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

ENVIRONMENTAL ASSESSMENT

EA-NUMBER: CO-100-2007-035EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER:

COC67086: Reservoir Draw Well # 14-31
COC70987: Pipeline Right-of-Way
COC71025: Road Right-of-Way

PROJECT NAME: Reservoir Draw #14-31

LEGAL DESCRIPTION: SWSW Sec 31, T12N, R96W, 6th PM, Moffat County, Colorado

APPLICANT: J-W Operating Company

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 well and pipeline would be located within Management Unit 2 (Little Snake Resource Management Plan). The objective of Management Unit 2 is to provide for the development of the oil and gas resource.

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 (NOS) has been posted in the public room of the Little Snake Field Office for a 30-day public review period beginning December 19,

2006 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.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES: The proposed action is to approve one Application for Permit to Drill (APD) submitted by J-W Operating Company. J-W Operating proposes to drill one natural gas well on federal land located in Section 31, T12N, R96W. An APD has been filed with the LSFO for the well, the Reservoir Draw Well #14-31. The APD includes drilling, pipeline construction, and surface use plans that cover mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by J-W Operating in the drilling and surface use plans would be attached by the BLM as Conditions of Approval to the approved APD.

The proposed well would be located approximately 39 miles southwest of Baggs, Wyoming. Construction work would be planned to start in the summer of 2007 and the estimated duration of construction and drilling would be 15 days. Access to the well would be off Moffat County Road 4. 1,639' of new road would be constructed to access the well site. The new road would be constructed on both federal and state land. The new road would require a 30' Right-of-Way. The length of the road to be constructed on federal land would be 1,136' disturbing 0.8 acres and the length of the road to be constructed on state land would be 503' disturbing 0.4 acres. Total disturbance from the new road would be 1.2 acres. An associated pipeline of 9,706' would also be constructed with the proposed well if it were a producer. The associated pipeline would be constructed on both federal and state land. The length of pipeline to be constructed on federal land would be 6,027' disturbing 6.9 acres and would require a 50' pipeline right of way. The length of pipeline to be constructed on state land would be 3,680' disturbing 4.2 acres. The pipeline would be buried to a design depth of 48" and total area of pipeline disturbance on both federal and state land would be 11.1 acres.

The proposed well pad would be cleared of all vegetation and leveled for drilling. Topsoil and native vegetation would be stockpiled for use in reclamation. Approximately 2.0 acres would be disturbed for construction of the well pad. This would include the 230' by 385' well pad, the topsoil, and subsoil piles. A reserve pit would be constructed on the well pad to hold drill mud and cuttings. If the gas 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 gas well proves unproductive, it would be properly plugged and the entire well pad and access road reclaimed.

The total area of disturbance for the road, well pad, and associated pipeline would be 14.3 acres.

NO ACTION ALTERNATIVE: The no action alternative is that the well would not be permitted and therefore the well would not be drilled. J-W Operating Company is the holder of a valid and current oil and gas lease for the area where the proposed well is located. Once an oil and gas lease is issued, the lessee/operator has already been given the right to drill on that oil and gas lease, subject to the conditions of the lease. Since the proposed action is consistent with the

ROD and the Oil and Gas Leasing EIS, rejecting the APD for the well is not a reasonable alternative and will not be analyzed.

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 would not adversely affect the regional air quality.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 01/18/07

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Jim McBrayer 04/16/07

CULTURAL RESOURCES

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see *Regional Class I Overview of Cultural Resources for the BLM Little Snake RMP,* and *Colorado Prehistory: A Context for the Northern Colorado River Basin,*

Colorado Council of Colorado Archaeologists. Also see *An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, and *An Isolated Empire, A History of Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resource Series, Number 2.

Environmental Consequences: The proposed project, J-W Operating Company's Reservoir Draw #14-31 has undergone a Class III cultural resource survey:

Larson, Thomas 2007 Results of a Class III Cultural Resource Inventory for the J-W Operating Company's Reservoir Draw # 14-31, Moffat County, Colorado.

The survey identified no cultural resources within the project area. The proposed project may proceed as described in this EA with the following mitigative measures in place.

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

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

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

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

Name of specialist and date: Robyn Watkins Morris 04/10/07

ENVIRONMENTAL JUSTICE

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

Environmental Consequences: None.

Mitigative Measures: None.

Name of Specialist and Date: Louise McMinn 04/12/07

FLOOD PLAINS

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 02/12/07

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive species and noxious weeds occur within the affected area. Cheatgrass and halogeton are common along road disturbances and in areas which do not have adequate perennial plant communities to inhibit their annual establishment. Halogeton has become a very noticeable problem in the affected area, as well as other areas in the western portion of Moffat County. Canada thistle and other biennial thistles are fairly common and can be established in the affected area, especially in road ditches. Russian knapweed and hoary cress (whitetop) have been found in the vicinity of the project and would also be capable of establishing in road ditches and on upland sites. Other species of noxious weeds are not known to be a problem in this area, but they can always be introduced by vehicle traffic, livestock operations and wildlife. The BLM, Moffat County, livestock operators, pipeline companies and oil and gas operators have formed the Northwest Colorado Weed Partnership to collaborate their efforts on controlling weeds and finding the best integrated approaches to achieve these results.

Environmental Consequences: The surface disturbing activities and associated traffic involved with constructing the access road, drilling and operating the well, installing the pipeline and other 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 and equipment brought onto the site can introduce these weed species. Wind, water, recreation vehicles, livestock and wildlife would also assist with the distribution of weed seed into the newly disturbed areas. 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. The operator would also be responsible for revegetation of the pipeline right-of-way, which may require controlling halogeton initially and controlling any subsequent establishment of other noxious weeds. All principles of Integrated Pest Management should be employed to control noxious weeds on public lands.

Mitigative Measures: None.

Name of specialist and date: Ole Olsen 04/11/07

MIGRATORY BIRDS

Affected Environment: The area contains potential breeding/nesting/foraging habitat for the burrowing owl (prairie dog colonies are currently inactive), mountain plover (primarily marginal habitat), northern harrier, Brewer's sparrow, and sage sparrow. Each of these species is included in the USFWS Birds of Conservation Concern 2002 List. Current field office records show no nests in this area for these species (although one mountain plover nest occurs approximately 1.75 miles east of project area). Ferruginous hawk and golden eagle foraging habitat is present as well as vicinity nesting habitat. Two ferruginous hawk nests occur 0.83 and 0.94 miles N/NE of the proposed location. Two golden eagle nest sites are located approximately 1 mile E/SE of the proposed location.

Environmental Consequences: Development of this location "may affect but is not likely to result in a trend toward federal listing" for the BLM sensitive ferruginous hawk, mountain plover, and burrowing owl. Ferruginous hawk nests would not be affected provided the stated timing stipulation is followed (see Mitigative Measures below). Project activities may result in minimal loss of breeding, nesting, and foraging habitat for the burrowing owl, mountain plover, northern harrier, Brewer's sparrow, and sage sparrow. Provided the timing stipulation below is followed, no loss of birds, nests, or broods is expected to occur. The project would have no effect on the golden eagle since activities would occur well outside the established ¼ mile protection buffer.

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

Name of specialist and date: Charlie Sharp 04/09/07

NATIVE AMERICAN RELIGIOUS CONCERNS

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

Name of specialist and date: Robyn Watkins Morris 04/11/07

PRIME & UNIQUE FARMLANDS

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 01/18/ 07

T&E SPECIES – ANIMALS

Affected Environment: Proposed activities would occur within the bald eagle general winter distribution. However, the species is not known to use the area, and no nests, winter roosts, or winter forage areas have been observed or documented.

Environmental Consequences: The proposed action would have "no effect" on the bald eagle.

Mitigative Measures: Bald eagle winter range – If a wintering bald eagle is observed in the immediate vicinity of the project site (well pad and access road), construction will be delayed until the eagle has moved out of the area.

Name of specialist and date: Charlie Sharp 04/09/07

T&E SPECIES – 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 04/11/07

T&E SPECIES - SENSITIVE PLANTS

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

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Hunter Seim 04/11/07

WASTES, HAZARDOUS OR SOLID

Affected Environment: If a release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there would be no impact on the environment.

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

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 01/18/07

WATER QUALITY – GROUND

Affected Environment: The surface formation is the Wasatch Formation. This formation could hold fresh water in its minor sandstone horizons but potable water is unlikely. Typically, the deeper the formation, the less useable and less fresh the water.

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 plan to ensure that the cementing

and casing programs adequately protect the down-hole resources. The entire hole would be cased with cement behind pipe.

Mitigative Measures: None.

Name of specialist and date: Jennifer Maiolo 02/07/07

WATER QUALITY – SURFACE

Affected Environment: The proposed well would be constructed near Horse Draw, an ephemeral drainage. Any runoff from the well pad, pipeline, or access road would drain towards Horse Draw, which drains into Powder Wash. All stream segments near the well pad location are presently supporting classified beneficial uses. No impaired stream segments occur in the vicinity of the proposed action.

Environmental Consequences: Runoff water from the well site would drain towards Powder Wash, which is an ephemeral tributary to the Little Snake River. Increased sedimentation to Powder Wash 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.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 05/22/07

WETLANDS/RIPARIAN ZONES

Affected Environment: No riparian habitat exists in the project area.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Charlie Sharp 04/16/07

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Jim McBrayer 04/16/07

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable.

Name of specialist and date: Jim McBrayer 04/16/07

NON-CRITICAL ELEMENTS

FLUID MINERALS

Affected Environment: The proposed action is in favorability zone 4 (highest for oil and gas potential). This well would penetrate the Wasatch, Fort Union, Ft. Union Coal, Lewis, Almond and Trout Creek. In this well, the Fox Hills, Lewis, and Almond Formations would be explored for possible economic gas recovery. The casing and cementing programs are adequate to protect down-hole resources. Shallow, thin beds of coal can be found in the Wasatch Formation; their mineable value is low and their total gas content is low. Thicker coal seams are found Fort Union and Mesaverde Formation; these seams are not currently economical to mine. The above identified seams would be isolated by the proposed casing and cementing program.

Environmental Consequences: The proposed casing and cementing programs appear to be adequate to protect and/or isolate all resources identified above. The entire hole would be cased with cement behind pipe.

Mitigative Measures: None.

Name of specialist and date: Jennifer Maiolo 02/07/07

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: Jennifer Maiolo 02/07/07

SOILS

Affected Environment: The proposed well would be located within the Haterton-Piezon complex soil-mapping unit. The Haterton and Piezon soils are found on plateaus and hilltops. This soil is shallow and excessively drained. The soils formed in eolian deposits and alluvium and are derived from sandstone. Slopes within this unit average 5 to 25 percent. Runoff is low in the Tricera soil and very high in the Haterton soil. The hazard of wind and water erosion is moderate.

Environmental Consequences: The construction and operation of the proposed well would affect soils within and immediately adjacent to the proposed area of disturbance. Increased soil erosion from wind and water would occur during construction of the well pad, access road, and pipeline. Erosion would continue throughout the operational life of the well. Loss of topsoil, soil compaction, and possible increases in sediment loads to drainages are impacts most likely to occur. Vegetation and soil would be removed from approximately 14.3 acres of land. Soil productivity would decline due to reduced soil microbial activity, impaired water infiltration, mixing of soil horizons, top soil loss, and introduction of weeds. Soil loss from construction would be greatest shortly after project start and would decrease in time as a result of stabilization through revegetation and reclamation of disturbed areas. Soil erosion would be reduced to an acceptable level with the mitigation described in the Surface Use Plan and Conditions of Approval in the approved APD. This mitigation would reduce the potential to have excessive sediments and salts in runoff water from the well site.

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

Name of specialist and date: Roy McKinstry 02/12/07

REALTY AUTHORIZATIONS

Affected Environment: The project route crosses or is adjacent to existing realty authorization COC0107410 (pipeline).

Environmental Consequences: Existing pipelines could be accidentally damaged during construction activities. Impacts would be temporary until the damage is repaired.

Mitigative Measures: Damage to existing pipelines will be minimized by:

- Utilize the "One Call" system to locate and stake the centerline and limits of all underground facilities in the area of proposed excavations.
- Provide 48 hour notification to the owner/operator of facilities prior to performing any work within 10 feet of buried or above ground pipelines.

Name of Specialist and Date: Louise McMinn 05/12/07

VEGETATION

Affected Environment: The vegetation at the site for the proposed well and pipeline is a mix of black sagebrush and shadscale. Depending on underlying soils, there are also small patches of big sagebrush. Bud sage, winterfat, and green rabbitbrush are other shrub species found in the community. Common understory species include Sandbergs bluegrass,

crested wheatgrass, Indian ricegrass, western wheatgrass, bottlebrush squirreltail, needle-and-thread grass and a variety of associated forbs.

Environmental Consequences: The Proposed Action would completely remove native vegetation from an approximately 14.3 acre area for the well, pipeline, and access road. This removal would be insignificant in the larger landscape, but would be in addition to the approximately two 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 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.

Mitigative Measures: None.

Name of specialist and date: Andrea J. Minor 04/16/07

WILDLIFE, TERRESTRIAL

Affected Environment: This site provides year-round habitat for pronghorn and mule deer. It also supports a variety of other small mammals, songbirds, and reptiles. No critical habitat or winter range is present. Species and sign observed during the onsite include pronghorn, cottontail rabbit, horned lark, and badger.

Environmental Consequences: General impacts for these species 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. Wildlife using the area are likely to be temporarily displaced during construction and will likely find the area unsuitable until reclamation is achieved. Most small mammals using the project area would be capable of avoiding construction activities and should not be directly harmed by these activities, although some burrowing animals may be killed by construction equipment. The proposed action would be unlikely to have measurable impacts to wildlife populations.

Mitigative Measures: None.

Name of specialist and date: Charlie Sharp 04/16/07

OTHER NON-CRITICAL ELEMENTS:

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Forest Management	N/A		
Hydrology/Ground			JM 02/07/07
Hydrology/Surface			RM 05/22/07
Paleontology			JM 02/08/07
Range Management		AM 04/16/07	
Realty Authorizations			LM 05/22/07
Recreation/Transportation		RS 05/22/07	
Socio-Economics		LM 04/13/07	
Solid Minerals		JM 02/08/07	
Visual Resources		JM 04/16/07	
Wild Horse & Burro Mgmt	N/A		
Wildlife, Aquatic	N/A		

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts may result from the development of the well 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 Reservoir Draw area. Currently no producing wells exist within a one-mile radius of the proposed well. Other past or existing actions near the project area that have influence on the landscape are wildfire, recreation, hunting, grazing, and ranching activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. 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.

Cumulative impacts to the plant communities within the gas leases 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 would also be increased through the Proposed Action. 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. Halogeton could increase along the new roads and well pads and is toxic to sheep. The resulting impact to grazing activities permitted in the area is a loss of available Animal Unit Months (AUMs), i.e. a loss of the amount of livestock that the allotment can reasonably carry.

Habitat fragmentation from well pad construction and the associated roads could likely decrease the nesting suitability for migratory birds in the Reservoir Draw area. Ingelfinger (2001) found that roads associated with oil and gas development impact passerines bird species. Bird densities were reduced within 100 meters of each road. With new road construction and an increase in traffic in this area, passerine populations in the area have the potential to decrease.

Although big game species are able to adapt to disturbances better than other wildlife, increased development would still have impacts to 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.

References:

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

STANDARDS:

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: This site provides year-round habitat for pronghorn and mule deer. It also supports a variety of other small mammals, songbirds, and reptiles. When assessed in 2003, this landscape was found to be not meeting this standard, due primarily to poor condition of plant communities. Thus, the proposed action would not directly result in the site not meeting this standard; however, it may delay landscape restoration. Proper reclamation and compliance with wildlife timing stipulations should help improve this standard for wildlife.

Name of specialist and date: Charlie Sharp 04/09/07

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: No threatened or endangered species occur in the project area. Proposed activities would occur within LSFO's bald eagle general winter distribution. However, the species is not known to use the area, and no nests, winter roosts, or winter forage areas have been observed or documented. Other potentially affected special status species or species of concern include the ferruginous hawk, golden eagle, burrowing owl, mountain plover, northern harrier, Brewer's sparrow, and sage sparrow. This standard is currently being met and would continue to be met under the Proposed Action.

Name of specialist and date: Charlie Sharp 04/09/07

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 faithfully 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 04/16/07

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

Name of specialist and date: Hunter Seim 04/11/07

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

Name of specialist and date: Charlie Sharp 04/16/07

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

Name of specialist and date: Roy McKinstry 05/22/07

UPLAND SOILS STANDARD: The proposed action would not meet the upland soil standard for land health and it is not expected to while the well location, pipeline, and access road are used for operations. The well pad site, pipeline corridor, and access road would 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 would reduce impacts to and conserve soil materials. Upland soil health would return to the well pad, pipeline corridor, and access road

disturbances after reclamation practices and well abandonments have been successfully achieved.

Name of specialist and date: Roy McKinstry 02/12/07

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

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
EA CO-100-2007-035

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 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. Right-of -Way Grants COC71025 and COC70987 will be issued to J-W Operating Company (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 13-point surface use plan, well location maps, and the Conditions of Approval are found in the well case file labeled COC67086, Reservoir Draw Well #14-31. ROW stipulations and maps for Grants COC71025 and COC70987 issued to J-W Operating Company 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 Land Law Examiner will also be involved.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED: