.C. 1761). The R/W grant should authorize operation, maintenance and termination of an access road across public lands located in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, section 6, T9N., R.93W., 6th PM, Moffat County, Colorado.

The access road is 1400 feet long and 40 feet wide, consisting of 1.3 acres.

The access road should be nonexclusive, be issued for 20 years with the right to renew, be subject to the stipulations and is subject to rental according to 43 CFR 2803.1-2.

RATIONALE

It is the policy of the Bureau of Land Management to grant R/Ws to occupy and use public land where such use 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. This action is consistent with the Little Snake Resource Management Plan and the objectives of Management Unit #2, Northern Central. The proposed use, as planned and mitigated, is a suitable use of the land, which will not conflict with the present or know future use of the area. The access road is consistent with Title V of FLPMA and the regulations authorizing use of public land under 43 CFR 2800.

Phillis A. Bowers
Realty Specialist

January 26, 2006
Date