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

ENVIRONMENTAL ASSESSMENT

EA-NUMBER: DOI-BLM-CO-N010-2011-0132-EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER: COC68817

PROJECT NAME: West Hart Gulch Well #1-8

LEGAL DESCRIPTION: SWSW, Sec. 8, T. 4 N., R. 90 W., 6th PM.
Moffat County, Colorado

APPLICANT: SWEPI LP

LAND USE PLAN (LUP) CONFORMANCE REVIEW: The proposed action was reviewed for conformance (43 CFR 1610.5, BLM 1617.3) with the following plan:

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

Date(s) Approved: October 2011

Results: The Proposed Action is in conformance with the LUP because it is specifically provided for in the following LUP goals, objectives, and management decisions as follows:

Allow for the availability of the federal oil and gas estate (including coalbed natural gas) for exploration and development. Objectives for achieving these goals include:

- Identify and make available the federal oil and gas estate (including coalbed natural gas) for exploration and development.
- Facilitate reasonable, economical, and environmentally sound exploration and development of oil and gas resources (including coalbed natural gas).

Section/Page: Section 2.13 Energy and Minerals/ page RMP-36

NEED FOR PROPOSED ACTION: To allow development of federal natural gas resources to meet the public's continuing economic demands for a dependable and affordable supply of oil, while giving due consideration to the protection of other resource values; and facilitate the

leaseholder‘s rights to develop oil and gas resources within their federal mineral leases in accordance with the Mineral Leasing Act of 1920, as amended.

The requested Federal Action is needed to provide access across federal lands managed by the BLM and allow development of minerals within an existing federal unit, according to the principles of multiple use, while maintaining the rights and obligations of other users and protecting resources in the project area.

PUBLIC SCOPING PROCESS: The action in this EA is included in the NEPA log posted on the LSFO web site: http://www.blm.gov/co/st/en/BLM_Information/nepa/lsfo.html.
The Notice of Staking (NOS) has been posted in the public room of the Little Snake Field Office for a 30-day public review period beginning July 31, 2011 when the NOS was received, and may be viewed during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays.

No comments were received.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES: The proposed action would be to approve one (1) Application for Permit to Drill (APD) submitted by SWEPI LP. The operator proposes to drill an oil well from private land located in the SWSW, Sec. 8, T. 4 N., R. 90 W., 6th P.M. into Federal minerals. An APD has been filed with the LSFO for the West Hart Gulch Well #1-8. The APD includes drilling and surface use plans that cover mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by SWEPI LP in the drilling and surface use plan would be attached by the BLM as Conditions of Approval to an approved APD.

The proposed wells would be located approximately 9.5 miles southeast from the town of Hamilton, CO off of Moffat County Road 37. Construction work would be planned to start during the fall of 2011 and the estimated duration of construction and drilling for the wells would be 2 months. The existing access road would not require any upgrade and 248 feet of new access road would be constructed. All of the access roads would be upgraded or constructed to have a maximum width of disturbance of 50 feet resulting in an 18 foot running surface and would be constructed in accordance with guidelines established in *The Gold Book: Surface Operating Standards for Oil and Gas Exploration and Development*. Road construction would result in 0.9 acres of new disturbance.

The location would be cleared of all vegetation and leveled for drilling. Topsoil and native vegetation would be stockpiled for use in reclamation. Approximately 1.9 acres would be disturbed for construction of the well pad. This would include the 400’ by 110’ well pad, the topsoil, and subsoil piles. A closed loop system would be utilized and no reserve pit would be authorized. Drill cuttings would be contained in a steel mud pit during drilling operations and hauled to a commercial disposal facility when drilling is completed. If the well is a producer, cut portions of the well site would be backfilled and unused portions of the well site would be

stabilized and re-vegetated. If the oil well proves unproductive, it would be properly plugged and the entire well pad and access road would be reclaimed.

SWEPI LP did not include plans for sales pipeline with the APD.

The total surface disturbance for the proposed action would be 2.8 acres.

