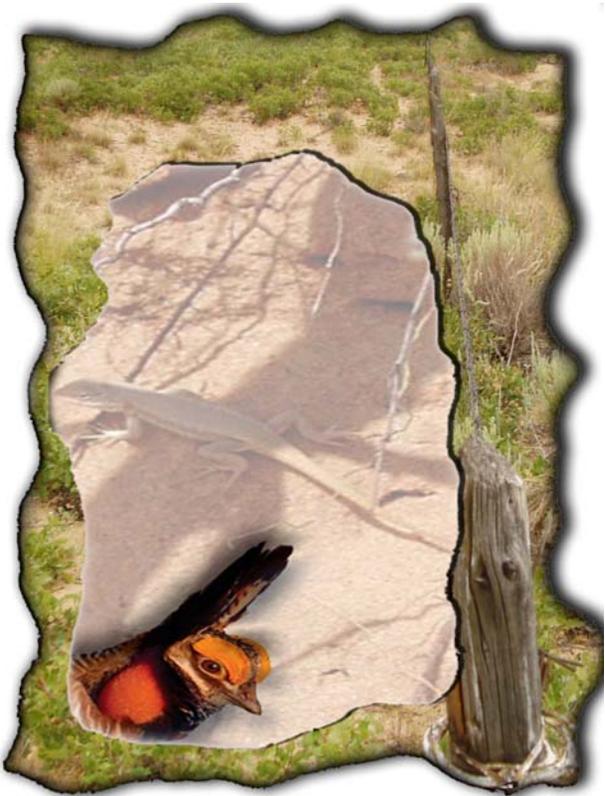


# 2 - Alternatives



## CHAPTER 2 ALTERNATIVES

Six alternatives are considered in this Resource Management Plan Amendment (RMPA) and Environmental Impact Statement (EIS). Under the No Action Alternative, management decisions and guidance would continue as directed by the current land use plans. Alternatives A, B, C, D, and E provide a range of management options that maintain, protect or enhance special status species' habitat while allowing existing activities to continue in a modified manner. These are summarized in Table 2-13.

The No Action Alternative is current management as prescribed in the current land use plans (1988 Carlsbad RMP, as amended, and the 1997 Roswell RMP, as amended). This alternative serves as the baseline to which other alternatives are compared.

Alternative A is the portion of the Conservation Strategy that applies to public land and Federal minerals in the Planning Area. (See Appendix 2 and Map A-1.) BLM participated in developing the Strategy. This alternative establishes the concepts of Primary Population Area (PPA), Sparse & Scattered Population Area (SSPA), and Isolated Population Area (IPA) for the lesser prairie-chicken.

Alternative B adopts the concepts of the Conservation Strategy in Alternative A and adds measures designed to provide greater protection of lesser prairie-chicken and sand dune lizard habitat.

Alternative C analyzes the zone concepts of Interim Management. Alternative D focuses on current occupied habitat for both species. Alternative E would apply the suggestions for special management from the Lesser Prairie-chicken ACEC nomination.

Federal statutes charge BLM to manage public land and resources based on the principle of multiple-use. While the driving force for change is the need to change management prescriptions in the context of special status species habitat, other uses of public land and resources come into play. In addition to listing the proposed changes in the prescriptions for managing special species habitat, this chapter will also list the proposed changes in the management prescriptions for designating interstate utility corridors in the Planning Area, oil and gas leasing, the subsequent development of those oil and gas leases through the reclamation phase, livestock grazing, and off-highway vehicle use (OHV) designations.

### CONTINUING MANAGEMENT GUIDANCE

This section describes the basic management policy and program direction that will continue to apply under all alternatives. This direction is fundamental and its associated guidance is based on laws, regulations, manuals, policies, executive orders, memoranda, and applicable planning documents. The information that follows pertains to public land in the Pecos District Office including the Planning Area.

#### Lands and Realty

The objective of the lands program is to facilitate the acquisition, exchange, or disposal of public land in order to provide the most efficient management of public resources. The program is responsible for processing land withdrawals, granting rights-of-way (ROWs) and easements on public land, and acquiring easements on nonpublic land where necessary. The lands program also issues leases and patents

under the Recreation and Public Purpose (R&PP) Act, and licenses and permits for specific uses such as filming or special events.

### **Recreation and Public Purpose**

Land would continue to be available for disposal to governmental or non-profit entities under the R&PP Act for public parks, building sites and correction centers, or other public purposes. BLM generally leases the land for up to 5 years or until substantial development has been completed and then the land may be patented. All applications are subject to public review and the National Environmental Policy Act (NEPA) process.

### **Rights-of-Way**

Under the authority of the Federal Land Policy and Management Act (FLPMA) and the Mineral Leasing Act of 1920, BLM grants ROW leases and permits to qualified individuals, businesses, and government entities for use of public land. Energy-related ROWs for roads and pipelines are one of the primary activities in the Pecos District Office lands program. The District processes ROW applications for access, utilities and telephone lines, fiber optic lines, and other communication sites. BLM regulations specify the typical width allowed for different uses, including pipelines, roadways, and utility lines.

### **Roads and Access**

The Pecos District has not had an active easement acquisition program. This is largely due to the numerous roads located throughout the District that have historically been open to the public. For the most part, this network of roads was generated by oil and gas development in the Planning Area. Any special restrictions, needs, or actions would be defined. BLM Manual 9113 (Roads) provides additional guidelines and standards for construction and maintenance

of transportation system roads on public land.

### **Fluid Minerals**

The 1920 Mineral Leasing Act, as amended, authorizes the Secretary of the Interior to lease oil and gas resources on all public domain and Federally-acquired lands. Lands excluded from such leasing by legislation or secretarial policy is listed in CFR Title 43, Part 3100.0-3. They include units of the National Park System; incorporated cities, towns, and villages; and lands recommended for wilderness study, as well as lands within the National Wilderness Preservation System. BLM Lease Form 3100-11, Offer to Lease and Lease for Oil and Gas, contains standard terms and conditions (STCs) that grant the leaseholder the right to develop the oil and gas resource and provide for the general protection of surface and subsurface resources under normal operations.

BLM, as agent for the Secretary of the Interior, is responsible for processing applications for permit to drill (APDs) and administering or assisting with the minerals development programs on BLM, the U. S. Department of Energy (DOE), and other lands with Federal minerals. BLM responsibilities include conducting pre-drill inspections of the proposed drill sites; assessing the status of cultural resources and threatened or endangered species; conducting compliance inspections and enforcement actions for lease terms and conditions, safety, production verification, and site maintenance; and abandonment inspections of drilling locations. In situations where there are Federal minerals underlying tribal, State, private, or other land ownership (split estate), BLM requires the operator or lessee to obtain a surface use agreement with the surface owner or post a bond if an agreement cannot be reached before an APD can be approved. BLM regulations, orders, notices, standard conditions of approval, and general requirements constitute the range of

standard procedures and environmental protection measures that are applied to individual operators and projects, as applicable, and are authorized by 43 CFR 3160. BLM Onshore Oil and Gas Orders and Notices to Lessees are applied as standard operating procedures.

New Mexico BLM has issued a number of Notice to Lessees (NTL) to those companies that operate on Federal and Indian leases. The NTLs provide instructions for a specific field or area of BLM jurisdiction. The NTLs are consistent with or exceed the minimum standards specified in the 43 CFR 3160 regulations or Onshore Orders. The BLM applies the STCs as well as special stipulations to the construction and operation of wells, pipelines, and compressors. STCs address the condition and management of the well location, associated equipment, access road, and reseeding and abandonment. STCs also ensure protection of cultural resources, compliance with the Endangered Species Act (ESA) of 1973, as amended, and the conservation of sensitive species.

The Pecos District Office uses the “BLM General Requirements for Oil and Gas Operations on Federal and Indian Lands” as a condition of approval (COA) that describes general requirements and standard plan of operations for wells drilled in its jurisdiction. The conditions may be supplemented by additional mitigation measures supplied by applicable surface managing agencies or surface owners in cases of split estates. If a surface managing agency or surface owner has supplied BLM and the operator with a reasonable written environmental requirement, the requirement may be incorporated into the APD if it does not affect adjacent Federal or Indian surface; does not compromise safety or conservation; or does not negate minimal Federal restoration requirements in cases of abandonment. Surface managing agencies in the Planning Area include DOE. Surface owners can include private surface owners,

Indian tribes, and the State of New Mexico. BLM grants approvals for routine modifications to a well’s construction and operating plan via sundry notice.

BLM must decide what lands are to be leased to access Federal minerals and whether special management constraints modifying the STCs are needed to protect the environment and other resources. For example, many of these constraints are designed to reduce erosion and sedimentation in order to minimize the impacts on soil and water resources. These constraints are generally appended to a lease at the time of lease offer or as COAs on APDs. These constraints are most often applied within special designations such as Special Management Areas (SMAs) or Areas of Critical Environmental Concern (ACECs). Stipulations include seasonal closures, or timing limitations (TL), that prohibit exploration, development, or any surface disturbing activities for designated time periods during the year to benefit wildlife. Controlled Surface Use (CSU) constraints are used to identify restrictions on well locations, surface use, or operations year-round in order to protect specific resource values or uses. No Surface Occupancy (NSO) constraints are intended for use when other constraints are insufficient to adequately protect the resource values and uses.

Lease exceptions, modifications, and waivers of management constraints can only be granted by the BLM if circumstances have changed or if the lessee demonstrates that operations can be conducted without harming the protected resource values and uses. Exceptions, modifications, and waivers are considered on a case-by-case basis as changes in the resource or management situation occur. Waivers, exceptions, modifications would be subject to other applicable regulatory and environmental compliance requirements.

Site-specific environmental assessments (EAs) are required prior to siting a new well.

During this process, environmental impacts are identified and management constraints are developed, which will mitigate impacts to the environment, public health and safety, cultural resources, and threatened, endangered, and sensitive species. The mitigation measures become the COAs attached to the permits for surface disturbing activities, such as APDs and sundry notices. Similarly, mitigation measures are attached as stipulations to right-of-way (ROW) grants, and as conditions on geophysical operations. Each mitigation measure is applied to protect a resource that would be affected by the operation being approved, even on existing leases. A reclamation management plan is also required.

### **Solid Minerals**

Federal land in the Planning Area is an important source of mineral materials for construction projects in the region, including sand and gravel, rock and stone, and other fill materials. The Pecos District issues Contracts (Form 3600-9 and 5450-5) and Permits (Form 5510-1) for the removal of mineral materials managed under 43 CFR 3600. These contracts and permits can be issued for up to 5 years and 200,000 cubic yards of material. Any amount, greater than 200,000 cubic yards, must be offered through a competitive bid. A mining plan, a reclamation plan, and a weed management plan are required with the contract or permit application, and plans must conform with modern mining and reclamation standards. The proposed operation plan goes through the NEPA process with the preparation of an EA, and is approved if the mining and reclamation plans comply with the existing land use plans and include appropriate mitigation measures. BLM is responsible for inspection and enforcement on all contracts and permits.

### Alternative Energy

At present, there are no renewable energy facilities on public land in Pecos District.

BLM, in conjunction with the Department of Energy's (DOE's) National Renewable Energy Laboratory, has conducted an assessment of the opportunities for development of renewable energy resources on land managed by BLM. The Planning Area did not meet the screening criteria to be considered as a potential area for the location of biomass, or geothermal energy generation facilities. Economic and societal forces beyond the control of the BLM dictate the level of interest in renewable energy. Future applications for wind or solar sites would undergo site-specific environmental analysis as part of the ROW or commercial lease process.

### Soils and Water

BLM's soils and watershed program places emphasis on preventing or avoiding further degradation of soil and water resources, as well as their conservation. The soils program will continue to provide support to other resource activities and also continue to emphasize its legislative mandates for the protection, maintenance, and enhancement of the soil resources. Policy and guidance for the management of soil resources associated with land administered by BLM are found in Manual Sections 7000 and 7100. Soil and water conservation practices will be used to develop site-specific Best Management Practices (BMP) at the project level to prevent or reduce the amount of pollution to a level compatible with water quality goals.

It is BLM policy to protect water resources through the Clean Water Act (CWA) programs such as the Non-point Source Pollution Program and the Riparian Program. The Non-point Source Pollution Program emphasizes improving water quality in degraded stream systems. The Riparian Program is concerned with maintenance and restoration of riparian zones both vegetative and hydrologically. Both programs have parallel or similar goals, and accomplishments in any one usually are beneficial to the others.

Water quality regulations in the U.S. receive its basic authority from two laws. The Federal Water Pollution Control Act of 1972, as amended by the CWA of 1977, is the basic authority for instream water quality standards and maximum permissible pollution discharges. The Safe Drinking Water Act of 1974 is the basic authority for domestic water quality standards.

The BLM's water resource program includes participation with the State and Environmental Protection Agency (EPA) in water quality management. Specifically, the BLM works to ensure that the management and development practices comply with State water quality standards. The hydrology program will continue to emphasize legislative mandates of protection, maintenance, and enhancement of the resources, as well as provide support to other resource activities for the Pecos District. Policy and guidance for the management of water resources associated with land administered by the BLM is summarized in Manual Sections 7000, 7200, and 7240.

### Floodplains

BLM's floodplain management program places emphasis on restoring, protecting, maintaining, and enhancing the functions of the floodplain and conserve natural floodplain values including wildlife habitat, water quality, flood water retention, and ground water recharge. The 100-year floodplain, for administrative purposes, serves as the basis for floodplain management on public land. The 100-year floodplain is based on Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (1983).

Surface disturbance will not be allowed within up to 200 meters of the outer edge of 100-year floodplains, to protect the integrity of those floodplains. On a case-by-case basis, an exception to this requirement may be considered based on one or more of the criteria listed below. The first three criteria

would not be applied in areas of identified critical or occupied habitat for Federally-listed threatened or endangered species.

- Additional development in areas with existing developments that have shown no adverse impacts to the riparian areas as determined by the Authorized Officer, following a case-by-case review at the time of permitting.
- Suitable off-site mitigation if habitat loss has been identified.
- An approved plan of operations ensures the protection of water or soil resources, or both.
- Installation of habitat, rangeland or recreation projects designed to enhance or protect renewable natural resources.

### Air Quality

All BLM actions and use authorizations must comply with all applicable local, State, tribal, and Federal air quality laws, statutes, regulations, standards, and implementation plans. The New Mexico Air Quality Bureau (NMAQB) is responsible for enforcing the State and National ambient air quality standards in New Mexico. Any proposed emission source would have to comply with the NMAQB regulations. Proposed sources that emit more than 10 pounds per hour or 25 tons per year of any air pollutant for which there is a National or State ambient air quality standard would have to demonstrate that these emissions would not contribute to an exceedance of an ambient air quality standard or substantially degrade air quality within pristine Federal Class I areas, such as National Parks greater than 6,000 acres or National Wilderness Areas (NWA) greater than 5,000 acres.

### Vegetation - Invasive Weed Management

BLM's goal is to detect new invasive plant species populations, prevent the spread of new invasive populations, manage existing populations using tools of integrated weed

management, and eradicate invasive populations. EO 11312, Invasive Species-1999, the Federal Noxious Weed Act of 1974, the New Mexico Noxious Weed Management Act of 1978, and the Federal Plant Protection Act of 2000 require the development of a weed management program.

This program focuses on the inventory of existing infestations, prevention of noxious weed invasion, monitoring revegetation efforts for invasive weeds, and assessment of the success of weed control efforts. This is accomplished when and where possible using the safest environmental methods available in a timely manner. Prevention and management of invasive plants assists in improving the health of public land.

### Livestock Grazing

The objective of this program is to promote healthy sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangeland to properly functioning condition; to promote the orderly use, improvement, and development of the public land; to efficiently and effectively administer domestic livestock grazing; and to provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy public rangelands.

The livestock grazing program is authorized principally by FLPMA, the Taylor Grazing Act of 1934, and the Public Rangelands Improvement Act of 1978. BLM must provide grazing permittees or lessees notice 2 years in advance of cancelling their grazing permit or lease if the lands in their allotment would be devoted to another public purpose, including disposal.

Three major parts of the program are grazing administration, resource inventory and monitoring, and range improvement.

Grazing administration consists of issuing and supervising permits and leases that authorize livestock grazing. Related tasks include detecting and abating unauthorized use and supervising allotments. Analysis of resource monitoring and inventory information is used to evaluate and adjust grazing use. Range improvement helps enhance rangeland resource conditions for a variety of uses, including domestic livestock and wildlife forage and watershed protection.

Public rangeland will be managed to meet the Standards for Public Land Health (BLM 2000a). If the Standards are not met due to livestock management practices, the Livestock Grazing Management guidelines offer tools to guide the Pecos District to improve those areas not meeting the Standards. Guidelines are reasonable and practical management options for livestock grazing, which when applied, move rangelands toward the Statewide standards. The guidelines are developed for public land livestock grazing, not for unsuitable land or land where livestock grazing does not occur. They are based on science, past and present management experience, and public input. These guidelines will be used to develop grazing management practices that will be implemented at the watershed, allotment, or pasture level.

Specific application of these guidelines, or Livestock Grazing Management Practices, occur at the field office level, in consultation, cooperation, and coordination with lessees, permittees, interested public, and landowners. Their implementation is carried out with recognition for the impact that BLM's management objectives have on adjacent landowners. Guidelines are designed to encourage innovation and experimentation in the development of alternative livestock grazing management practices. They improve rangeland health and consider the natural migration patterns of wildlife.

## Standards for Public Land Health and Livestock Grazing

All BLM activities are expected to meet the New Mexico Standards for Public Land Health that was accepted by the Secretary of the Interior as part of the Record of Decision for the Statewide RMP Amendment/EIS for Standards for Public Land Health and Guidelines for Livestock Grazing Management (BLM 2000a). BLM determines whether activities meet the standards by evaluating the results against indicators developed for each standard. The standards describe the conditions needed for healthy public land under three categories, Upland Sites, Biotic Communities, and Riparian Sites, summarized below.

### **Upland Sites Standard**

Healthy upland ecological sites are in a productive and sustainable condition within the capability of the site. Upland soils meeting the standard are stable and exhibit infiltration and permeability rates that are appropriate for the soil type, climate, and landform. The combined kind, amount, or pattern of vegetation provides protection on a given site to minimize erosion and assist in meeting State and tribal water quality standards. Indicators for this standard may include, but are not limited to, the following:

- Consistent with the capability of the ecological site, soils are stabilized by appropriate amounts of standing live vegetation, protective litter or rock cover.
- Erosion is indicated by flow patterns characteristics of surface litter soil movement, gullies and rills, and plant pedestalling.
- Satisfactory plant protection is indicated by the amount and distribution of desired species necessary to prevent accelerated erosion.

### **Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard**

Ecological processes such as the hydrologic cycle, nutrient cycle, and energy flow support productive and diverse native biotic communities, including special status, threatened, and endangered species. Desired plant community goals maintain and conserve productive and diverse populations of plants and animals that sustain ecological functions and processes. Restoration should first be achieved with native plants, and when appropriate, non-native plants. Indicators for this standard may include, but are not limited to, the following:

- Commensurate with the capability of the ecological site, plant and animal populations are productive, resilient, diverse, and sustainable.
- Landscapes are composed of communities in a variety of successional stages and patterns.
- Diversity and composition of communities are indicated by the kinds and amount of species.
- Endangered and special status species are secure and recovering, with the goal of delisting and ensuring that additional species need not be listed within New Mexico.

### **Riparian Sites Standard**

Healthy riparian areas are in a productive, properly functioning, and sustainable condition, within the capability of each site. There is present adequate vegetation of diverse age and composition to withstand high stream flow, capture sediment, provide for groundwater recharge, provide habitat, and assist in meeting State water quality standards. There are no riparian sites within the Planning Area.

## Wildlife - Special Status Species

Special status species are managed in accordance with BLM Manual 6840. The ESA (Public Law [PL] 93-205), as amended (PL 100-478), requires special protection and management for Federally-listed threatened or endangered (T&E) species, species proposed to be listed as T&E, and designated and proposed critical habitat. The act also requires the development and implementation of recovery plans for the conservation and survival of T&E species. In accordance with BLM Manual 6840, BLM also manages a large number of sensitive, non-listed species to protect them and prevent the need to list them as threatened or endangered. The purpose of this management prior to Federal listing is to use a broad range of management options to protect a species.

Federal and State-listed species are protected by requiring site-specific evaluations and clearances and by applying more stringent management prescriptions in areas that have been specially designated to protect target species. When a proposed project falls within habitat that has been designated as having the potential to support a protected species, a field survey is required prior to authorization of the project. When a new threatened, endangered, or proposed species protected by the ESA is listed, any potential habitat for that species is added to the conflict map. Any action that may affect Federally-listed species also requires consultation with the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the ESA.

Major legislation requiring actions by Federal agencies to protect T&E species, as well as other protected, non-Federally listed species and habitats, include the following:

- Fish and Wildlife Conservation Act of 1980 (PL 96-366).
- Fish and Wildlife Coordination Act of 1958 (PL 85-654).

- Migratory Bird Treaty Act of 1976 (PL 94-576).
- Plant Protection Act of 2000 (PL 106-224).

## Fire Management

The objective of the fire program is to manage and use fire consistent with its natural role in the functioning ecosystem, and the protection of life and property. The program guidance is documented in the 2004 Fire and Fuels Management Plan Amendment and Environmental Assessment for Public Land in New Mexico and Texas. The plan adheres to the National Fire Plan and 2001 Federal Fire Policy.

## Cultural Resources

The New Mexico BLM cultural resource program operates under the provisions of a 1997 National Programmatic Agreement among the BLM, the Advisory Council for Historic Preservation (ACHP), and the National Conference of State Historic Preservation Officers (SHPOs), and a 1998 Protocol Agreement between New Mexico BLM and New Mexico State Historic Preservation Officer. Although these agreement documents have greatly streamlined the BLM interaction with SHPO and the ACHP, the BLM still has significant and ongoing consultation obligations and responsibilities with Native American tribes, local and State governments, other Federal agencies, and interested groups and individuals.

Much of the workload of the cultural resource staff involves ensuring that Federal undertakings associated with, but not limited to, oil and gas development, extraction and transportation are in compliance with Section 106 and other applicable preservation laws and regulations. Over 1,000 undertakings are reviewed each year, ranging from a single well pad to major pipeline gathering

systems. BLM's policy has been to prevent impacts by planning the undertaking to avoid cultural resources. If impacts to the cultural resources cannot be avoided, mitigation of the effect is conducted prior to approval of the undertaking or required as a stipulation on the approval. A wide range of measures is used to avoid or mitigate impacts on cultural resources.

Specific legal requirements, which the BLM and other Federal agency cultural resource management programs operate under to meet the program objectives, include:

- American Antiquities Act of 1906 (PL 59-209; 34 Stat. 225; 16 USC 432, 433). The act is implemented by uniform regulations at 43 CFR Part 3.
- Recreation and Public Purposes Act of 1926 (PL 69-386; 44 Stat. 741; 43 USC 869). See 43 CFR Subpart 2741 and Manual Section 2740.
- Historic Sites Act of 1935 (PL 74-292; 49 Stat. 666; 16 USC 467-467).
- Regulations implementing the Landmarks program are at 36 CFR Part 65.
- Reservoir Salvage Act of 1960, as amended by Archaeological and Historic Preservation Act of 1974 (PL 86-523; 74 Stat. 220, 221; 16 USC 469, PL 93-291; 88 Stat. 174; 16 USC 469).
- National Historic Preservation Act (NHPA) of 1966 (PL 89-665; 80 Stat. 915; 16 USC 470 et seq.), as amended. Section 106 of the Act is implemented by regulations of the Advisory Council on Historic Preservation (ACHP), 36 CFR Part 800.
- National Environmental Policy Act of 1969 (PL 91-190; 83 Stat. 852; 42 USC 4321). The Act is implemented by regulations of the Council on Environmental Quality, 40 CFR 1500-1508.
- Archaeological and Historic Preservation Act of 1974 (PL 86-523; 16 USC 469-469c).
- Federal Land Policy and Management Act of 1976 (PL 94-579; 90 Stat. 2743; 43 USC 1701; "FLPMA").
- American Indian Religious Freedom Act of 1978 (PL 95-431; 92 Stat. 469; 42 USC 1996).
- Archaeological Resources Protection Act of 1979 (PL 96-95; 93 Stat. 721; 16 USC 470aa et seq.) as amended (PL 100-555; PL 100-588). It is implemented by uniform regulations and departmental regulations, both in 43 CFR Part 7.
- Native American Graves Protection and Repatriation Act of 1990 (PL 101-601; 104 Stat. 3048; 25 USC 3001). The Secretary of the Interior's implementing regulations are in 43 CFR Part 10.
- EO 11593 ("Protection and Enhancement of the Cultural Environment," 36 FR 8921, May 13, 1971).
- EO 13007 ("Protection of Religious Practices and Sacred Sites" [1996]).
- 36 CFR 60 - National Register of Historic Places (NRHP) (1981).
- 36 CFR 63 - Determinations of Eligibility for Inclusion in the NRHP.
- 36 CFR 79 - Curation of Federally Owned and Administered Archaeological Collections.
- Guidelines for Federal Agency Responsibilities, Under Section 110 of the NHPA.
- The Secretary of the Interior's Professional Qualifications Standards (48 FR 44716, September 29, 1983).
- The Secretary of the Interior's Standards for the Treatment of Historic Properties, 1995.

The BLM cultural program operates under a National programmatic agreement with the ACHP and SHPOs. As part of the agreement, a Preservation Board was established. Implementation of the agreement in New Mexico is through a protocol agreement with the State Historic Preservation Office (SHPO). Relevant documents include:

- Programmatic Agreement among the BLM, the ACHP, and the National Conference of State Historic Preservation Officers regarding the manner in which BLM will meet its responsibilities under the NHPA (1997).
- BLM Charter for the Preservation Board (1997).
- Protocol Agreement between New Mexico BLM and New Mexico State Historic Preservation Officer (1998). Program guidance for the BLM cultural resources program is found in these Washington Office released manuals:

**8100 Manual**—Cultural Resource Management.

**8110 Manual**—Identifying Cultural Resources.

**8120 Manual**—Protecting Cultural Resources.

**8130 Manual**—Utilizing Cultural Resources for Public Benefit.

**8160 Manual**—Native American Coordination and Consultation.

Specific BLM cultural resource program guidance for public land under the responsibility of the New Mexico State Office is provided in the Handbook H-8100-1, *Procedures for Performing Cultural Resources Field Work on Public Lands in the Area of New Mexico State BLM Responsibility* (2002).

## Paleontology

Paleontological resources are managed on public land because they are nonrenewable resources of value to scientists, educators, hobbyists, commercial collectors, and other members of the public. Without protection, the resources may be intentionally or unintentionally damaged or destroyed, causing valuable information to be lost. Paleontological resource protection objectives include facilitating research and collection on public land, use for education and recreation, protecting scientifically valuable resources that may be in conflict

with other land and resource uses, and protecting scientifically valuable fossils, as required by law.

The paleontology program achieves these objectives through the following activities (BLM 1987a):

- Identifying and evaluating paleontological resources so they may be adequately addressed in planning and environmental analysis documents.
- Maintaining and conducting an effective and continuing protection program.
- Increasing the awareness of Federal land managers and the public regarding the significance of paleontological resources and management requirements, and encouraging public participation in resource management.
- Developing volunteer or cooperative management agreements and associations with individuals, professional paleontologists, local organizations and governments, and the scientific community.
- Avoiding or mitigating impacts to valuable paleontological resources.
- Avoiding publicizing the exact locations of scientifically significant paleontological resources if such attention would conflict with management objectives.
- Managing and issuing collection permits when appropriate.

## Recreation

The objective of the outdoor recreation program is to ensure the continued availability of public land for a diverse array of quality resource-dependent outdoor recreation opportunities. Recreation use is managed to protect the health and safety of visitors; to protect natural, cultural, and other resource values; to stimulate enjoyment of public land; and to resolve user conflicts. Visitor demands and new recreation uses and opportunities will continue to influence how and what

recreational opportunities are provided in the Pecos District area.

FLPMA provides for management of outdoor recreation on public land. Section 202(c) (9) calls for land use planning consistent with Statewide outdoor recreation plans. Other National laws that govern recreation management in the Pecos District area include the National Trails System Act of 1968, as amended; the Federal Land Recreation Enhancement Act of 2005, the R&PP Act, as amended; and the Wilderness Act of 1964.

Most public land is managed to maintain a freedom of recreational choice with a minimum of regulatory constraints, as long as such use occurs in a responsible manner. Few BLM recreational facilities or supervisory efforts exist on this land, which are referred to as extensive recreation management areas (ERMAs). Where the nature of the resource attracts intensive recreational use, public land may be managed as special recreation management areas (SRMA). These are areas where the BLM makes major investments in recreational facilities and visitor assistance. Specific management direction in a SRMA is formulated by the BLM to provide for resource protection and public health, safety, and enjoyment.

### **Recreation Opportunity System**

The outdoor recreation program uses the Recreation Opportunity Spectrum (ROS) as the basic tool for inventory and management to ensure the general public a continued variety of quality recreational opportunities. Providing opportunities for backcountry recreation and more developed types of recreation close to major urban areas is emphasized. An effort is made to locate and establish use areas and trails compatible with social and natural environments in close proximity to heavily populated areas.

A broad range of outdoor recreation opportunities such as backpacking, camping, sightseeing, fishing, boating, picnicking, horseback riding, wildlife viewing, OHV use, mountain biking, and motorcycling is provided for, in an attempt to meet varying public needs. Access is maintained and developed, where necessary, to enhance recreation opportunities and allow public use.

### **Off-Highway Vehicle Use**

43 CFR 8340 provides for OHV use as a legitimate activity on public land wherever it is compatible with other resource management objectives. OHV designations are administrative, allowing management flexibility in response to changes in the environment. All public land is designated as "open," "limited," or "closed" to motorized vehicles (see Glossary). These designations are made in RMPs for public land in each Field Office area.

Emergency OHV limitations of use, and closure of areas and trails to OHV use, can occur under the authority of 43 CFR 8341.2. However, emergency closures are not OHV designations. Emergency closures can be done on a case-by-case basis to prevent or stop unnecessary degradation of resources or adverse effects to other authorized uses. Emergency closures remain in effect only until an interim or standard designation can be made, or until the adverse effects are eliminated and measures to prevent their recurrence have been implemented.

OHV use has increased substantially in the Pecos District over the last decade and is an increasing concern for all resource programs. The outdoor recreation program is concerned with providing access to recreational areas and opportunities in appropriate settings for OHV activities without degrading the intrinsic qualities of the landscape that are important for a range of public land resource values. BLM is also concerned with providing adequate access to resources and facilities on public land.

## Visual Resource Management

Legislation such as FLPMA, NEPA, and Surface Mining Control and Reclamation Act (SMCRA) outline the BLM's responsibilities for protecting the quality of the visual (scenic) values of public land. Policy and management guidance is also provided in BLM Manuals 8400, 8410-1, and 8431-1. Public land has a variety of visual values. These different values warrant different levels of management. Because providing the same level of management for all visual resources is neither desirable nor practical, the BLM systematically identifies and evaluates these resources to determine an appropriate level of management.

Visual values are identified through the BLM Visual Resource Management (VRM) inventory process and are considered with other resource values in the RMP. The inventory consists of a scenic quality evaluation, a visual sensitivity level analysis, and a delineation of distance zones. Based on these three factors, BLM-administered land is placed into one of four visual resource inventory classes (Class I through Class IV). A VRM class identifies suggested degrees of human modifications that should be allowed in a landscape to protect visual resources, with Class I allowing the least modification and Class IV the most.

VRM classes are not used as a device to stop surface disturbing activities. The inventory classes represent the relative value of the visual resources, with Class I assigned to areas where the visual value is the greatest. These include Wilderness Areas (Was), Wilderness Study Areas (WSAs), wild and scenic rivers, and other congressionally and administratively designated areas where decisions have been made to preserve a natural landscape.

Most of the Planning Area is presently designated as a Class III or Class IV. These classes provide the visual

management standards for the design and development of future projects and for rehabilitation of existing projects. Visual design considerations shall be incorporated into all surface-disturbing projects regardless of size or potential impact and is a management responsibility shared by all resource management programs. Each class designation has a defined management objective and can be found in the Glossary.

## Special Management Areas (SMAs)

The objective of the SMAs in the District is to protect, maintain, and enhance the special resource values on public land. Areas that have special resource values are identified where some uses may be restricted in order to protect the resources. These areas include public land such as SMAs, ACECs, WA, WSAs, SRMAs, and research natural areas (RNAs). There are no wilderness areas or wilderness study areas within the Planning Area.

## MANAGEMENT COMMON TO ALL ALTERNATIVES

The following management prescriptions of existing land use plans would be applied to all alternatives in the Planning Area.

### Lands and Realty

In order to comply with Section 368 of the Energy Policy Act of 2005, the Pecos District would designate utility corridors for major projects such as interstate electric transmission lines; pipelines; and communications lines for interstate use. New projects of these types would be sited in the utility corridors shown on Map U-1. The corridors depicted on Map U-1 would be no more than 3,500 feet wide and their compatible uses (pipelines only or electric transmission lines only or both uses) are explained in the map legend. The corridors depicted on Map U-1 include those that will be analyzed in the West-wide Energy

Corridor Programmatic Environmental Impact Statement. Information about this EIS can be obtained on-line at [www.corridoreis.anl.gov](http://www.corridoreis.anl.gov)

New projects of the type described above that propose to cross the Planning Area would be evaluated based on the impacts to lesser prairie-chicken and sand dune lizard habitats and other resources to meet the overall objectives of this plan. These projects would not be located in ROW avoidance areas if other routes can meet the purposes of the project. Lands acquired as habitat for Special Status Species would be added to the ROW exclusion area for major projects.

Minor ROWs for facilities such as fences, range and wildlife water pipelines, power distribution lines, access to oil and gas facilities, or oil and gas collection or distribution pipelines would be considered in exclusion and avoidance zones on a case-by-case basis to meet the overall objectives of this plan.

The Mescalero Sands ACEC and the Mathers RNA would continue to be ROW exclusion areas. The Laguna Plata and Maroon Cliffs Archeological Districts would continue to be ROW avoidance areas. The Mescalero Sand North Dune OHV Area would continue to be ROW avoidance areas. See Map NAA-1.

Landfills, hazardous waste disposal sites, and produced water disposal pits would not be authorized under ROWs or R&PP leases.

For all other projects in the Planning Area, public land would be open to the consideration of granting ROWs under the guidelines in Appendix 2 of the 1997 Roswell RMP and 1997 Carlsbad RMPA. (Both the RMP and RMPA are available

online at [www.nm.blm.gov](http://www.nm.blm.gov). Click on Planning/NEPA under Programs.)

Whenever possible, facilities would be confined to existing alignments, minimizing width requirements and maximizing multiple-occupancy. ROWs would be granted only after site-specific analysis. Development of specific agricultural leases may be considered only when the lease is compatible with or enhances the land's identified resource values.

Access to public land would be provided throughout the Planning Area. Easements would be acquired across non-Federal land to provide access to the public land for recreational, special management, and other resource needs. Priority for acquisitions of easements would be placed on former county roads vacated by the county government, when those roads are important for the management of the public land. Access would be closed, or restricted, where necessary and in accordance with OHV designations, to protect public health and safety or areas with significant resource values.

To reduce surface disturbance in the Planning Area, the decision to bury pipelines less than 5 inches in diameter would be determined on a case-by-case basis to meet the overall objectives of this plan. All pipelines greater than 5 inches in diameter and any lines with a pressure greater than 125 psi must be buried. If the use of plastic pipe is approved, the pipe must meet American Petroleum Institute specifications or equivalent standard specifications and intended use from pipe manufacturer.

BLM would work with all parties involved to remove idle power lines and poles within the Planning Area. The goal is to reduce habitat fragmentation and restore habitat for the lesser prairie-chicken.

## Minerals

### **Fluid Minerals**

The BLM would continue to require oil and gas lessees to conduct operations in a manner that would minimize adverse impacts to resources, land uses, and other users. To that end, the BLM would continue to apply reasonable mitigating measures to all oil and gas activities.

Requirements that have been issued in Orders or Notices to Lessees (NTL) concerning environmental and other factors associated with the drilling of oil and gas wells would continue to be enforced, as would future orders and NTLs. Regulation of pits falls under the jurisdiction of the New Mexico Oil Conservation Division. Open-top tanks, disposal pits, or other open pits would be required to be covered with a fine mesh netting to make them inaccessible to birds, bats and other wildlife.

Plans of Development (POD) may contain proprietary information which would prohibit its disclosure under the Freedom of Information Act.

### Soils

Current soil management strategies and prescriptions identified and analyzed in the 1988 Carlsbad RMP (available on-line at [www.nm.blm.gov](http://www.nm.blm.gov)) and the Roswell RMP would continue unchanged in the Planning Area. As specified in both the 1997 Carlsbad RMPA and the 1997 Roswell RMP, no surface disturbing activities would be allowed on slopes over 30 percent or on fragile soils. The slope restriction would not apply to livestock grazing.

### Water Resources

Current surface water quantity management strategies, in both the Carlsbad and Roswell Field Offices, would continue unchanged in

the Planning Area. See the 1997 Carlsbad RMPA and the 1997 Roswell RMP.

This includes Best Management Practices (BMPs) that would be developed in activity plans for actions that degrade surface water quality through non-point source pollution. The primary emphasis of BMPs would be on preserving water quality. Surface water quality parameters that would be addressed in BMPs include, but are not limited to: water temperature, turbidity, sediment transport and yield, chemical loading, and nutrient loading.

BMPs would be developed on a case-by-case basis for actions that degrade groundwater quality through non-point source pollution, for groundwater with 10,000 mg/l total dissolved solids (TDS) or less. The primary emphasis of BMPs would be on preserving water quality. Groundwater quality parameters that would be addressed in BMPs include, but are not limited to: TDS, pH, volatile organic compounds, and heavy metals.

### Floodplains

Current floodplain management strategies, in both the Carlsbad and Roswell Field Offices, would continue unchanged in the Planning Area. See the 1997 Carlsbad RMPA and the 1997 Roswell RMP.

### Air Quality

Current air quality management strategies, in both the Carlsbad and Roswell Field Offices, would continue unchanged in the Planning Area. See the 1997 Carlsbad RMPA and the 1997 Roswell RMP.

### Standards for Public Land Health and Guidelines for Livestock Grazing

BLM amended the Carlsbad and Roswell Resource Management Plans to incorporate the *New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing*

*Management* (January 2001), which adopted standards for public land health and guidelines for livestock grazing management in New Mexico. The standards describe conditions needed for healthy, sustainable public rangeland and relate to all uses of public land. The livestock grazing guidelines are management practices that are applied if it has been determined that grazing practices are responsible for non-achievement of a Standard. They are designed to improve public land health and are to be implemented at the watershed, allotment, or pasture level.

There are different indicators that provide a measure of resource quality and functioning condition upon which the standards for public land health would be assessed. These indicators describe attributes of soil and site stability, watershed function, and biotic (plant and animal) integrity. The assessment process is a combination of qualitative and quantitative techniques that use observations and measurements made in the field to assign numeric values or rankings to each indicator. The indicators are rated relative to the degree of departure from what a healthy site would look like. For instance, if a healthy site is described as having no or few rills and the assessed site has few rills, then it is rated as none to slight departure. Conversely, if the assessed site has many rills, the site is rated as having severe departure. Once each of these indicators has been rated, these rankings are combined to determine soil and site stability, watershed function, and biotic integrity. Some indicators are used in all three of these categories, some in two of the three, and some in only one specific category. The Carlsbad Field Office uses 21 different indicators, while the Roswell Field Office uses 22 of them.

The assessment process is based on the ecological site description and is done on a watershed basis. The Carlsbad and Roswell Field Offices have schedules in place to determine the order in which each

watershed area is assessed. These schedules were established based on input from other Federal and State agencies and various public comments. The indicators are rated against the soil, vegetation, and animals described as typically present in that ecological site. During the rating process, site capability and current weather patterns are considered. Site capability is a measure of expected conditions such as degree of erosion or pounds per acre of vegetative production. If a site has been degraded over time, from whatever type of disturbance, it would be rated based on its current capacity. Similarly, if a site has experienced abnormal precipitation, either very dry or very wet, then these weather conditions would be factored into the indicator ratings.

In addition to these indicators, both Field Offices have over 20 years of rangeland monitoring data collected at permanently established study plots. This data provides information about range condition, amount of annual vegetative production, composition and cover of vegetation, utilization amounts, and precipitation. This data will be used along with the assessment process to determine if the Standards for Public Land Health are being met.

### Vegetation

General management objectives are to improve vegetative composition, cover, and production in areas that currently do not meet the vegetation condition objectives; and to maintain vegetation condition in areas that meet vegetation condition objectives.

A total of 386 long-term range monitoring studies have been established on 84 allotments in the Planning Area. These studies collect data on livestock use, forage production and utilization, climatic data, and ecological condition and trend. The intensity and frequency of monitoring efforts vary with selective management categories, with "I" category allotments monitored at a

greater intensity and frequency than “M” and “C” allotments. Other monitoring data includes more recent Robel pole studies, photo trend plots, and Rangeland Health Evaluations. This data will continue to be collected within the Planning Area.

A site may provide suitable vegetative composition but lack the vertical structure required for successful lesser prairie-chicken nesting and concealment. Sampling transects of pastures using the Robel method in the late fall to early spring (November 1 to February 28 prior to the leafing out of shinnery oak and immediately prior to nesting), provides a standardized measure of the average height of residual grasses favored by lesser prairie-chickens for nest placement. The vegetative objective would be that at least 10 percent of all survey points should provide a Robel visual obstruction reading of at least 12 inches and a minimum average of 4 inches.

Current management would continue as identified in each Field Office RMP, including brush control methods. Brush control would be implemented to achieve Standards for Public Land Health and meeting Desired Plant Community objectives. Reclamation efforts on abandoned pads, roads, and caliche pits would continue to address and reduce habitat fragmentation, restore native habitat and promote lesser prairie-chicken and sand dune lizard expansion opportunities.

### Non-Native and Invasive Species

Management practices targeting species described in the Noxious Weed List for the State of New Mexico (NMDA, 1999) would follow those described in existing planning documents. The presence of those species described in the Noxious Weed List for the State of New Mexico (NMDA, 1999) is detected via continual inventory being carried on by all field going personnel. The inventory process is on-going to detect invasive populations when they are small.

Once a population is found, the Bureau coordinates with various agencies and the land user to implement some kind of treatment to remove or control the population.

Both Field Offices conduct noxious weed control via a Memorandum of Understanding between various Federal, State, County, and City agencies and private entities. These populations should be aggressively controlled to eliminate them or keep them small. Priority ranking for treatment of known populations is based upon the Class ranking of the species on the State List, the likelihood of the population to expand, the availability of funding and manpower, and time of year. High priority populations would be treated first, with Class A weeds having the highest priority for treatment, followed by Class B, then Class C. Control methods can be chemical, mechanical, fire, biological, or some combination.

### Livestock Grazing

Management priorities among allotments within the Planning Area would be based on similar resource characteristics, management needs, and both resource and economic potential for improvement. Livestock grazing decisions made in the 1988 Carlsbad RMP and the 1997 Roswell RMP would be carried forward.

Management prescriptions would be applied as needed across the Planning Area with the intent of achieving landscape goals and objectives. Actions would be accomplished via consultation, cooperation and coordination with Federal, State, and local agencies, grazing permittees/lessees and interested publics. Special status species populations and their needs, whether known or found during monitoring, would be addressed using adaptive management to allow livestock grazing while enhancing habitat for these species.

The Planning Area encompasses approximately 1.85 million acres, including about 850,000 acres of public land and all or parts of 114 grazing allotments that would be available for livestock use. Currently, a total of 192,125 animal unit months (AUMs) are authorized either by Grazing Permit or Grazing Lease. Changes in these numbers and any necessary adjustments to stocking rates and other management practices would be made based on monitoring data, assessments of Standards for Public Land Health, and through consultation, cooperation, and coordination with the grazing permittee or lessee. Adjustments may include changing the kind and class of livestock, season of use in specific pastures, number of livestock, or grazing patterns.

Rangeland improvements are to be planned and implemented in accordance with priorities established through benefit/cost analysis and must meet design specifications and standard operating procedures. Higher priority for rangeland improvements will be given to "allotments that do not meet the Standards for Public Land Health and Guidelines for Livestock Grazing". Contributions for improvements in the form of labor, material, equipment, or money are to be encouraged and are a factor in determining priority ranking for allocating funds. Vegetation treatments are to be conducted to control undesirable vegetation or increase desirable vegetation consistent with multiple-use objectives. Areas potentially suitable for treatment have been identified in the Planning Area and would be refined during site-specific analysis. Chemical treatments, prescribed burns, and mechanical removal of undesirable vegetation have been conducted in various areas within the Planning Area over the last 20 years.

