

BUREAU OF LAND MANAGEMENT-ROSWELL FIELD OFFICE
ENVIRONMENTAL ASSESSMENT # NM-510-06-156 FOR OCTOBER LEASE SALE
06 Element Checklist and Table 3.0 – Affected Environment and Basis for Determination No Further Analysis

Resources	Not Present	No Impacts	May Be Impacts*	Mitigation Included	BLM Reviewer	Date
CRITICAL ELEMENTS OF THE HUMAN ENVIRONMENT *Must address in document						
Air Quality			X		Hydrologist	
Floodplains	X				/s/ Michael McGee	10/16/06
Water Quality - Surface/Ground			X		Geologist/Hydrologist /s/ John Simitz /s/ Michael McGee	10/16/06
Cultural Resources		X			Archaeologist	
Native American Religious Concerns		X			Pat Flanary	10/16/06
Environmental Justice		X			Sur. Prot. Spec. Richard G. Hill	10/12/06
Areas of Critical Environmental Concern	X				/s/ J H Parman Plan & Env. Coord.	10/12/06
Farmlands, Prime or Unique	X				Realty Irene M. Gonzales	10-11-06
Invasive, Non-native Species			X		Range Mgmt. Spec. H. Miiller	10/16/2006
Wastes, Hazardous or Solid		X			Sur. Prot. Spec. Richard G. Hill	10/17/06
Threatened or Endangered Species	X				Biologist /s/ D Baggao	10/16/06
Wetlands/Riparian Zones			X	X	/s/ M Moe	10/16/06
Wild and Scenic Rivers	X				Outdoor Rec. Plnr.	
Wilderness	X				Paul Happel	10/13/06
NON-CRITICAL ELEMENTS						
General Topography/Surface Geology		X			Sur. Prot. Spec. Richard G. Hill	10/12/06
Mineral Resources		X			Pet Engr/Geo/SPS /s/ John S. Simitz	10-17-06
Paleontology		X			Archaeology Pat Flanary	10/16/06
Soil			X	X	Hydrologist	
Watershed/Hydrology			X	X	/s/ Michael McGee	10/16/06
Vegetation			x		J Spain Range Mgmt . Spec.	10/16/06
Livestock Grazing			x			
Special Status Species			X	X	Biologist /s/ D Baggao	10/16/06
Wildlife			X	X	/s/ M Moe	10/16/06
Recreation			X		Outdoor Rec. Plnr.	
Visual Resources			X		Paul Happel	10/13/06
Cave/Karst			X			
Public Health and Safety		X			Sur. Prot. Spec. Richard G. Hill	10/12/06



OCTOBER 2006 COMPETITIVE OIL AND GAS LEASE SALE
EA NUMBER: NM-510-06-156

1.0 Introduction

This analysis tiers into and incorporates by reference the information and analysis contained in the Roswell Resource Area Proposed Resource Management Plan Final Environmental Impact Statement (PRMP/FEIS). This document is available for review at the Roswell Office. This EA addresses impacts that are not specifically covered within the PMP/FEIS, as required by the National Environmental Policy Act of 1969 (NEPA), as amended (Public Law 91-90, 42 U.S.C. 4321 et seq.).

1.1 Purpose and Need

The purpose for the proposal to lease the lands is to define and produce oil and/or natural gas on valid Federal mineral leases issued to the applicants by the BLM. It is the policy of the BLM to make mineral resources available for disposal and to encourage development of mineral resources to meet National, regional, and local needs. The Mineral Leasing Act of 1920 (MLA), as amended [30 USC 181 et seq.], authorizes the BLM to issue oil and gas leases for the exploration of oil and gas, and permit the development of those leases. The proposed leases are binding legal contract that allows development of the mineral by the applicant. An approved Application for Permit to Drill (APD), issued by the BLM, would authorize the applicant to construct and drill proposed wells on a lease.

1.2 Conformance with Applicable Land Use Plan and Other Environmental Assessments

Pursuant to 40 Code of Federal Regulations (CFR) 1508.28 and 1502.21, this EA tiers to and incorporates by reference the information and analysis contained in the Roswell Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS, BLM [January 1997]), which was approved as the Approved Resource Management Plan for the Roswell Field Office (RFO) of the BLM by the Record of Decision (ROD) signed October 10, 1997. The PRMP/FEIS and ROD are available for review at the Roswell Field Office, Roswell, New Mexico. This EA addresses the resources and impacts as required by the National Environmental Policy Act (NEPA) of 1969, as amended (Public Law 91-90, 42 USC 4321 et seq.). The proposed action would not be in conflict with any State, local, or county plans.

1.3 Federal, State or Local Permits, Licenses or Other Consultation Requirements

Under Section 402 of the Clean Water Act (as amended), the U.S. Environmental Protection Agency (EPA), was directed to develop a phased approach to regulate storm water discharges under the National Pollutant Discharge Elimination System (NPDES) program. Industrial activities disturbing land may require permit coverage through a NPDES storm water discharge.

Depending on the acreage disturbed, either a Phase I industrial activity (5 or more acres disturbance) or a Phase II small construction activities (between 1 and 5 acres disturbance) permit may be required. Additionally, an U.S. Army Corps of Engineers Section 404 permit for the discharge of dredge and fill materials may also be required. Additionally, a New Mexico Surface Water Quality Bureau 401 certification may also be required under a U.S. Army Corps of Engineers Section 404 permit. Applicants are required to obtain all necessary permits and approvals prior to any disturbance activities.

The Roswell Field Office staff reviewed the proposed lease sale and determined it would be in compliance with threatened and endangered species management guidelines outlined in Biological Opinion (Cons. #2-22-96-F-102) and Biological Opinion (Cons. #22420-2006-I-0144).

Compliance with Section 106 responsibilities of the National Historic Preservation Act are adhered to by following the BLM – New Mexico State Historic Preservation Officer protocol agreement, which is authorized by the National Programmatic Agreement between the *BLM*, the *Advisory Council on Historic Preservation*, and the *National Conference of State Historic Preservation Officers*, and other applicable BLM handbooks.

Additionally, the lease applicants are required to:

- Comply with all applicable Federal, State and local laws and regulations.
- Obtain the necessary permits for the drilling, completion, and production of subsequent planned well construction and drilling activities, including water rights appropriations, the installation of water management facilities, water discharge permits, and relevant air quality permits.
- Certify that on private surface lands, a Surface Use Agreement has been reached with private surface landowners.