NO ACTION ALTERNATIVE

The No Action alternative would be to deny the Application for Permit to Drill and therefore the well would not be drilled, and the pad, access road, and facilities would not be constructed.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION

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

Resource/Issue	N/A or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Air Quality			X
Areas of Critical Environmental Concern	X		
Environmental Justice		X	
Cultural Resources			X
Flood Plains	X		
Fluid Minerals			X
Forest Management	X		
Hydrology/Ground			See Water Quality - Ground
Hydrology/Surface			See Water Quality - Surface
Invasive/Non-Native Species			X
Lands with Wilderness Characteristics	X		
Native American Religious Concerns			X
Migratory Birds			X
Paleontology			X
Prime and Unique Farmland	X		
Range Management	X		
Realty Authorizations	X		
Recreation/Transportation	X		
Socio-Economics			X
Soils	X		

Solid Minerals		X	
T&E and Sensitive Animals			X
T&E and Sensitive Plants	X		
Upland Vegetation		X	
Visual Resources		X	
Waste, Hazardous or Solid			X
Water Quality – Ground			X
Water Quality – Surface			X
Wetlands/Riparian Zones	X		
Wild and Scenic Rivers	X		
Wild Horse & Burro Mgmt	X		
Wilderness Study Areas (WSAs)	X		
Wildlife – Aquatic	X		
Wildlife – Terrestrial			X

AIR QUALITY

Affected Environment: There are five federal Class I areas within 100 kilometers of the Little Snake Field Office (LSFO) boundary, all of which occur in Colorado. There are no federal Class I areas in Utah or Wyoming within 100 km of the LSFO boundary. There are no non-attainment areas nearby that would be affected by the proposed action.

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.

At a regional scale, atmospheric dust, caused by destabilization of soil as a result of land use changes coupled with drought conditions, is receiving increased attention for its ability to alter alpine environments. Dust covered snow melts faster because it can absorb more solar energy, which affects snowpack conditions and can result in earlier and faster spring runoff events. The Colorado Plateau has been identified as a primary dust source for several recent alpine dust events on the Western Slope of Colorado. Areas of low annual precipitation, little to no vegetation cover, and an available supply of sediment are of primary concern for mitigation of expanding or new sources of dust.

Mitigation Measures: Retaining as much vegetative cover as possible during the project and/or reclaiming and covering disturbed areas shortly following excavation should help keep localized dust down during dry periods.

No Action Alternative
Under the No Action alternative, because no new disturbance, drilling rigs, or truck traffic is anticipated, no impacts to air quality would occur.

CULTURAL RESOURCES

Affected Environment: The approval of the APD, construction of the well pad, upgrading existing roads, and constructing a new access road are considered undertakings under Section 106 of the National Historic Preservation Act (NHPA).

BLM has the legal responsibility to take into account the effects of its actions on cultural resources located on federal land. BLM Manual 8100 Series, the Colorado State Protocol and BLM Colorado Handbook of Guidelines and Procedures for Identification, Evaluation, and Mitigation of Cultural Resources provide guidance on how to accomplish Section 106 requirements with the appropriate cultural resource standards. Section 106 of NHPA requires federal agencies to: 1) inventory cultural resources to be affected by federal undertakings, 2) evaluate the importance of cultural resources by determining their eligibility to the National Register of Historic Places (National Register), and 3) consult with the federal and state preservation agencies regarding inventory results, National Register eligibility determinations, and proposed methods to avoid or mitigate impact to eligible sites. Within the state of Colorado, BLM's NHPA obligations are carried out under a Programmatic Agreement between BLM, the Advisory Council on Historic Preservation, and the State Historic Preservation Officer. If the undertaking is determined to have "no effect" or "no adverse effect" by the BLM Little Snake Field Office archaeologist then it may proceed under the terms of the Programmatic Agreement. If the undertaking is determined to have "adverse effects" then consultation is initiated with the SHPO.

The prehistoric and historic cultural context for northwestern Colorado has been described in several recent regional contexts. Reed and Metcalf's (1999) context for the Northern Colorado River Basin is applicable for the prehistoric context and historical contexts include overviews compiled by Frederic J. Athearn (1982) and Michael B. Husband (1984). A historical archaeology context has also been prepared for the state of Colorado by Church and others (2007).

Proposed Action
Environmental Consequences: Cultural resources evaluated as eligible for the National Register can be directly or indirectly adversely impacted by surface disturbing activities and or the construction/modification of a building, structure, facility, or infrastructure. The proposed action also has the potential to detract from the integrity of any eligible cultural resources within the view-shed. Indirect adverse impacts to eligible cultural resources include but are not limited to collection of artifacts/cultural material, inadvertent trespass damaging integrity of cultural resources, and damage to the environmental setting.

The proposed undertaking has undergone a Class III cultural resource study:

Conner, Carl. E
2011 *Class III Cultural Resource Inventory Report for the Proposed West Hare 1-8 Well Location in Moffat County Colorado*. GRI Project No 2011-83. BLM LSFO #11.6.2011. OAHP# MF.LM.R932. Grand River Institute. Grand Junction, CO.

These studies did not identify any archaeological or historical sites eligible for the National Register within the area of potential effect for the proposed undertaking. The proposed undertaking will have no effect on historic properties. It may proceed as described with the following standard mitigative measures in place.

Mitigation Measures:

1. Any cultural and/or paleontological (fossil) resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and the authorized officer will make any decision as to proper mitigation measures after consulting with the holder.

2. 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.

3. 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.

No Action Alternative
Under the No Action alternative, there would be no surface disturbing activities and no effects on ground water hydrology.

FLUID MINERALS

Affected Environment: The proposed well is in the favorability zone 4 (highest for oil and gas potential). These wells would penetrate the Mesa Verde, Mancos and Niobrara formations.

Proposed Action
Environmental Consequences: The casing and cementing program would be adequate to protect all of the resources identified above. All coal seams and fresh water zones would also be protected. The BOP system would be adequately sized. All of these zones would be cased off.

Mitigation Measures: None.

No Action Alternative
Under the No Action alternative, there would be no development of fluid minerals and no effects on existing fluid mineral reservoirs.

INVASIVE/NON-NATIVE SPEICES

Affected Environment: Invasive and noxious weeds are present in the area. Invasive annuals such as downy brome (cheatgrass), halogeton, blue mustard and yellow alyssum are common, occupying disturbed areas. Invasive annual weeds are typically established on disturbed and high traffic areas whereas biennial and perennial noxious weeds are less common in occurrence. Colorado List B noxious weeds that are present within the surrounding areas include Russian knapweed, hoary cress (whitetop), Canada thistle, bull thistle, Scotch thistle and Hound's tongue. The BLM is in cooperation with the Moffat County Cooperative Weed Management program to employ the principals of Integrated Pest Management to control noxious weeds on public lands within the area of this project.

Proposed Action
Environmental Consequences: The surface disturbing activities and associated traffic involved with construction of this well site, access road and support infrastructure and subsequent activities would create an environment and provide a mode of transport for invasive species and other noxious weeds to become established. Construction equipment and any other vehicles

brought onto the site can introduce weed species. Wind, water, recreation vehicles, livestock and wildlife would also assist with the distribution of weed seed into the newly disturbed areas. The annual invasive weed species (downy brome, yellow alyssum, blue mustard and other annual weeds) occur on adjacent areas and would occupy the disturbed areas. The bare soils and the lack of competition from a perennial plant community would allow these weed species to grow unchecked and could affect the establishment of seeded plant species. Establishment of perennial grasses and other seeded plants is expected to provide the necessary control of invasive annual weeds within 2 or 3 years. Additional seeding treatments of the disturbed areas may be required in subsequent years if initial seeding efforts are not successful.

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

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

No Action Alternative
Under the No Action alternative, because no disturbance is anticipated, no additional effects to the spread of invasive weeds would occur.

LANDS WITH WILDERNESS CHARACTERISTICS

Affected Environment: The proposed project area was analyzed for lands with wilderness characteristics under WO-IM 2011-154, *Requirement to Conduct and Maintain Inventory Information for Wilderness Characteristics and to Consider Lands with Wilderness Characteristics in Land Use Plans.* Based on this analysis, the proposed project area is not subject to WO-IM 2011-154. The proposed project area is either on split estate in which BLM does not control the surface, or because GIS analysis for the areas where BLM controls the surface demonstrates that the lease is not in an area that meets the minimum size requirements for an inventory finding of the presence of characteristics. Size requirements are based on whether parcels are within roadless areas greater than 5,000 acres or are directly adjacent to designated wilderness or WSAs.

Proposed Action
Environmental Consequences: There would be no adverse impacts as the project area is on split estate and does not meet the qualifications for lands with wilderness characteristics.

Mitigation Measures: None.

No Action Alternative
Under the No Action alternative, because there are no lands with wilderness characteristics, there would be no effect.

MIGRATORY BIRDS

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

Native plant communities in the West Hart Gulch area are comprised primarily of sagebrush stands and mixed mountain shrubs (serviceberry and snowberry). A variety of migratory birds may utilize these vegetation communities within the project area during the nesting period (May through July) or during spring and fall migrations. The project area contains potential nesting and/or foraging habitat for the following USFWS 2008 Birds of Conservation Concern: golden eagle, Brewer's sparrow, sage sparrow, sage thrasher and loggerhead shrike. The closest golden eagle nest is over a mile away from the proposed well site, but species may hunt for prey in the general area.

Proposed Action
Environmental Consequences: The Proposed Action would disturb 2.8 acres of migratory bird habitat. Although this disturbance would be minimal on a landscape level, it would decrease patch size and may degrade habitat on a small scale. Indirectly, habitat effectiveness adjacent to well pad would be reduced as a result of noise and human activity during construction, drilling and completion activities. If drilling activities occur during the nesting season, there could be negative impacts to migratory bird species through nest destruction or increased stress leading to nest abandonment. Overall, the project is not expected to have a measurable influence on the abundance or distribution of migratory birds at a regional scale.

Mitigation Measures: None.

No Action Alternative
Under the No Action alternative, because no disturbance or loss of vegetation is anticipated, there would be no effects to migratory birds under this alternative.

NATIVE AMERICAN RELIGIOUS CONCERNS

Letters were sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Utes Tribal Council, Shoshoni Tribal Historic Preservation Officer, and the Colorado Commission of Indian Affairs in the spring of 2011 discussing upcoming projects the BLM would be working on in FY10 and FY11. Letters were followed up with phone calls. No comments were received (Letters on file at the Little Snake Field Office, Craig, Colorado).

PALEONTOLOGY

Affected Environment: The geologic formation at the surface is the Cretaceous Age Mancos Shale Formation (Km). This formation has been classified a PFYC Class 3 formation for the potential for occurrence of scientifically significant fossils. 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.

Proposed Action
Environmental Consequences: 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.

Mitigation Measures: 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."

No Action Alternative
Under the No Action alternative, because no ground disturbance, there would be no effects to paleontological resources.

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.

RECREATION/TRANSPORTATION

Affected Environment: FLPMA provides for recreational use of public land as part of multiple use management. Dispersed, unstructured activities typify the recreational uses occurring on most public land. Recreational activities include motorized touring, big and small game hunting,

backpacking, horseback riding, hiking, mountain bike use, sightseeing, pleasure driving, and OHV use.

Proposed Action
Environmental Consequences: BLM lands are not in the vicinity of the proposed project area and would not be affected by the proposed action(s).

Mitigation Measures: None.

No Action
Environmental Consequences: There would be no impacts to BLM lands from the No Action Alternative.

SOCIOECONOMICS

Affected Environment: Oil and gas exploration and production, as well as livestock operations and hunting are the main economic activities of the area.

Proposed Action
Environmental Consequence: The local economy may have some direct but minimal, short-term benefit from support services to the construction and drilling crews, but only a small number of people would be affected. Indirect benefits to the surrounding economy may occur if oil is recovered and leads to additional exploration in the project area. The indirect effects could include effects due to overall employment opportunities related to the oil exploration service support industry in the region as well as the economic benefits to state and county governments related to royalty payments and severance taxes. Generated revenue, as the result of successful drilling operations, would affect only a small number of people and not necessarily people from the socioeconomic area in the vicinity of the project.

It is not likely that the proposed project activities would generate high levels of concern, opposition, or dissatisfaction among local residents. A small, temporary increase in activity and noise disturbance may occur in rural subdivisions and areas primarily used for grazing, farming or hunting.

Mitigation Measures: None.

No Action Alternative
There would be minimal effects to the local work force due to the reduction in employment related to the drilling and completion of one well. There would also be minimal effects to the economy due to the lack of revenue and royalties related to the production of one well. Ongoing oilfield activities occur in the project area at present, the no action alternative would cause minimal impact, either beneficial or adverse, to the present socioeconomic environment.

T&E AND SENSITIVE ANIMALS

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

Sagebrush stands and mixed mountain shrublands provide habitat for Columbian sharp-tailed grouse. Much of the area is classified as overall habitat by the CDOW. There are no known lek sites in the vicinity of the proposed well site.

Brewer's sparrows are a summer resident in Colorado and nest in sagebrush stands. Nests are constructed in sagebrush and other shrubs in denser patches of shrubs. This species would likely be nesting in the project area from mid-May through mid-July.

Proposed Action
Environmental Consequences:

Colorado River Fish

In May 2008, BLM prepared a Programmatic Biological Assessment (PBA) that addresses water depleting activities associated with BLM's fluid minerals program in the Colorado River Basin in Colorado. In response to BLM's PBA, the FWS issued a Programmatic Biological Opinion (PBO) (ES/GJ-6-CO-08-F-0006) on December 19, 2008, which determined that BLM water depletions from the Colorado River Basin are not likely to jeopardize the continued existence of the Colorado pike minnow, humpback chub, bonytail, or razorback sucker, and that BLM water depletions are not likely to destroy or adversely modify designated critical habitat.

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

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

Columbian Sharp-tailed Grouse

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 weedy plants can also degrade habitat. The Proposed Action would alter 2.8 acres of grouse habitat. This disturbance would have minimal impacts to sharp-tailed grouse habitat. However, as development of the West Hart Gulch area continues, habitat patch size would be reduced, potentially impacting the quality of habitat in the area.

Brewer's Sparrow

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

Mitigation Measures: None.

No Action Alternative
Under the No Action alternative, because no disturbance or loss of vegetation is anticipated, there would be no effects on habitat.

VISUAL RESOURCES

Affected Environment: The project would be located in a VRM Class III area where moderate change to the characteristic landscape would be allowed as long as the existing characteristics of the landscape are partially retained.

Proposed Action
Environmental Consequences: The amount and location of direct and indirect effects to visual quality cannot be predicted until the site-specific APD stage of development. Designation and management of VRM classes allows BLM to establish objectives that set visual standards to be met during surface disturbing activities.

Mitigation Measures: None. However, every attempt should be made to minimize the impact of the proposed activities through careful location, minimal disturbance, and repeating the basic elements.

No Action Alternative
Environmental Consequences: There would be no impacts to the visual quality from the No Action Alternative.

WASTE, HAZARDOUS OR SOLID

Affected Environment: The Resource Conservation and Recovery Act (RCRA) of 1976 established a comprehensive program for managing hazardous wastes from the time they are

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

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

Mitigation Measures: The project would be regulated under the Resource Conservation and Recovery Act (RCRA) Subtitle C regulations, which are extremely stringent, as well as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that provides for the definition of hazardous substance, pollutant, and contaminant. The mitigation would include the stringent regulation of waste containment within the project area.

No Action Alternative
Under the No Action alternative, because no drilling or construction activities would be permitted there would be no effects.

WATER QUALITY – GROUND

Affected Environment: Potable water is possible in this area. Water is produced from one water well within 1.5 miles to the east. According to the Colorado Decision Support Systems information, the well is currently active.

Proposed Action
Environmental Consequences: With the use of proper construction practices, drilling practices, and 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 plans to ensure that the cementing and casing programs adequately protect the down hole resources.

Mitigation Measures: Onshore Order No. 2 requires that the Operator isolate and protect all fresh to moderately saline water (TDS < 10,000 PPM) that is encountered during drilling. The Operator is required to submit a report showing the depth and analysis of all ground water encountered during drilling.

No Action Alternative
Under the No Action alternative, because no drilling or construction activities would be permitted there would be no effects.

WATER QUALITY – SURFACE

Affected Environment: Any surface runoff from the West Hart Well #1-8 would drain into Waddle Creek, a perennial tributary to the Williams Fork River. Water quality for the mainstem of the Williams Fork River (from the confluence of the East and South Forks to the Highway 13/317 bridge at Hamilton) must support Aquatic Life Cold 2, Recreation E, Water Supply, and Agricultural uses. There are no water quality impairments or suspected water quality issues for perennial waters influenced by the project area considered in the proposed action.

Proposed Action
Environmental Consequences: Surface waters adjacent to or influenced by the proposed project areas are currently supporting classified uses. Increased sedimentation towards Waddle Creek and/or the Williams Fork River during spring runoff or from high intensity rainstorms is the most likely environmental consequence from the proposed action. Although some sediment may be transported off site and eventually reach perennial waters, the mitigation provided in the Surface Use Plan and the Conditions of Approval would reduce the potential impacts caused by surface runoff.

Mitigation Measures: Adhere to the mitigation provided in the Surface Use Plan and the Conditions of Approval and use Best Management Practices to reduce erosion and sedimentation.

No Action Alternative
Under the No Action alternative, because no drilling or construction activities would be permitted there would be no effects.

WILDLIFE – TERRESTRIAL

Affected Environment: Native plant communities in the West Hart Gulch area are comprised primarily of sagebrush stands and mixed mountain shrubs (serviceberry and snowberry). These plant communities provide habitat for a variety of big game, small mammals, birds and reptiles.

Proposed Action
Environmental Consequences: Impacts to wildlife species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat, increased stress and loss of habitat. These impacts are more significant during critical seasons, such as winter or reproduction. Big game species are often restricted to smaller areas during the winter months and may expend high amounts of energy to move through snow, locate food and maintain body temperature. Disturbances during

the winter can displace big game, depleting much needed energy reserves and may lead to decreased over winter survival.

Most small mammals, birds and reptiles using the project area would be capable of avoiding construction equipment and should not be directly harmed by these activities. Some burrowing animals may be killed by construction equipment. This should be considered a short-term negative impact that is not likely to harm populations of any species.

Mitigation Measures: None.

No Action Alternative
Under the No Action alternative, because no drilling or construction activities would be permitted there would be no effects.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts may result from the development of the West Hart Gulch Well #1-8 when added to non-project impacts that result from past, present, and reasonably foreseeable future actions.

Past actions near the project area that have influence on the landscape are energy development, wildfire, recreation, hunting, grazing, and ranching activities.

Present and proposed actions near the project area are primarily oil wells and facilities associated with the energy development. The surface is privately owned and used for grazing and hunting activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Contrasts in line, form, color, and texture from development would impact the visual qualities on the landscape.

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

Cumulative impacts to the livestock grazing operations in the area may be increased through the proposed action. This area has not received the rapid rate of energy development compared to other areas of NW Colorado. The development that has occurred in this area has yet to

negatively affect livestock production. If continued growth occurs, the growth in wells, roads, and human activity has the potential to reduce the availability of forage in this area far beyond direct impacts caused by construction.

Habitat fragmentation from well pad construction and the associated roads have likely decreased the nesting suitability for migratory birds in the resource area. Ingelfinger (2001) found that roads associated with oil and gas development have a negative impact on passerines bird species. Bird densities were reduced within 100m of each road. Due to the amount of new road construction and an increase in traffic on these roads, passerine populations in the area are likely decreasing.

The cumulative impacts of additional wells and roads in the project area would continue to degrade habitat for the greater sage-grouse and Columbian sharp-tailed grouse. Fragmentation, mostly due to road construction, is an important factor contributing to a decrease in habitat quality. Disturbances such as higher traffic volume and other human activities also contribute to degradation of habitat quality. Continued oil and gas development would lead to decreased use of the habitat.

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

Future development of the Federal Oil and Gas Lease for the purpose of energy production is likely to occur. When added to the existing activities in the project area approval of this proposed action would not cause undue damage to surface or subsurface resources.

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

STANDARDS:

STANDARDS FOR PUBLIC LAND HEALTH

In January 1997, Colorado BLM approved the Standards for Public Land Health. The five standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Environmental analyses of proposed projects on BLM land must address whether the Proposed Action or alternatives being analyzed would result in impacts that would maintain, improve, or deteriorate land health conditions identified in the applicable Land Health Assessment (LHA). However, because no component of the

Proposed Action would involve BLM surface lands, and LHA does not apply, and conformance with the land health standards is not evaluated in this EA.

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

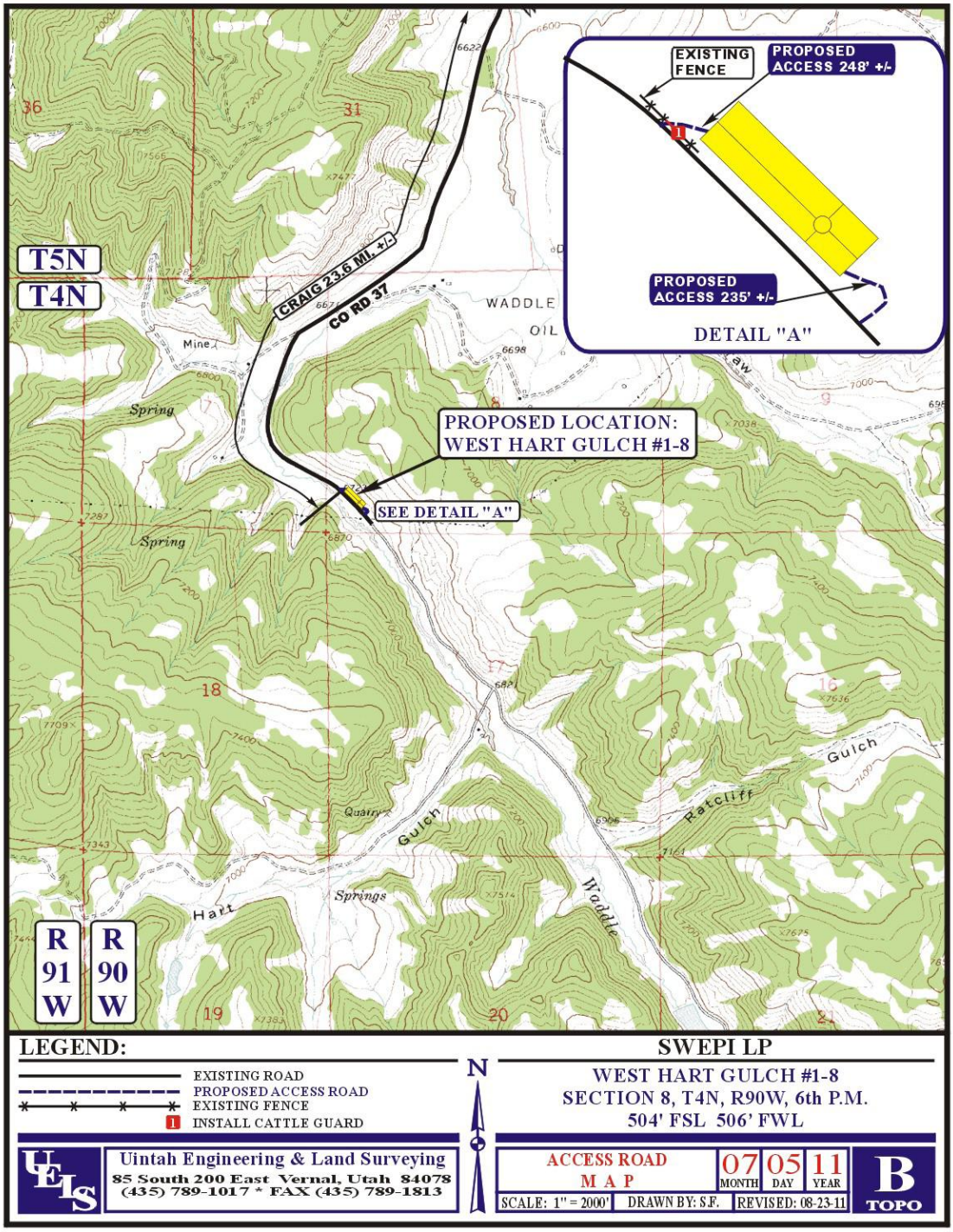
SIGNATURE OF PREPARER: /s/ Shawn Dee Wiser

DATE SIGNED: 11/08/11

SIGNATURE OF ENVIRONMENTAL REVIEWER: /s/ Barbara Sterling

DATE SIGNED: 11/08/11

Attachments: Proponent provided map.


EXISTING FENCE
PROPOSED ACCESS 248' +/-
1
PROPOSED ACCESS 235' +/-
DETAIL "A"
T5N
T4N
CRAIG 23.6 MI. +/-
CO RD 37
WADDLE
OIL
Mine
Spring
PROPOSED LOCATION:
WEST HART GULCH #1-8
SEE DETAIL "A"
Spring
Quarry
Gulch
Springs
Hart
Ratcliff
Gulch
Waddle
R 91 W
R 90 W
LEGEND:
EXISTING ROAD
PROPOSED ACCESS ROAD
EXISTING FENCE
1 INSTALL CATTLE GUARD
N
SWEPI LP
WEST HART GULCH #1-8
SECTION 8, T4N, R90W, 6th P.M.
504' FSL 506' FWL
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813
ACCESS ROAD MAP
07 MONTH
05 DAY
11 YEAR
B TOPO
SCALE: 1" = 2000'
DRAWN BY: S.F.
REVISED: 08-23-11

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
DOI-BLM-CO-N010-2011-0132-EA

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

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.

2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.

3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern.

4. There are no highly controversial effects on the environment.

5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.

6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State or local natural resource related plans, policies or programs.

7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.

8. Based on previous and ongoing cultural surveys and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

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

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
DOI-BLM-CO-N010- 2011-0132-EA

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

I have reviewed the direct, indirect and cumulative effects of the proposed activities documented in the West Hart Gulch Well #1-8 EA, No. DOI-BLM-N010-2011-0132 EA. I have also reviewed the project record for this analysis and the impacts of the proposed action and alternatives as disclosed in the Alternatives and Environmental Impacts sections of the EA. Based upon a review of the EA and the supporting documents, I have determined that the project is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. Because there would not be any significant impact, an environmental impact statement is not required.

SIGNATURE OF AUTHORIZED OFFICIAL: _____/s/ Timothy J Wilson for _____
Wendy Reynolds, Field Manager

DATE SIGNED: 11/09/11

Decision Record

DOI-BLM-CO-N010- 2011-0132-EA

DECISION AND RATIONALE:

I have determined that approving this APD is in conformance with the approved land use plan. It is my decision to implement the project with the mitigation measures provided in the Application for Permit to Drill and the Conditions of Approval. 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 12-point surface use plan, well location maps, and the Conditions of Approval are found in the well case file labeled COC68817, West Hart Gulch Well #1-8.

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 Land Law Examiner will also be involved.

Administrative Review or Appeal Opportunities

This decision is effective upon the date the decision or approval by the authorized officer. Under regulations addressed in 43 CFR Subpart 3165, any party adversely affected has the right to appeal this decision. An informal review of the technical or procedural aspects of the decision may be requested of this office before initiating a formal review request. You have the right to request a State Director review of this decision. You must request a State Director review prior to filing an appeal to the Interior Board of Land Appeals (IBLA) (43CFR 3165.4).

If you elect to request a State Director Review, the request must be received by the BLM Colorado State Office, 2850 Youngfield Street, Lakewood, Colorado 80215, no later than 20 business days after the date the decision was received or considered to have been received. The request must include all supporting documentation unless a request is made for an extension of the filing of supporting documentation. For good cause, such extensions may be granted. You also have the right to appeal the decision issued by the State Director to the IBLA.

Contact Person

For additional information concerning this decision, contact Shawn Wiser, Natural Resource Specialist, Little Snake Field Office, 455 Emerson Street, Craig, CO 81625, Phone (970) 826-5086.

SIGNATURE OF AUTHORIZED OFFICIAL: **/s/ Wendy Reynolds**
Wendy Reynolds, Field Manager

DATE SIGNED: 11/09/11