### Wildlife – Special Status Species

Wildlife habitat management prescriptions delineated in existing RMPs would continue

in the Planning Area. These prescriptions include:

- Recovery plans for species Federally-listed as threatened or endangered would be implemented under the authority of the ESA, including the reintroduction or relocation of native special status species in suitable areas on public land in coordination and cooperation with local governments.
- The construction of fence enclosures or barriers would be considered in habitat of special status species (includes Federal threatened or endangered, Federal candidate, or State-listed wildlife and plant species) to protect all or portions of a specific habitat, specific populations, or to provide for scientific research on a species and its habitat. Fenced enclosures would also be considered to protect special habitat features such as wildlife waters, springs, or to provide for scientific research on a species and its habitat. The intent of using fences in this manner is to protect small areas (less than 10 acres), as opposed to fencing-out large areas of public land. It is expected that enclosures or barriers, if used, would be small in size and associated with specific sites. If it is determined to be necessary, mitigation measures such as anti-perching structures and fence markers would be used.
- Existing habitat management plans (HMPs) would be revised, as needed, to incorporate changes resulting from decisions made in this RMPA. Modifications in existing HMPs would include public participation and review through the NEPA process. Actions in existing HMPs would continue to be implemented.
- Surface disturbance would not be allowed on public land within known prairie dog towns or towns identified in the future. Exceptions to this

requirement would be considered for maintaining existing structures or facilities. Prairie dog control would not be authorized on public land, except in emergency situations involving public health.

- Surface disturbance would not be allowed within up to 200 meters of active raptor nests on special, natural habitat features, such as trees, large brush, cliff faces and escarpments. Surface disturbance would not be allowed within up to 200 meters of playas and alkali lakes.
- The shinnery oak dune plant grassland and mixed desert shrub community types in the Planning Area would be maintained for special status species and sensitive species requiring this habitat type. These include the black-tailed prairie dog, swift fox, mountain plover, burrowing owl, Bell's vireo, gray vireo, ferruginous hawk, loggerhead shrike, and Texas horned lizard.
- The Master Memorandum of Understanding between the BLM and the Animal and Plant Health Inspection Service, Animal Damage Control (now Wildlife Services, WS) would guide predator damage management (PDM) activities on public land in the Planning Area. BLM would coordinate with WS to provide for the welfare and perpetuation of wildlife and to be responsive to the needs of individuals or groups who use public land. Constraints on PDM can be found in the 1997 Roswell RMP.
- The following special status species are not present in the Planning Area:  
**Endangered Species:** black-footed ferret, Northern aplomado falcon, interior least tern, Kuenzler's hedgehog cactus, Pecos gambusia, Sneed pincushion cactus, Koster's springsnail, Pecos assiminea snail, Roswell pyrg, Noel's amphipod; **Threatened Species:** bald eagle, Mexican spotted owl, Pecos

bluntnose shiner, Pecos sunflower, gypsum wild-buckwheat, Lee pincushion cactus; and **Candidate Species:** Texas hornshell.

- BLM would participate in and support the efforts of the Implementation Team for the Conservation Strategy.

The management prescriptions discussed in the alternatives later in this chapter would apply only inside the boundary of the Planning Area. If new lesser prairie-chicken leks outside the Planning Area are discovered in the future, the area around the lek would be considered occupied habitat and the prescriptions of the 1997 Roswell RMP/Carlsbad RMPA (Appendix 1 of both plans) would apply to proposed actions in and around that habitat. Similarly, if new sand dune lizard occupied habitat outside the Planning Area is discovered in the future, the prescriptions of the 1997 Roswell RMPA/Carlsbad RMPA (Appendix 1 of both plans) would apply in and around that habitat.

### Fire Management

Within the Planning Area, the Carlsbad Field Office and the Roswell Field Office have two different fire management unit (FMU) categories. In Eddy and Lea Counties, the FMU category is "C," areas where wildfire is desired, but there are significant constraints that must be considered in the use of fire. In Chaves and Roosevelt Counties, the FMU designation is "D," areas where wildfire is desired and there are few or no constraints for its use.

The difference between the Field Office designations can be found in the differences in the extent and intensity in oil field development. In Eddy and Lea Counties, managed by the Carlsbad Field Office, there is extensive and intensive oil field development. Those same levels of development are less in Chaves and Roosevelt Counties, managed by the Roswell Field Office.

The fire suppression considerations for the FMU categories are different. Category C guidelines state ecological and resource constraints along with health and safety are to be considered in determining the appropriate suppression response on a case-by-case basis by the incident commander or line officer. By contrast, Category D guidelines state these areas offer the greatest opportunity to take advantage of the full range of options available for managing wildland fire under the appropriate management response. Health and safety constraints also apply.

Wildfire suppression would in all likelihood be applied equally regardless of the administrative boundary. Soils and topography would drive any decisions regarding suppression strategy in the Planning Area. Because of the sandy soils and dune topography, fire suppression strategies would be based on existing roads serving as control lines. Directing personnel and equipment to fight a fire using direct attack methods in these conditions raises the very real risk of loss of equipment, injury and loss of life due to the difficulty of traveling cross-country in loose sand.

Current fire management strategies, in both the Carlsbad and Roswell Field Offices, would continue unchanged in the Planning Area. See the 2004 Resource Management Plan Amendment for Fire and Fuels Management on Public Land in New Mexico and Texas.

### Hazardous Materials

Current hazardous materials management strategies, in both the Carlsbad and Roswell Field Offices, would continue unchanged in the Planning Area. See the 1997 Carlsbad RMPA and the 1997 Roswell RMP.

### Cultural Resources

Cultural inventory surveys would be required to identify cultural resources prior to surface disturbance through all alternatives. Eligible prehistoric and historic sites would continue to be either avoided or archeologically treated prior to surface disturbance. Unevaluated sites would either be avoided or tested to determine eligibility and if eligible, would be archeologically treated prior to surface disturbance. Cultural resources would be managed for information or interpretation or conservation with the majority of sites falling into the information category.

### Paleontology

Protection of paleontological resources would follow through all alternatives. The required cultural inventory surveys would also identify exposed paleontological resources prior to surface disturbance through all alternatives. The geologic units or settings that have potential to produce fossils in planning area are the Quaternary outcrops shown on the Geologic Map of New Mexico 2003. Where fossil locations are known or where significant or important fossils are discovered, a qualified paleontologist would perform a literature and records search, conduct a field survey and report the findings prior to the BLM authorizing surface disturbance.

### Recreation

#### **Off-Highway Vehicles**

To clarify the intent of the 1997 Roswell RMP and to bring the 1988 Carlsbad RMP up to date, within the Planning Area, motorized wheeled cross-country travel would be allowed for any military, fire, search and rescue, or law enforcement vehicle used for emergency purposes.

Disabled access would be allowed per the Rehabilitation Act of 1973. Under the Act, an individual with a disability will not, solely by reason of his or her disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity conducted by BLM. Disabled access per the Rehabilitation Act is considered at the local level on a case-by-case basis. Motorized wheelchairs, as defined in the Rehabilitation Act are not considered OHVs and therefore, would not be restricted by any of the alternatives.

The State of New Mexico Department of Game and Fish is the licensing authority for all persons including persons with disabilities who engage in hunting. Disabled hunters may have with them a person who is not disabled to assist them with the retrieval of harvested game animals.

There would be no exceptions that allow for cross-country travel for game retrieval on BLM managed land that have a limited or closed designation. This policy is consistent with all the National Forests in the State of New Mexico. Public land users who engage in hunting activity on public land managed by the BLM should consider this cross-country restriction prior to engaging in hunting activities on public land.

For OHV use, an existing road would be defined as an established road, built or maintained by equipment, which shows no evidence of ever having been closed to vehicular traffic by such means as berms, ripping, scarification, reseeding, fencing, gates, barricades or posted closures. A two-track road would be defined as void of vegetation in the tracks which shows use for other purposes, such as recreation, mining, logging, and ranching, and shows no evidence of ever having been closed to vehicular traffic by such means as berms, reseeding, gating, fencing or signing.

Livestock and wildlife trails do not meet these definitions and would not be authorized for use by motorized vehicles.

Motorized wheeled cross-country travel for lessees and permittees would be limited to the administration of a BLM lease or permit. Persons or corporations having such a permit or lease would be able to perform administrative functions on public land within the scope of the permit or lease. Lessees and permittees would not be allowed to drive cross-country for the purposes of hunting, fishing, recreation or other purposes not directly related to the administration of their Federal permit or lease.

The constraints mentioned above, however, would not preclude modifying permits or leases to limit motorized wheeled cross-country travel during further site-specific analysis to meet resource management objectives or standards and guidelines.

Some examples of administrative functions include, but are not limited to:

- Gas or electric utilities monitoring a utility corridor for safety conditions or normal maintenance,
- Accessing a remote communications site for normal maintenance or repair,
- Livestock permittees checking vegetative conditions, building or maintaining fences, delivering salt and supplements, moving livestock, checking wells or pipelines as part of the implementation of a grazing permit or lease,
- Scientific groups under contract or permit for resource assessments or research,
- Surveying that result in locating well sites, pads and access roads on Federal mineral leases,

- A no surface occupancy (NSO) requirement would be applied to all new oil and gas leases within the Mescalero Sands North Dune OHV Area.

### Visual Resources

VRM classes remain unchanged throughout the Planning Area. Low profile tanks and structures would apply in Classes I and II. Under some visual conditions, low profile tanks and structures would be applied Class III. Painting stipulations from the Standard Environmental Color Chart and the Supplemental Environmental Color chart would apply.

### Special Management Areas

The current designations for, SMAs would remain unchanged. The SMAs within the Planning Area are the Mathers RNA, Bear Grass Draw, the Laguna Plata Archeological District, the Maroon Cliffs Archeological District, and the Poco Site. (See Map A-1.) All current management prescriptions for these SMAs would be carried forward.

### Environmental Justice

All residents, including low-income populations and Indian tribes, would receive equal notification of proposed actions authorized by BLM and ample opportunity to participate in BLM's planning process.

## **BEST MANAGEMENT PRACTICES**

Best management practices (BMPs) would be used across all alternatives. BMPs are tools to be used in the effort to return areas that have had surface disturbance (such as drill pads and roads) to natural conditions. As BMPs are employed in this effort, they may continuously change over time due to the finding of more efficient or effective techniques and methods in surface

reclamation/restoration practices. For a description of these BMPs, see Appendix 5.

## **GENERAL DESCRIPTION OF EACH ALTERNATIVE**

The following are short descriptions of the alternatives.

### No Action Alternative

The No Action Alternative is current management as prescribed in the current land use plans (1988 Carlsbad RMP, as amended, and the 1997 Roswell RMP, as amended). This alternative serves as the baseline to which other alternatives are compared.

### Alternative A

Alternative A is the portion of the Conservation Strategy that applies to public land and Federal minerals in the Planning Area. (See Appendix 2 and Map A-1.) This alternative establishes the concepts of Primary Population Area (PPA), Sparse & Scattered Population Area (SSPA), and Isolated Population Area (IPA) for the lesser prairie-chicken. This alternative has a Core Management Area (CMA) similar to Lesser Prairie-chicken Core Habitat Area established by the 1997 Roswell RMP.

The CMA in its entirety and occupied lesser prairie-chicken habitat in the PPA, SSPA and IPA would be closed to new leasing of Federal minerals until such time that the Special Status Species are no longer considered for listing as a threatened or endangered species by annual calculation. Under this alternative, about 18 percent of the total Federal mineral acreage in the Planning Area is closed to new leasing (see Table 2-1). If new leasing is considered, conditions would be attached that would preclude listing the special status species as threatened or endangered. Where deemed appropriate, exceptions to no new leasing may be allowed if habitat studies

show drilling and exploration would not impact habitats and to avoid potential drainage situations.

Featured also are 17 Habitat Evaluation Areas within the IPA. The Habitat Evaluation Areas would be closed to new oil and gas leasing until these areas can be evaluated. The target date for completing the evaluation is 2010. Depending on the results, unleased tracts would be either leased or remain closed to new leasing.

### Alternative B (Preferred Alternative)

Alternative B adopts the concepts of Conservation Strategy in Alternative A and adds measures designed to provide greater protection of lesser prairie-chicken and sand dune lizard habitat. (See Map B-1). In this alternative, the Core Management Area (CMA) is larger than that of Alternative A since it incorporates occupied habitat of special status species as well as the Mescalero Sands ACEC. This alternative also retains the concepts of PPA, SSPA, and IPA for the lesser prairie-chicken as well as the 17 Habitat Evaluation Areas.

The CMA in its entirety and occupied lesser prairie-chicken habitat in the PPA, SSPA and IPA would be closed to new leasing of Federal minerals until such time that the special status species are not considered for listing as a threatened or endangered species. Under this alternative, about 19 percent of the total Federal mineral acreage in the Planning Area is closed to new leasing (see Table 2-1). In the future, if new leasing is considered, conditions would be attached that would preclude listing the special status species as threatened or endangered. Where deemed appropriate, exceptions to no new leasing may be allowed if habitat studies show drilling and exploration would not impact lesser prairie-chicken and/or sand dune lizard habitats and to avoid potential drainage situations.

The Habitat Evaluation Areas would be closed to new oil and gas leasing until these

areas can be evaluated. The target date for completing the evaluation is 2010, pending Bureau funding. Depending on the results, unleased tracts would be either offered for lease with appropriate stipulations or remain closed to new leasing. See Appendix F for evaluation criteria.

Efforts would be made to protect habitat for both species and minimize the impacts of oil and gas exploration, development and production in the Planning Area. This would include, but is not limited to; reducing the number of new drilling locations, decreasing the size of well pads, reducing the number and length of roads, reducing the number of new power lines and pipelines and implementing BMPs for development and reclamation.

In general, development of oil and gas resources on existing leases would continue. However, not every pro-ration unit (spacing unit) in every existing lease would necessarily be available for drilling or other surface disturbing activities. To protect occupied and suitable habitat, exploration and development of some existing leases would require off-site surface locations and directional drilling. Development of existing leases in the Planning Area that are completely within occupied or suitable habitat may require unorthodox surface locations or multiple wells from existing surface disturbance. In some cases, a lease or pro-ration unit may not be entirely within occupied or suitable habitat. Surveys would be conducted to demonstrate the acceptability of an on-lease surface location. Drilling and other surface disturbing activities would be allowed if the activities would not have a negative impact on adjacent occupied or suitable habitat.

Surface disturbing activities would not be authorized in occupied and suitable dune complexes to protect sand dune lizard habitat. For existing oil and gas leases within sand dune lizard habitat, a survey for occupied and or suitable habitat, by a qualified biologist approved by the BLM,

TABLE 2-1  
MINERAL DESIGNATIONS OF FEDERAL MINERALS BY ALTERNATIVE

Alternative	Acres of Federal Minerals Closed to New Oil & Gas Leasing	Percent of Total Federal Minerals Closed to New Oil & Gas Leasing	Acres of Federal Minerals Open for New Leasing with NSO	Percent of Total Federal Minerals Open for New Leasing with NSO	Acres of Federal Minerals Open for New Leasing with Timing/Noise Stipulations	Percent of Federal Minerals Open for New Leasing with Timing/Noise Stipulations	Acres of Federal Minerals Open to New Leasing
No Action	11,173	1%	7,066	1%	287,357	25%	1,134,150
A	209,106	18%	23,639	2%	95,193	8%	936,217
B	221,456	19%	23,639	2%	79,863	7%	923,867
C	221,195	19%	8,000	2%	58,403	5%	924,128
D	120,851	11%	10,000	1%	126,748	11%	1,024,472
E	110,341	47%	6,451	1%	203,185	18%	126,890

Source: Pecos District Office Files, 2006.

would be required prior to authorization of further development. Based on survey results, BLM and the lease holder would work together to produce a plan of development to avoid occupied and suitable sand dune lizard habitats.

Alternative C

The zone concepts of Interim Management (see Appendix 1) and other prescriptions make up Alternative C (See Map C-1). Under this alternative, about 19 percent of the total Federal mineral acreage in the Planning Area is closed to new leasing (see Table 2-1). Zone 1 would be closed new oil and gas leasing. New oil and gas leasing would occur in Zone 2, but all new leases would have the NSO requirement. New oil and gas leasing in Zone 3 would require a plan of development prior to authorizing lease development and in key areas, an NSO stipulation would be applied. In Zone 4, all current management requirements authorized by existing land use plans would be applied. Regardless of the zone, no new oil and gas leasing would occur inside the Lizard Habitat Boundary shown on Map C-1.

Existing oil and gas leases in Zones 1, 2 and 3 would require an approved plan of development (POD) prior to approving the next application for permit to drill (APD)

Alternative D

Alternative D focuses on current occupied habitat for both species (See Map D-1). New oil and gas leasing or development restrictions and vegetative treatments would be applied only to occupied habitat. Under this alternative, about 11 percent of the total Federal mineral acreage in the Planning Area is closed to new leasing (see Table 2-1).

Alternative E

Alternative E would apply the suggestions for special management from the Lesser Prairie-chicken ACEC nomination (see Appendix 3 and Maps E-1, E-2 and E-3) received by BLM in December 2002. The special management measures would apply a 5-year moratorium on all livestock grazing and new oil and gas activities within the proposed ACEC south of U.S. Highway 380

as well as the two small portions of the proposed ACEC straddling U.S. Highway 70 (see Map E-1). Implementing the 5-year moratorium would require legislation.

Additionally, no drilling would be allowed within .09 miles of an active lek, within the proposed ACEC; and no new ROWs would be granted within 0.9 miles of an active lek within the proposed ACEC. Under this alternative, about 47 percent of the Federal mineral acreage in the proposed ACEC would be closed to new leasing (see Table 2-1).

The portion of the proposed ACEC laying between US Highways 70 and 380 would be designated as an Adaptive Management Area (see Map E-1). Experimental livestock grazing treatments in this area would include no grazing on at least one square mile within 1.5 miles of lek sites and light intensity grazing (after June 30) on at least one square mile within 1.5 miles of lek sites with a minimum of five lek sites used for each grazing treatment.

## MANAGEMENT OBJECTIVES

This section describes the management objectives for each resource or program within the Planning Area.

### Lands and Realty

The objective of Lands and Realty management is to protect habitat for the lesser prairie-chicken and sand dune lizard in the Planning Area and to permit land use applications not in conflict with protection of those habitats.

### Fluid Minerals

The Fluid Minerals resource objective for this RMPA is to make Federal mineral resources available for leasing, exploration, and development in a manner that provides protection for the lesser prairie-chicken and sand dune lizard habitats.

BLM planning guidance for oil and gas leasing directs the agency to make land use plan decisions (such as this RMPA) at the following four levels:

- Lands open for leasing subject to existing laws, regulations, formal orders, and the conditions of the standard lease form;
- Lands open to leasing subject to moderate constraints such as seasonal and controlled surface use restrictions;
- Lands open to leasing subject to major constraints such as a No Surface Occupancy stipulations; and
- Lands closed to leasing. Lands closed to leasing are areas where it has been determined that other land uses or resource values cannot be adequately protected with even the most restrictive lease stipulations and appropriate protection can be ensured only by closing the lands to leasing.

Plan-level decisions, such as this RMPA, to open lands to leasing represents BLM's determination, based on the information available at the time, that it is appropriate to allow development consistent with the terms of the lease, laws, regulations, and orders, and subject to reasonable conditions of approval. When applying leasing restrictions, BLM guidance states the least restrictive constraint meeting the resource protection objective should be used.

### Alternative Energy

BLM is directed to provide sites for alternative energy generating locations while considering the impacts to surrounding public land, resources and adjacent uses. This consideration includes protection of habitat for special status species.

### Soils

The management objective is to prevent or avoid impairment of soil productivity due to

accelerated soil erosion and physical or chemical degradation resulting from surface use activities.

### Water Resources

The management objective is to prevent or avoid impairment of water quality, both surface and subsurface, resulting from surface use activities.

### Floodplains

The management objective is to prevent or avoid impairment of floodplain values resulting from surface use activities.

### Air Quality

The management objective is to prevent or avoid impairment of air quality due to surface use activities.

### Vegetation

The objective of vegetation management within the Planning Area is to meet the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing (New Mexico Standards for Public Land Health). This can be achieved by maintaining or improving vegetation that would move towards the desired plant community, with an emphasis on special status habitat protection/restoration, watershed protection, wildlife habitat, and a sustainable livestock industry. In the New Mexico Standards, habitat for special status species is evaluated within the Biotic Standard.

### Non-Native and Invasive Species

The objective is to halt the spread of non-native and invasive plant species, monitor for the spread of these plants, and control or eliminate populations on public land.

### Livestock Management

The intent of the livestock grazing management program is to create a sustainable forage base for the livestock industry, while meeting the New Mexico Standards for Public Land Health, protecting watershed health, and maintaining or improving habitat requirements for special status species.

### Wildlife

The objective is to manage habitats on public land for the conservation and rehabilitation of wildlife, and plant resources consistent with multiple-use management principles, objectives and mandates.

### Recreation

The objectives are to allow recreation within the Planning Area that would minimize impacts to special status species habitat and still provide for unique and quality recreation experiences for public land users.

### Off-Highway Vehicle Management

The objective is to protect the habitats of special status species while providing adequate access for OHV use on public land suitable for OHV activity.

### Visual Resources

Visual resource standards throughout the Planning Area would be maintained to ensure continuity of color, line, form, and contour of the surrounding landscape.

### Special Management Areas

The objective is to manage ACECs and SMAs consistent with the management

prescriptions established in previous land use plans while providing protection, maintenance and enhancement of habitat for special status species.

## PROGRAM MANAGEMENT PRESCRIPTIONS OF EACH ALTERNATIVE

This section details the management prescriptions and mitigations of each alternative.

### No Action Alternative

#### **Lands and Realty**

BLM has identified public land suitable for disposal in Appendix 7 of the 1997 Roswell RMP. Criteria for acquisitions, found in Appendix 5 of the 1997 Roswell RMP, would be applied to potential acquisitions. Prairie-chicken Core Habitat Areas would be avoided when locating major ROWs (see Map A-1).

#### **Minerals**

##### Fluid Minerals

Timing and noise stipulations or condition of approvals for geophysical exploration operations, drilling for oil and gas, and other development would be enforced in lesser prairie-chicken habitat during the period of March 15 through June 15, each year from the hours of 3:00 am to 9:00 am.

Additionally, no new drilling would be allowed within up to 200 meters of leks known at the time of permitting. Refer to Appendix 1 of the 1997 Roswell RMP and the 1997 Carlsbad RMPA for more discussion of these requirements.

In addition to any special stipulations, the development of new and existing leases would be further guided by the application of

the Pecos District Standard Conditions of Approval (Appendix 2 of both the 1997 Carlsbad RMP Amendment and the 1997 Roswell RMP).

Cultural sites determined to be eligible or potentially eligible to the National Register of Historic Places would be protected from damage by avoidance.

Potentially eligible sites would be tested to determine their eligibility. Mitigation, such as data recovery, would be required for eligible sites if avoidance could not be accomplished.

As a standard practice, ephemeral and perennial drainages and wetland/riparian areas would be avoided by oil and gas related facilities, including drilling locations, production facilities, roads, and pipelines. Whenever possible, facilities would be confined to existing alignments or locations, minimizing width requirements and maximizing multiple occupancy.

Lease notices would be used to alert lessees to potential special requirements on exploration, drilling or production. Examples include lease notices covering protection of potential cave or karst areas, protection of threatened or endangered or sensitive plant or animal species.

##### Solid Minerals

All lands would be open to mineral material disposals (sand and gravel), except those identified as not open to exploration and development designated as closed in the 1988 Carlsbad RMP and the 1997 Roswell RMP. Pertinent sections of the Pecos District Conditions of Approval (Appendix 2 of both the 1997 Carlsbad RMPA and 1997 Roswell RMP) would be applied to mineral material disposals.

<b>TABLE 2-2 ACRES OF LEASED AND UNLEASED FEDERAL MINERALS IN PLANNING AREA</b>			
<b>COUNTY</b>	<b>LEASED FEDERAL MINERALS</b>	<b>UNLEASED FEDERAL MINERALS*</b>	<b>PERCENT LEASED BY COUNTY</b>
Chaves	136,907	205,177	40%
Eddy	222,096	29,032	88%
Lea	407,834	44,643	96%
Roosevelt	58,509	41,125	59%
<b>FIELD OFFICE</b>	<b>LEASED FEDERAL MINERALS</b>	<b>UNLEASED FEDERAL MINERALS</b>	<b>PERCENT LEASED BY OFFICE</b>
Carlsbad	629,930	73,675	90%
Roswell	195,416	246,302	44%
<b>Pecos District</b>	<b>825,346</b>	<b>319,977</b>	<b>72%</b>
<b>TOTAL FEDERAL MINERALS</b>		<b>1,145,323</b>	
Source: Pecos District Office Files, 2006. Note: *Figures include 11,173 acres of Federal minerals closed to new leasing under current RMPs.			

Past history indicates public land in the Planning Area has never been mined for locatable minerals. While there have been claims staked in close proximity to the area to date, they have always proven to be purely speculative in nature. Numerous field examinations, geology, and mineral assays have indicated that there are likely no locatable minerals of commercial value in this area.

All public land would be open for the leasing of solid minerals, except for the land otherwise identified in the 1988 Carlsbad RMP and the 1997 Roswell RMP.

### **Alternative Energy**

Neither the Carlsbad RMP nor the Roswell RMP address solar or wind energy. Management direction and planning guidance for solar energy are found in Instruction Memorandum (IM) No. 2005-006, Solar Energy Development Policy, and the Wind Energy Development

### **Programmatic Environmental Impact Statement.**

The IM outlines current BLM policy, which is to facilitate environmentally responsible commercial development of solar energy projects. Commercial concentrated solar power or photo-voltaic generating facilities must, however, comply with BLM planning, environmental and current ROW application requirements, as do other similar commercial uses.

The 2005 National Wind Energy Development Programmatic EIS ([www.windeis.anl.gov](http://www.windeis.anl.gov)) evaluated the potential impacts associated with the proposed action to develop a Wind Energy Development Program, including the adoption of policies and BMPs. This Programmatic EIS amends BLM land use plans (including the 1988 Carlsbad RMP and the 1997 Roswell RMP) to address wind energy development.

As a programmatic evaluation, this EIS does not evaluate site-specific issues associated with individual wind energy development projects. A variety of location-specific factors and variations in project size and design would determine the magnitude of the impacts from individual projects. Therefore, based on current land use plans and program guidance, any proposal to locate either solar or wind energy generating facilities on public land would be evaluated on a case-by-case basis using the assessment criteria in current land use plans. A discussion of alternative energy potential can be found in Chapter 3.

### **Vegetation**

Current management would continue as identified in each Field Office RMP. In the Roswell Field Office, these strategies would focus on moving towards the desired plant communities described in the 1997 Roswell RMP. In the Carlsbad Field Office,

management would focus on meeting the Natural Resources Conservation Service (NRCS) ecological site descriptions. Brush control would follow standard BLM stipulations and be implemented to achieve Standards for Rangeland Health. In the Roswell Field Office, no new treatments would be completed adjacent to an existing treatment until 5 years have passed.

### **Livestock**

Current management would continue as identified in each Field Office RMP.

### **Wildlife including Special Status Species**

Current management practices, prescriptions and stipulations implemented to protect wildlife habitat would continue as identified in current RMPs, including those regarding lesser prairie-chicken and oil and gas development.

Surface disturbance would not be allowed in documented occupied sand dune lizard habitat areas, or within up to 100 meters of suitable habitat associated with occupied habitat areas identified through field review. An exception to this restriction would be considered when an on-site evaluation of habitat extent, available species occurrence data, the proposed surface use, and proposed mitigations indicate the proposal would not adversely affect the local population.

All other wildlife management prescriptions would be the same as those found in Management Common to All Alternatives.

### **Recreation**

Management prescriptions would continue throughout the Planning Area with no change. These prescriptions include:

- The recreation opportunity spectrum (ROS) defines the Planning Area as rural and natural (see Glossary). Recreation opportunity would be

managed so that opportunities categorized by the ROS would be maintained. No management actions are proposed that would improve or degrade recreation opportunity to the extent that a change in any ROS category would result. Existing ROS classes are discussed in the Glossary.

- In the Planning Area, the objective of the interpretive program would be to assist visitors in developing awareness, appreciation and understanding of the areas they visit. The second objective would be to encourage thoughtful use of the natural resources available in the area to reduce impacts on natural resources. The final objective would be to promote a public understanding of BLM goals and objectives. The main emphasis for interpretation would be placed on the Mescalero Sands North Dune OHV Area, and the Hackberry Lake Intensive ORV Area. Tools used to accomplish these objectives may include: interpretive trails, exhibits, literature, waysides, environmental education, special populations programs, visitor and information stations, auto tours, campfire talks and guided walks.
- The SRMAs within the Planning Area are the Mescalero Sands North Dune OHV Area, the Mescalero Sands ACEC, and the Hackberry Lake Intensive ORV Area. See Map NAA-1 for locations of these areas. Areas outside SRMAs would be managed as extensive recreation management areas where only custodial management action would be taken to maintain a rural and natural condition.

### Off-Highway Vehicle

Current management would continue as identified in each Field Office RMPs which includes the following:

- In the Roswell portion of the Planning Area inventories, public review, and transportation planning would be conducted to support road by road designations for roads and trails suitable for OHV use. All roads and trails not otherwise categorized would be limited to existing roads and trails for OHV use. Pending completion of formal designations, all roads and trails would be managed as limited to existing roads and trails for OHV use.
- The Mescalero Sands North Dune OHV Area would remain designated as open to OHV use and would be enlarged to approximately 1,674 acres per the decision in the 1997 Roswell RMP. Within this expansion area, an area of about 400 acres south of U.S. Highway 380 between the highway and the OHV area would be used as an entrance corridor to the area. Upgrades and development could include interpretive and safety displays with emphasis on the National Tread Lightly Program, sun shelters, rest rooms, campground host site, potable water, and boundary signing. Livestock would be fenced-out from about 20 acres around existing and planned developments.
- In the Carlsbad portion of the Planning Area, public land is designated as open to OHV use. Off-road vehicle designations in the Carlsbad Field Office are shown on Map 2-6 of the 1988 Carlsbad RMP.
- The Hackberry Lake Intensive OHV Area would remain designated as open to OHV use.

### **Special Management Areas**

The current designations for ACECs would remain unchanged. The only ACEC in the Planning Area is the Mescalero Sands ACEC. (See Map A-1.) All current management prescriptions for the ACEC would be carried forward.

### **Alternative A**

This alternative is based on the Conservation Strategy. This alternative takes the concepts from the Conservation Strategy and applies them to public land and Federal minerals. It does not include conservation strategies applicable to State trust or private lands. The entire Conservation Strategy is included in Appendix 2.

### **Lands and Realty**

This alternative is the same as the No Action Alternative with the following differences:

- There would be a priority on exchanges (surface and minerals) with the State Land Office within the CMA. BLM has previously identified public land suitable for disposal in Appendix 7 of the 1997 Roswell RMP and on Map 2-1 of the 1988 Carlsbad RMP. Approximately 22,000 acres of State Trust land within the CMA would be considered for acquisition. Criteria for acquisitions, found in Appendix 5 of the 1997 Roswell RMP, would be applied to potential acquisitions.
- Pursuant to Strategy 3.2 of the Conservation Strategy, should an opportunity arise the BLM would consider acquisition of private land in the Planning Area for special status species habitat from willing sellers. The purpose of such possible acquisitions would be to establish habitat reserves. Criteria for acquisitions, found in Appendix 5 of the 1997 Roswell RMP, would be applied to potential acquisitions regardless of their location in the Planning Area. In addition to the management prescriptions in Appendix 2, lands acquired for special status species habitat would be added to the right-of-way exclusion area for major projects. Acquisition, in the public interest, would

be acquired via exchange, purchase (of land and easements), and donation.

- To support acquisitions described in the previous paragraph, land in the Pecos District previously identified as suitable for disposal would be made available for sale under the Federal Land Transaction Facilitation Act of 2000 (sometimes known as the Baca Bill). The only exception to this land is the public land in Roosevelt County identified in Appendix 7 of the 1997 Roswell RMP. This land, totaling approximately 3,151 acres, would be retained for lesser prairie-chicken habitat.
- The CMA would be designated as a ROW avoidance area. The Mescalero Sands ACEC and the Mathers RNA would continue to be ROW exclusion areas. The Laguna Plata Archeological District, the Maroon Cliffs Archeological District, and the Mescalero Sands North Dune OHV Area would continue to be ROW avoidance areas.
- ROWs for projects and facilities such as fences, range and wildlife water pipelines, power distribution lines, access to oil and gas facilities, or oil and gas collection or distribution pipelines would be considered in avoidance zones on a case-by-case basis.

## Minerals

### Fluid Minerals

The Conservation Strategy divides the Planning Area into four categories: the Core Management Area (CMA), the Primary Population Area (PPA), the Sparse and Scattered Population Area (SSPA), and the Isolated Population Area (IPA). Included in the IPA are 17 Habitat Evaluation Areas. See Map A-1 for locations of these areas.

The Conservation Strategy states that new oil and gas leasing would be deferred in some situations. BLM planning regulations

reserve the use of the term “deferred” for those situations in which a resource or management decision is delayed until some future action (also governed by a decision) is completed. Where the Conservation Strategy uses the term “deferred” BLM has used the term “closed” to new oil and gas leasing.

Timing and noise stipulations would be the same as the No Action Alternative for the CMA. In the PPA, SSPA and IPA the timing and noise stipulation would be maintained only as needed. These stipulations are intended to prevent disruption of lesser prairie-chicken leking and nesting by activities associated with energy exploration and development. Stipulations should be imposed only in areas where lesser prairie-chicken are present, as indicated by sightings or survey reports within a period of 2 years. Exceptions may be granted on a case-by-case basis. In areas where adequate surveys over 2 years have not detected lesser prairie-chicken, stipulations should be waived. They should be re-applied if lesser prairie-chicken re-appear. Note that some areas that may be important to lesser prairie-chicken recovery may already be receiving management protection under guidelines adopted for the sand dune lizard.

### **Core Management Area – New Oil and Gas Leasing**

As shown by Table 2-3, the CMA comprises about 14 percent of the total Federal mineral acreage in the Planning Area. About 74 percent of the Federal mineral acreage in the CMA is unleased. The CMA would be closed to new leasing for the life of this plan amendment. Under this alternative, the unleased (closed) area of the CMA equals about 10 percent of the total Federal mineral acreage in the Planning Area. Certain exceptions would be granted on a limited, case-by-case basis. This would include the presence of existing infrastructure, or as needed for pooling or drainage protection purposes, or for parcels

a minimum of one mile from suitable lesser prairie-chicken habitat. Exceptions would be subject to other applicable regulatory and environmental compliance requirements.

### **Core Management Area – Existing Oil and Gas Leases**

For existing leases, Plans of Development (PODs) and appropriate Conditions of Approval (COAs) would be required to ensure orderly development with a minimum of surface impact in lesser prairie-chicken habitat. PODs may not be required for every existing lease on the Planning Area, but are required when requested by the BLM. Included in PODs and COAs would be specifications for various strategies for minimizing impacts associated with new development and for reclaiming developed areas. The purpose of a POD is to require planning by the operator and BLM to ensure orderly development as a means to reduce or eliminate impacts to special status species habitat. A POD would incorporate applicable BMPs (see Appendix 5) and disclose to the fullest extent possible all future well locations; the location and arrangement of well infrastructure (e. g., tank batteries, compressors, power lines and poles); road locations; and ROWs.

### **Primary Population Area**

The Conservation Strategy adopted, with some modifications, the Robel impact distances in mapping and calculating the extent of habitat available to lesser prairie-chicken. Distances used in the calculation of habitat impacts surrounding different development features are shown in Table 2-4. These distances are used to evaluate impacts of potential projects and were applied to existing infrastructure as part of the definition of suitable and potentially suitable lesser prairie-chicken habitat (see page 50 of Appendix 2, the Conservation Strategy for a discussion of Robel impact radii).

Areas designated as occupied, suitable and potentially suitable habitat are shown on Map 4 of the Conservation Strategy (Appendix 2).

Table 2-5 shows the unleased mineral acreage by habitat type in the PPA of Alternatives A and B.

### **Primary Population Area – New Oil and Gas Leasing**

As shown by Table 2-3, the PPA comprises about 17 percent of the total Federal mineral acreage in the Planning Area. About 47 percent of the Federal mineral acreage in the PPA is unleased. Areas designated as occupied or suitable lesser prairie-chicken habitat (see page 51 of

Appendix 2) would be closed to new leasing. Under this alternative, the unleased (closed) area of the PPA equals about 8 percent of the total Federal mineral acreage in the Planning Area. Certain exceptions would be considered on a limited, case-by-case basis when indicated due to presence of existing infrastructure, or as needed for pooling or drainage protection purposes; and if leasing and subsequent development would not impact habitat. In these cases, a NSO stipulation would be applied to the occupied or suitable portions of the lease.

New oil and gas leasing in occupied and suitable lesser prairie-chicken habitat would be allowed in the future if, (1) by annual recalculation, there is demonstrated a net increase in the sum of suitable and occupied habitat in the PPA and (2) there is a statistically significant increase in lesser prairie-chicken population Statewide over the previous 5 years. If new leases are offered in occupied or suitable habitat as a result of recalculation, conditions would be attached that would preclude listing the special status species as threatened or endangered.

<b>TABLE 2-3 ALTERNATIVE A, ACRES OF LEASED AND UNLEASED FEDERAL MINERALS</b>							
<b>Management Area</b>	<b>Acres of Leased Federal Minerals</b>	<b>Percent Leased Federal Minerals</b>	<b>Acres of Unleased Federal Minerals</b>	<b>Percent Unleased Federal Minerals</b>	<b>Total Federal Mineral Acres</b>	<b>Comparison of Federal Mineral Acreage to Total Federal Mineral Acreage in the Planning Area</b>	<b>Comparison of Unleased Acres to Total Federal Mineral Acreage in the Planning Area</b>
Core Management Area	40,180	26%	115,949	74%	156,129	14%	(closed)10%
Primary Population Area	105,641	53%	93,157	47%	198,798	17%	(closed) 8%
Sparse & Scattered Population Area	81,572	56%	64,130	44%	145,702	13%	6%
Isolated Population Area	597,953	93%	46,741	7%	644,694	56%	4%
<b>Totals</b>	<b>825,346</b>	<b>72%</b>	<b>319,977</b>	<b>28%</b>	<b>1,145,323</b>	<b>100%</b>	<b>28%</b>
<b>SOURCE: Pecos District Office Files, 2006</b>							

Areas designated as potentially suitable lesser prairie-chicken habitat would be available for new oil and gas leasing. If leasing and development in these areas would impact suitable habitat, then areas designated as potentially suitable habitat would be closed to new oil and gas leasing. Areas of potentially suitable habitat where lands can be used to “block up” larger surrounding areas of suitable habitat would also be closed to new leasing. If, in the future, there is demonstrated a net increase in the sum of suitable and occupied habitat in the PPA and there is a statistically significant increase in lesser prairie-chicken population statewide over the previous 5 years, then BLM would consider new oil and gas leasing in areas designated as potentially suitable habitat that had been closed to new leasing as described in this paragraph. If new leases are offered, conditions would be attached that would preclude listing the special status species as threatened or endangered.

<b>TABLE 2-4 ROBEL IMPACT DISTANCES</b>	
<b>DISTURBANCE</b>	<b>IMPACT RADIUS</b>
Oil or gas wellheads	.1 mile
Sand/dirt 2-track roads	0
Caliche roads, oil field access roads	.1 mile
Paved roads	.5 mile
Compressor stations	.75 mile
Houses	.5 mile
Power lines	.25 mile
Center-pivot fields	.25 mile
<b>SOURCE: Pecos District Office Files, 2006</b>	

Federal minerals within the State Game Commission-owned Prairie-chicken Area would be closed to new oil and gas leasing. For pooling purposes or drainage protection, new leasing with a NSO stipulation may be allowed within a Prairie-chicken Area provided exploration and development does not impact suitable habitat. BLM would consider opening the Prairie-chicken Area to oil and gas leasing when the special status species are not

TABLE 2-5 UNLEASED FEDERAL MINERALS IN THE PRIMARY POPULATION AREA, ALTERNATIVES A AND B		
HABITAT CATEGORY	ACRES OF UNLEASED FEDERAL MINERALS	PERCENTAGE OF UNLEASED FEDERAL MINERALS IN THE PPA
Occupied	70,799	76%
Suitable	13,974	15%
Potentially Suitable	2,795	3%
Unsuitable	5,589	6%
<b>TOTAL</b>	<b>93,157</b>	<b>100%</b>
SOURCE: Pecos District Office, 2006		

considered for listing as a threatened or endangered species.

New oil and gas leasing would be allowed in areas designated as unsuitable habitat unless development in unsuitable lesser prairie-chicken habitat or potentially suitable lesser prairie-chicken habitat would extend an impact/avoidance zone into suitable lesser prairie-chicken habitat. BLM would determine if habitat is suitable or unsuitable prior to issuing a new oil and gas lease.

Unsuitable habitat would be open to new oil and gas leasing subject to standard lease terms.

#### **Primary Population Area – Existing Oil and Gas Leases**

For existing leases, PODs would be required when requested by the BLM. Subsequent COAs would also be required. Included in PODs and COAs would be specifications for various strategies for minimizing impacts associated with new development and for reclaiming disturbed areas. A POD would incorporate applicable BMPs and disclose all future well locations; the location and arrangement of well infrastructure (e. g., tank batteries, compressors, power lines and poles); road locations; and ROWs.

#### **Sparse and Scattered Population Area – New Oil and Gas Leasing**

As shown by Table 2-3, the SSPA comprises about 13 percent of the total Federal mineral acreage in the Planning Area. About 44 percent of the Federal mineral acreage in the SSPA is unleased. Occupied lesser prairie-chicken habitat (within 1.5 miles of the lek) would be closed to new leasing. New leasing with a NSO requirement may be allowed, where this is determined to be appropriate, i.e., pooling or drainage protection that does not impact suitable habitat. In the future, new leasing in occupied lesser prairie-chicken habitat would be linked to the status of the species or habitat in New Mexico, as identified in the annual USFWS candidate notice of review or other periodic agency review. If new leasing is considered, conditions would be attached that would preclude listing the special status species as threatened or endangered.

#### **Sparse and Scattered Population Area – Existing Oil and Gas Leases**

For existing leases, PODs would be required when requested by the BLM. Subsequent COAs would also be required as described for the Primary Population Area section above. Timing and noise stipulations would also be the same as described in the Primary Population Area section above.

#### **Isolated Population Area – New Oil and Gas Leasing**

As shown by Table 2-3, the IPA comprises about 56 percent of the total Federal mineral acreage in the Planning Area. About 7 percent of the Federal mineral acreage in the IPA is unleased. Occupied lesser prairie-chicken habitat (e.g. within 1.5 miles from an active lek) would be closed to new leasing. New leasing with a NSO

requirement may be allowed, where this is determined to be appropriate. In the future, new leasing in occupied lesser prairie-chicken habitat would be linked to the status of the species or habitat in New Mexico, as identified in the annual FWS candidate notice of review or other periodic agency review. If new leasing is considered, conditions would be attached that would preclude listing the special status species as threatened or endangered.

**Isolated Population Area – Existing Oil and Gas Leases**

For existing leases, PODs would be required when requested by BLM. Subsequent COAs would also be required as described for the Primary Population Area section above.

**Isolated Population Area – Habitat Evaluation Areas**

Habitat suitability analyses would be conducted in the 17 Habitat Evaluation Areas (see Map A-1) within the IPA. These areas would be prioritized for reclamation potential, and for potential to maintain re-established lesser prairie-chicken

populations. Until the evaluation of an area is complete, leasing in these areas is deferred. Criteria for continuing this closure or making these areas available for lease can be found in Appendix 8. Areas determined to be lacking high conservation value would be managed according to the IPA prescription.

**Sand Dune Lizard**

Throughout the Planning Area, the following measures would be taken to protect sand dune lizard habitat:

- New well pads would not be located in dune areas within occupied or suitable habitat, or within 100 meters of such dune areas. Proposed well site locations in dune areas would be moved to adjacent shinnery oak flats. Where dune complexes containing occupied or suitable habitat are larger than 5 acres and there are compelling reasons which cannot be mitigated, new pads would be located on the periphery of the dune complex.
- Construction of well pads within complexes of suitable habitat would be

Management Area	Acres of Leased Federal Minerals	Percent Leased Federal Minerals	Acres of Unleased Federal Minerals	Percent Unleased Federal Minerals	Total Federal Mineral Acres	Comparison of Federal Mineral Acreage to Total Federal Mineral Acreage in the Planning Area	Comparison of Unleased Federal Mineral Acres to Total Federal Mineral Acreage in the Planning Area
Core Management Area	43,338	25%	128,299	75%	171,637	15%	(closed) 11%
Primary Population Area	105,641	53%	93,157	47%	198,798	17%	(closed) 8%
Sparse & Scattered Population Area	78,414	60%	51,780	40%	130,194	11%	5%
Isolated Population Area	597,953	93%	46,741	7%	644,694	56%	4%
<b>Totals</b>	<b>825,346</b>	<b>72%</b>	<b>319,977</b>	<b>28%</b>	<b>1,145,323</b>	<b>100%</b>	<b>28%</b>

**SOURCE: Pecos District Office Files, 2006**

limited to a total of 13 well pads per square mile. (See page 99 of Appendix 2 for a further discussion of this issue.)