2.0 Alternatives Including the Proposed Action

Twelve (12) lease parcels were nominated and proposed for inclusion in the October 2006 Competitive Oil and Gas Draft Lease Sale. The twelve (12) parcels have a total of 8,978.810 acres proposed for leasing.

2.1 Alternative A - No Action

The No Action Alternative generally means that the proposed lease sale would not take place. This alternative would not offer for lease the proposed parcels listed under the Proposed Action. Therefore, if the externally initiated proposed parcels are not leased the continual land use values would not occur on the proposed lease sale parcels identified as a result of this analysis.

The No Action Alternative is presented for baseline analysis of resource impacts. Under BLM's current multiple use policy on federal lands and resources, this alternative was evaluated and would not impede this lease sale.

2.2 Alternative B - Proposed Action

The proposed action is to lease twelve (12) parcels with a total of 8,978.810 acres for the October 2006 Draft Lease Sale in the Roswell Field Office. The final analysis results; is to lease six (6) tracts totaling 4,116.630 acres, to modify two (2) parcels with 1,200.000 leaseable acres and exclude the portions of lands that are within the Pecos River 100-year floodplain, and to defer leasing four (4) tracts totaling 3,422.180 acres until the Special Status Species Resource Management Plan Amendment is approved.

The following parcels would be offered leased in their entirety with standard lease stipulations:

Parcel Number	Legal Description	Acres	Stipulations
NM-200610-022	T.0150S, R.0250E, 23 PM, NM Sec. 006 LOTS 1-7; 006 S2NE, SENW, E2SW, SE; Chaves County	637.750	SENM-LN-1 SENM-S-18 SENM-S-21 SENM-S-25
NM-200610-026	T.0130S, R.0270E, 23 PM, NM Sec. 030 LOTS 1-4; 030 NENW, E2SW; Chaves County	271.360	SENM-LN-1 SENM-S-17 SENM-S-19 SENM-S-21 SENM-S-25
NM-200610-027	T.0140S, R.0270E, 23 PM, NM Sec. 027 NENE, W2NE, E2NW, S2; Chaves County	520.000	SENM-S-17 SENM-S-18
NM-200610-028	T.0150S, R.0270E, 23 PM, NM Sec. 008 SESE; 029 N2, N2S2, SWSE; 030 LOTS 1-3; 030 E2, E2W2; 031 E2E2, NWNE, SWSE; 032 SENW, E2SW, SWSE; 033 ALL; Chaves County	2,198.840	SENM-LN-1 SENM-S-17 SENM-S-19 SENM-S-21
NM-200610-040	T.0110S, R.0310E, 23 PM, NM Sec. 005 LOTS 1-4; 005 S2; Chaves County	408.680	SENM-LN-1 SENM-S-21 SENM-S-25

The following parcels would be modified and lease stipulations attached:

Parcel Number	Legal Description	Acres	Stipulations
NM-200610-024	T.0130S, R.0260E, 23 PM, NM Sec. 024 E2SW, W2SW; 026 E2E2, SWSE; 035 SENW;	340.000	SENM-LN-1 SENM-S-17 SENM-S-21 SENM-S-25
NM-200610-025	T.0150S, R.0260E, 23 PM, NM Sec. 027 SE;	860.000	SENM-LN-1 SENM-S-17

	033 E2NE,SWNE,E2NWNW; 034 N2N2; 035 NE,N2NW,E2SE; Chaves County		SENM-S-18 SENM-S-21 SENM-S-25
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The following parcels would be deferred from the lease sale:

Parcel Number	Legal Description	Acres
NM-200610-041	T.0070S, R.0320E, 23 PM, NM Sec. 002 SE; 011 NE; Roosevelt County	320.000
NM-200610-052	T.0070S, R.0370E, 23 PM, NM Sec. 005 LOTS 1-3; 005 S2NE,SE;NW; 006 LOTS 6,7; 006 E2SW,SE; Roosevelt County	564.580
NM-200610-053	T.0070S, R.0370E, 23 PM, NM Sec. 007 LOTS 3-4; 007 E2SW,SE; 018 LOTS 1-4; 018 E2,E2W2; Roosevelt County	944.800
NM-200604-054	T.0070S, R.0370E, 23 PM, NM Sec. 019 LOTS 1-4; 019 E2,E2W2; 020 ALL; 021 W2; Roosevelt County	1,592.800

3.0 Description of Affected Environment

This section describes the environment that would be affected by implementation of the alternatives described in Section 2. Aspects of the affected environment described in this section focus on the relevant major resources or issues. Certain critical environmental components require analysis under BLM policy. These items are included below in Table 3.0, found as the first page of this document. Following the table, only the aspects of the affected environment that are potentially impacted are described. The following elements are not present: Areas of Critical Environmental Concern, Prime or Unique Farmlands, Wild and Scenic Rivers, Wilderness or Wilderness Study Areas, and Wild Horses and Burros.

3.1 Air Quality

The area of the proposed action is considered a Class II air quality area. A Class II area allows moderate amounts air quality degradation. The primary sources of air pollution are dust from blowing wind on disturbed or exposed soil and exhaust emissions from motorized equipment.

3.2 Cultural and Paleontology Resources

Once the decision is made by the lessee to develop a lease, an area specific cultural records review is done to determine if there is a need to conduct a cultural inventory of the areas that

would be affected by surface disturbing activities. Generally, a cultural inventory would be required and all historic and archeological sites that are eligible for listing in the National register of Historic Places or potentially eligible to be listed will be either avoided by the undertaking or have the information in the sites extracted through archeological data recovery prior to surface disturbance.

Parcels in this lease sale may also contain vertebrate fossils.

3.3 Native American Religious Concerns

A review of existing information indicates that the proposed actions are outside any known Traditional Cultural Property.

3.4 Environmental Justice

Executive Order 12898 requires Federal agencies to assess lease parcels to ensure there is no disproportionately high or adverse environmental, health, or safety impacts on minority and low-income populations. A review of the parcels offered for lease indicates that there are no impacts on minority and low-income populations.

3.5 Floodplains

The offered lease parcels that are located in the 100-year floodplain of the Pecos River have been removed from this lease sale. For administrative purposes, the 100-year floodplain serves as the basis for floodplain management on public lands. It is based on Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (1983) which describes a Zone A as the “Area of the 100-year flood”. Lease parcels located in the 100-year floodplain of the Pecos River are not offered in this lease sale.

3.6 Invasive, Non-native Species

Once the decision is made by the lessee to develop a lease, area specific Invasive and Non native species (Weed) inventory review is done to determine if there is a need for a weed inventory of the areas to be affected by surface disturbing activities. Generally, an Invasive and Non native species (Weed) inventory will be required. While there are no known populations of invasive or non-native species on the propose tracts, inations of noxious weeds can have a disastrous impact on biodiversity and natural ecosystems. Noxious weeds affect native plant species by out-competing native vegetation for light, water and soil nutrients. Noxious weeds cause estimated losses to producers \$2 to \$3 billion annually. These losses are attributed to: (1) Decreased quality of agricultural products due to high levels of competition from noxious weeds; (2) decreased quantity of agricultural products due to noxious weed infestations; and (3) costs to control and/or prevent the noxious weeds.

Further, noxious weeds can negatively affect livestock and dairy producers by making forage either unpalatable or toxic to livestock, thus decreasing livestock productivity and potentially



increasing producers' feed and animal health care costs. Increased costs to operators are eventually borne by consumers.

Noxious weeds also affect recreational uses, and reduce realty values of both the directly influenced and adjacent properties.

Recent federal legislation has been enacted requiring state and county agencies to implement noxious weed control programs. Monies would be made available for these activities from the federal government, generated from the federal tax base. Therefore, all citizens and taxpayers of the United States are directly affected when noxious weed control prevention is not exercised.

3.7 Threatened or Endangered Species

Under Section 7 of the Endangered Species Act of 1973 (as amended), the BLM is required to consult with the U.S. Fish and Wildlife Service on any proposed action which may affect Federal listed threatened or endangered species or species proposed for listing. RFO reviewed and determined the proposed action is in compliance with listed species management guidelines outlined in Biological Opinion (Cons. #2-22-96-F-102) and Biological Opinion (Cons. #22420-2006-I-0144). No further consultation with the U.S. Fish and Wildlife Service is required.

3.8 Wastes, Hazardous or Solid

Upon leased parcels that have subsequent proposed surface disturbing projects such as APDs, no waste material will be removed from the subsequent project areas and upon reclamation of reserve pit areas the NMOCD pit reclamation guidelines would be imposed where applicable.

3.9 Water Quality – Surface/Ground

Surface water within the area is affected by geology, precipitation, and water erosion. Factors that currently affect surface water resources include livestock grazing management, oil and gas development, recreational use and brush control treatments. No perennial surface water is found on public land in the area. Ephemeral surface water within the area may be located in tributaries, playas, alkali lakes and stock tanks.

Groundwater within the area is affected by geology and precipitation. Factors that currently affect groundwater resources in the area include livestock grazing management, oil and gas development, groundwater pumping, and possible impacts from brush control treatments. Most of the groundwater in the area is used for industrial, rural, domestic and livestock purposes.

3.10 Wetlands /Riparian Zones

Riparian areas are associated with the Pecos River, springs and seeps and playa areas. They are found within the floodplain of the Pecos River. Typical vegetation along the Pecos River include bulrush, cattail, phragmites, inland saltgrass, saltcedar, seepwillow, and scattered cottonwood trees. Playas are typically denuded of vegetation but may have salt-tolerant vegetation such as inland saltgrass, four-wing saltbush, pickleweed and alkali sacaton. Wetland/Riparian zones are

rare in the southeast and provide open water, a diversity of vegetation, and support a disproportionate amount of wildlife species given its limited area.

3.11 General Topography/Surface Geology

The topographic characteristics and/or regional setting of the project area are: The lands involved in this lease sale have topographic forms that naturally vary, not only to the nature of the land, but in differences in rock and soil texture and composition. The lease parcel areas may vary from hilly uplands to flat lands and with different degrees of sloping from place to place. The horizontal strata of the leaseable areas have small mountains, plateau escarpments and other topographical features that are etched out by weathering. The topographic details of the lands in the lease sale are dependent upon differences in rock structure, texture, and attitude that give rise to prominences of semi-arid desert type surface features in the southeastern parts of New Mexico.

3.12 Mineral Resources

The leaseable parcels have the probability of containing oil and gas resources. The lease parcels are used to explore for or develop and extract federal oil and/or gas and to obtain the benefits of producing such leases. Other mineral resources on the leaseable lands are the surfacing material that could be found in place such as caliche or gravel for the future development of subsequent road and well pad construction on the leased areas.

3.13 Paleontology

On the leased parcels all subsequent proposed projects could require archaeological survey inventories that would be analyzed for potential affects to cultural as well as other fossilized vertebrae's which would require the conservation of the finding upon discovery thereof.

3.14 Soil

The *Soil Survey of Chaves County, New Mexico, Southern Part (USDA Soil Conservation Service 1980)* was used to describe and analyze impacts to soils from the proposed action. The soil map units represented in the project area are:

Reakor-Reeves association: Deep, level to nearly level loams.

Reakor-Tencee association: Deep, level to nearly level loams and nearly level to hilly gravelly loams that are very shallow and shallow over indurated caliche.

Holloman-Gypsum land-Reeves association: Level to gently sloping loams that are very shallow and shallow over gypsum; Gypsum land; and deep, level to nearly level loams.

Glendale-Pecos-Vinton association: Rarely or frequently flooded, level fine sandy loams, silty clay loams and loamy fine sands.

Ector-Lozier-Tencee association: Nearly level to hilly cobbly loams and gravelly loams that are 4 to 20 inches deep over limestone or indurated caliche.

Roswell-Faskin-Jalmar association: Deep level to rolling, rapidly permeable and moderately permeable fine sands.

Tencee-Simona-Sotim association: Level to gently rolling, moderately permeable and moderately rapidly permeable gravelly fine sandy loams and fine sandy loams that are 6 to 20 inches deep over indurated caliche; and deep, level to gently sloping, moderately slowly permeable fine sandy loams.

The *Soil Survey of Roosevelt County, New Mexico, Northern Part (USDA Soil Conservation Service 1967)* was used to describe and analyze impacts to soils from the proposed action. The soil map units represented in the project area are:

Amarillo-Clovis loamy fine sands association: Deep and moderately deep sandy land.

Tivoli-Springer-Brownfield sands association: Deep, loose sandy land.

3.15 Watershed – Hydrology

The watershed and hydrology in the area is affected by land and water use practices. The degree to which hydrologic processes are affected by land and water use depends on the location, extent, timing and the type of activity. Factors that currently cause short-lived alterations to the hydrologic regime in the area include livestock grazing management, recreational use activities, groundwater pumping and also oil and gas developments such as well pads, permanent roads, temporary roads, pipelines, and powerlines.

3.16 Vegetation

MIXED DESERT SHRUB

Lease parcels are within the mixed desert shrub plant community as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Appendix 11 of the Draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community. The mixed desert shrub community is primarily made up of desert grasses, shrubs and cacti. The predominant shrub species include creosote (*Larrea tridentata*), mesquite (*Prosopis glandulosa*), tarbush (*Flourensia cernua*), saltbush (*Atriplex canescens*),  leaf sumac (*Rhus microphylla*), sage (*Artemisia* spp.), yucca (*Yucca* spp.) and javalinabush (*Condalia* spp.) Common cacti encountered are claret cup (*Echinocereus triglochidiatus*), cholla (*Opuntia imbricata*), prickly pear (*Opuntia phaeacantha*), and eagle claw (*Echinocactus horzonthalonius*). Forbs include plantain (*Plantago* spp.), globemallow (*Sphaeralcea* spp.), bladderpod (*Lesquerella* spp.) and buckwheat (*Eriogonum* spp.). Grasses include fluffgrass (*Dasyochloa pulchella*), sideoats grama (*Bouteloua curtipendula*), black grama (*Bouteloua eriopoda*), burrograss (*Scleropogon brevifolius*), dropseed (*Sporobolus* spp.), tobosa (*Pleuraphis mutica*) and blue grama (*Bouteloua gracilis*). Additional species included are gyp

grama (*Bouteloua breviseta*), coldenia (*Coldenia* spp.), gyp muhly (*Muhlenbergia* spp.) and Mormon tea (*Ephedra* spp.). Biological crusts also make up a major portion of this soil surface where gyp inclusions may occur; these crusts are indicative of gyp outcrop soil and protect the surface from undue erosion.

SHINNERY-OAK DUNE

Lease parcels are within the shinnery-oak dune vegetative community as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Appendix 11 of the Draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community. The primary features in the shinnery oak dune (SOD) community are topography influenced by aeolian and alluvial sedimentation on upland plains forming hummocks, dunes, sand ridges and swales and the presence of shinnery oak (*Quercus havardii*). The topography is gently sloping and undulating sandy plains, with moderate to very steep hummocky dunes of up to ten feet and more in height scattered throughout the area. Some of the dunes are stabilized with vegetation, while a number of them are unstable and shifting. Dune blowouts with shinnery oak and bluestem, either isolated or in dune complexes are common in this community. Dominant grasses include sand bluestem (*Andropogon hallii*), little bluestem (*Schizachyrium scoparium*), and three-awn (*Aristida* spp.).

GRASSLAND COMMUNITY

Lease parcels are within the Grassland Plant Community (GR) as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Appendix 11 of the Draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community. The distinguishing feature for the grassland community is that grass species typically comprise 75% or more of the desired plant community. Short-grass, mid-grass and tall-grass species may be found within this community such as blue grama (*Bouteloua gracilis*), black grama (*Bouteloua eriopoda*), tobosa (*Pleuraphis mutica*) and burrograss (*Scleropogon brevifolius*). This community also includes shrub, half-shrub and forb species. The percentages of grasses, forbs and shrubs actually found at a particular location will vary with recent weather factors and past resource uses.

3.17 Livestock Grazing

The parcels proposed in the lease sale cover portions of seven grazing allotments. Allot allotments are yearlong grazing with cow/calf herds.

3.18 Wildlife

The entire area provides a myriad of habitat types for terrestrial and aquatic wildlife species. The diversity and abundance of wildlife species in the area is due to the presence Grasslands, Shinnery Oak Dunes, Pecos River floodplain, a mixture of grassland habitat and mixed desert shrub vegetation, and escarpments which divides the uplands from the Pecos River valley.

Common bird species are mourning dove, mockingbird, white-crowned sparrow, black-throated sparrow, blue grosbeak, northern oriole, western meadowlark, Crissal thrasher, western kingbird, northern flicker, common nighthawk, loggerhead shrike, and roadrunner. Raptors include northern harrier, Swainson’s hawk, American kestrel, and occasionally golden eagle and ferruginous hawk.

Common mammal species using the area include mule deer, pronghorn antelope, coyote, gray fox, bobcat, striped skunk, porcupine, racoon, badger, jackrabbit, cottontail, white-footed mouse, deer mouse, grasshopper mouse, kangaroo rat, spotted ground squirrel, and woodrat.

A variety of herptiles also occur in the area such as yellow mud turtle, box turtle, eastern fence lizard, side-blotched lizard, horned lizard, whiptail, hognose snake, coachwhip, gopher snake, rattlesnake, and spadefoot toad.

3.19 Special Status Species

In accordance with BLM Manual 6840, BLM manages certain sensitive species not federally listed as threatened or endangered in order to prevent or reduce the need to list them as threatened or endangered in the future. Included in this category are State listed endangered species and Federal candidate species which receive no special protections under the Endangered Species Act. Special status species with potential to occur in the proposed project area are listed in Table 3.22.1.

Table 3.19.1 Habitat descriptions and Presence of BLM Roswell Field Office Special Status Species.

Common Name (scientific name)	Status	Habitat	Presence*
Lesser prairie chicken (<i>Tympanuchus pallidicinctus</i>)	Candidate	Shinnery Oak Dune	K
Sand dune lizard (<i>Sceloporus arenicoulus</i>)	State Endangered	Shinnery Oak Dune	S

Presence*

K - Known, documented observation within project area.

S - Habitat suitable and species suspected to occur within the project area.

3.20 Visual Resources

Visual Resource Management (VRM) on public land is conducted in accordance with BLM Handbook 8410 and BLM Manual 8411.

3.21 Recreation

The lease areas are primarily used by recreational visitors engaged in (hunting) (caving) (sight seeing) (driving for pleasure) (off-highway vehicle use) and other recreational activities. Non-recreation visitors include oil and gas industrial workers and ranchers.



Cave/Karst



No surface cave/karst features were observed in the immediate vicinity of the proposed actions. However, the proposed leases may be located in the High, Medium and Low Karst Potential Areas.

3.23 Public Health and Safety

The lease sale would not be harmful to the public health. Precautionary procedures and/or other safety measures would be attached to the subsequent projects in order to provide a safe and sound working environment within the lease areas.

4.0 Environmental Consequences and Proposed Mitigation Measures

No Action Alternative

Under the No Action Alternative, the proposed parcels would not be leased. There would be no subsequent impacts from oil and gas construction, drilling, and production phases of subsequent projected or proposed actions. The No Action Alternative would result in the continuation of the current land uses other than for the extraction of oil and gas resources. The No Action Alternative is also used as the baseline for comparison of alternatives.

The remainder of this section will describe and analyze the impacts of the lease sale.

4.1 Air Quality

4.1.1 Direct and Indirect Impacts

While the act of leasing a parcel would produce no impacts, subsequent development of the lease would temporarily directly impact air quality with pollution from exhaust emissions, chemical odors, and dust that would be caused by the motorized equipment used to construct the access road, well pad, and by the drilling rig that will be used to drill the well. Dust dissemination would discontinue upon completion of the construction phase of the access road and well pad. Air pollution from the motorized equipment would discontinue at the completion of the drilling phase of the operations. The winds that frequent the southeastern part of New Mexico generally disperse the odors and emissions. The impacts to air quality would be greatly reduced as the construction and drilling phases are completed. Other factors that currently affect air quality in the area include dust from livestock herding activities, dust from recreational use, and dust from use of roads for vehicular traffic.

4.1.2 Mitigation

None



4.2 Cultural and Paleontological Resources

While the act of leasing the lease parcels for oil and gas extraction would produce no impacts, subsequent development of the lease could have impacts on archaeological and paleontological resources.

4.2.1 Direct and Indirect Impacts

Subsequent disturbances on project construction areas within a lease could have the potential to impact cultural and paleontological resources.

4.2.1 Mitigation

Required archaeological surveys would be conducted upon all subsequent actions that are expected to occur from the lease sale to avoid disturbing cultural and/or paleontological sites.

4.3 Environmental Justice

4.3.1 Direct and Indirect Impacts

No minority or low income populations would be directly affected within the locality of the proposed lease sale. Indirect impacts could include impacts due to overall employment opportunities related to the oil and gas and service support industry in the region, as well as the economic benefits to State and County governments related to royalty payments and severance taxes. Other impacts could include a small increase in activity and noise disturbance in areas used for grazing, wood gathering or hunting. However, these impacts would apply to all public land users in the project areas.

4.3.2 Mitigation

None required.



4.4 Floodplains

Lease parcels located in the 100-year floodplain of the Pecos River are not offered in this lease sale.

4.4.1 Direct and Indirect Impacts

None

4.4.2 Mitigation

None



4.3 Invasive, Non-native Species

4.3.1 Direct and Indirect Impacts

While the act of leasing Federal minerals produces no impacts, subsequent development produces impacts in the form of surface disturbance. The construction of an access road and well pad may unintentionally contribute to the establishment and spread of noxious weeds. Noxious weed seed could be carried to and from the project areas by construction equipment, the drilling rig and transport vehicles. The main mechanism for seed dispersion on the road and well pad is by equipment and vehicles that were previously used and or driven across or through noxious weed infested areas. The potential for the dissemination of invasive and noxious weed seed may be elevated by the use of construction equipment typically contracted out to companies that may be from other geographic areas in the region. Washing and decontaminating the equipment prior to transporting onto and exiting the construction areas would minimize this impact.

Impacts by noxious weeds will be minimized due to requirements for the company to eradicate the weeds upon discovery. Multiple applications may be required to effectively control the identified populations.

4.3.2 Mitigation

In the event noxious weeds are discovered during construction of any access roads and well pads, measures will be taken to mitigate those impacts.

4.4 Threatened or Endangered Species

Under Alternative B, based on consultation with the US Fish & Wildlife Service, the impacts have been determined to be either “no affect” or “may affect, not likely to adversely affect.”

4.4.1 Direct and Indirect Impacts

None.

4.4.2 Mitigation

None.

4.5 Wastes, Hazardous or Solid

The lease parcels fall under environmental regulations that impact exploration and production waste management and disposal practices and impose responsibility and liability for protection of human health and the environment from harmful waste management practices or discharges.

4.5.1 Direct and Indirect Impacts

The direct impact would follow a lease sale project when solid waste is discarded and contaminates the land surface either by solid, semi-solid, liquid, or contained gaseous material. The indirect impact is the Environmental Protection Agency (EPA) definition of solid wastes that have been designated as exempt and nonexempt and if it is hazardous, civil and criminal penalties may be imposed if the waste is not managed in a safe manner, and according to regulations.

4.5.2 Mitigation

The lease sale parcels are regulated under the Resource Conservation and Recovery Act (RCRA) Subtitle C regulations which are extremely stringent. As well as, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that provides for the exclusion of petroleum, including crude oil or any fraction thereof from the definition of hazardous substance, pollutant, or contaminant.

4.6 Water Quality: Surface and Groundwater

4.6.1 Direct and Indirect Impacts

While the act of leasing a parcel would produce no impacts, subsequent development of the lease would lead to surface disturbance from the construction of the well pad, access road, pipelines, and powerlines can result in degradation of surface water quality and groundwater quality from non-point source pollution, increased soil losses, and increased gully erosion.

Potential direct impacts that would occur due to construction of the well pad, access road, pipelines, and powerlines include increased surface water runoff and off-site sedimentation brought about by soil disturbance: increased salt loading and water quality impairment of surface waters; channel morphology changes due to road and pipeline crossings; and possible contamination of surface waters by produced water. The magnitude of these impacts to water resources would depend on the proximity of the disturbance to the drainage channel, slope aspect and gradient, degree and area of soil disturbance, soil character, duration and time within which construction activity would occur, and the timely implementation and success or failure of mitigation measures.

Direct impacts would likely be greatest shortly after the start of construction activities and would likely decrease in time due to natural stabilization, and reclamation efforts. Construction activities would occur over a relatively short period; therefore, the majority of the disturbance would be intense but short lived. Direct impacts to surface water quality would be minor, short-term impacts which may occur during storm flow events. Indirect impacts to water-quality related resources, such as fisheries, would not occur.

Petroleum products and other chemicals, accidentally spilled, could result in surface and groundwater contamination. Similarly, possible leaks from reserve and evaporation pits could degrade surface and ground water quality. Authorization of the proposed projects would require full compliance with BLM directives and stipulations that relate to surface and groundwater protection.

4.6.2 Mitigation

The use of a plastic-lined reserve pits would reduce or eliminate seepage of drilling fluid into the soil and eventually reaching groundwater. Spills or produced fluids (e.g., saltwater, oil, and/or condensate in the event of a breach, overflow, or spill from storage tanks) could result in contamination of the soil onsite, or offsite, and may potentially impact surface and groundwater resources in the long term. The casing and cementing requirements imposed on the proposed wells would reduce or eliminate the potential for groundwater contamination from drilling muds and other surface sources.

4.7 Wetlands/Riparian Zones

Under Alternative B, there would be no impacts to wetland/riparian zones.

4.7.1 Direct and Indirect Impacts

None.

4.7.2 Mitigation

None.

4.8 General Topography/Surface Geology

The general topography and surface geology of the lease parcels are generally impacted by the construction projects that are permitted as a result of subsequent APD actions.

4.8.1 Direct and Indirect Impacts

The direct impact from a lease sale is that the lands involved could fall within an environmental sensitive area and subsequent lease actions could impact the issues of concern. Split estate is an issue of concern on a lease sale when and if a private surface landowner is not in agreement with the proposed project which could create an environmental sensitive area until the issues are resolved with the surface owner. Indirectly the proposed projects could fall within protected areas that would require changing the spacing requirements of a well by moving the location or road.

4.8.2 Mitigation

The lease sale could have mitigation measures imposed on the proposed subsequent action when and if the concern involves the issuance of such mitigation measures that are deemed necessary to resolve the environmental predicament.

4.9 Soils

4.9.1 Direct and Indirect Impacts

While the act of leasing a parcel would produce no impacts, subsequent development of the lease would physically disturb the topsoil and would expose the substratum soils on the subsequent project areas. Direct impacts resulting from the oil and gas construction of the well pad, access road, and reserve pit include removal of vegetation, exposure of the soil, mixing of horizons, compaction, loss of top soil productivity and susceptibility to wind and water erosion. Wind erosion would be expected to be a minor contributor to soil erosion with the possible exception of dust from vehicle traffic. These impacts could result in increased indirect impacts such as runoff, erosion and off-site sedimentation. Activities that could cause these types of indirect impacts include construction and operation of well sites, access roads, gas pipelines and facilities.

Contamination of soil from drilling and production wastes mixed into soil or spilled on the soil surfaces could cause a long-term reduction in site productivity. Some of these direct impacts can be reduced or avoided through proper design, construction and maintenance and implementation of best management practices.

Additional soil impacts associated with lease development would occur when heavy precipitation causes water erosion damage. When water saturated segment(s) on the access road become impassable, vehicles may still be driven over the road. Consequently, deep tire ruts would develop. Where impassable segments are created from deep rutting, unauthorized driving may occur outside the designated route of the access road.

4.9.2 Mitigation

The operator would stockpile the topsoil from the surface of the well pad which will be used for surface reclamation of the well pad. The impact to the soil would be remedied upon reclamation of the well pad when the stockpiled soil that was specifically conserved to establish a seed bed is spread over the well pad and vegetation re-establishes.

The reserve pits would be recontoured and reseeded as described in the attached Conditions of Approval. Upon abandonment of the wells and/or when the access roads are no longer in service the Authorized Officer would issue instructions and/or orders for surface reclamation/restoration of the disturbed areas as described in the attached Conditions of Approval.

Road constructions requirements and regular maintenance would alleviate potential impacts to the access road from water erosion damage.

4.10 Watershed - Hydrology

4.10.1 Direct and Indirect Impacts

While the act of leasing a parcel would produce no impacts, subsequent development of the lease would result in long term and short term alterations to the hydrologic regime. Peak flow and low flow of perennial streams, ephemeral, and intermittent rivers and streams would be directly affected by an increase in impervious surfaces resulting from the construction of the well pad and road. The potential hydrologic effects to peak flow is reduced infiltration where surface flows can move more quickly to perennial or ephemeral rivers and streams, causing peak flow to occur earlier and to be larger. Increased magnitude and volume of peak flow can cause bank erosion, channel widening, downward incision, and disconnection from the floodplain. The potential hydrologic effects to low flow is reduced surface storage and groundwater recharge, resulting in reduced baseflow to perennial, ephemeral, and intermittent rivers and streams. The direct impact would be that hydrologic processes may be altered where the perennial, ephemeral, and intermittent river and stream system responds by changing physical parameters, such as channel configuration. These changes may in turn impact chemical parameters and ultimately the aquatic ecosystem.

Long term direct and indirect impacts to the watershed and hydrology would continue for the life of the well and would decrease once all well pad and road surfacing material has been removed and reclamation of the well pads, access roads, pipelines, and powerlines has taken place. Short term direct and indirect impacts to the watershed and hydrology from access roads that are not surfaced with material would occur and would likely decrease in time due to reclamation efforts.

4.10.2 Mitigation

The operator would stockpile the topsoil from the surface of the well pad which will be used for surface reclamation of the well pad. The reserve pits would be recontoured and reseeded as described in the attached Conditions of Approval. Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer would issue instructions and/or orders for surface reclamation/restoration of the disturbed areas as described in the attached Conditions of Approval.

4.11 Vegetation

4.11.1 Direct and Indirect Impacts

At this stage (lease sale) there are no impacts. Impacts (both direct and indirect) will occur as the lease is developed in the future. These impacts will be analyzed on a site specific basis prior to development.

4.11.2 Mitigation

None

4.12 Livestock Grazing

4.12.1 Direct and Indirect Impacts

At the lease stage there are no impacts to livestock grazing.

4.12.2 Mitigation

none

4.13 Special Status Species

Under Alternative B, the species of concern, primarily lesser prairie chicken and sand dune lizard, are protected from oil and gas leasing because their habitats are being protected during the interim process until the completion of the Roswell Resource Management Plan Amendment (RMPA) to prevent irretrievable or irreversible commitment of these resources. The decision to lease parcels falling within Zone 1 of Interim Management is deferred until the Special Status Species Resource Management Plan Amendment is approved.

4.13.1 Direct and Indirect Impacts

Under Alternative B, Zone 1 habitats would remain protected. There would be no impacts resulting from leasing.

4.13.2 Mitigation

Mitigation would be developed at the time of approval of the RMPA, or at the APD level assessment of proposed wells if the parcels are sold in the future. Appropriate lease notices or lease stipulations would be attached at that time.

4.14 Wildlife

Under Alternative B, wildlife habitat would be protected by removing those parcels that fall within Zone 1 of the RMPA and Floodplain Zones.

4.14.1 Direct and Indirect Impacts

Subsequent lease development would impact wildlife due to surface disturbance and habitat fragmentation. The magnitude of impacts would depend on the exact location and time of development in relation to the affected wildlife species and habitat. These impacts would be analyzed on a site specific basis prior to development.

4.14.2 Mitigation

Stipulations and conditions of approval would be applied at the APD level to minimize wildlife impacts.

4.15 Recreation

While the act of leasing Federal minerals produces no impacts, subsequent development of a lease would generate impacts to recreation activities. Isolated parcels of land that generally do not have access through state lands or county or state roads oil and gas activities would have little or no affect on the recreational opportunities in this area. Recreation activities could occur within this area and are limited to access from state or county roads or through state lands. In areas with small blocks of public land oil and gas activities would have little or no affect on the recreational opportunities, since the recreating public has no legal or physical access to this parcel of public lands. Recreation opportunities that could occur in this area are limited or non-existent due to land patterns.

In large blocks of public land recreationists would have access to public lands from existing public roads as well as through state of New Mexico lands to allow recreationist to use public land and avoid the oil and gas facilities within the area.

4.15.1 Direct and Indirect Impacts

None

4.15.2 Mitigation

None

4.16 Visual Resources

Visual resource management is broken into four VRM classes. In the parcels proposed for leasing only class III and IV are represented.

The VRM Class III objective is to partially retain existing landscape character. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate a casual observer's view. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape. Facilities, such as produced water, condensate or oil storage tanks that rise above eight feet, would provide a geometrically strong vertical and horizontal visual contrast in form and line to the characteristic landscape and vegetation, which have flat, horizontal to slightly rolling form and line. The construction of an access road, well pad and other ancillary facilities, other than facilities greater in height than eight feet, would slightly modify the existing area visual resources. Facilities, such as condensate and produced water or oil storage tanks that rise above eight feet, would provide a geometrically strong vertical and horizontal visual contrast in form and line to the characteristic landscape and vegetation, which have flat, horizontal to slightly rolling form and line. Under visual resource Class III, the method for repeating the basic elements would be to remove strong vertical and horizontal contrast through use of low-profile facilities as reflected in the Roswell RMP (1997, p. AP1-4). Depending on the production nature of the well site,

multiple low-profile condensate and/or oil or produced water tanks would be necessary to accommodate the project. Through color manipulation, by painting well facilities to blend with the rolling to flat vegetative and/or landform setting with a flat gray-green color, the view is expected to favorably blend with the form, line, color and texture of the existing landscape. The flat color Olive Drab from the supplemental environmental colors also closely approximates the gray green color of the setting. All facilities, including the meter building, would be painted this color. Cumulative adverse visual impacts can be avoided by gradually moving into a more appropriate vegetative/landform setting color scheme. Facilities with low-profile horizontal line and form would facilitate favorable blending as older facilities go out of production and are removed.

The VRM Class IV objectives is to: “Provide for management activities which require major modification of the existing landscape character...Every attempt, however, should be made to reduce or eliminate activity impacts through careful location, minimal disturbance, and repeating the basic landscape elements.” Facilities, such as condensate and produced water or oil storage tanks that rise above eight feet, would provide a geometrically strong vertical and horizontal visual contrast in form and line to the characteristic landscape and vegetation, which have flat, horizontal to slightly rolling form and line. The construction of an access road, well pad and other ancillary facilities, would slightly modify the existing area visual resources. Through color manipulation, by painting well facilities to blend with the rolling to flat vegetative and/or landform setting with a gray-green color. The view is expected to favorably blend with the form, line, color and texture of the existing landscape. The flat Olive Drab from the supplemental environmental colors also closely approximates the gray green color of the setting. All facilities, including the meter building, would be painted this color. Cumulative adverse visual impacts can be avoided by gradually moving into a more appropriate vegetative/landform setting color scheme.

4.16.1 Direct and Indirect Impacts

Through color manipulation, by painting well facilities to blend with the rolling to flat vegetative and/or landform setting with a gray-green to brownish color, the view is expected to favorably blend with the form, line, color and texture of the existing landscape

4.16.2 Mitigation

The flat color Olive Drab 18-0622 TPX from the Supplemental Environmental Colors Chart is to be used on all facilities to closely approximate the vegetation within the setting. All facilities, including the meter building, would be painted this color. . If the proposed area is in a scenic corridor a low profile tank smaller than eight feet in high may be recommended for the proposed action.

4.17 Cave/Karst

The tracts proposed for leasing may be located in a low, medium or high karst potential area. If the lease is in a low karst potential area there may be very little challenges in producing petroleum products from this location. If the proposed lease is in a medium or high karst potential area there could be the potential of adverse impact to known cave entrances or karst features is present within the lease area.

4.17.1 Direct and Indirect Impacts

Leasing does not in itself cause a problem to a cave or karst area.

4.17.2 Mitigation

Stipulations SENM-LN-1 and stipulation SENM-S-21 will be implemented to prevent damage to cave/karst areas

4.18 Public Health and Safety

Public Health and Safety would not be impacted by the leasing of the parcels.

4.18.1 Direct and Indirect Impacts

The subsequent construction, drilling, and production operations would have direct impacts on the conduct of oil and gas activities on the lease. Indirectly if the operations on subsequent lease actions are carried out in a safe workman like manner, no impacts are anticipated.

4.18.2 Mitigation

Upon subsequent proposed projects mitigation measures may be attached to the condition of approval if the operations are not conducted in a professional constructive manner.

4.19 Cumulative Impacts

The Roswell Field Office manages Federal hydrocarbon resources in Chaves, Roosevelt, Lincoln, De Baca and Curry counties. There are about 8,550 wells in these counties. About 41 percent (3,500) of the wells in these counties are Federal wells.

Data from 1993 – 2005 indicate about 94 wells are drilled in these counties annually. About 20 wells per year are drilled on Federal lands in these counties.

Estimates of total surface disturbance for this lease sale action are based on full field development. Full field development assumes development of every spacing unit and has a total complement of roads, pads, power lines, gravel sources and pipelines. Exploration and development of hydrocarbon resources outside of well-developed areas increases the distance required for roads, pipelines, and power lines. The parcels offered are not within or near well-developed fields.

The surface disturbance assumptions shown in the following table estimate impacts associated with oil and gas exploration and development drilling activities in these areas.

- Access Roads: 14 foot-wide travel way, 3.0 acres disturbance per access road
- Drill Pads: 1.4 acres disturbance per average well pad (250 feet x 250 feet)
- Pipelines: 3.6 acres initial disturbance per producing well (30 feet right-of-way width)
- Power lines: 1.0 acre initial disturbance per producing well
(9 acres total disturbance per well)

parcel	acres in parcel	Full Field Development *		
		acres disturbed 40 acre spacing	acres disturbed 160 acre spacing	acres disturbed 320 acre spacing
NM-2006-022	637.750	144	36	18
NM-2006-026	271.360	63	18	9
NM-2006-027	520.000	117	27	18
NM-2006-028	2198.840	495	117	63
NM-2006-040	408.680	90	27	9
NM-2006-024	340.000	72	18	9
NM-2006-025	860.000	198	45	27

*assumes all surface disturbance is on the parcel acreage

Cumulative Impact Table (Based on Full Field Development)

	40 ACRE SPACING	160 ACRE SPACING	320 ACRE SPACING
Soils	21% -23% of parcel acreage	5% - 7% of parcel acreage	2% - 3% of parcel acreage
Water Resources	21% -23% of parcel acreage	5% - 7% of parcel acreage	2% - 3% of parcel acreage
Floodplains	21% -23% of parcel acreage	5% - 7% of parcel acreage	2% - 3% of parcel acreage
Air Quality	21% -23% of parcel acreage	5% - 7% of parcel acreage	2% - 3% of parcel acreage
Cultural Resources	21% -23% of parcel acreage	5% - 7% of parcel acreage	2% - 3% of parcel acreage
Paleontological Resources	21% -23% of parcel acreage	5% - 7% of parcel acreage	2% - 3% of parcel acreage

5.0 Consultation/Coordination

RFO Lease Interdisciplinary Staff who worked on the development of this document.

BLM Staff

Richard Hill, Environmental Protection Specialist

Dan Baggao, Wildlife Biologist

Melvin Moe, Wildlife Biologist

Pat Flanary, Archaeologist

Paul Happel, Natural Resource Specialist

Michael McGee, Hydrologist

John Simitz, Geologist

John Spain, Range Conservation Specialist

Helen Miller, Range Conservation Specialist

Irene Gonzales, Reality Specialist
Larry Bray, Assistant Field Manager- Lands & Minerals
Janet Graham, GIS Specialist
Jerry Dutchover, Minerals
Howard Parman, Planning and Environmental Coordinator

6.0 Description of Mitigating Measures and Residual Impacts:

The lease sale will be mitigated by attaching the Oil and Gas Leasing Stipulation(s) to the lease parcel(s). The Roswell Field Office, Surface Use and Occupancy Requirements, Conditions Of Approval, and the Roswell Field Office's Special Leasing Stipulations, which are in place at the New Mexico State Office, will provide adequate mitigation for all lease parcels.

Direct, indirect, cumulative and residual impacts of leasing and lease development are generally described in the Roswell Approved Resource Management Plan and Record of Decision, October 1997. An environmental analysis will be prepared on a case-by-case basis upon receipt of future subsequent actions.

SUMMARY:

- a) Five (5) Parcels totaling 3956.630 acres will be leased in their entirety.
- b) Two (2) Parcels were modified to exclude the portions of lands that are within the Pecos River 100 year floodplain. Leaseable Acres; 1,200.000 acres + 240 acres/pulled = 1440.000 proposed acres.
- c) Four (4) Parcels with a total of 3,422.180 acres were deferred in their entirety to protect the Lesser Prairie Chicken Zone 1 in accordance with Interim Management.
- d) One (1) Parcel was pulled totaling 80.000 acres and will be leased in the January 2007 lease sale.

DECISION RECORD

DECISION: It is my decision to authorize the Roswell Field Office October 2006 Lease Sale. Therefore a total of six (6) entire parcels, and two (2) modified parcel shall be set forth for inclusion in the competitive lease sale. In as much as the lease sale is going to be implemented, some of the mitigation measures identified in the FONSI will be attached to certain lease parcels.

1) NM-200610-022 2) NM-200610-026 3) NM-200610-027 4) NM-200610-028 5) NM-200610-040 6) NM-200610-024 – Modified 7) NM-200610-025 – Modified

FINDING OF NO SIGNIFICANT IMPACT: This action is addressed in the Roswell Resource Area Resource Management Plan/Final Environmental Impact Statement, January 1997. I have reviewed the NEPA analysis described in EA No. NM -510-20060-156 including the explanation and resolution of any potentially significant environment impacts resulting from the lease sale. In accordance with the finding of no significant impacts, I have decided that an EIS is not required on this action. I have determined that the lease sale will not have any significant impacts on the human environment.

Mitigation Measures/Remarks:

I am certain that the lease sale will not adversely affect the federal mineral land involved, as long as the specific lease sale stipulations are attached to the lease parcels and the surface protection requirements are attached to all subsequent actions resulting from this lease sale.

The Roswell Field Office; Surface Use and Occupancy Requirements, Conditions Of Approval, and the Roswell Field Office's Special Leasing Stipulations which are in place at the New Mexico State Office, will provide adequate mitigation for the lease sale parcels. On a case by case basis, all surface protection requirements pertinent to oil and gas development in the Roswell Field Office area, as well as, any other applicable mitigation measures required for oil and gas operations on federal leases, shall be attached to every action and/or subsequent drilling application.

RATIONAL FOR DECISION: The decision to proceed with the lease sale will not result in any undue or unnecessary environmental degradation of federal mineral land. The lease sale is in conformance with the Roswell Approved Resource Management Plan and Record of Decision, October 1997.

COMPLIANCE and MONITORING: A compliance and monitoring plan is not necessary for this action at this time. However, compliance and monitoring plans will be attached, implemented, and executed, upon approval of subsequent actions.

Authorized Official Signature: _____
Roswell Field Manager

/s/ Eddie Bateson

10/17/06

Date: