

ENVIRONMENTAL ASSESSMENT
EA-NV-030-08-02

Oil & Gas Resources Leasing
Nye County, Nevada

Nye County, Nevada
November 2007



It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

EA-NV-030-08-02



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carson City Office
5665 Morgan Mill Rd
Carson City, Nevada 89701-1448
<http://www.nv.blm.gov/Carson>



In Reply Refer to:
EA-NV C30-08-002
(NV-033)

Dear Reader:

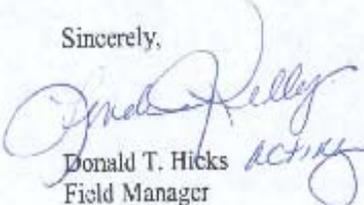
Enclosed for your consideration is the Environmental Assessment (EA), and Finding of No Significant Impact (FONSI) prepared by the Bureau of Land Management, Carson City Field Office (BLM) for Oil and Gas Resources Leasing in Nye County, Nevada. The EA and FONSI are open for a 30-day review and comment period, ending on December 19, 2007. Following the comment period, a Decision Record (DR) will be prepared to document the decisions made.

The proposed action is to lease some or all of the geothermal resources at sites located in the Gabbs Valley area of Nye County, Nevada. The 10 lease applications, covering approximately 25,360 acres, are located within the BLM Carson City Field Office management area and are open to fluid mineral leasing.

Upon review of any comments, the Decision Record will be issued. The approved Final EA will be mailed to all who participated in the review process and will be available on the Carson City Field Office website http://www.blm.gov/nv/st/en/fo/carson_city_field.html.

Comments may be sent to: BLM Carson City Field Office, 5665 Morgan Mill Road, Carson City, NV 89701, Attn: C. James, fax: (775) 885-6147, or e-mail: cjames@blm.gov. If you have any questions, please contact Carla James at (775) 885-6131.

Sincerely,


Donald T. Hicks
Field Manager

FINDING OF NO SIGNIFICANT IMPACT

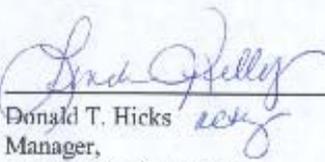
OIL AND GAS RESOURCES LEASING NYE COUNTY, NEVADA Environmental Assessment EA-NV-030-08-02

Ten lease applications, covering approximately 25,360 acres, have been filed for oil and gas resources within the Bureau of Land Management Carson City Field Office (BLM) management area and in accordance to the 43 CFR 3100 regulations, oil and gas leasing.

This EA, EA-NV-030-08-02, evaluates the impacts on the natural and human environment that could result from issuing leases for oil and gas resources. The issuance of leases for oil and gas resources is a federal action, a commitment to resource development, and confers on the lessee the right to future exploration and development within the lease area. There are four stages of oil and gas resource development within a lease, including exploration, development, production, and closeout. Each of the four stages requires separate site-specific environmental analysis and BLM authorization when ground-disturbing activities are proposed. The issuance of a lease does not, however, confer on the lessee the right to explore for or develop geothermal resources beyond the level of casual use. As a result, there are no direct impacts resulting from the issuance of geothermal leases.

Nevertheless, it is reasonably anticipated that issuing a lease could result in subsequent exploration, development, production, and closeout activities by the lessee. The impact analysis in the EA characterizes the potential for impacts in each lease area. The determination of environmental risk is resource-specific and is based on a number of factors, including the presence and extent of resources within the proposed lease section, the extent of resources in the surrounding area, and the quality of existing data.

Based on the analysis of the *Carson City Field Office Oil and Gas Resources Leasing Environmental Assessment*, environmental assessment (EA) EA-NV-030-08-02, I have determined that the action will not have a significant effect on the human environment and an environmental impact statement (EIS) will not be prepared.



Donald T. Hicks
Manager,
Carson City Field Office

11-16-07
Date

NV-07-09-005 2556.120 Acres
T.0120N, R.0350E, 21 MDM, NV
Sec. 001 LOTS 1-4;
 001 S2N2,S2;
 002 LOTS 1-4;
 002 S2N2,S2;
 003 LOTS 1-4;
 003 S2N2,S2;
 004 LOTS 1-4;
 004 S2N2,S2;

Nye County
Carson City FO
FORMERLY LEASE (NO)S. N53862
Formerly Lease No.

NV-07-09-006 2538.670 Acres
T.0120N, R.0350E, 21 MDM, NV
Sec. 006 S2NE,SENW,E2SW,SE;
 007 LOTS 1-4;
 007 E2,E2W2;
 008 ALL;
 005 LOTS 1-4;
 005 S2N2,S2;
 006 LOTS 1-7;

Nye County
Carson City FO
Formerly Lease No.

NV-07-09-007 2560.000 Acres
T.0120N, R.0350E, 21 MDM, NV
Sec. 009 ALL;
 010 ALL;
 011 ALL;
 012 ALL;

Nye County
Carson City FO
Formerly Lease No.

NV-07-09-008 2560.000 Acres
T.0120N, R.0350E, 21 MDM, NV
Sec. 012 ALL;
 015 ALL;
 016 ALL;
 021 ALL;
 022 ALL;

Nye County
Carson City FO
Formerly Lease No.

NV-07-09-010 2544.240 Acres
T.0120N, R.0350E, 21 MDM, NV
Sec. 017 ALL;
 018 LOTS 1-4;
 018 E2,E2W2;
 019 LOTS 1-4;
 019 E2,E2W2;
 020 ALL;

Nye County
Carson City FO
Formerly Lease No.

NV-07-09-011 2460.000 Acres
T.0130N, R.0350E, 21 MDM, NV
Sec. 014 ALL;
 015 ALL;
 016 E2,SW;
 020 ALL;

Nye County
Carson City FO
Formerly Lease No.

NV-07-09-013 2560.000 Acres
T.0130N, R.0350E, 21 MDM, NV
Sec. 021 ALL;
 022 ALL;
 023 ALL;
 024 ALL;

Nye County
Carson City FO
Formerly Lease No.

NV-07-09-014 2560.000 Acres
T.0130N, R.0350E, 21 MDM, NV
Sec. 025 ALL;
 026 ALL;
 035 ALL;
 036 ALL;

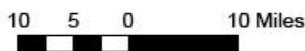
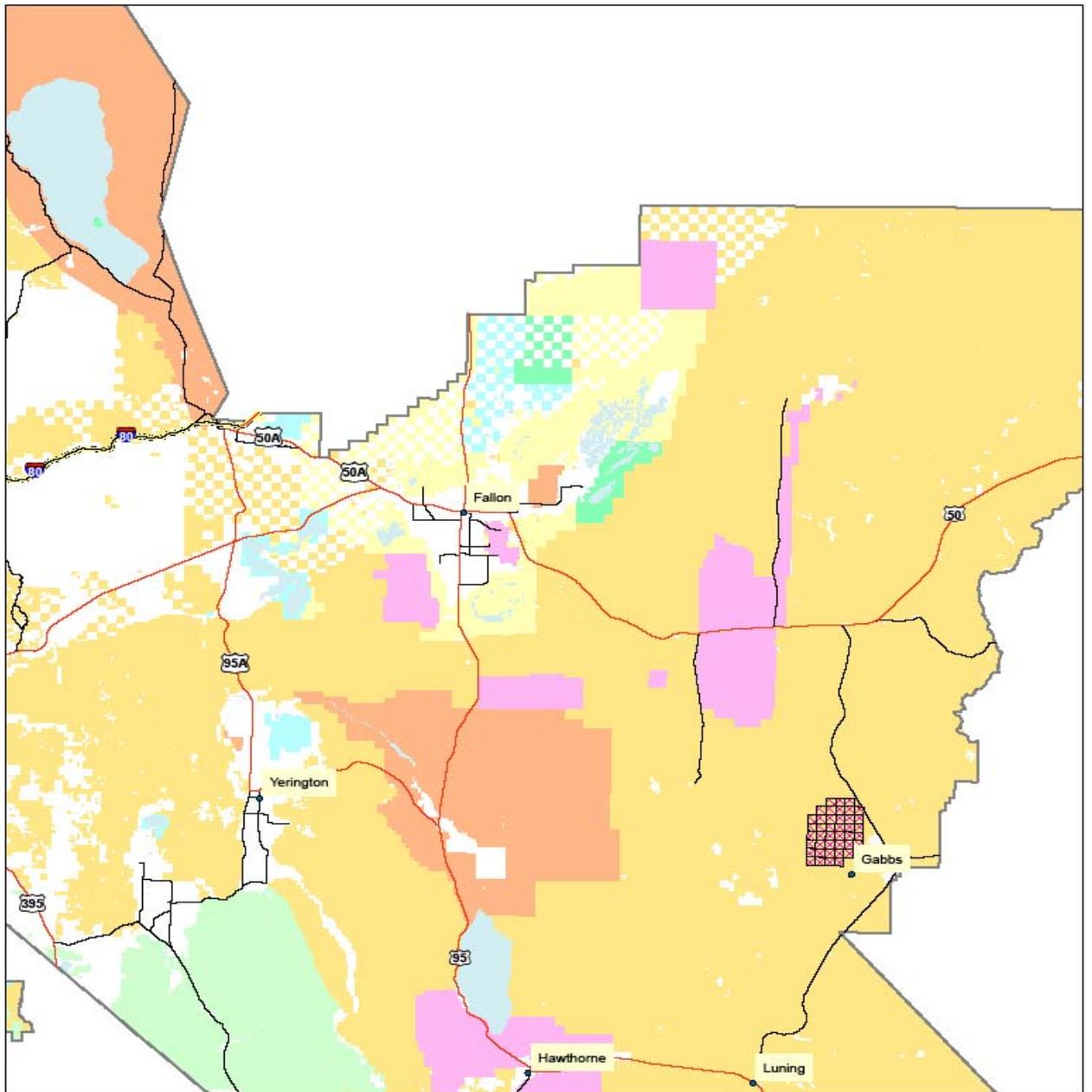
Nye County
Carson City FO
Formerly Lease No.

NV-07-09-015 2560.000 Acres
T.0130N, R.0350E, 21 MDM, NV
Sec. 027 ALL;
 028 ALL;
 033 ALL;
 034 ALL;

Nye County
Carson City FO
Formerly Lease No.

NV-07-09-016 2461.000 Acres
T.0130N, R.0350E, 21 MDM, NV
Sec. 029 ALL;
 030 ALL;
 031 ALL;
 032 ALL;

Nye County
Carson City FO
Formerly Lease No.

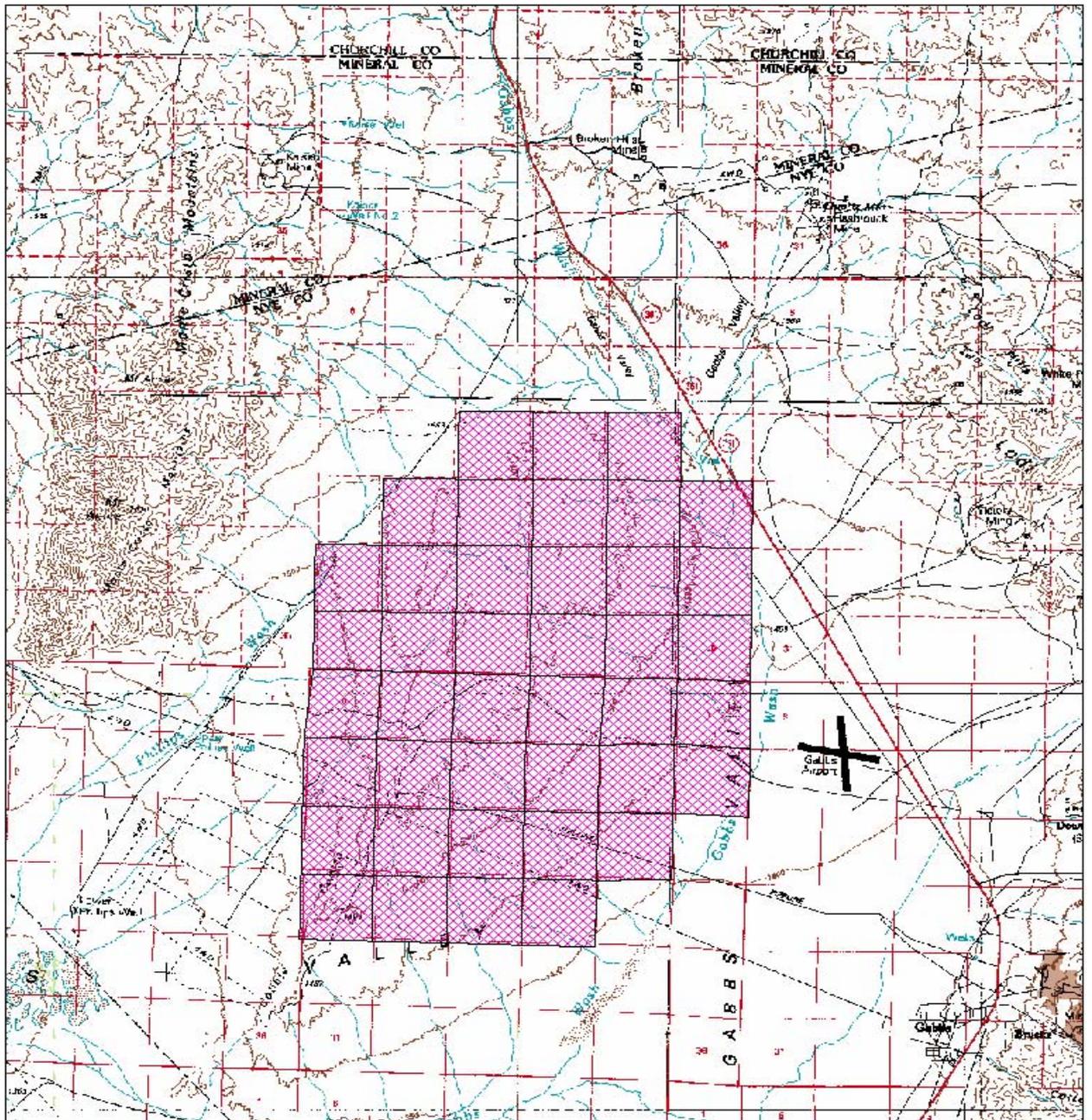


Land Status

- Bureau of Land Management
- Bureau of Reclamation
- CA State
- Department of Defense
- Fish and Wildlife
- Water
- Bureau of Indian Affairs
- NV State
- Private
- Forest Service
- Lease Parcels



**Figure 1 - Oil and Gas Sale Parcels
Gabbs Valley
Carson City Field Office**



**Figure 2 - Oil and Gas Sale Parcels
Gabbs Valley
Carson City Field Office**

I. INTRODUCTION/PURPOSE AND NEED

Introduction

The Bureau of Land Management (BLM), Carson City Field Office (CCFO), has prepared this environmental assessment to analyze impacts to the human and natural environment from leasing of oil and gas resources in the Gabbs Valley area in Nye County, Nevada. Oil and gas resources on public lands are subject to lease under the Mineral Leasing Act of 1920, as amended and supplemented (30 U.S.C. 181 *et seq.*); 43 CFR 3100 Onshore Oil and Gas Leasing: General, and 3101 Issuance of Leases. Oil and gas resources are oil, oil shale, native asphalt, solid and semisolid bitumen, and bituminous rock (including oil-impregnated rock or sands from which oil is recoverable only by special treatment after the deposit is mined or quarried) or gas (excepting helium). Pursuant to 43 CFR 3101.1-2, a lessee shall have the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource within the bounds of the lease subject to: stipulations attached to the lease; restrictions deriving from specific, nondiscretionary statutes; reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed.

After a lease has been granted, it is reasonably foreseeable that the operator may propose subsequent exploration and development activities for BLM approval. These would require BLM authorization and, if necessary, environmental review. For exploration other than casual use activities, the operator must file an exploration permit that identifies, among many things, the areas to be explored and the method of exploration. When the operator has filed this permit with the local BLM office, the proposed action in the exploration permit undergoes National Environmental Policy Act (NEPA) review to determine if there are any environmental conflicts in the area to be disturbed. If so, the BLM may, at its discretion, approve or disapprove the permit or modify it by requiring additional mitigating measures. Should the operator not be willing to accept the decision, the permit can be modified and resubmitted, or the decision can be appealed.

The development phase occurs when the operator has located a potentially economic reservoir. The operator must file an operations plan to describe how an operator will drill for and test the oil and gas resources covered by the lease. The action proposed in the operations plan would undergo NEPA review by the local BLM office to evaluate the possible environmental impacts of the action. If environmental conflicts are likely to occur, the BLM may again approve, modify, or disapprove the plan.

Barring abandonment of exploration and development wells, the final phase of this process is the creation of, for example, a production well. After the appropriate paperwork is filed with the local BLM office, the proposed action again undergoes the approval process. Should this drilling operation result in producing wells, continued monitoring would be required to check for any hydrocarbon spills resulting from leaking pipelines, overfilled tank batteries, or tanker truck spills. This area would need continued monitoring to ensure safety for people, livestock and wildlife.

Oil and gas exploration and production upon BLM managed land are conducted through leases with the BLM and are subject to terms and stipulations to comply with all applicable federal and state laws pertaining to various considerations for sanitation, water quality, wildlife, safety, and reclamation. Stipulations may be site specific and are derived from the environmental analysis process.

Purpose and Need

The purpose of the proposed action is to lease some or all of the oil and gas resources in the lease sites located in the Gabbs Valley area in Nye County, Nevada. The pending lease applications encompass BLM managed lands that are open to fluid mineral leasing.

On May 18, 2001, President Bush issued Executive Order (EO) 13212, Actions to Expedite Energy-Related Projects, which states “the increased production and transmission of energy in a safe and environmentally sound manner is essential.” Executive departments and agencies are directed to “take appropriate actions, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission, or conservation of energy.” EO 13212 further states that “(f)or energy-related projects, agencies shall expedite their review of permits or take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health, and environmental protections. The agencies shall take such actions to the extent permitted by law and regulation, and where appropriate.”

In response to the EO 13212, BLM issued a National Energy Policy Implementation Plan in June 2001, which directs the BLM to process leases, in a timely manner, in order to help support efforts to increase energy production from federal lands, while preserving the health of the public lands. Demand for oil in the United States has increased gas prices dramatically in a relatively short time; therefore, an increase in the level of exploration, development, and production of oil resources is needed.

Land Use Plan Conformance Statement

The proposed action and alternatives described below are in conformance with the 2001 Carson City Field Office Consolidated Resource Management Plan, page MIN10-1. It is the policy of the Department of the Interior to encourage the development of energy and mineral resources on lands in a timely manner to meet national, regional and local needs consistent with the objectives for other public land uses.

II. PROPOSED ACTION AND ALTERNATIVES

Proposed Action

The Nevada BLM is considering leasing 10 parcels of BLM managed land that have been proposed for leasing oil and gas resources in the Gabbs Valley area of Nye County, Nevada (Figures 1 & 2). The proposed action is to lease some or all of these pending lease applications that cover an area of approximately 25,360 acres. Subsequent oil and gas exploration and production on BLM managed land conducted through leases with the BLM are subject to terms and stipulations to comply with all applicable federal and state laws pertaining to various considerations for sanitation, water quality, wildlife, safety, and reclamation. Stipulations may be site specific and are derived from the environmental analysis process for the area Resource Management Plan. The CCFO Consolidated Resource Management Plan (“CRMP”) describes which areas are closed to fluid mineral leasing, but it does not identify any stipulations for fluid mineral leasing. Standard Operating Procedures are identified in the CRMP and these would be considered for any future surface disturbing activities under lease. This EA would evaluate the potential for significant impacts and whether or not an EIS needs to be prepared for the proposed action.

The proposed action is considered a federal action and a commitment to resource development therefore requiring NEPA analysis. While issuing a lease for oil and gas resources confers on the lessee the right to future exploration and development of these resources within the lease area, it does not confer the right to proceed with any ground-disturbing activities to explore for or develop oil and gas resources if such activities would extend beyond the level of casual use. As a result, the proposed issuance of the lease would have no direct impacts.

Issuance of oil and gas leases could have indirect impacts because such leasing represents a commitment of resources, and it is reasonably expected that subsequent exploration, development, production, and closeout activities would occur. The EA therefore presents a broad scope analysis of the potential indirect and cumulative impacts from oil and gas leasing to determine whether these indirect impacts by the lessee could be significant.

Proposals for exploration and/or development at specific sites will be examined for conformance with the land use plan and analyzed for NEPA adequacy at the time the proposals are submitted. Any proposal for exploration and/or development must be analyzed as required by NEPA prior to the proposed action.

All lands available for leasing are offered for competitive oral bidding. The BLM Nevada State Office is required to hold sales for such lands at least quarterly. At least 45 days before a competitive auction, lands to be offered for competitive lease sale are posted in the Nevada State Office. At the day of the auction, the minimum acceptable bid of \$2 per acre, the total first years rental and a \$75 administration fee must be paid. The remainder of the bonus bid for each parcel is due within 10 working days. The lands offered in leasing units will be a maximum of 2,560 acres per lease. Only lands that have been offered competitively and receive no bid are made available for noncompetitive leasing. Lease offers are not made for less than 640 acres and may not include more than 10,240 acres. Leases are issued for a primary term of 10 years. The amount of rental for leases will be \$1.50 per acre for the first 5 years of the lease term and \$2 per acre for any subsequent year. A royalty rate of 12.5 percent on all leases is required on the amount or value of the production removed or sold.

No Action Alternative

The only alternative considered is the No Action Alternative or no leasing. Under this alternative, the BLM would reject the leases and future exploration and development could not occur. Implementation of this alternative is inconsistent with the Federal Energy Policy to promote the development of environmentally attractive energy resources. However, the BLM could adopt the No Action Alternative if the Proposed Action would result in unacceptable impact to the public lands.

III. AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS ANALYSIS

Scoping and Issue Identification

Internal scoping was completed on June 25, 2007 with the Carson City Field Office Interdisciplinary Team. At that time, no issues were identified. A scoping letter was sent to the Nye County Board of Commissioners on June 28, 2007 and there was no response.

General Setting

The proposed lease areas are located in the Gabbs Valley just west of the town of Gabbs in Nye County, Nevada. The terrain within this large area is varied and consists of steep mountainous areas, alluvial fans, playas and dune areas.

Critical Elements of the Human Environment

Appendix 5 of BLM's NEPA Handbook (H-1740-1) identifies Critical Elements of the Human Environment that are subject to requirements specified in statutes or executive orders and must be considered in all BLM environmental documents. The Critical Elements are included in **Table 3-1** below.

TABLE 3-1 CRITICAL ELEMENTS OF THE HUMAN ENVIRONMENT			
Critical Element	Not Present	Present/Not Affected	Present/May Be Affected
Air Quality		√	
Areas of Critical Environmental Concern	√		
Cultural Resources			√
Farm Lands (prime or unique)	√		
Floodplains	√		
Migratory Birds			√
Native American Religious Concerns	√		
Threatened or Endangered Species	√		
Wastes, Hazardous or Solid	√		
Water Quality (Surface/Ground)		√	
Wetlands/Riparian Zones	√		
Wild and Scenic Rivers	√		
Wilderness	√		
Invasive, Nonnative Species		√	
Environmental Justice	√		

The following rationale was used to determine that Critical Elements present in the area would not be affected as a result of implementation of the Proposed Action.

Air Quality – Existing air quality would not be affected by the issuance of oil and gas leases as there is no surface disturbance associated with the proposed action.

Native American Religious Concerns – The following tribe has been notified via certified letter on August 3, 2007: Yomba Shoshone Tribe. They were asked to identify traditional cultural

places or any other areas of traditional cultural importance that should be considered within the potential are of effect. This was followed by a telephone call from CCFO staff. The Tribe responded that they had no comments at this time concerning leasing in the proposed area.

Threatened or Endangered Species – In April, 2007 the U.S. Fish and Wildlife Service’s electronic listing of federally listed threatened, endangered, proposed for listing and candidate (TEPC) species was reviewed to determine which species might be associated with the two lease areas. (www.fws.gov/nevada/protected_species/index.html 2007). There are no federally listed species expected to use either lease area. No federally listed species habitat occurs on or adjacent to the two proposed lease areas. Therefore, the proposed action would not have an impact on federally listed species.

Water Quality (Surface/Ground) – The proposed lease parcels are in the Gabbs Valley watershed, identified by Hydrologic Unit Code 16060002 (U.S. Geological Survey, 2007). The parcels are in an area of dissected terrain with numerous ephemeral drainages, but no perennial bodies of water. The largest drainage is Gabbs Wash, which runs north-to-south along the east portion of the proposed lease area. Maps published by the Federal Emergency Management Agency (1990) show that this segment of Gabbs Wash would be inundated during a 100-year flood.

The drainage pattern and risks of flooding and erosion could affect future decisions regarding exploration and development activities. The proposed location of well pads, production facilities, access roads, and other surface disturbances could be modified or denied within the discretion of the BLM authorized officer.

The municipal water supply for Gabbs, Nevada is groundwater derived from Lodi Valley, which is recharged from runoff from the Paradise and Desatoya ranges (Miller and Taylor, 2005). Groundwater movement near Gabbs is to the south and west, so the proposed lease area is generally down-gradient from the municipal wells.

Except for the aquifer supplying water to Gabbs, groundwater in the basin is generally poor. Geothermal influences, evaporative concentrations, and long and extensive contact with volcanic units have affected water quality (Miller and Taylor, 2005). The lack of an alternate source of fresh water makes source water protection a major concern for Gabbs residents.

Oil and gas exploration and development in the future could require more detailed study of groundwater resources in the area. Mitigation measures to protect groundwater, especially the Gabbs municipal aquifer, would be likely.

Invasive, Nonnative Species - There are no noxious weed infestations that have been located within the proposed lease parcels. However there are two small areas of salt cedar adjacent to parcel 3, southeast of Tonopah Jct. Invasive, non-native species would not be affected by oil and gas lease issuance in the proposed areas. No ground disturbing or other activities would occur as a result of the Proposed Action that would result in establishment of invasive, non-native species. Since there are no noxious weed populations within the proposed lease areas, the implementation of this alternative would have no effect. However, potential future invasions due to surface disturbances may be possible, but the most likely invader other than early seral stage native weeds would be cheatgrass.

Resources Present but not Affected (other than critical elements)

The following resources, which are not Critical Elements of the Human Environment as defined by BLM's Handbook H-1740-1, are present in the area. BLM has evaluated the potential impact of the Proposed Action on these resources and has determined that although the resources are present, they would not be affected by the Proposed Action. Rational for dismissing these resources from further discussion in the document are as follows:

Land Use – Land in the project area is public land administered by BLM which issues land use authorizations for a variety of purposes, including transportation and utility use. Surface occupancy and use is subject to all valid existing surface rights. There is no surface disturbance associated with leasing of oil and gas resources so there would be no affect relating to the existing ROW. The proposed action would be subject to existing rights so conflicts with any existing authorized land uses is not anticipated.

Visual resources – The proposed lease areas are designated as Class III for visual resources. The management objective for Class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape as a result of leasing would be no change.

Resources Present and Brought Forward For Analysis (critical & non-critical elements)

Cultural Resources - The proposed lease parcels discussed in this report would be offered for lease subject to applicable laws and lease conditions. The proposed parcels described herein may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders.

The Carson City Field Office (CCFO) Class I Inventory Report for the December 2007 Oil and Gas Lease Sale adequately summarizes the presence and absence of archaeological inventories and cultural properties located on each proposed parcel. The Bureau of Land Management (BLM) will not approve any ground disturbing activities that may affect cultural properties eligible to the National Register of Historic Places (NRHP), until it completes its obligations under applicable requirements of the NHPA and other authorities. On all parcels, once a project specific proposal is submitted, an additional Section 106 cultural resource assessment would be completed where site specific issues would be addressed as appropriate. The BLM may require modification to exploration or development proposals to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized or mitigated.

All cultural resource information was reviewed and pertinent cultural resource information was analyzed for the Area of Potential Effect (APE), which is defined as the entire parcel being offered for the December 2007 oil and gas lease sale. Cultural resource information concerning the proposed parcels is minimal, with 16 previous small-area inventories that cover a small portion (less than 200 acres) of the proposed oil and gas lease area. In no instance can the entire parcel be considered completely surveyed. Un-inventoried portions of the parcels were compared with similar areas where inventories had been conducted. This analysis included an assessment of elevation, topography, vegetation and water resources.

Based on the results of previous cultural resource inventories, the potential for locating additional cultural resources within the proposed lease parcels reviewed for the December 2007 oil and gas lease sale ranges from low to moderate. Furthermore, analysis of the reasonably foreseeable impacts of leasing both identified and unidentified cultural properties resulted in the recommendation of **No Historic Properties Affected**. This is based on the determination that reasonable development could occur on each proposed parcel without impact to eligible properties. A brief summary and analysis of inventories within the proposed parcels follows, which illustrates how this determination was made.

Gabbs Valley Parcels

This proposed block of parcels are located 4 to 12 miles northwest of Gabbs, Nevada within Gabbs Valley, on and northeast of Cobble Cuesta, west of the Gabbs Airport, and east of Phillips Wash. Elevations range from just less than 4600 feet on the west margin of Cobble Cuesta, to just over 5300 feet above mean sea level. Vegetation ranges is very predominantly Great Basin desert shrub. Geology is centered on an exposure of tuffaceous sedimentary rock with Quaternary surficial eolian, alluvial and fluvial deposits.

Although several previous surveys for cultural resources have been conducted within these parcels, no documented sites have been recorded, to date. Based on the assessment of soils, elevation, topography, vegetation and water resources in surveyed areas with similar conditions, the potential for finding NRHP-eligible sites within these proposed parcels would be likely, but they would represent a very small amount of the area of the 41 sections that are the parcels. The expected sites would consist of prehistoric/ ethnographic period resources such as lithic scatters, quarry locales, and camp sites, or local historical resources that would oriented toward early mining or oil and gas production. Most of this western portion of Nye County's mining involved hard rock miners working southeast of the proposed parcels in the Gabbs area. It is not known—and not highly likely—for the parcels of this local region to contain adits, shafts, prospects and associated domestic and commercial features of mining in tuffaceous sediments. Due to the expected site type, size, density of occurrence and predicted density clusters, it has been determined that reasonable development could occur on these proposed parcels, without impact to NRHP-eligible cultural properties.

After consideration of cultural resource information, and other general data including the applicable Carson City Consolidated Resource Management Plan (RMP), and associated Environmental Impact Statement (EIS) and oil and gas activity NEPA documents, specific data relating to the individual proposed parcels such as topography and soils, as well as personal knowledge and experience of the lands at issue, it has been determined that reasonable development could occur without adverse impacts to cultural properties eligible to the NRHP.

The Nevada Protocol Part VII.D. was applied to the cultural resource review for the September 2007 lease sale and the CCFO determination, under the Nevada Protocol review threshold at VII.D.(1), is that **there are no historic properties affected; eligible sites are present but will not be affected as defined by 36 CFR 800.4**.

Known cultural resources are located in such a fashion (size, density and placement) that avoidance is feasible during development of oil and gas resources. The potential for locating additional cultural resources within the proposed lease parcels reviewed for the December 2007 Oil and Gas Lease Sale is low to moderate. A complete inventory of the proposed lease parcels has not occurred; therefore, the following stipulation should be added to each lease parcel:

“This lease may be found to contain historic properties and/ or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves and Repatriation Act, E.O. 13007, or other statutes and executive orders. The BLM will not approve any ground disturbing activities that may affect such properties or resources until it completes its obligations under applicable requirements of the NHPA and other authorities. The BLM may require modification to exploration or development proposals to protect properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized or mitigated.”

According to Part VI.B (1)(d) of the Nevada Protocol, the BLM will request the review of the Nevada State Historic Preservation Office (SHPO) prior to project implementation. This review includes requesting SHPO concurrence on the determination of effect. The Nevada SHPO will be consulted regarding any proposed exploration and development.

Range - The parcels lie within grazing allotments. However, since there is no ground disturbance associated with leasing, oil and gas leasing would not affect the range resource or grazing in these areas.

Soils/Geology/Minerals - There are no mining operations authorized in these areas. However, there may be unpatented mining claims in these areas. An oil and gas lease would be subject to valid existing rights established by existing unpatented mining claims or mineral material sales contracts.

The lessee would agree per stipulation in the lease that future operations will not interfere with the material operations of Nevada Department of Transportation material sites.

Implementation of the proposed action would have no affect on soils, geology, or minerals in these areas. No ground disturbing activities beyond those currently authorized would occur as a result of oil and gas leasing.

Wildlife - The lease area has limited general wildlife diversity due to the lack of elevation change and vegetation diversity. Two terrestrial wildlife habitats occur within the areas as described in the Nevada Wildlife Action Plan (Wildlife Action Plan Team 2006). The major wildlife habitat types include,

Intermountain Cold Desert Scrub – Historically, this habitat would have been dominated by Indian rice grass, spiny hopsage, shadscale and chenopods (Wildlife Action Plan Team 2006). Range evaluations indicate these plants still dominate. Wildlife species associated with this habitat type include pale kangaroo mouse, Great Basin collared lizard and black-throated sparrow (Wildlife Action Plan Team 2006).

Sagebrush – The lease areas has a mix of Intermountain basin big sagebrush and Great Basin xeric mixed sagebrush. Low sagebrush, big sagebrush, spiny menodora, horsebrush, needlegrass and galleta grass (BLM 1988) and shadscale are included in the xeric communities (Wildlife Action Plan Team 2006). Desert kit fox, desert horned lizard and vesper sparrow are species associated with this habitat type (Wildlife Action Plan Team 2006).

A few mule deer may be found in the winter in this area traveling between foothill areas on either side of the valley. No key deer areas are located within the lease area (BLM 1988).

Historically, pronghorn were present in all valleys of Nevada (BLM 1988). Pronghorn typically need open spaces with good forb and shrub availability. These animals will use foothill areas to escape winter cold and summer heat. A few pronghorn may be found in the lease area on a seasonal basis. No key areas have been delineated within or near the proposed lease area.

This area is outside of any Sage Grouse Population Management Unit, and there is no information to indicate that they occupy the lease area (Axtell 2007).

Other upland game birds are absent from this area with the exception of the possibility of a few mourning dove passing through the general area on a seasonal basis.

The proposed administrative leasing of areas east of Gabbs, Nevada would have no effect on general wildlife populations. There would be no impacts to important game or upland game species including sage grouse, or key habitats as a result of leasing parcels in the two areas.

Special Status Species

BLM Sensitive Species

BLM Manual 6840 defines sensitive species as "...those species not already included as BLM Special Status Species under (1) Federal listed, proposed or candidate species; or (2) State of Nevada listed species. Native species may be listed as "sensitive" if it: (1) could become endangered or extirpated from a state or significant portion of its range; (2) is under review by the FWS/NMFS; or (3) whose numbers or habitat capability are declining so rapidly that Federal listing may become necessary, or (4) has typically small and widely dispersed populations; (5) inhabits ecological refugia, specialized or unique habitats; (6) is state-listed, but is better conserved through application of the BLM sensitive species status." It is BLM policy to provide sensitive species with the same level of protection that is given federal candidate species. The major objective of this protection is to preclude the need for federal listing (BLM 2003).

Nevada BLM sensitive species expected, or found in or near the area are shown in Appendix A (BLM 2003).

Neo-tropical Migratory Birds

On January 11, 2001, President Clinton signed Executive Order 13186 (Land Bird Strategic Area) placing emphasis on conservation and management of migratory birds. The species are not protected under the Endangered Species Act, but most are protected under the Migratory Bird Treaty Act of 1918. No BLM policies have been developed to provide guidance on how to incorporate migratory birds into NEPA analysis. However, advice based on past USFWS MOU's, list items the USFWS believes are fundamental for the analysis of impacts to and planning for these birds. These items are (1) effects to highest priority birds listed by Partners in Flight; (2) effects to important bird areas (IBA's); (3) effects to important over wintering areas.

Avifaunal Biomes that are found on the area are described by Partners in Flight (PIF) [Beidleman 2000], PIF-Nevada (Neel 1999) and Nevada Wildlife Action Plan (Nevada Wildlife Action Plan Team 2006). The Intermountain West is the center of distribution for many western birds. Over half of the biome's Species of Continental Importance have 75% or more of their population here. Many breeding species from this biome migrate to winter in central and western Mexico or in the Southwestern biome (Beidleman 2000). There are no Important Bird Areas (IBA) associated with this area.

The species of concern listed by PIF that could occur in the area are shown in Appendix B.

The proposed administrative leasing would not have an effect on neo-tropical migratory bird populations expected or occurring in the area.

No Action Alternative

The physical descriptions of the affected environment for the alternative would be the same as that for the proposed action. Implementation of the No Action Alternative would result in the lands not being open to oil and gas exploration, other than casual use, or development.

Although environmental impacts would not occur under the No Action Alternative, implementation of this alternative would not be consistent with the land use plan or the issuance of oil and gas leases in the project area. This is also inconsistent with the Federal Energy Policy to promote the development of environmentally attractive energy resources. The No Action Alternative would deprive the BLM of royalty payments which could be generated by the successful completion of oil or gas development.

Cumulative Impacts

Gabbs Valley has had oil and gas exploration activity mainly consisting of old (late 50's) seismic exploration southwest of the planned well locations. There are no producing wells in Gabbs Valley.

Cumulative impacts include the combined effect of past projects, current projects, specific planned projects, and other reasonably foreseeable future actions (RFAs) within the project study area to which the oil and gas exploration development may add incremental impacts. The time frame for cumulative impact analysis encompasses the projected life of the exploration which is approximately one year. The area of analysis encompasses Gabbs Valley and the adjacent mountains. The resources that would be directly or indirectly affected by the consequences of oil and gas leasing or other actions that will be analyzed in a cumulative sense consist of soils and vegetation, visual resources, noise, air quality, wildlife, range, and socio economic resources.

All resource values have been evaluated for cumulative impacts. It has been determined that cumulative impacts would be negligible as a result of the proposed action or alternative.

Monitoring

Monitoring needs for this action have been identified in the standard stipulations that have been attached to this document.

IV. CONSULTATION, COORDINATION AND PREPARATION

Consultation with others

The following local agencies were consulted during preparation of the EA:

Nye County Board of Commissioners
Yomba Shoshone Paiute Tribe

List of Preparers and Reviewers

Don Hicks	Carson City Field Office Manager,
Carla James	EA Project Team Leader, Supervisory Geologist
Terri Knutson	Planning & Environmental Coordinator
JoAnn Hufnagle	Supervisory Realty Specialist
Terry Neumann	HazMat
Arthur Callan	Recreation, Wilderness, VRM
Jim Carter	Cultural Resources, Native American Religious Concerns, Paleontology
Jim Schroeder	Water Resources
Jim deLaureal	Soils; Invasive, Nonnative Species
Steep Weiss	Forestry
Dean Tonenna	T&E Plants, Vegetation
Rita Suminski	Wildlife, T&E Animals, Migratory Birds
Keith Barker	Fire
Russ Suminski	Range Resources

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Appendix A
BLM Sensitive Species associated with the proposed lease area

Animal

Golden Eagle – *Aquila chrysaetos*
Burrowing owl - *Athene cunicularia*
Prairie Falcon – *Falco columbarius*
Loggerhead shrike- *Lanius ludovicianus*
Vesper Sparrow – *Pooecetes gramineus*
Western Pipistrelle bat – *Pipistrellus hesperus*
Pallid bat – *Antrozous pallidus*
Brazilian free-tailed bat - *Tadarida brasiliensis*
Fringed myotis – *Myotis thysanodes*
California myotis – *Myotis californicus*

Plants

Nevada Oryctes – *Oryctes nevadensis*
Nevada dune beardtongue – *Penstemon arenarius*
Lahontan beardtongue – *Penstemon palmeri* var. *macranthus*

Source: www.natureserve.com, www.heritage.nv.gov, CCFO Habitat Management Plans, misc. observ

APPENDIX B

Neo-tropical Migratory Birds, Species of Continental Importance on two proposed lease areas

Salt Desert Scrub (Beidleman 2000) – This biome experiences harsh climactic variation and is often dominated by salt-tolerant shrubs. Species of concern associated with this habitat type in the project area are,

Loggerhead Shrike – *Lanius ludovicianus* (Neel 1999, Nevada Wildlife Action Plan 2006)
Burrowing Owl – *Athene cunicularia* (Neel 1999)

Issues related to this habitat type include physical destruction of salt desert shrubs, habitat conversion and use of rangeland pesticides (Neel 1999). Off-road vehicle activity and non-native species invasion has also been identified as an issue (Nevada Wildlife Action Plan 2006).

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Tonenna, D. Input to Gabbs area oil and gas leasing EA 2007.

Wildlife Action Plan Team. 2006. Nevada Wildlife Action Plan. Nevada Department of Wildlife, Reno.

http://www.fws.gov/nevada/protected_species/index.html

<http://www.heritage.nv.gov>

APPENDIX C

Standard Stipulations For All Leases in Carson City Field Office

The following lease stipulations have been developed as mitigating measures for geothermal/oil and gas leasing and other reasonably foreseeable development activities with regard to geothermal/oil and gas exploration and development within the Carson City Field Office.

Material Site Stipulation

The Lessee accepts this lease subject to the right of the State of Nevada to remove material from the land embraced in Material Sites and agrees that operations performed by the lessee will not interfere with operations of the State of Nevada, Department of Transportation.

Native American Consultation

All development activities proposed under the authority of this lease are subject to the requirement for Native American consultation prior to BLM authorizing the activity. Depending on the nature of the lease developments being proposed and the resources of concerns to tribes potentially effected, Native American consultation and resulting mitigation measures to avoid significant impacts may extend time frames for processing authorizations for development activities, as well as, change in the ways in which developments are implemented.

Riparian Areas

No surface occupancy within 650 feet (horizontal measurement) of any surface water bodies, riparian areas, wetlands, playas or 100-year floodplains to protect the integrity of these resources (as delineated by the presence of riparian vegetation and not actual water). Exceptions to this restriction may be considered on a case-by-case basis if the BLM determines at least one of the following conditions apply: 1) additional development is proposed in an area where current development has shown no adverse impacts, 2) suitable off-site mitigation will be provided if habitat loss is expected, or 3) BLM determines development proposed under any plan of operations ensures adequate protection of the resources.

Endangered Species

The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modifications of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act, 16 U.S.C. 1531, as amended, including completion of any required procedure for conference or consultation.