- Opportunities to drill multiple wells from one pad would take precedence over new pad construction in occupied or suitable habitat. If new construction is unavoidable, pad size in occupied or suitable habitat would be kept to a minimum.
- Abandoned well pads and the caliche roads that serve these wells would be cleaned of caliche, raked, contoured, and reclaimed. All out-of-service roads in occupied and suitable sand dune lizard habitat would be reclaimed and closed to vehicle use, pending consultation with grazing permittees. However, in certain instances based upon a site evaluation, abandoned well pads and out-of-service roads may not need to be reseeded in sand dune areas because it may be determined that there is not an adverse effect to the sand dune lizard.
- Conduct research to determine if selective site-specific planning of infrastructure within dune complexes can minimize development impacts such that the 13 well pads per square mile limitation could be increased. (See page 99 of Appendix 2 for a further discussion of this issue.)
- The repetitive use (more than once every 5 years) of thumper trucks for seismic exploration would be avoided unless poor results or new technology dictate new seismic surveys are needed. Thumper trucks would avoid dune complexes when feasible.

### Mineral Materials

In the CMA and the PPA, no new mineral material sites would be authorized in occupied or suitable prairie-chicken habitat. In the SSPA, no mineral material sites

would be authorized in occupied prairie-chicken habitat. In the IPA, no new mineral material sites would be authorized within 1.5 miles of an active lek.

### **Alternative Energy**

With regards to authorizing commercial solar or wind energy sites within the Planning Area, Alternative A would be the same as the No Action Alternative.

### **Vegetation**

A number of different shrub land and grassland vegetation types with a shinnery oak or sand sage component are considered habitat for lesser prairie-chickens. Suitable vegetation exists across the historical range of the species, wherever rangeland has not been highly altered or converted to other uses. Plant community characteristics of suitable or potential lesser prairie-chicken habitat can be described using the system of ecological site descriptions developed by U.S. Department of Agriculture, NRCS. The following NRCS ecological site descriptions vary slightly in plant composition, but share a common set of vegetative characteristics considered necessary for lesser prairie-chicken habitat: Deep Sand CP-2, SD-3 & HP-3, Sandhills CP-2, SD-3, & HP-3, Sandy Plains CP-2 & HP-3, and Loamy Sand SD-3 & HP-3.

The Conservation Strategy standard for plant composition and grass height describes high quality habitat (see Appendix 2) within the sand shinnery and sand sage-grassland ecosystems. Under this alternative, the Strategy's vegetative objective for vegetation cover and composition in quality lesser prairie-chicken habitat would have an average canopy cover of 30 to 50 percent grasses, 25 to 40 percent shrubs, and 3 to 10 percent forbs; with no more than 42 percent bare ground and litter. Areas that fail to meet these conditions should not necessarily be considered unsuitable for lesser prairie-chickens. In some areas populations persist

in habitat of poor or marginal quality, and these areas should be considered of great conservation importance. In these locations, survival and recruitment are likely to be increased if habitat conditions are improved to meet vegetative standards. In areas where populations have disappeared due to deterioration or elimination of high quality habitat, long-term recovery may be needed to meet habitat goals. In such areas, the focus of management should be on maintaining consistent progress towards meeting the vegetative standards.

In some locations, competition from shrub invasion impedes restoration of grasses and forbs needed for lesser prairie-chicken nesting and brood rearing. When this occurs, limited use of chemical treatment could help achieve the vegetative standards for quality habitat described above.

Chemical control would target, but not be limited to, mesquite and shinnery oak. The Roswell Field Office requirement, that no new treatments completed adjacent to an existing treatment until 5 years have passed, would be dropped.

On public land, BLM personnel would identify priority areas for control projects and carry out treatments in coordination with other interested agencies and permittees. Mechanical and chemical treatment would be used in accordance with BLM standards and specifications for brush management, as outlined in the Draft EIS for Vegetation Treatment on BLM Lands in Thirteen Western States, BLM Manual 9011 (Chemical Pest Control), and BLM Manual 9015 (Integrated Weed Management). NRCS ecological site descriptions provide plant communities for sites based on soil type. These site descriptions describe the potential vegetative composition that the treatments are designed to achieve.

Mesquite control may be carried out in concert with other efforts to enhance rangeland management for both grazing management and successful lesser prairie-chicken recruitment. While mesquite is one of the predominant shrubs affecting the

health and habitat quality of rangelands in southeast New Mexico, consideration also should be given to control of cholla, catclaw, or other shrubs where such actions may increase rangeland productivity and alleviate pressure on lesser prairie-chicken nesting and brood-rearing habitat.

In the past, standing dead materials have been allowed to fall naturally. This usually takes 3-5 years. This practice would continue, as there are no current plans to remove standing dead materials, either by mechanical means or prescribed fire. In the future, should it be deemed necessary to remove these materials before they fall naturally, the use of mechanical means or prescribed fire may be considered. Potential impacts of these actions would be addressed in project specific Environmental Assessments.

The following guidelines for chemical treatment of shinnery oak would be followed. Adherence to these guidelines should be emphasized as part of the overall rangeland management strategy for lesser prairie-chicken and sand dune lizard habitat.

- Treatment with herbicides is recommended only when habitat goals cannot be achieved by other means, such as grazing system management.
- Given the condition stated above, treatment of shinnery oak is recommended when necessary to achieve vegetative standards for plant composition and canopy cover—for example, when shinnery oak cover still exceeds guidelines after grazing management has been applied.
- In conducting such treatments, the goal should be to temporarily reduce shinnery oak competition with grasses, allowing grass cover to increase naturally. Herbicides should be used at dosages that would set

back (defoliate) shinnery oak, not kill it.

- Large block and linear application should be avoided. Instead, application should follow natural patterns on the landscape such that only patches needing treatment are treated.
- Herbicide treatment should never be applied in dune areas and corridors between dune complexes.
- Herbicide treatment should not be applied around large oak motts, and within 1.5 miles of active lek sites where lesser prairie-chicken numbers are large or increasing.
- Post-treatment grazing management is essential to success. Grazing would be deferred for at least two growing seasons after treatment. Grazing after that time may be allowed only if progress towards meeting vegetative standards is being made. Longer periods of rest may be required in some cases, especially during drought conditions.
- Tebuthiuron treatments for shinnery oak control within 500 meters of occupied or suitable habitat for sand dune lizard would not be allowed.
- Proposals for shinnery oak treatments with non-tebuthiuron herbicides or defoliant within 500 meters of occupied or suitable habitat would be reviewed by the sand dune lizard research team (biologists from NMDGF, BLM, or other relevant agencies).
- Sand dune lizard dispersal corridors of untreated shinnery oak flats at least 500 meters wide should be retained between suitable habitats, both occupied and unoccupied, that

are separated by less than 2000 meters. See Figure 2-1.

### **Livestock Management**

The prescriptions of this alternative would be applied to public land leased or permitted for livestock grazing by BLM. Grazing is not considered to be incompatible with healthy rangelands, and in fact may be an important tool in managing for lesser prairie-chicken species protection and recovery. A central challenge however is to ensure that, in areas where lesser prairie-chicken leks are present, grazing occurs in a manner that allows suitable nesting and brood-rearing habitat to be maintained. An equal challenge is to achieve these safeguards for lesser prairie-chicken habitat without negatively impacting the economic interests of ranchers and ranching communities.

Grazing would be maintained at a level consistent with the seasonal nesting and brood-rearing habitat requirements of the lesser prairie-chicken, as defined by vegetative objectives stated in the Vegetation section of this chapter. Ranch operators voluntarily participating in a conservation program would agree to meet these standards through the adoption of a suitable grazing program for their land or lease allotment. Such a program may involve an overall reduction in AUMs or acreage grazed, modification of fences and water sources, implementation of a more conservative, deferred or rotational grazing system that rests breeding areas to ensure adequate residual grass cover for nesting, and other related changes in management.

Participating in a conservation program would allow ranch operators to receive fair compensation for costs associated with reductions in AUMs, building range improvements, or changing grazing practices. While the BLM has no such program currently, funding may be provided by various private, State, or Federally-sponsored funding programs, such as the Environmental Quality Incentives Program

(EQIP), the Wildlife Habitat Incentives Program (WHIP), the Grassland Reserve Program (GRP), and various wildlife habitat programs administered by the FWS and the NMDGF. These types of programs may offset some of the costs incurred when participating in a conservation program.

Under this alternative, approximately 1.85 million acres, which includes about 850,000 acres of public land and makes up all or parts of 114 grazing allotments, would continue to be available for livestock use.

Currently, a total of 192,125 AUMs are permitted either by grazing permit or grazing lease. Any adjustments to a permit or lease, whether an increase or a decrease, would be made based on monitoring data, Standards Assessments, and through consultation, as discussed in 43 CFR 4100. Adjustments may include changing the kind and class of livestock, season of use, number of livestock, or grazing patterns. Actual use varies from year-to-year due to adjustments of annual stocking rates and other management practices. These annual adjustments are made at the grazing permittee/lessee's request. The permittee/lessee may reduce livestock numbers due to drought, market conditions, or other reasons; or may ask for a temporary increase if good rainfall and corresponding forage production has occurred.

While the current grazing regulations (43 CFR 4100) provide flexibility and wide latitude to improve and maintain rangeland health, voluntary relinquishment would be one method to meet the goal of establishing habitat reserves for the lesser prairie-chicken within the Planning Area. Under this alternative, the decision to relinquish livestock grazing is totally voluntary on the part of the permittee/lessee. If a grazing permittee/lessee decides to voluntarily relinquish grazing on his/her allotment to resolve conflicts that exist between livestock grazing and protection of lesser prairie-chicken habitat, BLM would close the

allotment to livestock grazing. This allotment closure would continue for the life of the current permit or lease, would be re-evaluated each time the permit/lease is transferred or renewed, and may or may not continue when the plan is revised.

The criterion for BLM to accept a voluntary relinquishment and to close the allotment to grazing is that conflicts exist between livestock grazing and protection of lesser prairie-chicken habitat.

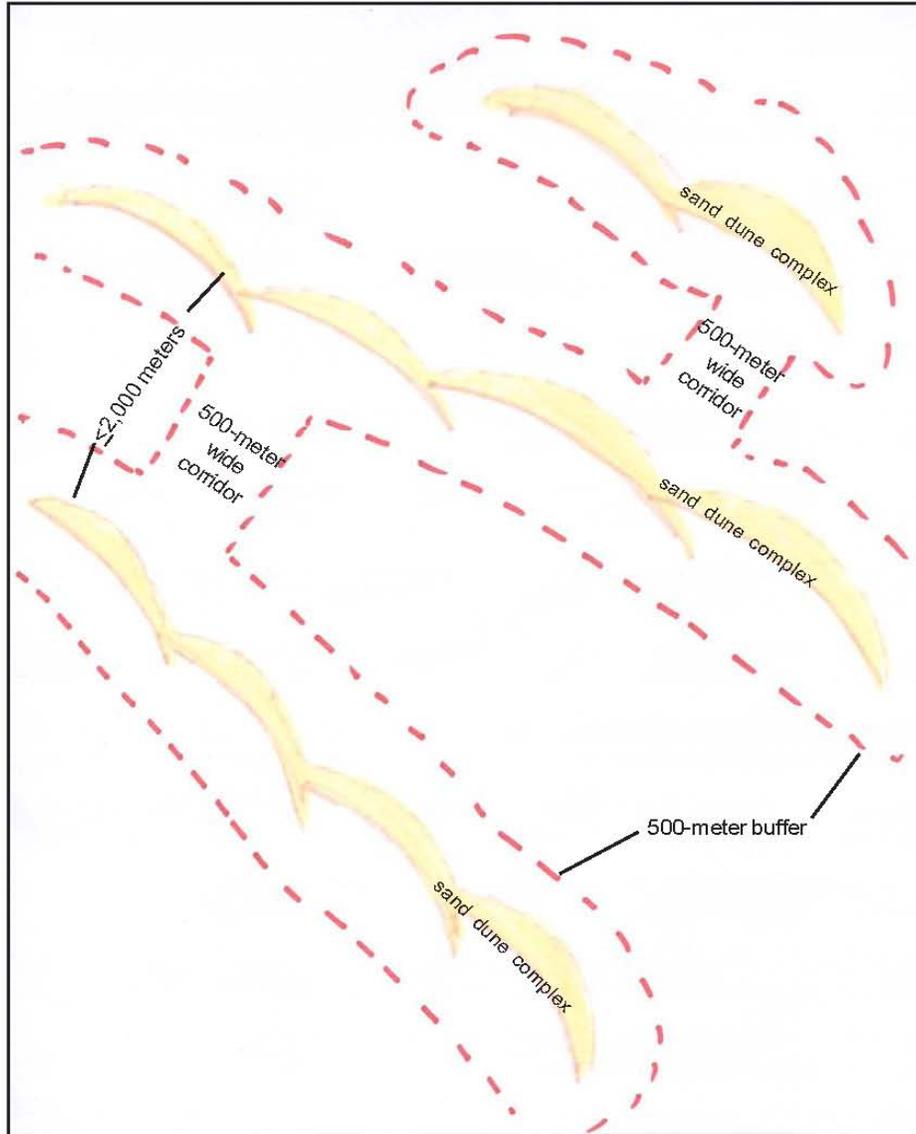
Current management (see Management Common to All Alternatives, Vegetation and Livestock Grazing sections of this chapter) describes how BLM evaluates vegetation and rangeland health. When conflicts arise BLM works in coordination and cooperation with grazing permittee/lessee to reduce these conflicts by modifying uses (grazing plans, grazing patterns, and other uses), installing projects (brush control, fences, water pipelines), or actions as necessary. As stated in the previous paragraph, temporary adjustments can be made based on monitoring data.

Grazing would be deferred for at least two growing seasons after treatment. Grazing after that time would be allowed only if progress towards meeting vegetative standards is being made. Longer periods of growing season deferment would be required in some cases, especially during drought conditions.

### **Wildlife including Special Status Species**

The most direct and effective means of improving the population status of lesser prairie-chicken and sand dune lizards in New Mexico is to enhance characteristics of rangeland habitat needed for successful breeding and juvenile recruitment. The Conservation Strategy focuses on improving the quality of suitable and potentially suitable habitat for breeding, nesting, and

**Figure 2-1.** Vegetation treatment buffers and dispersal corridors for occupied and suitable sand dune lizard habitat. Not drawn to scale.



brood rearing, in areas around current and historic lek sites.

Under this alternative, most of the wildlife habitat needs or prescriptions are identified in other resource programs. Therefore refer to the minerals, livestock grazing, vegetation, recreation, realty, and OHV for guidelines addressing sand dune lizard and lesser prairie-chicken habitats. Current surface and occupancy requirements except those referring to lesser prairie-chicken and sand dune lizard would remain in place.

Management prescriptions tied to general wildlife habitat would remain the same as the No Action Alternative except for those identified below:

- Research and monitoring to evaluate success of reclamation efforts for those projects designed to improve habitat is needed. See Appendix 6 for a description of monitoring of lesser prairie-chicken habitat.
- BLM would also support the propagation of lesser prairie-chicken and transplant efforts throughout the Planning Area, with an emphasis that the habitat parameters necessary for survival would be in place prior to reintroduction unless identified and needed for research projects.
- New areas or combinations of areas that can function as lesser prairie-chicken reserves and sites for reintroduction would be established in the IPA. These should be located within predominantly suitable habitat areas large enough to support viable lesser prairie-chicken populations and meet other criteria specified in Appendix 8. The Waste Isolation Pilot Plant (WIPP) site would serve as the location of one such reserve. Potash enclaves and private land that may be available from willing sellers would be considered as a second possible reserve location.

## **Recreation**

Same as the No Action Alternative.

### Off-Highway Vehicle Management

This alternative adopts the prescriptions of the No Action Alternative with the following differences based on the recommendations found in the Conservation Strategy (Appendix 2, page 79):

- Within the Planning Area, inventories, public review, and transportation planning would be conducted to support road-by-road designations for roads and trails suitable for OHV use. Pending completion of formal designations, the Planning Area would be managed as limited to existing roads and trails for OHV use. A preliminary road network is shown on Map R-1.
- Designations within established OHV areas would remain unchanged.
- BLM would evaluate adequacy of existing designations and access management for each key area. A key area refers to the CMA and habitat suitable for the sand dune lizard.
- The Mescalero Sands North Dune OHV Area would remain at its current size of 562 acres. No new off highway vehicle areas would be established although the need may be identified.

## **Special Management Areas**

Same as the No Action Alternative.

### Alternative B (Preferred Alternative)

This alternative adopts the concepts of the Conservation Strategy in Alternative A and adds measures designed to provide greater protection of lesser prairie-chicken and sand dune lizard habitat.

## Lands and Realty

This alternative is similar to Alternative A with the following differences and additions:

The BLM would consider acquisition of land in the Planning Area for special status species habitat when the opportunity arises from willing sellers. Acquisitions would be acquired via exchange, purchase of land and easements, and donation if they:

- Improve management of natural resources through consolidation of BLM, State, and other Federal lands where agencies have compatible land management missions;
- Secure property necessary to protect special status species, promote biological diversity, enhance wildlife habitat, provide access to public waters and public land, and preserve archaeological and historical resources;
- Criteria for acquisitions, found in Appendix 5 of the 1997 Roswell RMP, would be applied to potential acquisitions regardless of their location in the Planning Area.

In order to provide opportunities for expansion of lesser prairie-chicken habitat within the Planning Area and to reduce the impacts of electric power lines, applicants for electric power lines could participate in a power line removal credit (PLRC). Under this program applicants could remove 1.5 miles of idle power lines (wire and poles) within prairie-chicken habitat management unit (CMA, PPA, SSPA and IPA) and habitat type (occupied or suitable/potentially suitable) before receiving authorization to construct 1.0 mile of new power line. Appendix 6, Monitoring and Implementation, contains the details of the implementation of the PLRC program. The PLRC program would not be applicable in unsuitable habitat, regardless of the management unit (CMA, PPA, SSPA and IPA).

Other mitigation measures that would be considered include, but are not limited to, those shown below. These mitigation measures are ranked in order of effectiveness of reducing impacts from power lines:

- Burying new distribution power lines within 2 miles of occupied lesser prairie-chicken habitat (measured from the lek) and in suitable lesser prairie-chicken habitat within 2 miles of an active lek. See Table 2-4, Robel Impact Distances.
- Using internal combustion engines to power equipment at the well. Such engines would be muffled to 75 db measured at 30 feet from the source.
- Constructing new power lines in locations which avoid occupied and suitable lesser prairie-chicken habitat.
- In cases where overhead power lines already exist in occupied or suitable lesser prairie-chicken habitat, new power lines could be constructed immediately adjacent to an existing line but only to the extent of the existing overhead power lines. Where sections of the new power line cannot follow the existing line, it would have to be buried.
- Constructing all infrastructure supporting development of a well (including roads, power lines and pipelines) within the same corridor.

Within sand dune lizard habitat (see Map B-1), new surface disturbance in dune complexes would not be authorized. Exceptions to this requirement would be considered based on the proposed surface use and proposed mitigations indicating the proposal would not adversely affect sand dune lizard habitat.

The CMA and occupied habitat within the PPA would be designated as ROW avoidance areas. The Mescalero Sands ACEC and the Mathers RNA would continue

to be ROW exclusion areas. The Laguna Plata Archeological District, the Maroon Cliffs Archeological District, and the Mescalero Sands North Dune OHV Area would continue to be ROW avoidance areas.

Lands acquired as habitat for special status species would be added to the ROW avoidance areas. ROWs for projects and facilities such as fences, range and wildlife water pipelines, power distribution lines, access to oil and gas facilities, or oil and gas collection or distribution pipelines would be considered in avoidance zones on a case-by-case basis to meet the overall objectives of this plan.

## **Minerals**

### Fluid Minerals

Alternative B is similar to Alternative A with the following differences:

Leasing with requirements for Plans of Development (PODs) or Conditions of Approval (COAs) to ensure orderly development with a minimum of surface impact in lesser prairie-chicken and sand dune lizard habitats would be considered on a case-by-case basis, providing impacts from exploration and development would not impact efforts to restore habitat.

These PODs and COAs would contain various strategies for minimizing impacts associated with new development and for reclaiming developed areas. Methods to achieve this potential would include, but not be limited to, vegetative treatments, rehabilitation of pads, roads, and ROWs and reduction of infrastructure needed to support the lease. They would be designed to improve habitat, enhance connectivity, reduce fragmentation, and move towards Desired Plant Community (DPC).

Within the Planning Area, timing (March 1<sup>st</sup> to June 15<sup>th</sup>, from the hours of 3:00 a.m. to 9:00 a.m.) and noise stipulations would be

applied. These stipulations are intended to prevent disruption of mating and nesting by activities associated with energy exploration and development. Stipulations would be imposed in areas where the species is present.

Exceptions to these requirements would be considered in emergency situations such as mechanical failures. Potential drill rig loss, drill rig scheduling or the potential loss of a lease are not emergency situations. These exceptions, however, would not be granted if BLM determines, on the basis of biological data or other relevant facts or circumstances, that the granting of an exception would disrupt prairie-chicken booming activity during the breeding season. Requests for exceptions on a non-emergency basis may also be considered, for the period of March 1<sup>st</sup> to June 15<sup>th</sup>, but these exceptions would not be granted if BLM determines that there is lesser prairie-chicken habitat, lesser prairie-chicken sightings, historic leks and or active leks within 1.5 miles of the proposed location, or any combination of the above mentioned criteria.

Exceptions to the timing stipulation/COA would not be granted in the following areas:

1. The CMA or PPA.
2. The IPA or SSPA within 1.5 miles of a lek that has been active for one out of the last 5 years.
3. The IPA or SSPA within 1.5 miles of sightings within the past 2 years. If lesser prairie-chickens are not sighted by the end of the second year, exceptions would be considered for the area. However, if a new sighting occurs in the same area, the stipulations would be reapplied.
4. The 17 Habitat Evaluation Areas before and during the habitat evaluation process. Once the evaluation of the 17 Habitat Evaluation Areas is complete, the Habitat Evaluation Areas that do not meet the criteria would be considered for

exceptions. No exceptions would be granted in the Habitat Evaluation Areas that meet or exceed the criteria in Appendix 8.

5. Any new areas identified as Habitat Evaluation Areas that were not in the original 17 but meet or exceed the evaluation criteria.

Exceptions would also be subject to other applicable regulatory and environmental compliance requirements. BLM reserves the right to impose other stipulations in the same area of this leasehold if an exception is granted.

Unitization may be utilized on new leases in the Planning Area to ensure protection of special status species habitat; as allowed by lease notices. Existing lessees would be encouraged to join these units.

Within the Planning Area, coordinated efforts to reclaim and restore habitat in previously developed areas would be carried out when and where opportunities arise. Priority locations are areas in the Habitat Evaluation Areas, IPA and SSPA and around lesser prairie-chicken reserves where restoration can help restore connectivity between isolated habitat blocks. Attempts would be made to reclaim two previously disturbed acres for every one acre of new disturbance.

If new lesser prairie-chicken leks are discovered in the future within the Planning Area, 1.5-mile radius around the lek would be considered occupied habitat and the prescriptions of this alternative would apply to proposed actions in and around that habitat. Similarly, if new sand dune lizard occupied habitat is discovered in the future within the Planning Area, the prescriptions of this alternative would apply in and around that habitat.

### **Core Management Area**

Within the Planning Area, the CMA would be expanded to include the existing Mescalero Sands ACEC as one contiguous block.

In all other respects, the prescriptions of the CMA of Alternative B are the same as the prescriptions of the CMA of Alternative A.

As shown by Table 2-6, the CMA under this alternative equals about 15 percent of the total acreage in the Planning Area. About 25 percent of the Federal mineral acreage in the CMA is leased and 75 percent is unleased. Under this alternative, the unleased (closed) Federal mineral acreage in the CMA comprises about 11 percent of the total Federal mineral acreage in the Planning Area.

### **Primary Population Area**

In the PPA, areas designated as occupied, suitable, potentially suitable and unsuitable habitat are shown on Map B-5. Map B-5A shows the tracts available for oil and gas leasing and tracts already under lease in all habitat categories.

Areas designated as potentially suitable lesser prairie-chicken habitat would be available for new oil and gas leasing. If leasing and development in these areas would impact suitable habitat, then areas designated as potentially suitable habitat would be closed to new oil and gas leasing. Areas of potentially suitable habitat where lands can be used to "block up" larger surrounding areas of suitable habitat would also be closed to new leasing.

BLM would consider new leasing in suitable habitat within the Primary Population Area when there is a calculated two to one ratio of reclaimed acres to disturbed acres within

the entire PPA and inter-agency coordination with the US Fish and Wildlife Service is conducted. The calculation would be conducted at five-year increments from the approval of this resource management plan amendment. In addition to meeting the two to one ratio, other considerations factoring into a decision for new leasing include, but are not limited to, the site characteristics of a tract nominated for leasing such as its proximity to occupied habitat, surface ownership, and the density of existing infrastructure.

BLM would consider new oil and gas leasing in occupied habitat within the PPA at such time the lesser prairie chicken is no longer considered for listing as a threatened or endangered species.

In all other respects, the prescriptions of the PPA of Alternative B are the same as the prescriptions of the PPA of Alternative A.

As shown by Table 2-6, the Federal mineral acreage in the PPA under this alternative equals about 17 percent of the total Federal mineral acreage in the Planning Area. About 53 percent of the Federal mineral acreage PPA is leased and 47 percent is unleased. Under this alternative, the unleased (closed) Federal mineral acreage in the PPA comprises about 8 percent of the total Federal mineral acreage in the Planning Area.

#### **Sparse and Scattered Population Area**

In all respects, the SSPA of Alternative B is the same as the SSPA of Alternative A with the exception of the timing and noise stipulation.

As shown by Table 2-6, the Federal mineral acreage in the SSPA under this alternative equals about 11 percent of the total Federal mineral acreage in the Planning Area. About 60 percent of the Federal mineral acreage in the SSPA is leased and 40 percent is unleased. Under this alternative,

the unleased Federal mineral acreage in the SSPA comprises about 5 percent of the total Federal mineral acreage in the Planning Area.

#### **Isolated Population Area**

In all respects, the IPA of Alternative B is the same as the IPA of Alternative A with the exception of the timing and noise stipulation.

As shown by Table 2-6, the Federal mineral acreage in the IPA under this alternative equals about 56 percent of the total Federal mineral acreage in the Planning Area. About 93 percent of the Federal mineral acreage in the IPA is leased and 7 percent is unleased. Under this alternative, the unleased Federal mineral acreage in the IPA comprises about 4 percent of the total Federal mineral acreage in the Planning Area.

#### **Isolated Population Area – Habitat Evaluation Areas**

Habitat suitability analyses would be conducted in the 17 Habitat Evaluation Areas (see Map B-1). These areas would be prioritized for reclamation potential and for potential to re-established connectivity to adjacent isolated habitat blocks. Until the evaluation of an area is complete, new oil and gas leasing would be deferred. It may be determined, through the suitability analysis process, that these areas would be discretionarily closed to future oil and gas leasing. Criteria for closing these areas or making these areas available for lease can be found in Appendix 8. Lessees of existing oil and gas leases would be required to provide a POD.

Deferment of leasing in the 17 Habitat Evaluation Areas would continue until the habitat suitability analysis is complete, pending available funding and partners willing to work with BLM.

### **Sand Dune Lizard – New Oil and Gas Leasing**

Tracts nominated for lease within the Lizard Habitat Boundary (see Map B-1) would be evaluated by BLM for sand dune lizard habitat suitability. Depending on the results of that evaluation, leasing of the tract may be deferred from leasing until occupancy surveys can be completed, or the tract may be offered for lease with a No Surface Occupancy (NSO) stipulation, or a Sand Dune Lizard Habitat survey stipulation, or other appropriate stipulations including standard stipulations.

Prospective buyers of Federal leases described above should realize implementation of NSO or Sand Dune Lizard Habitat stipulations may not allow approval of all spacing unit locations or full development of the lease.

New leases would require PODs which would incorporate the results of the habitat surveys. The purpose of a POD is to assist the operator and BLM with planning for orderly development as a means to reduce or eliminate impacts to special status species habitat. A POD would also incorporate applicable best management practices and disclose all future well locations to the fullest extent possible; the location and arrangement of well infrastructure (e. g., tank batteries, compressors, power lines and poles); road locations; and ROWs.

Should a tract be leased with the conditions described above, the lessee would be responsible for any subsequent occupancy surveys within the lease. Surveys for occupied sand dune lizard habitat would follow scientific protocol and conducted by personnel approved by BLM. Surveys would follow the protocol outlined in the following section, Sand Dune Lizard – Existing Oil and Gas Leases.

If, after acquiring a Federal mineral lease with an NSO stipulation or any other stipulation, the lessee can demonstrate

through the use and application of peer-reviewed science that the rationale behind the stipulation is no longer necessary, waivers, exceptions, or modifications to the lease would be considered by the Authorized Officer. The lease would be subject to the Pecos District land use plans in effect at the time of consideration. Granting of a waiver, exception or modification is a discretionary action which the operator should not routinely expect.

- **WAIVER:** a permanent exemption for a lease stipulation and the stipulation would no longer apply anywhere within the lease.
- **EXCEPTION:** a case-by-case exemption for a lease stipulation and the stipulation would continue to apply to all other sites within the lease.
- **MODIFICATION:** a fundamental change in the provisions of a lease stipulation, either temporarily or for the term of the lease.

See Appendix 6, Monitoring and Implementation, Table AP6-1 for details for the steps necessary to obtain waivers, exceptions and modifications.

Waivers, exceptions, modifications would also be subject to other applicable regulatory and environmental compliance requirements. BLM reserves the right to impose other stipulations in the same area of this leasehold if a waiver, exception or modification is granted.

Should occupied sand dune lizard habitat be found outside the Lizard Habitat Boundary (shown on Map B-1) but within the Planning Area, the management prescriptions described above would be applied to new oil and gas leasing.

### **Sand Dune Lizard – Existing Oil and Gas Leases**

For existing leases within the sand dune lizard boundary (see Map B-1) the lessee

would be responsible for occupancy and habitat suitability surveys required prior to permitting surface disturbing activities. Surveys would be considered Conditions of Approval (COAs) and conducted by BLM employees or BLM approved contractors and personnel. Depending on the results of the survey, proposed well sites may not be available to be developed and directional drilling may be necessary to develop all spacing units within a lease. Shinnery oak flats adjacent to dune complexes are the preferred location for proposed well sites.

Surveys for occupied sand dune lizard habitat would follow scientific protocol. The recommended time period for sand dune lizard surveys is June 1 through September 30 between the hours of 9:00 a.m. and 5:00 p.m., but avoiding the heat of mid-day. Since surveys must be completed before any surface disturbing activities would be approved, lessees that do not complete surveys in the proper time frame would have to wait up to 8 months, October 1 through May 31, before conducting surveys. Depending on the results of the surveys, prospective well locations may be moved up to 200 meters to avoid occupied or suitable sand dune lizard habitat.

Existing leases would require PODs, when requested, which would incorporate the results of the habitat surveys. The purpose of a POD is to assist the operator and BLM with planning for orderly development as a means to reduce or eliminate impacts to special status species habitat. A POD would also incorporate applicable best management practices and disclose all future well locations to the fullest extent possible; the location and arrangement of well infrastructure (e. g., tank batteries, compressors, power lines and poles); road locations; and ROWs.

If the lessee can demonstrate through the use and application of peer-reviewed science that the rationale behind a

stipulation is no longer necessary, waivers, exceptions, or modifications to the lease may be considered by the Authorized Officer. The lease would be subject to the Pecos District land use plans in effect at the time of consideration. Granting of a waiver, exception or modification is a discretionary action which the operator should not routinely expect.

- **WAIVER:** a permanent exemption for a lease stipulation and the stipulation would no longer apply anywhere within the lease.
- **EXCEPTION:** a case-by-case exemption for a lease stipulation and the stipulation would continue to apply to all other sites within the lease.
- **MODIFICATION:** a fundamental change in the provisions of a lease stipulation, either temporarily or for the term of the lease.

Waivers, exceptions, modifications would also be subject to other applicable regulatory and environmental compliance requirements. BLM reserves the right to impose other stipulations in the same area of this leasehold if a waiver, exception or modification is granted.

Should occupied sand dune lizard habitat be found outside the Lizard Habitat Boundary (shown on Map B-1) but within the Planning Area, the management prescriptions described above would be applied to the development of existing oil and gas leases.

### Mineral Materials

In the CMA and in the PPA, no new mineral material sites would be authorized in occupied or suitable prairie-chicken habitat. In the SSPA, no mineral material sites would be authorized in occupied prairie-chicken habitat. In the IPA, no new mineral material sites would be authorized within 1.5 miles of an active lek.

## Alternative Energy

One of the priorities of this alternative is protection, and expansion of occupied habitat and suitable habitat for the lesser prairie-chicken and sand dune lizard habitat. Applications to permit either solar or wind energy sites on public land within the Planning Area would be considered if the applicant can demonstrate no negative impacts on occupied and suitable lesser prairie-chicken or sand lizard habitat.

## Vegetation

In addition to items in Alternative A, the following would be implemented in managing vegetation.

The Desired Plant Community (DPC) concept of the Roswell Field Office, described in Appendix 11 of the Roswell Resource Area Draft RMP/EIS (September 1994) and implemented by the 1997 Approved Roswell RMP, would be adopted in the Carlsbad Field Office portion of the Planning Area.

The standard practices that would be employed to meet management objectives in each community are:

- Utilization levels not exceeding 45 percent of annual plant production. Utilization levels would be determined prior to green-up and measured on key forage species and overall utilization. See Appendix 6 for further description of the monitoring process.
- Projects such as fences, exclosures, water developments, erosion control structures, reseeding, or vegetative sales.
- Grazing treatments such as rest, changes in season of use, class of livestock, or stocking rates.

- Vegetation treatments, including, prescribed fire or wildland fire use, fuelwood sales, and biological, chemical or mechanical controls.
- Treatment of salt cedar as conditions warrant. Considerations in determining whether to treat include location and density of salt cedar stands, available budget and staff to conduct treatment, and objectives of proposed treatment.

Constraints on treatments for each community would be:

- Native, deciduous tree species in all plant communities, such as hackberry, black walnut, New Mexico walnut, and desert willow, would be protected from vegetation treatments and surface disturbance.

### Grassland Community

While this community has been broken up into several subtypes, the most common subtype within the Planning Area is the mesquite grassland. This subtype is found in the "sand country" east of the Pecos River and is characterized by level to gently rolling terrain, with dunes ranging from small stabilized hummocks to large active dunes. Vegetation treatments to influence DPC would be considered at the following threshold levels:

**Mesquite**--1/3 of the shrub cover composition

**Cholla** --100 plants/acre

**Catclaw**-- 5 percent vegetative cover

**Creosote**--20 percent of the vegetative canopy

**Lechuguilla**--20 percent of the vegetative canopy

**Tarbush**--20 percent of the vegetative canopy

**Broom snakeweed**--25 percent by weight of vegetative production

**Pinon/juniper**--12 percent vegetative cover

TABLE 2-7 VEGETATION MANAGEMENT - GRASSLAND COMMUNITY		
Vegetative Community Objectives		
Percent Vegetative Cover	Percent Vegetative Composition	Percent Composition By Weight
Grass/Forbs 15-52	Grasses 30-85	Grasses 60-90
	Forbs 10-15	Forbs 10-30
Shrubs/Trees 3-12	Shrubs 1-10	Shrubs 15-25
		Trees 1-10
Bare Ground 14-60		
Small Rock/ Large Rock 0-30		
Litter 8-44		
SOURCE: Pecos District Office Files, 2006		

Shinnery Oak-Dune Community

Vegetation treatments to influence DPC in the shinnery oak-dune community would be considered at the following threshold:

**Mesquite**--1/3 of the shrub cover composition

**Shinnery Oak** --40 percent of vegetative cover by composition

Constraints on treatments in the shinnery oak dune community would be:

- Treatments may be conducted to achieve DPC objectives in areas that are not considered suitable or occupied habitat for special status species (e.g., the sand dune lizard). Suitable and occupied habitat would not be chemically treated unless the species is removed from State or Federal listing, or a chemical application rate is developed that would not impair habitat.

Mixed Desert Shrub Community

Vegetation treatments to influence DPC in the mixed desert shrub community would be considered at the following threshold levels:

**Mesquite**-- 1/3 of the shrub cover composition

**Cholla**--100 plants/acre

**Catclaw** --5 percent canopy cove

**Creosote**--20 percent of the vegetative canopy

**Lechuguilla**--20 percent of the vegetative canopy

**Tarbush**--20 percent of the vegetative canopy

**Broom snakeweed**--25 percent by weight of vegetative production

**Pinon/juniper**--2 percent vegetative cover

TABLE 2-8 VEGETATION MANAGEMENT – SHINNERY OAK-DUNE COMMUNITY		
Vegetative Community Objectives		
Percent Vegetative Cover	Percent Vegetative Composition	Percent Composition By Weight
Grass/Forbs 16-40	Grasses 50-70	Grasses 60-80
	Forbs 10-15	Forbs 10-30
Shrubs/Trees 3-17	Shrubs 25-40	Shrubs 15-25
		Trees 1-10
Bare Ground 5-20		
Small Rock/ Large Rock 0-1		
Litter 25-70		
SOURCE: Pecos District Office Files, 2006		

The Vegetative Community Objectives listed above would replace the cover and composition requirements for high quality habitat outlined in Alternative A.

Ecological site descriptions, currently being modified by NRCS to include plant communities and transitional pathways, would be used to assess the Standards for Rangeland Health.

<b>TABLE 2-9 VEGETATION MANAGEMENT – MIXED DESERT SHRUB COMMUNITY</b>		
<b>Vegetative Community Objectives</b>		
<b>Percent Vegetative Cover</b>	<b>Percent Vegetative Composition</b>	<b>Percent Composition By Weight</b>
Grass/Forbs 11-28	Grasses 55-75	Grasses 50-80
	Forbs 10-20	Forbs 10-20
Shrubs/Trees 6-15	Shrubs 15-20	Shrubs 10-30
	<b>Trees 1-10</b>	Trees 1-10
Bare Ground 10-40		
Small Rock/ Large Rock 15-35		
Litter 1-12		
SOURCE: Pecos District Office Files, 2006		

Rangeland restoration and vegetation treatments would continue to be implemented to improve or maintain the plant community needed to achieve multiple-use management goals. These goals would address watershed management, wildlife habitat, and rangeland health. Plant communities in the Carlsbad Field Office are based on the NRCS ecological site descriptions and are described in the Roswell Field Office by the DPC listed in Appendix 11 of the 1994 Draft Roswell RMP. Brush encroachment from mesquite and catclaw would be a primary target to restore native grassland ecosystems with a focus on lesser prairie-chicken habitat types. Growing season rest for 2 years after treatment would be required, unless earlier grazing use or a longer deferment is needed to make progress towards meeting the vegetative standard.

Within the Planning Area, any habitat that is currently designated as unsuitable for lesser prairie-chicken or sand dune lizard, but has potential to become suitable would be identified and targeted for treatment. Methods to achieve this potential would

include, but not be limited to, vegetative treatments, rehabilitation of pads, roads, and ROWs, and would be designed to improve habitat, enhance connectivity, reduce fragmentation, and move towards DPC. Not all areas designated as unsuitable habitat, however, can be converted to suitable since the soils in some of these areas are not capable of producing the necessary vegetation for lesser prairie-chicken or sand dune lizard habitat.

Although mineral extraction may occur on a given piece of land over a period of many years, eventually resources become exhausted and wells and related infrastructure are taken out of production. In some areas this has already occurred; elsewhere, some wells are nearing maturity and may be plugged and abandoned within the next decade. This would create opportunities to increase suitable habitat, and to create or expand lesser prairie-chicken management areas. Recent pilot projects have focused on reclamation of abandoned well-pads and access roads, and re-contouring these sites with the surrounding landscape. Rangeland restoration efforts would target disturbed areas such as plugged/abandoned pads, roads, and ROWs in lesser prairie-chicken habitat areas. Techniques to accomplish this restoration include removal of caliche, re-contouring, reseeding, fertilizer/water application if appropriate, and temporary fencing to allow establishment of vegetation. A combination of techniques could be utilized and would be site-specific, depending on habitat requirements.

Mesquite encroachment into sand-shinnery and sand-sage ecosystems reduces the amount of forage and creates habitat that is unsuitable for lesser prairie-chicken nesting or brood-rearing. Mesquite control may be used to improve rangeland health in areas not used by lesser prairie-chickens, thereby reducing grazing pressure in nesting areas. This also could help offset forage losses due to initiation of conservative grazing on other ranch lands that are important lesser

prairie-chicken habitat. Thus, mesquite control would be considered a valuable management tool.

While much of the targeted area is not in the sand-shinnery and sand-sage ecosystems, indirect benefits, such as reduced grazing pressure in nesting or brood rearing areas, would be realized. The intent of these treatments is to move towards the attributes of DPC described above.

Shinnery oak treatments would follow guidelines described under alternative A.

Vegetative treatments would include chemical, mechanical, and the use of prescribed fire. Brush species such as mesquite, catclaw, and noxious/invasive weeds would be targeted and treatment would be site-specific based on habitat requirements and site potential. Standard Bureau stipulations regarding buffer areas and growing season rest would be applied.

Buffers would include “leave out” or untreated areas to protect habitat needs such as cover or to preserve those areas where habitat requirements are being met. Growing season rest for 2 years after treatment would be required, unless earlier grazing use is deemed a necessary tool to achieve habitat requirements or a longer deferment is needed due to drought conditions.

### **Livestock Management**

Under Alternative B, approximately 1.85 million acres, which includes about 850,000 acres of public land and makes up all or parts of 114 grazing allotments, would be available for livestock use.

Currently, a total of 192,125 AUMs are permitted either by grazing permit or grazing lease. Any adjustments to a permit or lease, whether an increase or a decrease, would be made based on monitoring data,

Standards Assessments, and through consultation, as discussed in 43 CFR 4100.

Adjustments may include changing the kind and class of livestock, the season of use, the number of livestock, or grazing patterns. These adjustments can occur either on a pasture basis or allotment wide. Actual use varies from year-to-year due to adjustments of annual stocking rates and other management practices. These annual adjustments are made at the grazing permittee/lessee’s request. The permittee/lessee may reduce livestock numbers due to drought, market conditions, or other reasons; or may ask for a temporary increase if good rainfall and corresponding forage production has occurred. While the current grazing regulations (43 CFR 4100) provide flexibility and wide latitude to improve and maintain rangeland health, voluntary relinquishment would be one method to meet the goal of establishing habitat reserves for the lesser prairie-chicken within the Planning Area. Under this alternative, the decision to relinquish livestock grazing is totally voluntary on the part of the permittee/lessee. If a grazing permittee/lessee decides to voluntarily relinquish grazing on his/her allotment to resolve conflicts that exist between livestock grazing and protection of lesser prairie-chicken habitat, BLM would close the allotment to livestock grazing. This allotment closure would continue for the life of this plan amendment and may or may not continue when the plan is revised.

The criterion for BLM to accept a voluntary relinquishment and to close the allotment to grazing is that conflicts exist between livestock grazing and protection of lesser prairie-chicken habitat.

Since population numbers and habitat for the lesser prairie-chicken can be impacted by livestock grazing, management strategies would be implemented on allotments within the Planning Area. The strategies, based on monitoring data,

include changing the time of year certain pastures are grazed, reducing/increasing allowable utilization levels, implementing pasture rotation schemes, and reducing/increasing the annual stocking rates on public land. Seasonal use restrictions would be applied, on a pasture basis, if monitoring indicates habitat requirements are not being met. An example would be removing livestock from a pasture during lesser prairie-chicken booming, and nesting seasons, and then allowing livestock back into the pasture once this timeframe is past.

Growing season rest for 2 years after a brush control treatment would be required, unless a different time period, longer or shorter, is deemed a necessary tool to achieve habitat requirements.

As part of livestock management Guidelines, range improvement projects would be constructed where it is determined that these projects can enhance habitat. Improvements such as fencing, both traditional wire and “virtual” fences, and water development would be constructed to allow continued livestock use while improving habitat requirements for both lesser prairie-chickens and sand dune lizards. An example would be a cross fence in a large pasture, especially if only a portion of the pasture is suitable/occupied habitat that would divide the pasture along the suitable/occupied habitat line. By constructing the fence, livestock use could occur in the non-suitable portion during key time periods, while allowing growing season rest or no livestock in the suitable area while young are being reared.

The same idea could be accomplished by adding additional water sources in a large pasture with few existing water sources. Adding another trough in non-suitable areas could draw livestock out of suitable areas during key time periods. As the technology becomes available, virtual” fencing, which is a combination of satellite/computer/ear tag technology that provides stimuli to livestock to guide their movement, could also be used

to move livestock out of key areas for certain time periods.

Range improvement projects would not be allowed if it is determined that the project could have negative impacts to habitat. An example would be a water trough, or any activity, that would concentrate livestock at the edge of a dune complex that has occupied or suitable habitat for sand dune lizards. Concentrating animals in such an area could break down the dune and reduce or eliminate the ability of sand dune lizards to survive.

### **Wildlife including Special Status Species**

Under Alternative B, most of the wildlife habitat needs or prescriptions are identified in other resource disciplines. Therefore refer to the minerals, livestock grazing, vegetation, recreation, realty, and OHV for guidelines addressing sand dune lizard and lesser prairie-chicken habitats. Current surface and occupancy requirements except those referring to lesser prairie-chicken and sand dune lizard would remain in place.

This alternative is similar to Alternative A with the following differences and additions:

- Predator control for the purpose of protecting sensitive wildlife species may be conducted on public land within the Planning Area on a case-by-case basis. Any predator control actions would follow the protocol listed in the 1997 Roswell RMP.
- Increased intensity in research and monitoring would be needed to evaluate changes in habitat condition, land use threats to the species, species use and distribution, reclamation efforts, propagation, and other projects that may help in enlarging the knowledge base of these species. See Appendix 6 for a description of monitoring lesser prairie-chicken habitat.

- BLM would support the propagation of lesser prairie-chicken and transplant efforts throughout the Planning Area, with an emphasis that the habitat parameters necessary for survival be in place prior to reintroduction; unless identified and needed for research projects.
- If necessary, BLM would pursue and propose changes to State wildlife management regulations on game species based on impacts to land resources and game populations.
- BLM would continue reclamation practices on historical oil and gas for the betterment of rangeland health and wildlife species. These efforts would enhance distribution of special status species in appropriate habitats over the long-term.
- Based on monitoring visitor use and lesser prairie-chicken needs, if results indicate that a SRP is the best method to regulate visitations in lek areas, then an SRP may be issued. If an SRP were to be issued, there would be no cost to the visitor/permittee. The SRP would allow visitations for the purpose of watching or photography to continue while tracking visitor use and spreading impacts so that one lek or group of leks does not bear the brunt of visitors.
- The issuance of a special recreation permit would contain specific stipulations regarding distance, noise, and interfering with the natural mating ritual of the lesser prairie-chicken. The Wildlife and Recreation Specialists in each Field Office would draft stipulations to be attached to a SRP for the purpose of minimizing impact to mating areas.

## Recreation

Alternative B would adopt the prescriptions of the No Action Alternative with the following additions:

- In the Planning Area, outside the SRMAs there are extensive recreation management areas (ERMAs). Within these ERMAs recreation use includes hunting, OHV riding, photography, driving for pleasure, watchable wildlife, and dispersed camping.
- At present there is no data to support the premise that recreational activities within the Planning Area are the causes of population decline. However, through visitor monitoring in the Planning Area, if data becomes available that identifies recreational use as a factor in population decline, BLM would implement corrective management actions such as; seasonal closures of roads leading to lek areas, noise restrictions in or around leks, or the issuance of Special Recreation Permits (SRP).

During the lesser prairie-chicken mating season, noise restrictions would be in effect from March 1 through June 15 and from 3 a.m. to 9 a.m. Generators associated with recreation uses would not be allowed in or near identified mating areas during booming season. These conditions would be identified on interpretive signs and placed in key areas within the Planning Area.

### Off-Highway Vehicle Management

Within the Planning Area, inventories, public review, and transportation planning would be conducted to support road-by-road designations for roads and trails suitable for OHV use. Pending completion of formal designations, the Planning Area would be managed as limited to existing roads and trails for OHV. A preliminary road network is shown on Map R-1.

Within the Planning Area, seasonal OHV use would be implemented designated OHV areas based on monitoring of visitor use and needs of the lesser prairie-chicken and sand dune lizard. These restrictions would be implemented to protect booming areas adjacent to the OHV areas during the

booming season. If monitoring of lesser prairie-chicken and their habitat indicates the need for further restrictions, then no OHV use would be allowed in the Planning Area between the hours of 3 a.m. to 9 a.m. from March 1 through June 15.

A lesser prairie-chicken and sand dune lizard survey would be conducted prior to implementation of any phases since this OHV area borders the CMA. See Map B-3 for the location of the phases. Providing there would be no conflicts with lesser prairie-chicken and sand dune lizard habitat issues, the Mescalero Sands North Dune OHV Area would be expanded from the existing 562 acres to 1,674 acres in a three-phase plan based on monitored visitor use and demand. Phase One would be 418 acres to the north of the existing OHV boundary and would be limited to designated routes. Phase Two would be 295 acres south of the existing boundary designated open. Phase Three would be 399 acres east of the existing boundary designated open. Acreage for the expansion of each phase of the Mescalero Sands North Dune OHV Area was identified by BLM staff biologists. Prior to the release of the Draft EIS, BLM staff biologists reported no conflicts with special status species or their habitat. Before expanding of any phase of Mescalero Sands North Dune OHV Area, the acreage would be surveyed again by BLM staff biologists to confirm that conflicts do not exist with special status species or their habitat.

Every established recreation area, including OHV areas, must have a recreation area management plan (RAMP). This resource management plan amendment would amend the RAMP for the Mescalero Sands North Dune OHV Area.

Improvements to the existing facilities and the development of additional facilities would continue throughout the Mescalero Sands North Dune OHV Area, so long as they are compatible with management of special status species. Signage would be

placed at key locations for interpretation and education of the recreating public and to show route designations.

The portion of the Hackberry Lake Intensive OHV Area (22,673 acres) located within the Planning Area, would be designated limited to existing designated routes with the exception of 132 acres of dune complex, known as the Shugart Dunes, which would remain open.

The Square Lake dune complexes are within the Planning Area and have historically been heavily used for OHV recreation. BLM would propose establishing the Square Lake OHV Area consisting of 5,974 acres designated as limited to existing routes and 817 acres of sand dunes designated as open. See Map B-4 for the location of the dunes and the designated roads and trails. BLM staff biologists identified the dune areas and the transverse routes between the dunes. The staff biologists found no conflicts exist in lesser prairie-chicken or sand dune lizard habitat. Prior to the release of the Draft EIS, wildlife biologists reported no conflicts with special status species or their habitat in the proposed Square Lake OHV Area. Prior to any development in the Square Lake OHV Area, BLM staff biologists would re-survey the area to confirm there are no conflicts with the Special Status Species or their habitat.

Should the criteria be met to establish the Square Lake OHV Area, BLM would develop a RAMP for the area which would include route designation and the impacts would be analyzed in a National Environmental Policy Act (NEPA) document. Once the RAMP is completed, implementation would include marking designated trails and developing maps of the trails.

Establishment of the proposed OHV area would be pending the results of the evaluation of the Habitat Evaluation Areas and a lack of conflicts with lesser prairie-

chicken and sand dune lizard habitat protection.

The proposed Square Lake OHV Area would be limited to vehicles with a width of 55 inches or less. This would normally exclude the use of sand rails and dune buggies. Signage containing information and showing designated routes would be placed at key locations for interpretation and education of the recreating public.

### **Special Management Areas**

Same as the No Action Alternative.

### Alternative C

This alternative would adopt the concepts of Interim Management (see Appendix 1).

### **Lands and Realty**

Same as No Action Alternative.

### **Minerals**

#### Fluid Minerals

This alternative would use a phased approach to evaluating oil and gas leasing and development within the Planning Area. Careful consideration of mineral leasing and development would be taken to avoid making land management decisions that may adversely affect special status species. Timing and noise stipulations for this alternative would be the same as the No Action alternative.

The following lists the conditions and criteria for prospective mineral leasing and development within the Planning Area.

#### **Sand Dune Lizard**

All Management Zones that have occupied or suitable sand dune lizard habitat would be closed to new leasing for the life of the plan amendment or until such time that the special status species is no longer

considered for listing as a threatened or endangered species. If new leasing is considered, conditions would be attached that would preclude listing the special status species as threatened or endangered.

### **Management Zones:**

Zone 1 would be closed to new leasing until the lesser prairie-chicken is not warranted for listing based upon the USFWS candidate notice of review, which is completed on an annual basis. Exceptions to the closure may be considered on a case-by case basis for pooling or drainage protection purposes, or for parcels that are insignificant in size. Granting exceptions would require a thorough review of habitat suitability, lek locations and cumulative impacts that would potentially occur if the exception is granted.

As shown by Table 2-10, the Federal mineral acreage in Zone 1 of this alternative equals about 32 percent of the total Federal mineral acreage in the Planning Area. About 40 percent of the Federal mineral acreage in Zone 1 is leased and 60 percent is unleased. Under this alternative, the unleased (closed) Federal mineral acreage in Zone 1 comprises about 19 percent of the total Federal mineral acreage in the Planning Area.

A tract offered for lease in Zone 1 would include a lease stipulation calling for a plan of development (POD) before any development would be authorized. A POD would be required to include all future well locations, well infrastructure (tanks, compressors, power lines/poles) and their location, road location, and ROWs that would access future wells.

Plans of development (POD) would also be required for existing leases. The POD would be required before the approval of the next well to be drilled within an existing lease. The purpose of a POD is to assist the operator and BLM with planning the

**TABLE 2-10  
ALTERNATIVE C, ACRES OF FEDERAL MINERALS**

Management Zone	Acres of Leased Federal Minerals	Percent Leased Federal Minerals	Acres of Unleased Federal Minerals	Percent Unleased Federal Minerals	Total Federal Mineral Acres	Comparison of Federal Minerals to Total Federal Mineral Acreage in the Planning Area	Comparison of Unleased Acres to Total Federal Mineral Acreage in the Planning Area
Zone 1	144,622	40%	221,195	60%	365,817	32%	19%
Zone 2	59,910	69%	27,257	31%	87,167	8%	2%
Zone 3	453,546	89%	56,573	11%	510,119	45%	5%
Zone 4	167,652	92%	14,568	8%	182,220	16%	1%
<b>Total</b>	<b>825,730</b>	<b>72%</b>	<b>319,593</b>	<b>28%</b>	<b>1,145,323</b>	<b>100%</b>	<b>28%</b>

**SOURCE: Pecos District Office Files, 2006.**

orderly development as a means to reduce or eliminate impacts to special status species habitat. A POD would incorporate applicable best management practices and disclose all future well locations; the location and arrangement of well infrastructure (e. g., tank batteries, compressors, power lines and poles); road locations; and ROWs. To the extent possible, a 1.5-mile buffer zone that excludes drilling would be utilized around active leks (those active within the last 3 years) to provide resource protection.

Zone 2 would allow new leasing with a NSO stipulation. This would be applied on those lands associated with lesser prairie-chicken/sand dune lizard core areas in the Roswell and Carlsbad Field Offices. For existing leases, the same POD process for Zone 1 would be required.

As shown by Table 2-10, Federal mineral acreage in Zone 2 of this alternative equals about 8 percent of the total Federal mineral acreage in the Planning Area. About 69 percent of the Federal mineral acreage in Zone 2 is leased and 31 percent is unleased. Under this alternative, the unleased Federal mineral acreage in Zone 2 comprises about 2 percent of the total Federal mineral acreage in the Planning Area.

Zone 3 would allow new oil and gas leasing and would include a lease stipulation for a

POD before any development of the lease would be authorized. The POD would also account for habitat avoidance within a 1.5-mile radius of known historic lek sites and have the noise and timing stipulation applied to oil and gas activities and other potential disturbances along with the POD. For existing leases, the same POD process for Zone 1 would be required.

As shown by Table 2-10, Federal mineral acreage in Zone 3 under this alternative equals about 45 percent of the total Federal mineral acreage in the Planning Area. About 89 percent of the Federal mineral acreage in Zone 3 is leased and 11 percent is unleased. Under this alternative, the unleased Federal mineral acreage in Zone 3 comprises about 5 percent of the total Federal mineral acreage in the Planning Area.

Management of Federal minerals (both leased and unleased) in Zone 4 would be in accordance with existing resource management stipulations and conditions of approval.

As shown by Table 2-10, Federal mineral acreage in Zone 4 of this alternative equals about 16 percent of the total Federal mineral acreage in the Planning Area.

About 92 percent of the Federal mineral acreage in Zone 4 is leased and 8 percent

is unleased. Under this alternative, the unleased Federal mineral acreage in Zone 4 comprises about 1 percent of the total Federal mineral acreage in the Planning Area.

There would be no change from current management (current RMP) for locatable, saleable, or solid leasable minerals.

### **Alternative Energy**

With regards to authorizing solar or wind energy sites within the Planning Area, Alternative C would be the same as the No Action Alternative.

### **Vegetation**

Management direction would follow the No Action alternative with the addition of the DPC discussion under Alternative B.

### **Livestock Management**

Management direction would be the same as the No Action Alternative.

### **Wildlife Including Special Status Species**

Management direction would be guided under the No Action Alternative with the addition of guidelines applied to the minerals section for the lesser prairie-chicken and sand dune lizard.

### **Recreation**

Same as the No Action Alternative.

#### Off-Highway Vehicle Management

Same as Alternative A.

### **Special Management Areas**

Same as the No Action Alternative.

### Alternative D

This alternative focuses on maintaining occupied lesser prairie-chicken and sand dune lizard habitat.

### **Lands and Realty**

Same as the No Action Alternative.

### **Minerals**

#### Fluid Minerals

Soils in some of these areas are not capable of producing the necessary vegetation for lesser prairie-chicken or sand dune lizard habitat.

Although mineral extraction may occur on a given piece of land over a period of many years, eventually resources become exhausted and wells and related infrastructure are taken out of production. In some areas this has already occurred; elsewhere, some wells are nearing maturity and may be plugged and abandoned within the next decade. This would create opportunities to increase suitable habitat, and to create or expand lesser prairie-chicken management areas. Recent pilot projects have focused on reclamation of abandoned well-pads and access roads, and re-contouring these sites with the surrounding landscape. Rangeland roads and ROWs no longer needed in lesser prairie-chicken habitat areas would be treated in such a manner. Techniques to accomplish would be developed as best management practices. Occupied habitat of the lesser prairie-chicken and the sand dune lizard would be closed to new oil and gas leasing. New leasing would be considered in occupied habitat on a case-by-case basis with a required unitization stipulation. Cooperative unitization would be promoted within the entire Planning Area.

Within the Planning Area in occupied lesser prairie-chicken habitat, no surface disturbing activities would be allowed within a 1.5 mile radius of active leks. If, in the future, new lesser prairie-chicken leks are discovered,

then the area around the lek would be considered occupied habitat and the prescriptions of this alternative would apply to proposed actions in and around that habitat.

**TABLE 2-11  
ALTERNATIVE D, ACRES OF FEDERAL MINERALS**

Management Category	Acres of Leased Federal Minerals	Percent Leased Federal Minerals	Acres of Unleased Federal Minerals	Percent Unleased Federal Minerals	Total Federal Mineral Acres	Comparison of Federal Minerals to Total Federal Mineral Acreage in the Planning Area
Occupied Habitat	823,555	87%	120,851	13%	944,406	82%
Not Occupied Habitat	188,242	20%	12675	6%	200,917	18%
<b>TOTAL</b>	<b>1,011,797</b>	<b>88%</b>	<b>133,526</b>	<b>12%</b>	<b>1,145,323</b>	<b>100%</b>

**SOURCE: Pecos District Office Files, 2006.**

Development of existing leases within occupied habitat would require a POD to be approved prior to authorizing surface disturbing activities. The purpose of a POD is to assist the operator and BLM in planning the orderly development as a means to reduce or eliminate impacts to special status species habitat. A POD would incorporate applicable best management practices and disclose all future well locations; the location and arrangement of well infrastructure (e. g., tank batteries, compressors, power lines and poles); road locations; and ROWs.

Timing and noise stipulations would be applied only in areas around active leks (occupied habitat).

Development of oil and gas resources would not be authorized in occupied sand dune lizard habitat, however, pre-development surveys by the lessee would not be required for exploration and development of oil and gas resources to determine occupancy for sand dune lizards.

Coordinated efforts to reclaim and restore habitat in previously developed areas would be carried out when and where opportunities arise. Priority areas for reclamation are those within occupied habitat or where restoration can help restore connectivity between isolated occupied habitat blocks. Attempts would be made to reclaim two previously disturbed acres for every one acre of new disturbance.

Solid Minerals

There would be no change from current management (current RMP) for locatable, saleable, or solid leasable minerals.

**Alternative Energy**

One of the priorities under this alternative is protection, and expansion of occupied habitat for the lesser prairie-chicken and sand dune lizard habitat. Applications to permit either solar or wind energy sites on public land within the Planning Area would be considered if the applicant can

demonstrate no negative impacts on occupied lesser prairie-chicken or sand lizard habitat.

### **Vegetation**

Management direction would follow Alternative A, with the addition of the DPC discussion from Alternative B. These actions, designed to protect, maintain, and enhance lesser prairie-chicken and sand dune lizard habitat would focus only on occupied habitat.

### **Livestock Management**

Management direction would follow Alternative A, except grazing management practices to meet vegetative and habitat parameters for the lesser prairie-chicken and sand dune lizard would be applied only in those pastures with occupied habitat within the Planning Area.

Within the Planning Area, when a grazing permit/lease is transferred due to the base property being sold and the buyer does not wish to graze livestock, the AUMs associated to the permit/lease would be placed in Voluntary Non-Use, and no livestock would be authorized. Voluntary Non-Use would only be authorized at the permittee/lessee's request, the request would be analyzed at each annual billing cycle, and would be used to enhance habitat for special status species.

### **Wildlife including Special Status Species**

Under this alternative most of the wildlife habitat needs or prescriptions are identified in other resource disciplines. Therefore refer to the minerals, livestock grazing, vegetation, recreation, realty, and OHV for guidelines addressing sand dune lizard and lesser prairie-chicken habitats. All surface and occupancy requirements would remain in place except for those addressing sand dune lizard and lesser prairie-chicken habitat. These requirements would only apply to occupied habitat. The suitable

sand dune lizard habitat next to occupied habitat would not be protected under Alternative D.

Continued research and monitoring is needed to evaluate changes in distribution, habitat condition, land uses, threats to the species, reclamation efforts, propagation, and other projects that may help in enlarging the knowledge base of these species.

Under this alternative the timing and noise stipulation boundary would be modified to encompass occupied habitat only. The most current information would be used to decide whether to apply this stipulation at the APD stage.

### **Recreation**

Same as the No Action Alternative.

#### Off-Highway Vehicle Management

Within the Planning Area, inventories, public review, and transportation planning would be conducted to support road-by-road designations for roads and trails suitable for OHV use. Pending completion of formal designations, the Planning Area would be managed as limited to existing roads and trails for OHV use. A preliminary road network is shown on Map B-6.

In the Mescalero Sands North Dune OHV Area, only Phase One expansion would be implemented. This expansion would enlarge the OHV area from 562 acres to 980 acres. The expansion would be based on monitored visitor use and demand providing there are no conflicts with lesser prairie-chicken and sand dune lizard. OHV use in Phase One would be limited to designated routes. See Map B-3 for the location of Phase One.

Additional improvements to the existing facilities and the development of additional facilities would continue throughout the Mescalero Sands OHV Area. Signage

would be placed at key locations for OHV and biologic interpretation and education of the recreating public and to show route designations. In the Carlsbad Field Office portion of the Planning Area, recreation activities involving the use of OHVs would be limited to existing roads.

### **Special Management Areas**

Same as the No Action Alternative.

### **Alternative E**

Alternative E would apply the suggestions for special management from the Lesser Prairie-chicken Area of Critical Environmental Concern (ACEC) nomination (see Appendix 3 and Maps E-1, E-2 and E-3) received by BLM in December 2002.

Under this alternative a committee made up of State, Federal and academic wildlife specialists would oversee the management of the proposed ACEC. The committee would develop and implement an adaptive management strategy for the proposed Lesser Prairie-chicken ACEC. This includes establishing Moratorium Areas and an Adaptive Management Area within the proposed ACEC. See Map E-1 and Appendix 3.

The Moratorium Areas include the populations south of Highway 380 and north of 33<sup>0</sup>N, the Quercho Plains populations and adjacent historic habitat, and the isolated northern populations adjacent to U.S. 70. The Adaptive Management Area is the remainder of the proposed ACEC.

### **Lands and Realty**

Inside the proposed ACEC, no new authorizations for ROWs would be allowed within 1.5 km (0.9 miles) of an active lek.

Outside the proposed ACEC:

Lands acquired as habitat for special status species would be added to the ROW exclusion area for major projects. Exceptions would be considered in exclusion zones on a case-by-case basis for facilities such as fences, range and wildlife water pipelines, power distribution lines, access to oil and gas facilities, or oil and gas collection or distribution pipelines.

ROWs for projects and facilities such as fences, range and wildlife water pipelines, power distribution lines, access to oil and gas facilities, or oil and gas collection or distribution pipelines would be considered in avoidance zones on a case-by-case basis.

The Mescalero Sands ACEC and the Mathers RNA would continue to be ROW exclusion areas. The Laguna Plata and Maroon Cliffs Archeological Districts would continue to be ROW avoidance areas. The Lesser Prairie-chicken Core Habitat area (outside the proposed ACEC) and the Mescalero Sand North Dune OHV Area would continue to be ROW avoidance areas.

### **Minerals**

#### **Fluid Minerals**

Outside the proposed ACEC, management would continue as described in the No Action Alternative. Inside the proposed ACEC boundary the following management actions would be applied:

- A 5-year moratorium on all new oil and gas activities (leasing and development) would be established in the Moratorium Areas of the Proposed ACEC. Due to lease rights granted under the Mineral Leasing Act, implementing the moratorium would require legislation to be enacted by Congress.

- No drilling would be allowed within 1.5 km (.9 miles) of known leks in the Adaptive Management Area of the Proposed ACEC.
- The entire proposed ACEC would be closed from locatable and salable mineral entry.
- The entire proposed ACEC would be closed to non-energy (solid) mineral leasing.

As shown by Table 2-12, about 53 percent of the Federal minerals acreage in the moratorium area is leased and 47 percent is unleased.

### **Alternative Energy**

With regards to authorizing solar or wind energy sites within the Planning Area, Alternative E would be the same as the No Action Alternative.

### **Vegetation**

Under Alternative E, a permanent ban on the use of tebuthiuron would be instituted within the Adaptive Management Area (see Map E-1). If other herbicides are deemed useful by the management committee to retard growth of shinnery oak and to promote grass cover, other less lethal herbicides would be used in place of tebuthiuron. In addition, the collection of plant material would be prohibited unless authorized by special permit, and then only for educational or scientific applications. The intentional introduction of any exotic plants or animals would be prohibited.

### **Livestock Management**

Within the proposed ACEC (see Appendix 3 and Map E-2), where populations are sparse and disconnected or extirpation is imminent, a 5-year moratorium on livestock

grazing would be imposed to allow for an emergency habitat recovery period. Monitoring of habitat conditions and lesser prairie-chicken leks would be used to test the hypothesis that conditions for the species would improve during the 5-year moratorium. These areas include the populations south of Highway 380 and north of 33<sup>0</sup> N, the Querecho Plains populations and adjacent historic habitat, and the isolated northern populations adjacent to U.S. Highway 70.

The remaining portion of the proposed lesser prairie-chicken ACEC contains the “core” populations of the lesser prairie-chicken, and consists mainly of the Caprock Wildlife Area (see Appendix 3). Lesser prairie-chicken populations in this area are more stable and in less imminent danger, therefore this area would be used to test adaptive management methodologies for enhancing and sustaining lesser prairie-chicken habitat. These methodologies may include conservative livestock grazing, as well as herbicide applications, so long as the activities promote the recovery and stability of lesser prairie-chicken populations. All management strategies implemented within the Adaptive Management Area would be applied with rigorous experimental design. This Adaptive Management Area can be used to develop sound criteria for recovering lesser prairie-chickens, and that these criteria can then be applied to the other parts of the proposed lesser prairie-chicken ACEC, once the emergency moratorium has ended.

Under this alternative, there would be experimental reductions in livestock grazing within the Adaptive Management Area of the proposed lesser prairie-chicken ACEC. Active lek sites would be used as experimental units; with treatments applied to randomly selected, geographically independent lek sites. A minimum of five lek sites would be used for each grazing treatment. Treatments would include no grazing on at least one square mile (2.6

**TABLE 2-12  
ALTERNATIVE E, ACRES OF FEDERAL MINERALS**

<b>Management Category</b>	<b>Acres of Leased Federal Minerals</b>	<b>Percent Leased Federal Minerals</b>	<b>Acres of Unleased Federal Minerals</b>	<b>Percent Unleased Federal Minerals</b>	<b>Total Federal Mineral Acres</b>	<b>Comparison of Federal Minerals to Total Federal Mineral Acreage in the Planning Area</b>
Moratorium	126,890	53%	110,341	47%	237,231	100%
<b>Total</b>	<b>126,890</b>	<b>53%</b>	<b>110,341</b>	<b>47%</b>	<b>237,231</b>	<b>100%</b>

SOURCE: Pecos District Office Files, 2006.

km<sup>2</sup>) within 1.5 miles (2.4 km.) of lek sites and light intensity grazing (after June 30) on at least one square mile (2.6 km<sup>2</sup>) within 1.5 miles (2.4 km.) of lek sites.

Under this alternative, the introduction of any exotic plants or animals would be prohibited.

**Wildlife including Special Status Species**

Under this alternative most of the wildlife habitat needs or prescriptions are identified in other resource programs. Therefore refer to the minerals, livestock grazing, vegetation, recreation, realty, and OHV for guidelines addressing sand dune lizard and lesser prairie-chicken habitats.

All other wildlife habitat management prescriptions would be the same as No Action.

**Recreation**

This alternative would adopt the prescriptions of the No Action Alternative with the following additions:

- Recreation activities and access to the proposed Lesser Prairie-chicken ACEC would be limited during the mating season and accessible only by special permit. A SRP would be required for users/visitors to enter an ACEC during the mating season for the purpose of watching or photography. The issuance of a SRP

would contain specific stipulations addressing distance, noise, and interfering with the natural mating ritual of the lesser prairie-chicken. Permit stipulation would have the purpose of minimizing impacts to mating areas.

- Recreation opportunities in the proposed ACEC would be limited only to recreation activities appropriate to the rural and natural nature of the Planning Area.

Off-Highway Vehicle Management

This alternative adopts the prescriptions of the No Action Alternative with the following differences:

- Vehicular traffic within the proposed ACEC would be limited to designated roads only. All other roads would be closed to all but administrative uses. Outside the proposed ACEC, but within the Planning Area, current OHV designations would remain unchanged. See Map E-3.

**Special Management Areas**

Alternative E would establish the Lesser Prairie-chicken ACEC, consisting of four tracts totaling 362 square miles (935 sq. km). (See Map E-1.) This alternative would incorporate the public land of the Mescalero Sands ACEC and eliminate separate ACEC designations.

## ALTERNATIVES AND ISSUES CONSIDERED BUT NOT ANALYZED IN DETAIL

BLM considered two alternatives that were not analyzed in detail. This first would have permitted oil and gas leasing and subsequent development, livestock grazing and OHV use in the Planning Area without regard for the habitat needs of the lesser prairie-chicken and the sand dune lizard. Since this alternative would result in actions more detrimental to habitat protection than the No Action Alternative and likely speed the listing of either the lesser prairie-chicken or sand dune lizard as a threatened or endangered species, it was dropped from analysis.

The second alternative would have banned future development on existing oil and gas leases, and closed the Planning Area to livestock grazing. Holders of existing oil and gas leases have valid rights for the development of their leases. Closing the Planning Area to livestock grazing violates

the Taylor Grazing Act of 1934, Federal livestock grazing regulations, and would likely lead to protracted legal proceedings in Federal court. For these reasons, this alternative was dropped from analysis.

The concept of phased oil and gas development was not included in any of the alternatives. Given the amount of Federal minerals already under lease (see Table 2-2 and Map 2-1) and the number of active wells (see Map 2-3) in the Planning Area, phased development was dropped from consideration.

Public land in the western United States was assessed for renewable energy potential by the Department of Energy. The Planning Area has little potential for either geothermal and biomass energy generation and, therefore, these categories were not considered in the alternatives.

“Assessing the Potential for Renewable Energy on Public Lands” is available at [www.nrel.gov/docs/fy03osti/33530.pdf](http://www.nrel.gov/docs/fy03osti/33530.pdf).

## COMPARISON OF ALTERNATIVES

**TABLE 2-13A LANDS & REALTY**

TOPIC	NO ACTION ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B (PREFERRED)	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Public Land Identified for Disposal	22,000 acres identified in the 1997 Roswell RMP within the Planning Area	3,151 acres in Roosevelt County identified for disposal switched to retention	Same as Alternative A	Same as No Action	Same as No Action	Same as No Action
Definitions of Right-of-Way Avoidance/ Exclusion Areas	ROW avoidance/ exclusion definition unified and updated for the Planning Area.	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Right-of-way Exclusion Areas	Mescalero Sands ACEC, Mathers RNA	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Right-of-Way Avoidance Areas	Core prairie-chicken Areas, Mescalero Sands North Dune OHV Area, Hackberry Lake Intensive ORV Area, Maroon Cliffs, Laguna Plata, Bear Grass Draw, Poco Site	Core Management Area, occupied habitat within the Primary Population Area, Mescalero Sands North Dune OHV Area, Hackberry Lake Intensive ORV Area, Maroon Cliffs, Laguna Plata, Bear Grass Draw, Poco Site	Same as Alternative A	Same as No Action	Same as No Action	Same as No Action
Rights-of-Way	Issued on a case-by-case basis	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Inside proposed ACEC, no ROWs within 0.9 miles of an active lek. Outside the proposed ACEC, same as No Action
Priority on Land Exchanges with State Land Office	None	Yes	Yes	None	None	None
Potential Acquisitions	Acres identified in the 1997 Roswell RMP within the Planning Area	Consider acquisitions from willing sellers for special status species habitat	Same as Alternative A	Same as No Action	Same as No Action	Same as Alternative A
Interstate Utility Corridors	Management Common to All Alternatives identifies corridors for major interstate utilities	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Electric Power Lines	No prescription	Same as No Action	Power Line Removal Credit program - 1.0 miles of new construction for every 1.5 miles of idle line removed	Same as No Action	Same as No Action	Same as No Action

## COMPARISON OF ALTERNATIVES

**TABLE 2-13B MINERALS**

TOPIC	NO ACTION ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B (PREFERRED)	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Areas Closed to New Oil & Gas Leasing	Mathers RNA, Mescalero Sands ACEC, portions of Maroon Cliffs	CMA –includes Mathers RNA PPA – occupied & suitable habitat closed; potentially suitable habitat may be closed depending on its location to occupied & suitable. Future leasing in occupied possible if suitable acres increase & population increases. SSPA & IPA – occupied habitat is closed. 17 Habitat Evaluation Areas (HEAs) – may be closed depending on evaluation results. Mescalero Sands ACEC – closed Maroon Cliffs – portions closed	CMA –includes Mescalero Sands ACEC & Mathers RNA PPA – occupied & suitable habitat closed; potentially suitable habitat may be closed depending on its location to occupied & suitable. SSPA & IPA – occupied habitat is closed. 17 HEA – may be closed depending on evaluation results. Maroon Cliffs – portions closed	Zone 1 (includes Mathers RNA and Mescalero Sands ACEC) and portions of Maroon Cliffs	Mathers RNA, Mescalero Sands ACEC, portions of Maroon Cliffs	Mathers RNA, Mescalero Sands ACEC, portions of Maroon Cliffs
NSO Applied to New Oil & Gas Leasing	Mescalero Sands North Dune OHV Area Corridor, Mescalero Sands North Dune OHV Area, portions of Maroon Cliffs	Mescalero Sands North Dune OHV Area Corridor, Mescalero Sands North Dune OHV Area and portions of Maroon Cliffs CMA – tracts along edges needed for proration/drainage PPA – where appropriate for occupied, suitable and potentially suitable habitat 17 HEA – may be applied depending on evaluation results.	Mescalero Sands North Dune OHV Area Corridor, Mescalero Sands North Dune OHV Area and portions of Maroon Cliffs CMA – tracts along edges needed for proration/drainage PPA – where appropriate for occupied, suitable and potentially suitable habitat 17 HEA – may be applied depending on evaluation results.	Mescalero Sands North Dune OHV Area Corridor, Mescalero Sands North Dune OHV Area and Zone 2	Mescalero Sands North Dune OHV Area Corridor and Mescalero Sands North Dune OHV Area	Mescalero Sands North Dune OHV Area Corridor and Mescalero Sands North Dune OHV Area
5-year Moratorium on All Oil & Gas Activity	None	Same as No Action	Same as No Action	Same as No Action	Same as No Action	No oil & gas activity (no new leasing or development of existing leases) in portions of the proposed ACEC south of US Hwy 380 & the 2 portions straddling US Hwy 70. Action needed by Congress.
Plan of Development (POD)	Not required	Required for all new & existing leases	Required for all new & existing leases	Required for all new & existing leases	Required only in occupied habitat	Not required

## COMPARISON OF ALTERNATIVES

**TABLE 2-13B MINERALS (Concluded)**

TOPIC	NO ACTION ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B (PREFERRED)	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Disposal of Mineral Materials	Closed - Mathers RNA, Mescalero Sands ACEC, Mescalero Sands North Dune OHV Area	Same as No Action plus no new sites in occupied within the CMA and PPA	Same as Alternative A	Same as No Action	Same as No Action	No new minerals materials pits in Proposed ACEC
Sand Dune Lizard Protection	No surface disturbance in occupied habitat or within 100 meters of suitable habitat	Establishes a 13 wells/sq. mi. limit No development within 100 meters of occupied/suitable habitat	<u>New leases</u> - require a POD. NSO in dune complexes. <u>Existing leases</u> - require a survey with a POD to avoid occupied and suitable habitat by up to 200 meters.	No new leasing in occupied habitat. POD required for existing leases.	Same as No Action	None
LPC Timing & Noise Requirements	No drilling or geophysical exploration in LPC Habitat Area from March 15 – June 15. Exhaust noise not to exceed 75 db measured 30 feet from source	Current prescriptions maintained only as needed & active leks defined as active within 2 yrs. Exhaust noise not to exceed 75 db measured 30 feet from source	Timing expanded to March 1 – June 15 in Planning Area. Exceptions considered up to March 15. No exceptions considered after that date. Exhaust noise not to exceed 75 db measured 30 feet from source	Same as No Action	Same as No Action	Same as No Action
Development of Existing Leases In or Adjacent to Active LPC Leaks	No disturbance within up to 200 meters of known leks	No disturbance within up to 200 meters of known leks plus PODs required	Same as Alternative A	Same as Alternative A	Same as Alternative A	No disturbance within 1.5 km (0.9 mi) of known leks

## COMPARISON OF ALTERNATIVES

**TABLE 2-13C ALTERNATIVE ENERGY, SOILS, WATER, FLOODPLAIN, AIR, INVASIVE SPECIES, FIRE MANAGEMENT, HAZARDOUS MATERIALS, CULTURAL RESOURCES, PALEONTOLOGICAL RESOURCES AND VISUAL RESOURCES**

RESOURCE	NO ACTION ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B (PREFERRED)	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Alternative Energy	Commercial solar or wind energy sites considered on a case-by-case basis	Same as No Action	Solar or wind energy sites located in places with no impacts to occupied & suitable species habitat	Same as No Action	Solar or wind energy sites located in places with no impacts to occupied species habitat	Same as No Action
Soils	Current soil management prescriptions would continue	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Water Resources	Current quality & quantity management prescriptions for surface & subsurface water would continue	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Floodplains	Current floodplain management prescriptions would continue	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Air Quality	Current air quality management prescriptions would continue	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Non Native & Invasive Species	Current identification & treatment strategies would continue	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Fire Management	Current fire management categories & prescriptions would continue	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Hazardous Materials	Current management actions would continue	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Cultural Resources	Current management prescriptions would continue	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Paleontological Resources	Current management prescriptions would continue	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Visual Resources	Current management prescriptions would continue	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action

## COMPARISON OF ALTERNATIVES

**TABLE 2-13D VEGETATION**

TOPIC	NO ACTION ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B (PREFERRED)	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Standards for Public Land Health & Guidelines for Livestock Grazing	Evaluated on a watershed basis using monitoring data and current conditions	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Brush Control	To be used as a tool to move toward the Standards	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Roswell Field Office 5-year Wait for Adjacent Chemical Treatments	No new treatment next to existing chemical treated area for 5 years in Roswell Field Office. Does not apply in Carlsbad Field Office.	In the Planning Area the 5-yr constraint dropped	Same as Alternative A	Same as No Action	Same as Alternative A	Same as No Action
Mesquite Treatment	To be used as a tool to move toward the Standards	Mechanical or chemical treatment to moves toward better chicken habitat	Same as Alternative A	Same as No Action	Same as Alternative A	Same as No Action
Shinnery-Oak Treatment	To be used as a tool to move toward the Standards	Treat in cases where shinnery-oak exceeds composition or canopy standards & only to defoliate, not eradicate.	Same as Alternative A	Same as No Action	Same as Alternative A	None
Desired Plant Community	DPC designated in Roswell, but not Carlsbad	Same as No Action	DPC adopted throughout the Planning Area	Same as No Action, plus add DPC from Alternative B	Same as Alternative A, plus add DPC from Alternative B	Same as No Action
Rest After Treatment	2 growing seasons	Minimum of 2 growing seasons, grazing after that time allowed if progress towards meeting vegetative standards is being made.	2 growing seasons unless a different time period, longer or shorter, is necessary to achieve habitat requirements	Same as No Action	Same as Alternative A	Not necessary in proposed ACEC, same as No Action outside proposed ACEC boundaries
Sand Dune Lizard Habitat	None	Where occupied & suitable habitat is separated by less than 200 meters, leave untreated dispersal corridors at least 500 meters wide	Occupied and suitable habitat would not be treated unless sand dune lizard is removed from state or Federal lists; or a chemical application rate is developed that would not impair habitat	None	Same as Alternative A	None
Tebuthiuron Ban	None	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Use banned in the adaptive management portion of the proposed ACEC

## COMPARISON OF ALTERNATIVES

**TABLE 2-13E LIVESTOCK MANAGEMENT**

TOPIC	NO ACTION ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B (PREFERRED)	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Standards for Public Land Health & Guidelines for Livestock Grazing	Evaluated on a watershed basis using monitoring data and current conditions	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
5-year Moratorium on Livestock Grazing	None	None	None	None	None	No livestock grazing on the portions of the proposed ACEC south of US Hwy 380 & the 2 portions straddling US Hwy 70
Use Authorization	Currently 192,125 AUMs on 114 allotments	Same as No Action	Same as No Action	Same as No Action	Same as No Action	155,615 AUMs on 114 allotments
Changes in Numbers	Changes based on monitoring data and, assessments of the Standards of Public Land Health in consultation with the allotment holder	Same as No Action	Same as No Action	Same as No Action	If an allotment's base property is sold & the buyer does not wish to graze livestock, the AUMs would be placed in Voluntary Non-Use.	5-yr Moratorium removes AUMs on 32 allotments in portions of the proposed ACEC. In the remainder of the proposed ACEC (the Adaptive Management Area) experimental reductions would be made.
Range Improvements	Priority given to the projects designed to move towards achieving the Standards	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Voluntary Relinquishment of Grazing	None	Option for Prairie-chicken reserves in Planning Area. Allotment holder's choice to do so. BLM would close allotment to grazing for life of this plan amendment. Closure may or may not be carried forward when plan is revised.	Same as Alternative A	Same as No Action	Same as No Action	Same as No Action
Participation in Conservation Programs	Allotment holders neither encouraged nor discouraged from participating	Allotment holders are encouraged to participate in conservation programs that are consistent with the seasonal nesting and brood-rearing habitat requirements for Prairie-chicken.	Same as Alternative A	Same as No Action	Same as No Action	Same as No Action

## COMPARISON OF ALTERNATIVES

**TABLE 2-13F WILDLIFE\*** NOTE: \*Many of the management prescriptions meant to protect, maintain and enhance habitat for special status species habitat are described in the other resource sections of this chapter.

TOPIC	NO ACTION ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B (PREFERRED)	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Lesser Prairie-chicken Core Habitat Areas	Established within Roswell Field Office only	Prairie-chicken Habitat Core Areas replaced with the CMA & PPA	Prairie-chicken Habitat Core Areas replaced with a CMA larger than Alternative A & PPA	Same as No Action	Prairie-chicken Core Areas removed. Surface Use & Occupancy Requirements (SUORs) applied only to occupied habitat	Prairie-chicken Core Areas replaced by proposed ACEC
Lesser Prairie-chicken Timing & Noise Restrictions	No geophysical exploration, drilling or other development in chicken habitat from March 15 to June 15 between 3 am to 9 am. Point sources of noise in chicken habitat muffled to 75 db measured 30 feet from the source.	Current stips maintained only as needed & active leks defined as active within 2 yrs. Exhaust noise not to exceed 75 db measured 30 feet from source	Timing expanded to March 1 – June 15 in Planning Area Exceptions considered up to March 15. No exceptions considered after that date. Exhaust noise not to exceed 75 db measured 30 feet from source.	Same as No Action	Same as No Action	Same as No Action
Sand Dune Lizard	No surface disturbance in occupied habitat or within up to 100 meters of suitable habitat.	Same as No Action	No surface disturbance in dune complexes in lizard habitat. See the Chapter 2 Minerals section for prescriptions of this alternative.	Same as No Action	No surface disturbance in occupied habitat	Same as No Action
Playas & Alkali Lakes	No surface disturbance within up to 200 meters	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Predator Control	1997 Roswell RMP sets up conditions & protocol for predator control	Encouraged to increase Prairie-chicken nesting success	Encouraged to increase Prairie-chicken nesting success	Same as No Action	Same as No Action	Same as No Action
Recovery Plans	Plans for Federally-listed species would be implemented, including reintroduction of native species in coordination & cooperation of local governments	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Fence Enclosures	Would be considered for small areas only to protect special status wildlife or plant species; or special habitat features.	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Habitat Management Plans (HMP)	Existing HMPs may be modified as result of RMPA & done with public participation & NEPA .	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action

## COMPARISON OF ALTERNATIVES

**TABLE 2-13G RECREATION**

TOPIC	NO ACTION ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B (PREFERRED)	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Special Recreation Management Areas	Mescalero Sands North Dune OHV Area & Hackberry Lake Intensive ORV Area	Same as No Action	Adds Square Lake OHV Area	Same as No Action	Same as No Action	Same as No Action
Recreation Permits for Lesser Prairie-chicken Observation	None	Same as No Action	If visitation begins to negatively impact lesser prairie-chicken, a permit system would be instituted.	Same as No Action	Same as No Action	Access to proposed ACEC for recreation by permit only
Timing & Noise Restrictions	None	Same as No Action	Generators associated with recreation uses not allowed in or near leks from March 1-June 15 from the hours of 3 am to 9 am.	Same as No Action	Same as No Action	Same as No Action
Recreation Opportunity Spectrum	ROS designation of Planning Area is rural & natural	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action

## COMPARISON OF ALTERNATIVES

**TABLE 2-13H OFF-HIGHWAY VEHICLE MANAGEMENT**

TOPIC	NO ACTION ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B (PREFERRED)	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Open to OHV Use	Mescalero Sand North Dune OHV Area, Hackberry Lake Intensive ORV Area, CFO portion of the Planning Area	Mescalero Sand North Dune OHV Area, Hackberry Lake Intensive ORV Area	Mescalero Sand North Dune OHV Area, the open dunes of Shugart In Hackberry Lake & Square Lake OHV Areas	Same as No Action	Same as No Action	Same as No Action
Limited to Designated Roads & Trails	Roswell portion of the Planning Area, Maroon Cliffs, portion of Laguna Plata, Bear Grass Draw, Poco Site	Planning Area (including the Carlsbad portion), Maroon Cliffs, portion of Laguna Plata, Bear Grass Draw, Poco Site	Planning Area (including the Carlsbad portion), the interdune portions of Hackberry Lake & Square Lake OHV Areas, Maroon Cliffs, portion of Laguna Plata, Bear Grass Draw, Poco Site	Same as No Action	Same as No Action	Same as No Action
Closed to OHV Use	Mathers RNA, Mescalero Sands ACEC, portions of Laguna Plata,	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Same as No Action
Designated Roads & Trails	Transportation planning with route designation plan pending in Roswell portion of Planning Area. No such pending in Carlsbad portion	Review current designations for adequacy of habitat protection	Transportation planning with route designation plan pending in entire Planning Area.	Same as Alternative A	Same as No Action	Transportation planning with route designation plan pending in the proposed ACEC. Outside the proposed ACEC, same as No Action
Seasonal Use of Established OHV Areas	Not proposed	Same as No Action	If needed, timing & noise restriction would not allow OHV use from March 1 – June 15 from the hours of 3 am to 9 am	Same as No Action	Same as Alternative B	Same as No Action
Mescalero Sands North Dune OHV Area	Expansion from current 562 acres to 1,553 acres.	No expansion	Expanded in 3 phases if no conflicts with habitat protection	Same as Alternative A	Only Phase 1 expansion if no conflicts with habitat protection	Same as No Action
Hackberry Lake Intensive ORV Area	Current management continues	Same as No Action	Designation changed to limited to designated roads & trails in inter dune area. Open dunes in Shugart area to remain as open to OHV use.	Same as Alternative A	Same as No Action	Same as No Action
Proposed Square Lake OHV Area	Not proposed	Same as No Action	Established only if possible habitat conflicts eliminated or mitigated. Would establish management of an area already used by the public. Limited to vehicles less than 55 inches wide. OHV use limited to designate roads & trails in inter dune area. Dunes designated as open to OHV use	Same as No Action	Same as No Action	Same as No Action

## COMPARISON OF ALTERNATIVES

**TABLE 2-13I SPECIAL MANAGEMENT AREAS**

TOPIC	NO ACTION ALTERNATIVE	ALTERNATIVE A	ALTERNATIVE B (PREFERRED)	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Areas of Critical Environmental Concern (ACECs)	Mescalero Sands ACEC	Same as No Action	Same as No Action	Same as No Action	Same as No Action	Establishes the Lesser Prairie-chicken ACEC as 4 separate tracts. Incorporates the Mescalero Sands ACEC & eliminates the dual designation.
Special Management Areas	Mescalero Sands North Dune OHV Area, Mathers RNA ,Hackberry Lake Intensive ORV Area, Maroon Cliffs, Laguna Plata, Bear Grass Draw, Poco Site	Same as No Action	Criteria for establishing Square Lake OHV Area	Same as No Action	Same as No Action	Same as No Action