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-100-2006-082 EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER:

COC69110: BM Federal Well #13-13
COC69111: BM Federal Well #14-13
COC69111: BM Federal Well #23-3

PROJECT NAME: Three Cedar Ridge Wells

LEGAL DESCRIPTION:

BM Federal Well #13-13: SWSW Sec. 13, T12N, R89W, 6th PM
BM Federal Well #14-13: SWSW Sec. 14, T12N, R89W, 6th PM
BM Federal Well #23-3: NENW Sec. 23, T12N, R89W, 6th PM

APPLICANT: Cedar Ridge, 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 Cedar Ridge Wells would be located within Management Unit 1 (Little Snake Resource Management Plan). Management Unit 1 is rated as possessing the highest favorability for the occurrence of oil and gas resources in the Little Snake Resource Area. The management objectives of this unit are to realize the potential for development of coal, oil, and gas resources.

The proposed action was 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 Notices of Staking (NOSs) have been posted in the public room of the Little Snake Field Office for a 30-day public review period beginning May 5, 2006 when the NOSs were 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 three Applications for Permit to Drill (APDs) submitted by Cedar Ridge, LLC. Cedar Ridge proposes to drill three natural gas wells on private and BLM administered land near Slater, Colorado. APDs have been filed with the LSFO for the BM Federal Well #13-13, the BM Federal Well #14-13, and the BM Federal Well #23-3. These well permit applications include drilling and surface use plans. The APDs cover mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by Cedar Ridge in the drilling and surface use plans would be attached by the BLM as Conditions of Approval (COAs) to an approved APD.

The proposed wells would be located approximately 3 miles south of Slater, Colorado. The approximate date work would start is fall of 2006 and the estimated duration of construction and drilling is 20 days for each well. Moffat County Roads 1 and 129 would be used to access the well sites. Cedar Ridge proposes to construct 2728 feet of new road access and upgrade an existing two-track for approximately 4302 feet. New road construction would conform to BLM specifications for a "resource road", with a 14-foot wide running surface. Total surface disturbance for the new access road and reconstruction of the two-track would be approximately eight (8.0) acres. All new road construction would be on lease and on federal surface or private land. All new road construction and upgrading would be on lease or private land and would not require a federal Right-of-Way.

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 1.5 acres would be disturbed for construction of each well pad. This would include the 250' by 200' well pad, the topsoil pile, and subsoil piles to be constructed at each well site. An unlined reserve pit would be constructed on each of the well pads to hold drill mud and cuttings. If a 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 a gas well proves unproductive, the well would be properly plugged and the entire well pad and access road would be reclaimed.

Cedar Ridge did include plans for gas gathering pipelines, water disposal pipelines, and underground electrical power lines to be co-located in the same utilities trench. Approximately 4,365 feet of new utility corridor would be constructed and connected to existing utility lines in the existing coalbed natural gas field to service the wells once production is established. The produced water from the proposed well locations would be transported by the buried water pipeline to the Moffat 26-12-89 water disposal well #1 located on private land in the Section 26, T12N, R89W. New utility line installation would be buried and occur within and adjacent to the

new access road construction. All utility corridor construction would be on federal or private surface and on lease; a federal right-of-way is not required.

NO ACTION ALTERNATIVE: The "no action" alternative is that the wells would not be permitted and therefore no wells would be drilled. Cedar Ridge holds a valid and current oil and gas lease for the area where the proposed three Cedar Ridge 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 08/25/06

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 08/22/06

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, Cedar Ridge Battle Mountain Federal Wells 13-13, 14-13, 23-3 well pads, and access roads, has undergone a Class III cultural resource survey:

Zier, Christian J.
2006 O & G Environmental Consulting, LLC, Cedar Ridge Battle Mountain Federal Wells 13-13, 14-13, 23-3 and Access Roads, Moffat County, Colorado. BLM 66.2.06 Centennial Archaeology, Inc. Fort Collins, 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: Gary D. Collins 08/17/06

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 08/23/06

FLOOD PLAINS

Affected Environment: Active floodplains and flood prone zones are avoided.

Environmental Consequences: No threat to human safety, life, welfare, or property will result from the proposed action.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 08/25/06

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive species and noxious weeds occur within the affected area. Cheatgrass, houndstongue and musk thistle are common along road disturbances in the affected area. Canada thistle and other biennial thistles are fairly common and can be established in the affected area, especially in road ditches. Russian knapweed and spotted knapweed are in the vicinity of the project and would also be capable of establishing in road

ditches. 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 and wildlife.

Environmental Consequences: The surface disturbing activities and associated traffic involved with drilling and operating the well will 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 from other weed infested areas. Wind, water, recreation vehicles, livestock and wildlife will also assist with the distribution of weed seed into the newly disturbed areas. The operator will be required to control any invasive and/or noxious weeds that become established within the disturbed areas involved with drilling and operating the well. 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 08/17/06

MIGRATORY BIRDS

Affected Environment: The proposed project area provides hunting habitat for Golden Eagle and Prairie falcon that are species on the 2002 Birds of Conservation Concern list. There are no known nest sites for either of these species within ½ mile of the proposed access road or well pad.

Environmental Consequences: Nesting and fledgling activities of both species should not be impacted by construction or production activities associated with the proposed well. There is little chance of take of either species as a result of this project.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 08/30/06

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: Gary D. Collins 08/17/06

PRIME & UNIQUE FARMLANDS

Affected Environment: Not Present

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 08/25/06

T&E SPECIES – ANIMALS

Affected Environment: There are no threatened or endangered species or habitat for such species in the project area. The three proposed wells are within nesting habitat for Columbian sharp-tailed grouse and greater sage-grouse, both are BLM special status species. The Federal 13-13 well is over ¾ mile from the nearest active sharp-tailed grouse lek. A survey for breeding grouse was conducted during May of 2006 in the project area. One male and one female sharp-tailed grouse were observed in close proximity to the Federal 13-13 well. The biologist who conducted the survey reported that the male was performing breeding displays. The female was flushed from a tree and the male grouse left shortly after the female's departure. It is likely that this was an opportunistic breeding display not associated with an actual lek but rather a male displaying for a female that was roosting in a nearby tree. Intensive surveys for grouse have been conducted in this area in 2004 and 2006 and no birds were found to be displaying at this site in either of these surveys. The lack of observations of birds during two separate surveys spanning a total of six days during peak breeding season supports the theory that the male and female observed near this well site were not using a traditional lek.

The Federal 14-13 and the Federal 23-3 wells are both over a mile away from the nearest active sharp-tailed grouse lek. The 13-13 is within 1 mile of a historic greater sage-grouse lek. This lek has not been active within the last five years.

Environmental Consequences: There will be no impacts to threatened or endangered species as a result of these three wells. Construction activities associated with well pad development and access road construction could have a negative impact on nesting sharp-tailed grouse and greater sage-grouse if conducted during the nesting season. These activities could lead to nest destruction or abandonment by hens resulting in decreased productivity from the local grouse populations. A long term loss of approximately 12 acres of nesting habitat will occur as a result of well pad and access road construction. It is likely that grouse would avoid an extended area beyond the boundaries of the access road and well pad if the well is brought into production. This may result in displacement of birds from traditional nesting areas.

Mitigative Measures: CO-30 No surface disturbing activities between March 1 and June 30 in order to protect nesting grouse.

Name of specialist and date: Timothy Novotny 08/30/06

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 08/22/06

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 08/22/06

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 08/17/06

WATER QUALITY/HYDROLOGY – GROUND

Affected Environment: Near surface waters will be protected by the surface casing and cement behind pipe. Potable water is likely in this area. The surface casing is from 300' to the surface with cement behind pipe. The top-of-cement (TOC) for the production casing is

up to the surface casing for all three wells. This will effectively case and cement the hole from the total bottom depth to the surface within the Lewis Formation. No water within any formations will 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 all of the downhole resources.

Mitigative Measures: None

Name of specialist and date: Robert Ernst 08/24/06

WATER QUALITY – SURFACE

Affected Environment: The project area is located on the hills south of the Little Snake River near Slater, CO. Topographically, the area is typified by isolated peaks, buttes, and mountain ridge fingers. Water is abundant; numerous perennial and intermittent streams flow through the project area toward the river. Runoff water from the project area would flow in a northeasterly direction through several unnamed drainages and Kilgore Gulch, all tributaries of the Little Snake River. The Little Snake River within the affected environment must have water quality sufficient to support Aquatic Life Cold 1, Recreation 1a, Water Supply and Agriculture. Tributaries of the Little Snake River when they flow water must support the same beneficial uses. All stream segments within the affected environment are presently supporting their classified uses.

Environmental Consequences: Impacts 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. 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, the mitigation provided in the Surface Use Plan and the Conditions of Approval will reduce the potential impacts caused by surface runoff to an acceptable level.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 08/25/06

WETLANDS/RIPARIAN ZONES

Affected Environment: There are no wetlands or riparian zones present near the proposed well sites.

Environmental Consequences: None

Mitigative Measures: None

Mitigative Measures: Timothy Novotny 08/30/06

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 08/22/06

WILDERNESS, WSAs

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 08/22/06

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 Lewis, Trout Creek, Hatfield, and Deep Creek Sandstone Formations. This well is being drilled to develop conventional gas sands. Coals have been identified in the 8-point drilling plan and they are identified as potential gas pay targets.

Environmental Consequences: The proposed top-to-bottom casing and cementing programs are adequate to protect and/or isolate all resources identified above.

Mitigative Measures: None

Name of specialist and date: Robert Ernst 08/24/06

PALEONTOLOGY

Affected Environment: The geologic formation at the surface of the BM Federal 14-13 and 23-3 holes is the Cretaceous age Lewis Shale Formation (Kls) . The geologic formation at the surface of the BM Federal 13-13 hole is the Cretaceous age Mesa Verde Formation (Kmv). Both formations have been classified as Class II formations 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.

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. This impact can be effectively mitigated by ceasing operations and notifying the Field Office Manager immediately upon discovery of a fossil during construction activities. 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 timeframe. 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 08/24/06

REALTY AUTHORIZATIONS

Affected Environment: The project route crosses or is adjacent to existing realty authorizations COC64270 and COC64273, held by Cedar Ridge LLC.

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 would 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 08/23/06

SOILS

Affected Environment: The proposed well sites are found within the Evanot-Yamo complex soil-mapping unit. Slopes within this unit average 3 to 20 percent. These soils are found on hills and are very deep and well drained. They formed in loess. Runoff is rated as medium and the hazard of water erosion is moderate. The hazard of soil blowing is slight.

Environmental Consequences: The construction and operation of the Cedar Ridge wells would affect soils within and immediately adjacent to the proposed areas of disturbance. Road and well pad construction should follow the design standards and recommendations outlined in the Surface Operating Standards for Oil and Gas Development, 4th Edition.

Increased soil erosion from wind and water would occur during construction of the well pads, access roads, and utility corridors. 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 12.5 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 erosion would be reduced to an acceptable level with mitigation described in the Surface Use Plan and Conditions of Approval in the approved APD. 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.

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 or surface drainages affected by the roads or well pads.

Name of specialist and date: Barb Blackstun 08/25/06

TRAVEL MANAGEMENT

Affected Environment: Wells #14-13 and #23-3 both have existing access from Moffat County Roads (MCR) 1 and 129. The access off MCR 129 is a low standard road that accesses an existing pipeline.

Environmental Consequences: Use of the low standard access road off MCR 129 as a shortcut by workers between well #13-13 to wells #14-13 and #23-3 will cause erosion of this road as it is not built for these higher traffic levels.

Mitigative Measures: Vehicular travel is limited to the approved location and approved access route. The water haul route will coincide with the proposed access road. Any changes in the water source or haul route must have written approval before the changes take place.

Name of specialist and date: Rob Schmitzer 08/28/06

VEGETATION

Affected Environment: Each of the three proposed wells would be located in a sagebrush-grass plant community. Dominant plants present include Wyoming big sagebrush (Artemesia tridentata wyomingensis), basin big sagebrush (A. tridentata tridentata), green rabbitbrush (Chrysothamnus viscidiflorus), rubber rabbitbrush (C. nauseous), desert paintbrush (Castilleja chromosa), sego lilly (Calochortus nuttallii), yarrow (Achillea millefolium), biscuitroot (Lomatium macrocarpum), western wheatgrass (Agropyron smithii), squirreltail (Sitanion hystrix), prairie junegrass (Koeleria pyramidata), Kentucky bluegrass (Poa pratensis), and Sandberg bluegress (P. sandbergii).

Environmental Consequences: The three proposed wells and new access roads would completely remove approximately 12.5 acres of native vegetation. This disturbance would be minimal within the larger landscape, but would be in addition to several roads and other human activities that have removed and/or disturbed the native plant community. The vegetation removal would remain until completion of the wells, when the pads would be shrunk and partially reclaimed. Upon successful reclamation, the overall impact would be lessened. If a well does not produce, the entire pad and any new access road would be completely reclaimed with native vegetation, greatly reducing long-term impacts. As long as required reclamation practices are followed and native species are successfully reestablished, the overall impact to the plant community would be minimal.

Mitigative Measures: None

Name of specialist and date: Hunter Seim 08/22/06

WILDLIFE, AQUATIC

Affected Environment: There is no aquatic wildlife habit near any of these three proposed well locations.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 08/30/06

WILDLIFE, TERRESTRIAL

Affected Environment: The proposed well pads are within year round habitat for pronghorn antelope, mule deer and elk. The existing access road to the proposed well site is located within mule deer and elk severe winter range. No new construction or drilling activities will occur within big game severe winter range. The area also provides habitat for a variety of small mammals, songbirds and reptiles.

Environmental Consequences: Well pad construction and drilling activities are likely to displace big game animals. Construction and drilling should avoid critical winter periods (December 1 April 30) in order to reduce stress on wintering big game. Traffic associated with well drilling activities would have a negative impact on big game animals using critical winter range if these activities were to occur during this time period.

Most small mammals using the project area will be capable of avoiding construction equipment and should not be directly harmed by these activities. There is potential that some individual animals will be susceptible to higher predation rates as they are displaced from the construction area. 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. It can be expected that any small mammal species impacted by construction activities will recover to pre-construction levels within a couple of years.

Approximately 12 acres of nesting habitat for songbirds will be destroyed during construction activities. No active nests are likely to be impacted due to timing constraints on development for greater sage-grouse. The loss of nesting habitat should be small in regards to population levels and no long term negative impact to any songbird species is anticipated as a result of this project.

Reptilian species are not common in the project area and are likely limited to garter snakes, bull snakes, prairie rattle snakes and sagebrush lizards. Most individuals would be able to avoid construction equipment and should not be impacted by these activities. Increased vehicle traffic resulting from production activities may result in accidental and intentional

mortality to some individuals. Increased mortality is not expected to be significant and should not result in negative impacts on any species population.

Mitigative Measures: CO-09 No surface disturbing activities on big game crucial winter range between December 1 and April 30.

Name of specialist and date: Timothy Novotny 08/30/06

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 08/25/06	
Hydrology/Ground		RE 08/24/06	
Hydrology/Surface		BB 08/25/06	
Paleontology			See Paleontology
Range Management		JHS 08/22/06	
Realty Authorizations			See Realty
Recreation/Travel Mgmt.			See Travel Mgmt.
Socio-Economics		LM 08/23/06	
Solid Minerals		RE 08/24/06	
Visual Resources		JM 08/22/06	
Wild Horse & Burro Mgmt	BB 08/25/06		

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts may result from the development of the three Cedar Ridge 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 Slater, CO area. Currently numerous producing wells exist within a one-mile radius of the proposed wells. 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. Only a small reduction in available forage would be anticipated. Some wildlife species may be temporarily displaced by construction at the well site, access road, and future pipeline routes, 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 suitable habitat for a variety of big game, small mammal, reptilian, amphibian and avian species. These habitats are currently capable of supporting diverse, productive wildlife populations. The proposed project has the potential to temporarily displace individuals that use the area during construction. Direct mortality resulting from construction should not have any impact on any wildlife populations. Once construction is complete, most wildlife species will reoccupy areas not disturbed by construction. A permanent loss of approximately 12 acres of habitat will not have a big impact on wildlife in the area. Production activities may result in slight increases in mortality to some reptilian and avian animals as a result of collisions with motor vehicles. Production related impacts should not have a long term negative impact on any species populations. Production activity is also likely to result in extended displacement larger than the well pad site. This standard is currently being met and will continue to be met in the future.

Name of specialist and date: Timothy Novotny 08/30/06

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: There are no threatened or endangered species present in the proposed project area. There are two BLM special status species present in the project area, Columbian sharp-tailed grouse and greater sage-grouse. The proposed well pads are not likely to impact any traditional lek sites for either species. Approximately 12 acres of nesting habitat for both species will be lost as a result of this project. Mitigative measures will help ensure that breeding and nesting activities are not disrupted as a result of construction of the access roads, well pad or drilling of the well. This standard is currently being met and will continue to be met in the future.

Name of specialist and date: Timothy Novotny 08/30/06

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: This area is currently meeting this standard. The vigor and diversity of the plant community is providing good wildlife habitat, soil protection, forage production, and ecosystem resilience. The Proposed Action would be a minor impact within the larger landscape, but successful reclamation, as required, must occur to prevent these disturbances from causing weed and erosion problems that could affect the quality of the surrounding plant community. As long as all required reclamation practices are followed and followed through, the Proposed Action would meet this standard.

Name of specialist and date: Hunter Seim 08/22/06

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 or the Proposed Action. This standard does not apply.

Name of specialist and date: Hunter Seim 08/22/06

RIPARIAN SYSTEMS STANDARD: There are no wetlands or riparian systems present near the proposed well site. This standard does not apply.

Name of specialist and date: Timothy Novotny 08/30/06

WATER QUALITY STANDARD: The proposed action would meet the public land health standard for water quality. Reclamation of the utility trenches would occur shortly after utility line installation to minimize sheet and rill erosion from the corridors. Interim reclamation of the unused area on the well pads would be completed shortly after drilling to minimize sheet and rill erosion from the well sites. When the well pads are no longer needed for production operations, the disturbed areas 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 08/25/06

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, utility corridors, and access roads are used for operations. The well pad sites, corridors, and access road 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, utility corridors, and access road disturbances after well abandonment and reclamation practices have been successfully achieved.

Name of specialist and date: Barb Blackstun 08/25/06

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-100-2006-082

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 these three APDs 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's 13-point surface use plan, well location maps, and the Conditions of Approval are found in the well's case file labeled COC69110, Well #13-13; COC69111, Well #14-13; and COC69111, Well #23-3.

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: