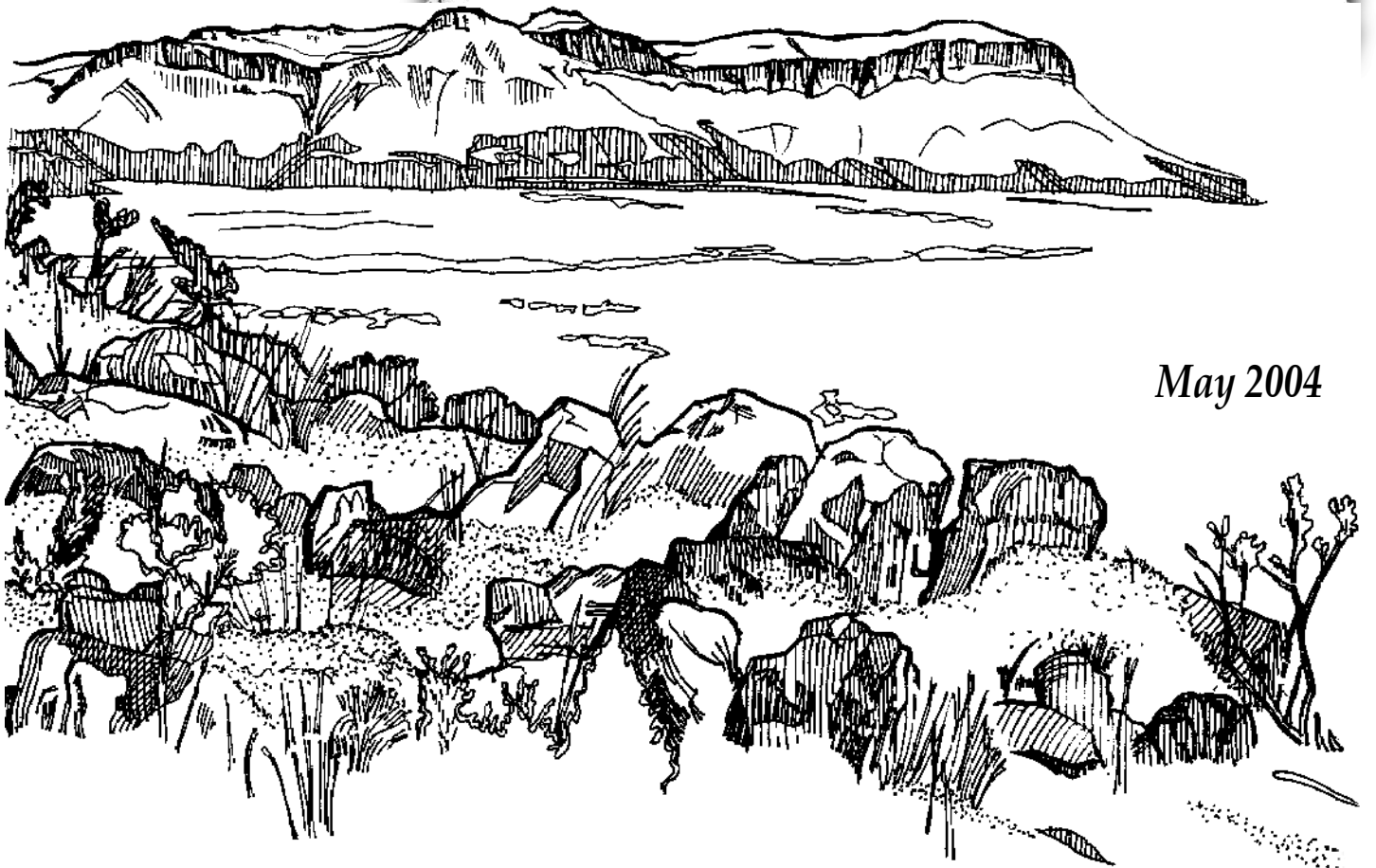




Supplement to Proposed Resource Management Plan Amendment and Final Environmental Impact Statement for Federal Fluid Minerals Leasing and Development in Sierra and Otero Counties

*United States Department of the Interior
Bureau of Land Management*

LAS CRUCES FIELD OFFICE



May 2004

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The Bureau of Land Management is responsible for the balanced management of the public lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield, a combination of uses that take into account the long-term needs of future generations for renewable and nonrenewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific, and cultural values.

BLM/NM/PL-04-006



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Las Cruces Field Office
1800 Marquess
Las Cruces, New Mexico 88005
www.nm.blm.gov

IN REPLY REFER TO:
1610 (03000)

May 2004

Dear Reader:

Enclosed is the Supplement to the Proposed Resource Management Plan Amendment (RMPA) and Final Environmental Impact Statement (EIS) for Federal Fluid Minerals Leasing and Development in Sierra and Otero Counties.

This Supplement is issued to improve public understanding of the Proposed Plan regarding the management of Federal oil and gas leases and subsequent development activities, within Sierra and Otero Counties, New Mexico. This supplement is intended to:

1. Identify the three areas that the Governor of New Mexico has recommended for closure to leasing, and that BLM is now proposing to close to leasing.
2. Provide further explanation of the changes made by BLM, from Alternative A in the Draft RMPA/EIS to Alternative A Modified in the Proposed RMPA/Final EIS.
3. Explain how the changes made between the Draft EIS and Final EIS do not change the impact to the environment.
4. Allow the public an opportunity to comment on these issues.

The Supplement has been mailed to individuals who received the Proposed RMPA/Final EIS or subsequently requested to be added to the mailing list, as well as appropriate Federal, Tribal, State, and local agencies. The Supplement is available for review at the BLM New Mexico State Office, 1474 Rodeo Road, Santa Fe, New Mexico and at the BLM Las Cruces Field Office, 1800 Marquess, Las Cruces, New Mexico. In addition it is posted on the New Mexico State Office Internet web page at www.nm.blm.gov.

The comments must be postmarked or delivered within 30 days of the date that the Environmental Protection Agency publishes the notice of receipt of the Supplement in the *Federal Register*. All comments must be in writing and mailed to the following address:

Regular Mail:

State Director
Supplement Comments
Bureau of Land Management
P.O. Box 27115
Santa Fe, NM 87502-0115

Overnight Mail:

State Director
Supplement Comments
Bureau of Land Management
1474 Rodeo Road
Santa Fe, NM 87505

Comments via e-mail and fax will not be accepted. Comments should be specific to the information presented in the Supplement and should also reference pages, whenever possible.

Comments will be fully considered as a part of the BLM decision-making process. A Record of Decision will be made available to the public and mailed to all interested parties. Once the Record of Decision is issued, BLM will begin implementing the RMPA. The Las Cruces Field Office plans to use the RMPA as the framework for pursuing collaborative management of natural resources on public land in Sierra and Otero Counties.

Questions regarding this document can be directed to Tom Phillips, Planning Team Leader at (505) 525-4377.

Sincerely,

A handwritten signature in black ink that reads "Edwin L. Roberson". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Edwin L. Roberson
Field Manager

Enclosure

**SUPPLEMENT TO THE
PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENT/
FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR FEDERAL FLUID MINERALS LEASING AND DEVELOPMENT
IN SIERRA AND OTERO COUNTIES**

Draft ()

Final (X)

LEAD AGENCY: U.S. Department of the Interior, Bureau of Land Management (BLM)

TYPE OF ACTION: Administrative

JURISDICTION: Sierra and Otero Counties, New Mexico

ABSTRACT


This Supplement to the Proposed Resource Management Plan Amendment (RMPA)/Final Environmental Impact Statement (EIS) for Federal Fluid Minerals Leasing and Development in Sierra and Otero Counties is issued to improve public understanding of the Proposed Plan. This supplement is intended to: identify the three areas that the Governor of New Mexico has recommended for closure to leasing and that BLM is now proposing to close; provide further explanation of the changes made by BLM, from Alternative A in the Draft RMPA/EIS to Alternative A Modified in the Proposed RMPA/Final EIS; explain how the changes made between the Draft RMPA/EIS and Final RMPA/EIS, do not change the impact to the environment; and allow the public an opportunity to comment on these issues.

Of the nearly 7 million acres of Federal, State, Tribal, and private lands in the two counties, BLM administers approximately 1.8 million surface acres and 5 million acres with underlying Federal minerals. The BLM Las Cruces Field Office manages public land in the two counties.

Comments must be postmarked or delivered within 30 days of the date that the Environmental Protection Agency publishes the notice of receipt of the Supplement in the *Federal Register*.

For further information contact: Tom Phillips, RMPA/EIS Team Leader at (505) 525-4377.

RECOMMENDED:



Edwin L. Roberson
Las Cruces Field Manager

APPROVED:



Linda S. C. Rundell
New Mexico State Director

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1.1 PURPOSE FOR THE SUPPLEMENT

The Proposed Resource Management Plan Amendment (RMPA)/Final Environmental Impact Statement (EIS) for Federal Fluid Minerals Leasing and Development in Sierra and Otero Counties was completed in December 2003. This was the result of over 5 years of extensive public involvement to identify what public land in the two county planning area should be made available for oil and gas leasing, and how leasing on the land should be managed.

During the subsequent 30-day public protest period and 60-day Governor's Consistency Review period, BLM received feedback indicating concern about the extent of changes made between the Draft EIS and the Final EIS. The perception by the Governor of New Mexico and many of the public is that the changes between the Draft and Final are significant, and that there should have been an opportunity for the BLM to receive public input in the form of comments prior to issuance of the Final EIS.

In addition, the Governor of New Mexico has recommended that two areas on Otero Mesa and one area in the Nutt grasslands (totaling 35,790 acres) be permanently closed to leasing, as opposed to being temporarily withheld from leasing for 5 years.

Therefore, the purpose of this supplement is: to identify the three areas that the Governor has recommended for closure to leasing and that BLM is now proposing for closure; provide further explanation of the changes made by BLM, from Alternative A in the Draft RMPA/EIS to Alternative A Modified in the Proposed RMPA/Final EIS; to explain how the changes made between the Draft EIS and Final EIS do not change the impact to the environment; and to allow the public an opportunity to comment on these issues.

Most of the information provided in this supplement is directly from either the Draft RMPA/EIS or the Proposed RMPA/Final EIS. Wherever appropriate, BLM has provided a reference to the location where the information is found.

1.2 PROPOSED ACTION

The Proposed Action is the Proposed Plan as identified in the Final EIS on pages 2-27 to 2-30, and further modified by this Supplement. The Proposed Plan identifies which lands will be made available for leasing for oil, gas, and geothermal resources and how exploration and development on those available lands will be managed. Figure 1 summarizes the management resulting from the Proposed Plan.

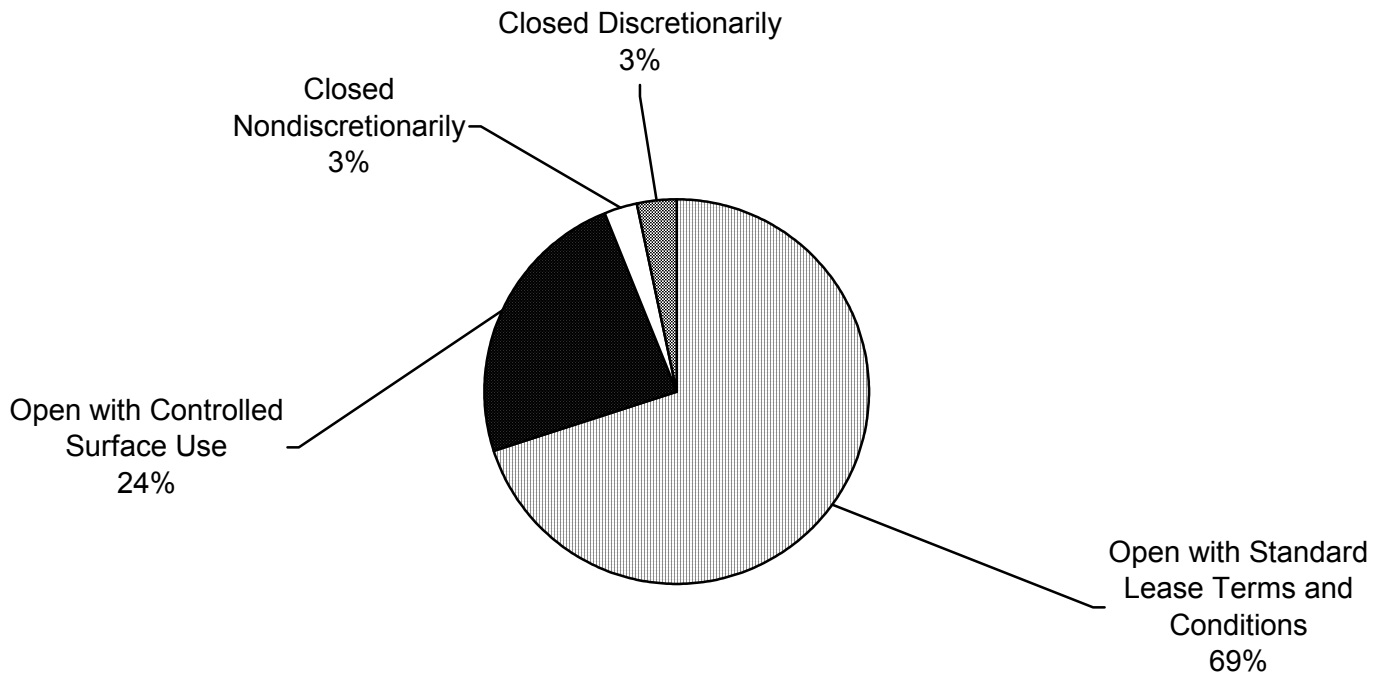
Under the Proposed Plan, the majority of public land in Sierra and Otero Counties would remain open to leasing. However, in accordance with BLM Handbook H-1624-1, BLM has modified the existing management situation as follows: (1) to identify which public land would be available for leasing and subsequent development, (2) to determine how the available land would be managed, and (3) to respond to legislative or regulatory requirements or management objectives.

The Proposed Plan allows for the protection of resource values while sustaining the ability of the fluid minerals industry to achieve the Reasonable Foreseeable Development (RFD) and fulfilling the policy of multiple use and sustained yield of public lands as directed under Federal Land Policy Management Act (FLPMA).

1.2.1 Lands and Access

The majority of existing management direction for lands and access allows leasing with Standard Lease Terms and Conditions. Resource concerns that warrant

FIGURE 1 MANAGEMENT UNDER THE PROPOSED PLAN



closure to leasing, a stipulation for more protection, or further clarification are described below.

White Sands Missile Range Safety Evacuation Zone, an area adjacent to the western edge of the White Sands Missile Range, may be evacuated on days that missiles are fired. The land is administered by BLM; however, the Department of the Army is responsible for evacuation notification. Therefore, BLM would continue to manage the land as open to leasing with Standard Lease Terms and Conditions, but would issue a Lease Notice to lessees informing them of the potential for evacuation (Final EIS, Appendix D, page D-13).

The old Air Force bombing and gunnery range is an area that was used previously as an impact area and subsurface use is prohibited. BLM would manage the land as a non-discretionary closure to ensure public safety (Final EIS, Appendix D, page D-2).

The Caballo Mountain Communication Site area would be managed as open to leasing with Standard Lease Terms and Conditions. Recreation & Public Purpose (R&PP) leases and patents would remain open to leasing with a stipulation of No Surface Occupancy (Final EIS, Appendix D, page D-5).

Public water reserves would be managed as open to leasing with Standard Lease Terms and Conditions.

Community Pit 7, a mineral material area managed by BLM for public use, would remain open to leasing with No Surface Occupancy (Final EIS, Appendix D, page D-6).

The Berrendo Administrative Camp Site would remain open to leasing with a stipulation to control surface use to avoid impacts on existing structures and the helipad to protect capital investment (Final EIS, Appendix D, page D-9).

1.2.2 Watersheds and Water Resources

Highly erosive and fragile soils (mapped by the Natural Resources Conservation Service as Nickel-Bluepoint, Alamogordo-Gypsum Land-Aztec, Holloman-Gypsum Land-Yesum and Prelo-Tome-Largo) would remain open to leasing, but with a stipulation to control surface use to maintain productivity and minimize erosion (Final EIS, Appendix D, page D-9).

Riparian/other wetlands/playas would remain open to leasing, but with a stipulation of No Surface Occupancy within 0.25 mile to minimize impacts on these sensitive areas (Final EIS, Appendix D, page D-6).

The five watershed areas identified and mapped by BLM would remain open to leasing with Standard Lease Terms and Conditions.

The six ecological study plots would remain open to leasing with a stipulation of No Surface Occupancy to protect existing ecological resources in these areas for research and scientific purposes (Final EIS, Appendix D, page D-7).

1.2.3 Wildlife and Special Status Species

The four big game habitat areas identified and mapped by BLM would remain open to leasing with Standard Lease Terms and Conditions.

The Nutt and Otero Mesa desert grassland habitat areas would remain open to leasing, but with a stipulation to control surface use by limiting industry's disturbance to no more than 5 percent of the leasehold at any one time and requiring the new lessees to form exploratory units prior to commencing drilling activity. The purpose is to protect remnant Chihuahuan Desert grassland habitat and associated special status species of wildlife through greater planning

of future oil and gas development (Final EIS, Appendix D, page D-10).

As part of discussions during the Section 7 Consultation effort with the U.S. Fish and Wildlife Service, and due to uncertainties regarding the future of oil and gas activities and their impact in the Nutt and Otero Mesa grassland areas, BLM is proposing to close to leasing three of the more pristine portions of the grassland habitat.

The three areas are comprised of the Nutt grassland complex (8,094 acres) and two Otero Mesa grassland complexes (11,483 acres and 16,213 acres). Maps showing these areas are found at the back of this document.

Special status species habitats identified by BLM would remain open to leasing, but with a stipulation to control surface use to avoid adverse impacts on individual species and their associated habitats (Final EIS, Appendix D, page D-12).

Unoccupied habitat suitable for bighorn sheep, identified by BLM, would remain open to leasing with Standard Lease Terms and Conditions. There are no current plans by the New Mexico Department of Game and Fish to introduce bighorn sheep into these areas.

1.2.4 Cultural Resources

Lake Valley Historic Town site would remain open to leasing, but with a stipulation of No Surface Occupancy to protect the town site and schoolhouse, which are subject to existing cultural resource regulations. Both are on the State Register of Historic Properties and are eligible for inclusion on the National Register of Historic Places (Appendix D, page D-8).

The protected cultural resource areas of Rattlesnake Hill Archaeological District, Lone Butte, and Jarilla Mountains would be

open to leasing, but with a stipulation of No Surface Occupancy to protect those cultural resources since they are listed on the State Register of Cultural Properties or eligible for inclusion on the National Register of Historic Places (Final EIS, Appendix D, page D-5).

Designated historic trails (i.e., Mormon Battalion, Butterfield, and Jornada del Muerto) would remain open to leasing, but with a stipulation to control surface use. No surface-disturbing activities would be allowed within 0.25 mile from each side of the trails for their entire lengths; however, areas along the trail where there is existing disturbance could be used to cross the trails (Final EIS, Appendix D, page D-11).

1.2.5 Recreation and Visual Resources

Tularosa River Recreation Area would remain open to leasing with a stipulation of No Surface Occupancy (Final EIS, Appendix D, page D-7).

Red Sands Off-Road Vehicle (ORV) area would remain open to leasing with Standard Lease Terms and Conditions; however, a Lease Notice would be issued advising the lessee about the intermittent use of this recreation area (Final EIS, Appendix D, page D-13).

Visual Resource Management (VRM) Class I areas, which coincide with the six Areas of Critical Environmental Concern (ACECs), would remain discretionarily closed to leasing to protect the high-quality visual resource values that have been identified in these areas (Final EIS, Appendix D, page D-3).

VRM Class II areas would remain open, but with a stipulation to control surface use to protect visual resources in these areas (Final EIS, Appendix D, page D-11).

VRM Classes III and IV would remain open to leasing with Standard Lease Terms and Conditions.

Cuchillo Mountains Piñon Nut Collection Area would remain open to leasing with Standard Lease Terms and Conditions; however, a Lease Notice would be issued advising the lessee that the current use of the stands of piñon pine trees as a public and commercial nut collection area must be maintained (Final EIS, Appendix D, page D-13).

Lake Valley Backcountry Byway would remain open to leasing, but with a stipulation of No Surface Occupancy in order to protect the scenic resources along the Byway (Final EIS, Appendix D, page D-8). No surface disturbance will be authorized within 0.5 mile of either side of the road. For proposed disturbances between 0.5 and 1 mile from either side of the road, operators also may be required to provide and implement mitigation plans for proposed development activities.

1.2.6 Special Management Areas

The Jornada del Muerto, Brokeoff Mountains, Guadalupe Escarpment, and Sacramento Escarpment Wilderness Study Areas (WSAs) would remain non-discretionarily closed to leasing to protect the wilderness values of these areas (Final EIS, Appendix D, page D-2).

The six ACECs would remain discretionarily closed to leasing to protect the high-quality resource values of these areas (Final EIS, Appendix D, page D-3).

The eight nominated ACECs would be discretionarily closed to leasing. They have been determined to meet BLM's "relevance and importance" criteria, and they would be managed to protect the known or potential

biological communities in each of these areas until such time as they are evaluated further for designation (Final EIS, Appendix D, page D-4).

1.3 AGENCY OBJECTIVES AND MANAGEMENT DIRECTION

In 1998, a gas find on Otero Mesa resulted in increased interest on the part of the oil and gas industry. Large increases in the number of lease nominations prompted BLM to review the 1986 RMP with regard to subsequent guidelines for fluid minerals leasing and development. Given the lack of direction in the existing 1986 RMP and the increasing level of interest, it was determined that an amendment to the 1986 RMP would be required to guide leasing decisions on public land in order to comply with the 1992 supplemental guidelines described above (BLM Handbook H-1624-1).

The objective of this RMPA is to determine (1) which lands overlying Federal fluid minerals are suitable and should continue to remain available for leasing and subsequent development and (2) how those leased lands will be managed. The Final EIS identifies the impacts that the Proposed Plan for fluid minerals leasing and subsequent activities could have on the environment and identifies appropriate measures to mitigate those impacts.

In the case of lands available for leasing, BLM has identified in the Final EIS, which lands are to be managed with Standard Lease Terms and Conditions and Best Management Practices; or where necessary to mitigate special resource concerns, what stipulations will be applied to lease parcels in the form of either No Surface Occupancy or Controlled Surface Use stipulations. These mitigations are generally summarized in the Final EIS in Appendix C, Table C-1. Appendix D in the Final EIS, provides a brief description of the resource concerns that, under the Proposed Plan, would be closed

to leasing or open to leasing with Stipulations or Lease Notices.

1.4 SIGNIFICANT CHANGE TO PROPOSED RMPA

In the Governor's letter to the State Director, dated March 5, 2004, concern surfaced about the three core habitat areas that the Final EIS (page 2-29 and Appendix F) identified as being withheld from leasing for 5 years. The Governor expressed concern that not all three areas were clearly identified in the Final EIS and also that the withholding of these areas was not permanent. BLM had proposed that these areas be withheld for at least 5 years to allow an opportunity to evaluate the oil and gas exploration and development activities during this time and to evaluate the impacts to the Chihuahuan Desert Grassland habitat from this use.

The Proposed Plan identified three areas comprised of two Otero Mesa grassland complexes (11,483 acres and 16, 213 acres), and one Nutt grassland complex (8,094 acres), totaling 35,790 acres. These areas would be withheld from leasing, but if future evaluation of activities and impacts indicated the stipulation limiting disturbance to 5 percent and requiring unitization, then leasing could commence without amending the land use plan decision. However, if analysis indicated that the 5 percent stipulation was not appropriate, then an amendment would be required prior to leasing.

The change, which BLM is now seeking comments on, is to discretionarily close these three areas (35,790 acres) to fluid minerals leasing to provide assurance of longer-term protection of the most pristine portions of this important grassland habitat. The two Otero Mesa areas are shown on Map 1 and the Nutt area is shown on Map 2 located at the back of the document.

The BLM is seeking public comments on this proposed closure, which is a change to the Proposed Plan. The public is strongly encouraged to provide their comments and concerns regarding this significant change, so BLM can carefully assess this proposal prior to issuing the Record of Decision.

1.4.1 Environmental Consequences

The Environmental Consequences are thoroughly described in Chapter 4 of the Final EIS, and a summary of potential impacts by alternative is found in Table 1 in this Supplement. Those impacts regarding the closure to leasing of the three core habitat areas are further clarified below. The impacts include increasing the total areas discretionarily closed to leasing from 30,097 acres (Final EIS, page 2-24) to 65,887 acres. There is an associated reduction in the total acreage available for leasing with a stipulation limiting disturbance to 5 percent and requiring unitization from 121,141 acres to 85,351 acres. Closing these areas to leasing may change how exploration and development of oil and gas resources is conducted and may possibly affect the way that industry looks at this area as a frontier area. Although leasing and development may be limited by the closing of these three areas, the Proposed Plan would still allow for leasing on 69 percent of the two county planning area under Standard Lease Terms and Conditions and 26 percent of the planning area would be available for leasing under a variety of stipulations, as identified in the Final EIS.

BLM does not believe there are any differences in short-term impacts to the grassland resource, whether the 35,790 acres are temporarily withheld from leasing or closed to leasing at this point. Under the Proposed Plan in the Final EIS, BLM would not have opened up the areas to leasing if monitoring of the effects of leasing indicated that exploration and development activities would have adversely impacted the important resource values found in these areas. Therefore, under the Change to the Proposed Plan, BLM would close the areas now and would still have the ability to evaluate the activities and impacts to adjacent grassland areas.

1.5 CHANGES BETWEEN DRAFT RMPA AND PROPOSED RMPA

Modifications and corrections were made in response to public comments on the Draft RMPA/EIS. Most of the changes were made to improve the clarity and intent of the management direction. Although the management change may be reflected through a change to a stipulation, the objectives for the management of oil and gas activities and for the protection of resource concerns have not changed. The changes reflected in the Proposed RMPA/Final EIS are within the scope and analysis of the Draft RMPA/EIS and do not significantly alter the alternatives or analysis of the environmental consequences.

Due to the concerns raised about changes made between the Draft EIS and the Final EIS, this supplement will provide further explanation of the changes made.

**TABLE 1
SUMMARY OF POTENTIAL IMPACTS BY ALTERNATIVE**

Resources	No Action Alternative (Existing Management)	Alternative A Modified (Proposed Plan)	Alternative B
CONSTRAINTS	<p>Within the Planning Area, lands administered by the military and National Park Service, as well as villages, towns, and incorporated cities are all non-discretionarily closed to leasing. Within BLM's Decision Area:</p> <ul style="list-style-type: none"> • Closed to leasing – 63,721 acres (3%), 46,047 acres non-discretionary closures, 17,673 acres discretionary closures • Open with stipulations – 243,784 acres (12%) • Open with Standard Lease Terms and Conditions (SLTC) – 1,747,500 acres (85%) 	<p>Within the Planning Area, lands administered by the military and National Park Service, as well as villages, towns, and incorporated cities are all non-discretionarily closed to leasing. Within BLM's Decision Area:</p> <ul style="list-style-type: none"> • Closed to leasing 121,710 acres (6%), 55,823 acres non-discretionary closures, 65,887 acres discretionary closures • Open with stipulations – 524,661 acres (25%) • Open with STLC – 1,406,625 acres (69%) 	<p>Within the Planning Area, lands administered by the military and National Park Service, as well as villages, towns, and incorporated cities are all non-discretionarily closed to leasing. Within BLM's Decision Area:</p> <ul style="list-style-type: none"> • Closed to leasing – 325,155 acres (16%), 46,047 acres non-discretionary closures, 279,108 acres discretionary closures • Open with stipulations – 1,095,622 acres (63%) • Open with STLC – 632,228 acres (31%)
LANDS AND ACCESS	<p>Considering that a small percentage of land that could be disturbed to achieve the reasonable foreseeable development (RFD) scenario, and that the majority of designated lands are dispersed and most could be avoided, overall impacts on lands and access or on the ability to explore for or exploit fluid minerals would be expected to be minimal. Use of existing access is encouraged in order to avoid or minimize impacts. If new access were needed for fluid minerals activities, impacts from road construction would be unavoidable, but can be mitigated.</p>	<p>Under the Proposed Plan, potential impacts would be the same as the No Action Alternative except that greater protection is afforded Community Pit 7 (80 acres, No Surface Occupancy).</p>	<p>Under Alternative B, potential impacts would be the same as Alternative A.</p>
MINERAL RESOURCES	<p>Production of fluid minerals is beneficial socio-economically. Geothermal resources are renewable; however, oil and gas production results in an irreversible commitment of resources. Under the No Action Alternative, considering the large percentage of lands available for leasing and development, the ability to explore for and exploit fluid mineral resources is sufficient to achieve the RFD.</p>	<p>As explained for the No Action Alternative, production of fluid minerals is beneficial socio-economically. Geothermal resources are renewable; however, oil and gas production results in an irreversible commitment of resources. Under the Proposed Action, the surface management constraints as well as required mitigation and best management practices imposed by the Proposed Plan are not anticipated to significantly impact the ability to explore for or exploit oil and gas resources. However, some surface management requirements in certain areas potentially may burden a project financially. The costs of management versus anticipated revenue from a project may delay the project or make a project infeasible.</p>	<p>As explained for the No Action Alternative, production of fluid minerals is beneficial socio-economically. Geothermal resources are renewable; however oil and gas production results in an irreversible commitment of resources. Under Alternative B, protection of resources is greater. The ability to explore and exploit fluid mineral resources (that is, the ability to achieve the RFD) could be affected, and could be significantly affected locally, due to the increase in the acres of lands unavailable for leasing (discretionary closures) and stipulations of No Surface Occupancy (over Alternative A) in areas of medium potential for oil and gas and medium and high potential for geothermal resources. Also, as described under Alternative A, some surface management requirements in certain areas potentially may burden the project financially.</p>

**TABLE 1
SUMMARY OF POTENTIAL IMPACTS BY ALTERNATIVE**

Resources	No Action Alternative (Existing Management)	Alternative A Modified (Proposed Plan)	Alternative B
SOILS	While impacts on highly erosive and fragile soils would occur, such impacts can be mitigated through implementing mitigation procedures under SLTC implemented through conditions of approval. Prime farmland may be taken out of production, but impacts would be expected to be short-term. Impacts are expected to be minimal.	Under the Proposed Plan, anticipated impacts on highly erosive and fragile soils would be similar to the No Action Alternative. Occupancy or use of such areas would be considered on a case-by-case basis and best management practices and conditions of approval could be imposed to mitigate potential impacts. Impacts would be expected to be minimal.	Under Alternative B, impacts on highly erosive and fragile soils would not occur on lands where there are additional discretionary closures. Otherwise, impacts anticipated under Alternative B are similar to Alternative A.
WATERSHEDS AND WATER RESOURCES	Under existing management, potential impacts on groundwater would be expected to be minimal. For surface water, based on the protection provided by existing management direction, impacts on surface water (including watersheds) are expected to be minimal.	Under the Proposed Plan, potential impacts on groundwater are anticipated to be similar to the No Action Alternative. For surface water features such as watersheds, occupancy or use in sensitive areas would be considered on a case-by-case basis and impacts could be mitigated by implementing best management practices and other conditions of approval. Impacts on riparian, other wetlands, and playas would be minimized or eliminated by imposing the stipulation of No Surface Occupancy within 0.25 mile (400 meters). Impacts on other surface water features could be mitigated through avoidance, or implementation of best management practices and other conditions of approval. Impacts on surface water could be less than those identified under the No Action Alternative and would be expected to be minimal.	Under Alternative B, potential impacts on groundwater are anticipated to be similar to the No Action Alternative and Alternative A. For surface water, watershed areas would be closed to leasing, thereby minimizing or eliminating impacts of fluid minerals activities on watershed areas. Impacts on riparian, other wetlands, and playas would be minimized or eliminated by imposing the stipulation of No Surface Occupancy within 0.5 mile (800 meters). Impacts on other surface water features can be mitigated through avoidance, or implementation of best management practices and other conditions of approval. Impacts on surface water may be less than those identified under the No Action Alternative or Alternative A and would be expected to be minimal.
NOISE	Depending on sit-specific conditions, there would be noise impacts on human and wildlife receptors that could be reduced, but could not be eliminated.	Under the Proposed Plan, potential impacts from noise would be the same as the No Action Alternative.	Under Alternative B, potential impacts from noise would be the same as the No Action Alternative and Alternative A.

**TABLE 1
SUMMARY OF POTENTIAL IMPACTS BY ALTERNATIVE**

Resources	No Action Alternative (Existing Management)	Alternative A Modified (Proposed Plan)	Alternative B
VEGETATION	<p>Considering the small percentage of land that could be disturbed to achieve the RFD over a period of 20 years and with proper reclamation, potential impacts on vegetation in BLM's Decision Area would be expected to be minimal. However, if the RFD were realized and focused in one area, impacts on vegetation could be more substantial resulting in direct impacts such as loss of habitat and fragmentation of habitat, and indirect impacts such as loss of topsoil through erosion. Also, spread of noxious weeds by field activities could impact native vegetation. Impacts can be reduced by protective measures and reclamation under the provisions of SLTC implemented through conditions of approval. All ecological study plots have a stipulation of No Surface Occupancy; therefore, potential impacts would be minimized or eliminated in those areas.</p>	<p>Under the Proposed Plan, anticipated impacts on vegetation would be expected to be the same as the No Action Alternative. Impacts would be reduced by protective measures and reclamation under SLTC and best management practices implemented through conditions of approval.</p>	<p>Under Alternative B, anticipated impacts on vegetation would be expected to be the same as the No Action Alternative and Alternative A.</p>
WILDLIFE	<p>As with vegetation, considering the small percentage of land that could be disturbed to achieve the RFD over a period of 20 years, impacts on wildlife in BLM's Decision Area in general would be expected to be minimal. However, if the RFD were realized and focused in one area, impacts from human activity, noise, and traffic on wildlife could be more substantial. Under existing management, wildlife and crucial habitat are managed for fluid minerals as open with SLTC.</p>	<p>Under the Proposed Plan, impacts on wildlife would be the same as under the No Action Alternative. Crucial habitat (grasslands, montane scrub, and woodland/forest) would be managed under SLTC, with best management practices and other conditions of approval to minimize loss and fragmentation of habitat. Additionally, the Otero Mesa and Nutt Chihuahuan desert grasslands would be protected by limiting the surface occupancy to no more than 5 percent on the majority of the areas, and closing 35,790 acres to leasing within the more pristine portions of the Otero Mesa and Nutt areas, where no surface disturbance would occur.</p>	<p>Under Alternative B, anticipated impacts on wildlife are expected to be the same as the No Action Alternative and Alternative A.</p>

**TABLE 1
SUMMARY OF POTENTIAL IMPACTS BY ALTERNATIVE**

Resources	No Action Alternative (Existing Management)	Alternative A Modified (Proposed Plan)	Alternative B
SPECIAL STATUS SPECIES	Based on the protection provided by existing management direction, under the provisions of SLTC implemented through conditions of approval, potential impacts on special status species would be expected to be minimal. All exploration and development activities must follow requirements of Section 7 of the Endangered Species Act and current BLM policy. Under existing management, if impacts on special status species were identified during site-specific investigations, SLTC allow for relocating the site within a reasonable distance (e.g., as much as or more than 200 meters). SLTC also allow for delaying activities within a reasonable time period (e.g., as much as or more than 60 days).	Under the Proposed Plan, impacts on special status species would be reduced from the No Action Alternative. In addition to the protective requirements under the No Action Alternative, special status species would be managed under the stipulation of controlled surface use. Site-specific fluid minerals operations would avoid known populations and habitat. Each exploration and development project would be reviewed carefully to identify potential effects on the species and habitat, and a high potential exists for imposing timing limitations and other conditions of approval resulting from BLM analysis. Potential impacts would be expected to be minimal.	Under Alternative B, occupied or essential habitat associated with special status species would be closed to leasing, thereby minimizing or eliminating impacts from fluid minerals activities on those species.
CULTURAL RESOURCES	Based on the protection provided by existing management direction, impacts on cultural resources would be expected to be minimal. Potential impacts on cultural resources would be reviewed and considered in accordance with Section 106 of the National Historic Preservation Act using established procedures. Implementation of such procedures would be expected to result in avoidance of any identified adverse effects or satisfactory mitigation of those effects.	Under the Proposed Plan, potential impacts on cultural resources of particular concern would be reduced from the No Action Alternative. A more restrictive stipulation of No Surface Occupancy, would further protect these important cultural resources. Other cultural resources would be protected as described under the No Action Alternative. Potential impacts would be expected to be minimal.	Under Alternative B, potential impacts on cultural resources of particular concern would be reduced further from Alternative A by managing these resources with even more restrictive stipulations. Other cultural resources would be protected as described under the No-action Alternative. Potential impacts would be expected to be minimal
RECREATION	Considering the small percentage of land that could be disturbed to achieve the RFD over a period of 20 years, and that the majority of designated recreation areas are dispersed and most likely could be avoided, impacts on recreation in general would be minimal. A portion of the recreation areas along the Tularosa River is managed allowing No Surface Occupancy; therefore, impacts would be minimized or eliminated in that area.	Under the Proposed Plan, potential impacts on recreational resources in general and in the Tularosa River area would be the same as the No Action Alternative. Recreational resources of particular concern would be given more protection through a stipulation of No Surface Occupancy intended to preserve the recreational experience.	Under Alternative B, potential impacts on recreational resources in general would be the same as the No Action Alternative. Recreational resources of particular concern would be given greater protection than Alternative A by closing them to leasing, thereby preserving the recreational experience and minimizing or eliminating potential impacts from fluid minerals activities.

**TABLE 1
SUMMARY OF POTENTIAL IMPACTS BY ALTERNATIVE**

Resources	No Action Alternative (Existing Management)	Alternative A Modified (Proposed Plan)	Alternative B
VISUAL RESOURCES	Under existing management, Visual Resources Management (VRM) Class I areas are closed to leasing and, therefore, no visual impacts would occur in these locations as a result of fluid minerals activities. VRM Classes II, III, and IV are managed with SLTC, under which development of facilities has the potential to result in significant visual impacts in some areas. Development likely would result in contrast of line, form, color, and texture to the characteristic landscape and would attract attention depending on the location and proximity to sensitive viewers. Impacts on other areas may occur due to the introduction of facilities that are not characteristic of the existing setting, but can be mitigated.	Under the Proposed Plan, potential impacts on visual resources would be the same as the No Action Alternative except that a more restrictive stipulation (controlled surface use) on areas designated as VRM Class II would reduce impacts in these areas.	Under Alternative B, potential impacts on visual resources would be the same as Alternative A except that a more restrictive stipulation (controlled surface use) in areas designated as VRM Class III would reduce impacts in these areas.
SPECIAL MANAGEMENT AREAS	Under existing management, Wilderness Study Areas (WSAs) and Areas of Critical Environmental Concern (ACECs) are closed to leasing, thereby minimizing or eliminating potential impacts on these resources from fluid minerals activities. Nominated ACECs are managed with SLTC; however, because these areas were nominated primarily to protect special status species and associated habitat, requirements for special status species described above would apply.	Under the Proposed Plan, potential impacts on WSAs and ACECs would be the same as the No Action Alternative. Potential impacts on nominated ACECs would be reduced. In addition to the requirements described under the No Action Alternative, nominated ACECs would be managed by closing them to leasing.	Under Alternative B, potential impacts on WSAs and ACECs would be the same as the No Action Alternative and Alternative A. Nominated ACECs would be closed to leasing, thereby minimizing or eliminating potential impacts from fluid minerals activities.
SOCIAL AND ECONOMIC CONDITIONS	The achievement of the RFD would result in positive primary and secondary economic effects as well as generate royalties and tax revenue. Environmental justice issues were considered and no significant adverse impacts that would disproportionately affect minority or low-income communities are anticipated at this time.	Under the Proposed Plan, potential impacts would be the same as the No Action Alternative.	Under Alternative B, potential impacts would be the same as the No Action Alternative and Alternative A.

1.5.1 List Of Changes

There are 14 changes listed below, which are also found in the Preface of the Final EIS.

1. Changed proposed management for the Watershed Areas from Open with Controlled Surface Use to Standard Lease Terms and Conditions.
2. Changed proposed management for the Big Game Habitat Areas from Open with Controlled Surface Use to Standard Lease Terms and Conditions.
3. Changed proposed management for the Chihuahuan Desert Grasslands (Otero Mesa and Nutt) from Open with No Surface Occupancy to Controlled Surface Use (5 percent and unitization).
4. Changed proposed management for Habitat Suitable for Bighorn Sheep from Open with Controlled Surface Use and Timing Limitation to Standard Lease Terms and Conditions.
5. Changed proposed management for the Rattlesnake Hill Archaeological District from Closed to Open with No Surface Occupancy.
6. Changed proposed management for the Cultural Resource Area in the Jarilla Mountains from Open with Controlled Surface Use to No Surface Occupancy.
7. Changed proposed management for the Red Sands ORV Area from Open with a Timing Limitation Stipulation to Standard Lease Terms and Conditions with a Lease Notice.
8. Changed proposed management for the Cuchillo Mountains Piñon Nut Collection Area from Open with Controlled Surface Use to Standard Lease Terms and Conditions and a Lease Notice.
9. Changed proposed management for the Lake Valley Backcountry Byway from Open with Controlled Surface Use to No Surface Occupancy within 0.5 mile
10. Changed proposed management for the Nominated ACECs from Open with Controlled Surface Use to Closed.
11. Corrected proposed management for the White Sands Missile Range Evacuation Area from Open with a Timing Limitation Stipulation to open with Standard Lease Terms and Conditions and a Lease Notice.
12. Corrected proposed management for the WSAs to include two omitted WSAs in the Non-Discretionary Closure.
13. Corrected proposed management for the Public Water Reserves to reflect that the Order of Withdrawal for Public Water Reserve No. 107 did not withdraw these areas from mineral leasing. These small areas would be Open with Standard Lease Terms and Conditions.
14. Corrected the proposed management for VRM and ORV Limited Areas by dropping the Controlled Surface Use stipulation. This was a stipulation, which is duplicated by another proposed stipulation (VRM Class II – Controlled Surface Use).

1.5.2 Discussion Of Changes

The discussion below is intended to provide more explanation as to the reasons for the changes and why those changes do not constitute significant changes to the scope of the alternatives nor to the associated impacts.

1.5.2.1 Watershed Areas

In the Draft EIS (pages 2-25 and A-VI-22), BLM had indicated that within five watershed areas, future leases would be have a stipulation of Controlled Surface Use with the objective of protecting watershed values in accordance with the 1986 RMP Decisions; however, no specific management direction was provided in the stipulation. Stipulations are provisions that modify the standard lease rights and are attached and made a part of the lease. According to BLM guidance (BLM H-1624-1, Planning for Fluid Mineral Resources) and NM policy (IM-NM-89-358, Oil and Gas

Lease Stipulation Guidance), the use of stipulations should be considered appropriate only when they are both necessary and justifiable. A stipulation can be considered justifiable if there are resources, values, or users present that (1) cannot coexist with fluid minerals operations, or (2) cannot be adequately managed or accommodated on other lands for the duration of the operation, or (3) would provide greater benefits to the public than those of fluid minerals operations.

The stipulation in the Draft EIS was re-considered, and BLM determined that there were no additional or more stringent environmental protections needed that would modify the standard lease rights. The same level of resource protection can be achieved at the site-specific proposal stage. At this stage, BLM could apply necessary Conditions of Approval on Applications for Permit to Drill as well as require the lessee to follow the Best Management Practices as described in Appendix B in the Final EIS. Therefore, the stipulation was not necessary, and these areas would be available for leasing under Standard Lease Terms and Conditions (Final EIS, page 2-28).

This change between the Draft and Final does not change the impacts on the watershed areas associated with oil and gas leasing and development.

1.5.2.2 Big Game Habitat Areas

In the Draft EIS (pages 2-25 and A-VI-24), BLM indicated that within the habitat areas, leases would have a stipulation of Controlled Surface Use with the objective of protecting adequate habitat for big game species (deer and antelope). The stipulation stated that operations would be designed to avoid known populations and habitat; each exploration and development project would be scrutinized carefully for potential effects on species and habitat; and further, new disturbances would be minimized to reduce loss, fragmentation of,

and edge effect in habitat by the use of existing roads and utility corridors and minimizing cross-country placement of roads, pipelines, etc.

This stipulation clearly identified BLM's desired objective; however, it did not provide to industry any more than a general indication that they should minimize new disturbances in much of the planning area in response to the objective of protecting habitat for big game species. A stipulation is only used when surface management requirements are known and they would otherwise modify the standard lease rights granted to the lessee. In the case of this stipulation, BLM has determined that when an evaluation is made of a site-specific project, any necessary modifications can be applied in the form of Conditions of Approval, without affecting the lease rights granted (Final EIS, page B-3). For this reason, a special stipulation is not warranted, and the Proposed RMPA corrects that.

BLM has evaluated the impacts of the Proposed Plan on big game habitat areas and determined that for two and part of a third one, there are no specific stipulations that must be applied to future leases in those areas to provide protection to the habitats. Therefore, leasing would be allowed with Standard Lease Terms and Conditions (Final EIS, page 2-28). Those areas are: White Sands Antelope Area (exclusive of the Nutt Antelope Area), Caballo Mountains Deer Area, and the Sacramento Mountains Deer Area (Final EIS, pages 4-37 to 4-39). When Applications for Permit to Drill are received in these areas, BLM would evaluate the proposal to determine if any site-specific Conditions of Approval are required.

Within the Nutt Antelope Area and the Otero Mesa Habitat Areas, BLM has identified the high quality Chihuahuan Desert Grassland portions as needing an increased level of protection. This is provided for by a stipulation of Controlled Surface Use, which

would limit surface disturbances to no more than 5 percent and also require that leaseholders form exploratory units. A unique feature of the unitization requirement is that it would require greater planning and coordination of development activities on the part of industry. There would be less surface disturbance because BLM would be working with one unit operator rather than numerous lease holders, and therefore, avoid the disturbance that comes from the duplication of wells, pipelines, roads, etc. This would further reduce surface impacts because there would be greater planning prior to development and minimized surface disturbance (Final EIS, pages 4-37 to 4-39). Therefore, there is no change to the impacts on the big game habitat areas associated with oil and gas leasing and development.

1.5.2.3 Chihuahuan Desert Grasslands (Otero Mesa And Nutt)

In the Draft EIS (pages 2-25 and A-VI-14), BLM indicated that within the two Desert Grassland Habitat areas, leases would be stipulated with No Surface Occupancy, except within 150 meters of existing roads. The stated objective was to protect portions of the remaining desert grassland community by minimizing habitat fragmentation.

The stipulation in the Draft RMPA would have limited new disturbances to 300 meter zones along existing roads and trails. This would have required exploration to be conducted primarily by directional drilling. Comments received from many, including a recognized subject matter expert from the New Mexico Bureau of Mines and Mineral Resources (NMBMMR) were very critical of applying this kind of stipulation for these large grassland areas. Specifically the Principal Senior Petroleum Geologist at the NMBMMR stated,

In frontier exploration areas such as Sierra and Otero Counties, exploration and initial development must be accomplished through

the drilling of vertical and not horizontal wells. The reason for this is quite clear. There are numerous potential pay zones in the lower, middle, and upper Paleozoic sections throughout the RMPA area. A horizontal well can not adequately evaluate and test any potential pay zone except for the single zone it is intended for...(Proposed RMPA, Vol. II, page G-I-45).

Due to these comments on the Draft that were specific to the grassland stipulation, the BLM determined there was a need to re-evaluate the No Surface Occupancy stipulation, and consider a different approach that would similarly meet the resource objectives. The objective was to protect the unique grassland area while still allowing oil and gas development to proceed in a manner that was environmentally responsible. BLM analysis indicates the grassland areas could be adequately protected utilizing a 5 percent maximum surface disturbance stipulation (Final EIS, page 4-31). This stipulation complied with BLM guidance (H-1624-1) to seek the least restrictive stipulation necessary to protect important resources such as grassland areas. In addition, the New Mexico Resource Advisory Council suggested BLM consider including a requirement for unitization as a part of the 5 percent stipulation. Based on further evaluation of that suggestion, the 5 percent and unitization stipulation for the Otero Mesa and Nutt grasslands was incorporated into the Proposed RMPA/Final EIS.

A unique feature of the unitization requirement is that it requires greater planning and coordination of development activities on the part of the oil and gas industry. As already discussed, this would result in less surface disturbance because BLM would be working with one unit operator rather than numerous lease holders, and therefore, avoid the disturbance that comes from the duplication of wells, pipelines, roads, etc.

In addition to the combined 5 percent and unitization stipulation, the Proposed RMPA defers nearly 28,000 acres in the Otero Mesa and 8,000 acres in the Nutt grassland from leasing (**now proposed to be closed to leasing**). These areas were identified because they contain the best **potential** aplomado falcon habitat within the two grassland areas. The Adaptive Management parcels would be re-evaluated at 5-year intervals to determine if adjustments are needed to protect the species or allow for orderly development of potential oil and gas reserves. These areas were identified as a result of Section 7 Consultation efforts with the U.S. Fish and Wildlife Service, and because of uncertainties regarding future oil and gas activities and their impact in the Nutt and Otero Mesa grassland areas (Final EIS, page 2-29).

The combination of these two proposed decisions were determined to protect the Chihuahuan Desert Grassland habitat areas and associated special status species of wildlife through greater planning of future oil and gas development. The stated objective to minimize the surface disturbance and provide protection to the important Chihuahuan Desert Grassland habitat continues to be met with the combined 5 percent and unitization stipulation (Final EIS, pages 4-30 to 4-31).

The BLM determined there were no significant changes to the impacts analyzed in the Draft and Final EISs based on the anticipated level of surface disturbance projected by the Reasonable Foreseeable Development (RFD). The RFD did not change between the Draft and Final EISs, thus the level of impact is essentially the same. The following is the re-analysis that BLM has used to support the determination that no significant changes to impacts result from changes between the Draft EIS and the Final EIS.

1.5.2.3.1 Further Analysis of Existing Data

The RFD anticipates no more than 1,600 acres of surface disturbance from oil and gas exploration and development over the entire 2.1 million acres of public land in Sierra and Otero Counties (0.076 percent). If all of the disturbance were to occur on the Otero Mesa grasslands which would be stipulated with 5 percent and unitization (105,000 acres), the impact would be to 1.5 percent of the area.

Under the Draft EIS, the stipulation for the grasslands is "NSO except within 150 meters of existing roads". Within Otero County, there is an estimated road density of 1.3 miles/section. For the grassland area that would equate to 213 miles of roads and if disturbance were confined to a 300 meter buffer along these roads, the No Surface Occupancy stipulation would allow surface occupancy on 24,960 acres of the grassland area. However, the RFD that was used by BLM for analysis anticipates no more than 1,600 acres of actual new disturbance. Under the Draft EIS, disturbance would be confined to areas within close proximity of existing roads, thereby concentrating activity and associated surface disturbance. Opportunities to modify locations for well pads and pipelines would be very minimal and would not afford the authorized officer much flexibility to mitigate resource concerns.

Under the Proposed RMPA, the 5 percent stipulation would limit the amount of land available for surface occupancy to 5,244 acres (in the Otero Mesa grassland area) and 814 (in the Nutt grassland area). However, the RFD has not changed and therefore, BLM does not anticipate more than 1,600 acres of disturbance within the

entire two county planning area. New disturbance would not be confined to areas within close proximity of existing roads; however, under the 5 percent limit on new disturbance, there would be greater use of existing roads wherever possible and more “co-location” of pipelines along access roads. This would similarly concentrate the activity and associated surface disturbance from oil and gas activities, but to a lesser degree. Opportunities to modify locations for well pads and pipelines would be greater, and the authorized officer would have more flexibility to mitigate other resource concerns.

BLM determined that there were no appreciable differences between the impacts of the proposal in the Draft EIS and the Final EIS, primarily because the amount of disturbance is expected to be so small under either alternative. This is based on the RFD of 1,600 acres, which did not change between the Draft EIS and the Final EIS. Another factor BLM considered is that there is no assurance that all of the disturbance would occur in the grassland habitat, as the RFD describes projected development over a two county area. Existing leases are found throughout southern Otero County and are not restricted to the grassland area.

1.5.2.4 Habitat Suitable For Bighorn Sheep

In the Draft EIS (pages 2-25 and A-VI-19), BLM indicated that within sites with suitable habitat for bighorn sheep, leases would be stipulated with Controlled Surface Use and Timing Limitation, so that no exploration or construction would occur in important occupied habitat during the lambing season of January through June. The objective was to protect potential habitat from degradation and minimize adverse impacts on occupied habitat of bighorn sheep during the lambing season.

This proposed decision was changed for two reasons. Currently, there are no bighorn sheep populations known on public land in Sierra or Otero Counties. Although the New Mexico Department of Game and Fish has identified a number of areas in southern New Mexico for possible reintroduction, there are no active plans for that reintroduction in Sierra or Otero Counties. The lease stipulation was primarily tied to avoidance of activity in lambing areas. Secondly, any proposal to reintroduce bighorn sheep would need to be addressed in a land use plan, and if that were to be undertaken, appropriate leasing stipulations would be addressed then. Therefore, the change of management proposed for these leases to Standard Lease Terms and Conditions (Final EIS, page 2-29) will provide for appropriate site specific adjustments to requests for surface disturbance, should bighorn sheep naturally or artificially re-occupy an area.

Therefore, there is no change to the impacts on the potential bighorn sheep habitat areas associated with oil and gas leasing and development.

1.5.2.5 Rattlesnake Hill Archaeological District

In the Draft EIS (pages 2-25 and A-VI-7), BLM indicated that on 889 acres of the District, leasing would not be allowed and within the remaining 2,725 acres, leasing would be allowed with a stipulation of No Surface Occupancy. The objective was to protect the cultural resources. The objective for management of this culturally rich area is similar to two other areas in this part of Otero County, which in the Draft RMPA would be leased with stipulations of No Surface Occupancy and Controlled Surface Use. BLM determined that each of these areas required the same level of protection due to their similar resource concern, and therefore, changed the

management proposed for the Rattlesnake Hill Archaeological District to allow leasing but with a stipulation of No Surface Occupancy (Final EIS, pages 2-29 and D-4).

The impacts to cultural resources are generally described (Final EIS, page 4-43), and are associated with physically impacting the properties as opposed to off-site impacts affecting the properties. This is why BLM determined the proposed management in the Final EIS provides for the same level of resource protection as identified in the Draft EIS; however, it may still allow for careful extraction of fluid resources should industry decide that off-site drilling is warranted.

1.5.2.6 Jarilla Mountains Cultural Resource Area

In the Draft EIS (pages 2-25 and A-VI-27), BLM indicated that on approximately 803 acres in the Jarilla Mountains, leasing would be allowed with Controlled Surface Use to restrict travel to existing roads and trails. The resources in this area were similar to two other culturally rich locations in this part of Otero County, which were to be made available for leasing with a No Surface Occupancy stipulation. BLM determined that the stipulation in Alternative A would not provide adequate protection to the resources and would have greater protection if it were managed similarly to the other two areas. Leasing with Controlled Surface Use is intended to be used when lease occupancy and use generally are allowed on all portions of the lease year-round, but because of special values, or resource concerns, specific lease activities require strict control. The Final EIS provides a description of the various types of lease controls, such as No Leasing, Leasing with No Surface Occupancy, and Leasing with Controlled Surface Use (Final EIS, pages 2-18 through 2-20).

Therefore, BLM changed the management proposed for the Jarilla Mountains Cultural Resource Area to allow leasing, but with a stipulation of No Surface Occupancy (Final EIS, pages 2-29 and D-4). This provides for an increased level of resource protection as that which was identified in the Draft EIS; however, it would still allow for careful extraction of fluid resources, should industry decide that off-site drilling is warranted.

1.5.2.7 Red Sands ORV Area

In the Draft EIS (pages 2-26 and A-VI-36), BLM indicated that leasing would be allowed in this recreational ORV area with a stipulation for Timing Limitation. This was designed as a way of informing the lessee that there are safety issues relating to motorcycle use of the area that must be addressed when seismic or drilling operations are proposed. The BLM determined it would be more appropriate to issue a Lease Notice with any future leases in this area, as any required short-term timing limitations are dealt with on a case-by-case basis through Conditions of Approval at the Application Permit to Drill stage (Final EIS, pages 2-29 and D-13). Timing Limitations are designed to effect seasonal restrictions and prohibit surface use during specified time periods to protect identified resource values (Final EIS, page Glossary-15). Therefore, a stipulation for Timing Limitation is not necessary; however, the same level of protection to the existing opportunities for recreational use is provided for, and safety to both the recreating public and the operator is not compromised.

1.5.2.8 Cuchillo Mountains Piñon Nut Collection Area

In the Draft EIS (pages 2-26 and A-VI-31), BLM indicated that leasing in this area of northwestern Sierra County would be with a stipulation to Control Surface Use

by avoiding destruction of piñon pine trees. BLM has determined a stipulation was not necessary to do this. Leasing with Controlled Surface Use is intended to be used when lease occupancy and use generally are allowed on all portions of the lease year-round, but because of special values or resource concerns, specific lease activities require strict control. The Final EIS provides a description of the various types of lease controls, such as No Leasing, Leasing with No Surface Occupancy, and Leasing with Controlled Surface Use (Final EIS, pages 2-18 through 2-20).

The same level of protection to the resource would be provided under the Proposed RMPA, as a Lease Notice would provide necessary notification to the lessee that they would be required to implement necessary mitigations to reduce damage to piñon pine trees, such as rerouting of access roads and modification of pad locations (Final EIS, pages 2-30 and D-13).

1.5.2.9 Lake Valley Backcountry Byway

In the Draft EIS (pages 2-26 and A-VI-32), BLM indicated leases in this area would have a stipulation to Control Surface Use by minimizing surface disturbing activities within ¼ mile of each side of the Byway. Also, long-term impacts would need to be consistent with the VRM objectives of the Byway, with Conditions of Approval likely to be imposed such as paint color requirements and modification to site locations. BLM has determined the values of the Backcountry Byway would not be sufficiently protected under the Controlled Surface Use Stipulation and has therefore proposed in the Final EIS (pages 2-30 and D-8), that leases in this area would have a stipulation for No Surface Occupancy within 0.5 mile of the Byway. For proposals between 0.5 mile and 1 mile distance of the Byway, the operator would be required to minimize the visual impact of their proposal by providing visual screening or modifying

their locations to reduce the visibility. This would improve the management of the Byway to meet the objectives for this area. As identified in the National Backcountry Byway Notice of Dedication, there are outstanding scenic views that are an important feature of the Byway; therefore, the impacts anticipated in the Draft EIS are being similarly anticipated in the Final EIS.

1.5.2.10 Nominated ACECs

In the Draft EIS (pages 2-26 and A-VI-33), BLM identified future leases in these areas would be available with a stipulation to Control Surface Use by designing operations to avoid known populations and habitat of a variety of special status species. BLM received numerous comments from the public suggesting that leasing with this stipulation would not be adequate to protect the values identified for the Nominated ACECs. BLM guidance regarding Nominated ACECs is to provide protection of the significant resource values until the areas are fully evaluated and a determination on whether to designate them as ACECs has been made. BLM had re-evaluated the proposed management and determined that adequate protection would not be afforded to the resources, and therefore, increased the interim protection by Discretionarily Closing these areas to leasing (Final EIS, pages 2-30 and D-4). The impacts are therefore the same in the Final EIS as identified in the Draft EIS.

1.5.2.11 White Sands Missile Range Evacuation Area

In the Draft EIS (pages 2-34 and A-VI-35), BLM identified future leases within this area of eastern Sierra County would have a Timing Limitation attached to them; however, it did not specify when the timing limitation would be imposed. The objective was to provide protection to the operator on days when missiles would be fired; however, this program is under the authority

and control of the Department of Army and is coordinated by the U.S. Army Corp of Engineers in Albuquerque and White Sands Missile Range. The missile firings occasionally require evacuations of up to one full day at a time, and seldom have there been evacuations of more than two consecutive days at a time.

BLM has evaluated the need for the Timing Limitation stipulation and determined the stipulation does not indicate when evacuations would be imposed, nor does BLM anticipate the very short-term evacuations as affecting lease rights granted. Due to the fact that BLM cannot impose the evacuation (because of the lack of authority) and the fact that the Department of Army schedules the firings and issues the notices of evacuation, a Timing Limitation is not warranted. However, BLM does believe a Lease Notice would be appropriate for leases in this area and would issue that as described in the Final EIS (pages 2-29 and D-13). The Lease Notice would provide the same level of caution to lessees, as the Timing Limitation Stipulation would have, as identified in the Draft EIS.

1.5.2.12 Wilderness Study Areas

In the Draft EIS (pages 2-18 and A-VI-6), BLM indicated that in accordance with Interim Policy and Guidance for Lands Under Wilderness Review, two WSAs would continue to be non-discretionarily closed to leasing. This management did not change between the Draft EIS and the Final EIS; however, prior to issuance of the Final EIS, BLM realized that two additional WSAs had been inadvertently left out of the Draft EIS and therefore included them in the Final EIS (pages 2-15 and D-2). This action is not discretionary and therefore no change in management has been proposed, but between the Draft EIS and the Final EIS, an additional 10,153 acres have been included in areas closed to leasing (approximately

0.5 percent of the decision area). The reason this is not considered to be a significant change is because much of this additional acreage coincides with the Sacramento Escarpment ACEC and was also identified as discretionarily closed to leasing in both the Draft EIS (pages 2-26 A-VI-9) and the Final EIS (pages 2-30 and D-3). Although the acreage may have changed by a small amount, the two newly identified WSAs are closed to leasing, regardless of BLM's draft alternative. Therefore, there is no effective difference between the Draft EIS and Final EIS.

1.5.2.13 Public Water Reserves

In the Draft EIS (pages 2-1 and A-VI-4), BLM indicated the public water reserves within Sierra and Otero Counties were withdrawn from mineral leasing, and therefore, non-discretionarily closed to leasing. However, further research determined that in fact the public water reserves, although withdrawn from settlement, location, sale or entry, they were not withdrawn from the Minerals Leasing Act of 1920. Therefore, it is permissible for BLM to consider making these areas available for leasing.

BLM determined there was a need for a correction tied to the information provided in the Draft RMPA and based on further review of the Executive Order that withdrew those areas (PWR 107, 1926) determined it did not withdraw them from mineral leasing. Therefore, these areas would be made available for leasing under Standard Lease Terms and Conditions. Any further site-specific mitigation would be imposed as needed. For instance, if the public water reserve is a livestock or wildlife water, then well pad locations would be required to be at least .25 mile away (Final EIS, page B-7). If the public water reserve is a natural spring, then a stipulation of No Surface Occupancy would apply that would require surface disturbances to avoid the area by

.25 mile (Final EIS, page 2-28). These mitigations effect the same result as was identified in the Draft EIS.

1.5.2.14 VRM and ORV Limited Areas

In the Draft EIS (pages 2-26 and A-VI-30), BLM indicated leasing would be available on the VRM and ORV limited areas, but a stipulation of Controlled Surface Use would apply. The stipulation specified new disturbances should be minimized by only allowing long-term impacts that were consistent with the VRM Class objectives, reclamation must occur as soon as possible, and Conditions of Approval would be imposed such as paint color, judicious sitting, and using existing roads and corridors. In response to comments made concerning the use of Controlled Surface Use stipulations and the lack of clarity in the stipulation as to what would be imposed through the stipulation, BLM carefully reviewed many of these stipulations. In the case of this one, BLM found there were objectives for the management of oil and gas relating to the resources involved, but no guidance or direction on how that would apply to lease related activities. In addition, BLM discovered this stipulation in large part was overlapped by other stipulations such as for Existing and Nominated ACECs (VRM Class I) and VRM Class II areas. Also, BLM has not changed the policy that new projects must meet the VRM Class III and IV Area objectives specific to each area. These objectives are appropriately mitigated at the Application for Permit to Drill stage, when a location is proposed and is evaluated during subsequent Environmental Assessments conducted by BLM (Final EIS, pages B-3 and B-4).

BLM determined that in all cases, reclamation should occur as soon as

possible, and therefore, has directed that vegetation would be re-established quickly on bare ground in the Best Management Practices (Final EIS, page B-10). Due to the fact that the visual resources would continue to be protected under the Proposed Plan, as they would have under the Preferred Alternative in the Draft EIS, the impacts are the same.

2.1 AFFECTED ENVIRONMENT

The affected environment is not restated in this supplement; however, it is located in the Final EIS, Chapter 3.

3.1 PUBLIC PARTICIPATION

Public input has been an important and extensive part of this planning effort. BLM has gone to great length to include any and all publics, organized groups, and local, State, Tribal, and Federal governments. The public participation activities to date are summarized in Chapter 5 of the Final EIS (pages 5-1 through 5-5).

With the issuance of the Notice of Change to the Proposed RMPA, Notice of Availability of a Supplement to the Final EIS, and opening of a 30-day public comment period, BLM is asking for comment on the information provided in this Supplement. It is important BLM receive input from all interested parties who can present information that will improve BLM's evaluation of the Proposed Plan and the Change to the Proposed Plan, prior to issuance of the Record of Decision.

The comment period will begin on the date the Environmental Protection Agency issues the notice of availability in the Federal Register and will end 30 days after that date. The ending date for the comment period will be on the BLM website (www.nm.blm.gov) and in news releases provided to the local media.

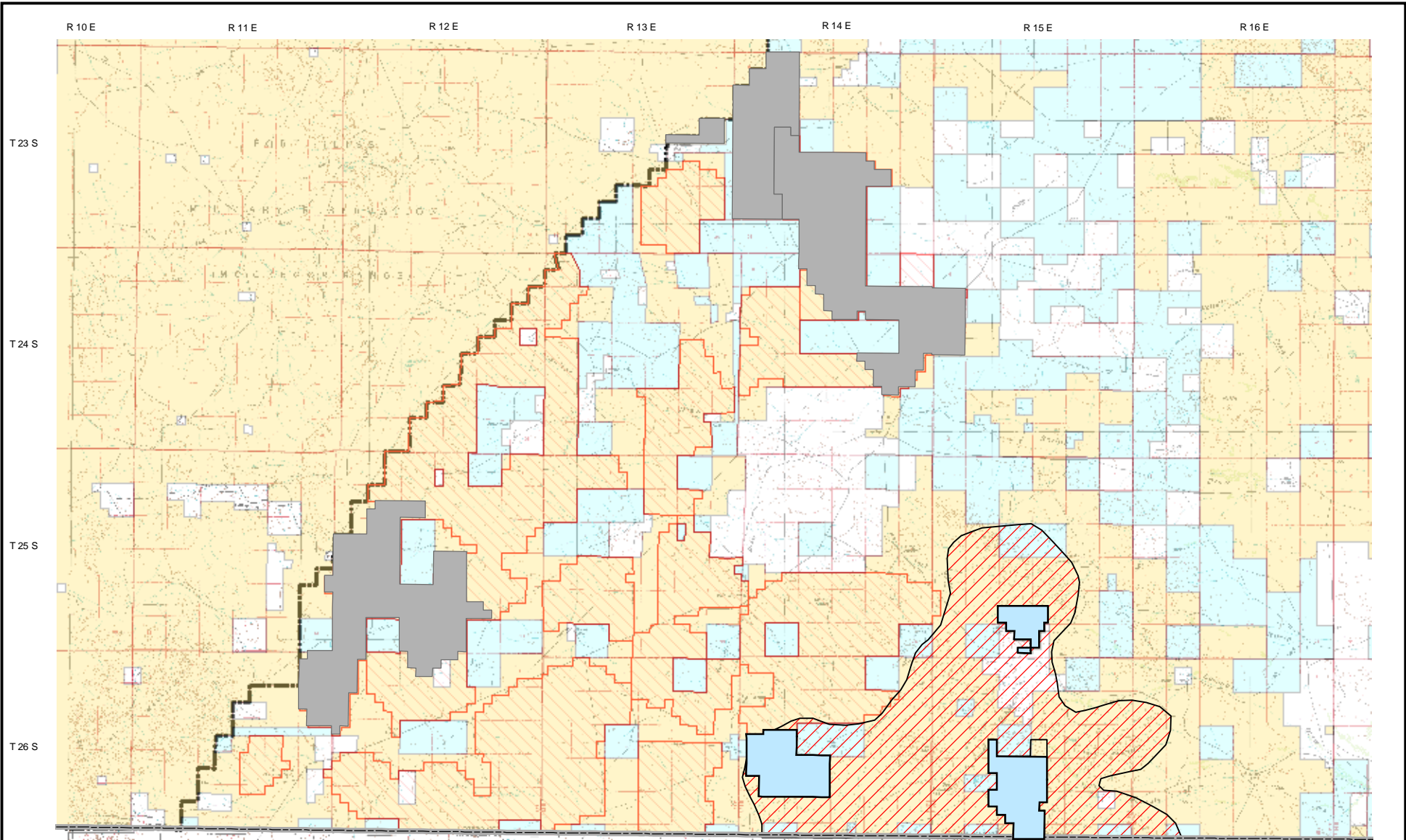
Comments must be sent to: State Director, Bureau of Land Management, Supplement Comments, P.O. Box 27115, Santa Fe, NM 87502-0115. If sent by an overnight delivery service or hand carried, the address is as follows: State Director, Bureau of Land Management, Supplement Comments, 1474 Rodeo Road, Santa Fe, NM 87505.

5.1 REFERENCES

U.S. Department of the Interior, Bureau of Land Management (BLM). May 1990. *BLM Handbook H-1624-1. Planning for Fluid Mineral Resources.*

U.S. Department of the Interior, Bureau of Land Management (BLM). October 2000. *Draft Resource Management Plan Amendment and Environmental Impact Statement for Federal Fluid Minerals Leasing and Development in Sierra and Otero Counties.*

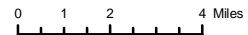
U.S. Department of the Interior, Bureau of Land Management (BLM). December 2003. *Proposed Resource Management Plan Amendment and Final Environmental Impact Statement for Federal Fluid Minerals Leasing and Development in Sierra and Otero Counties.*



Locator Map



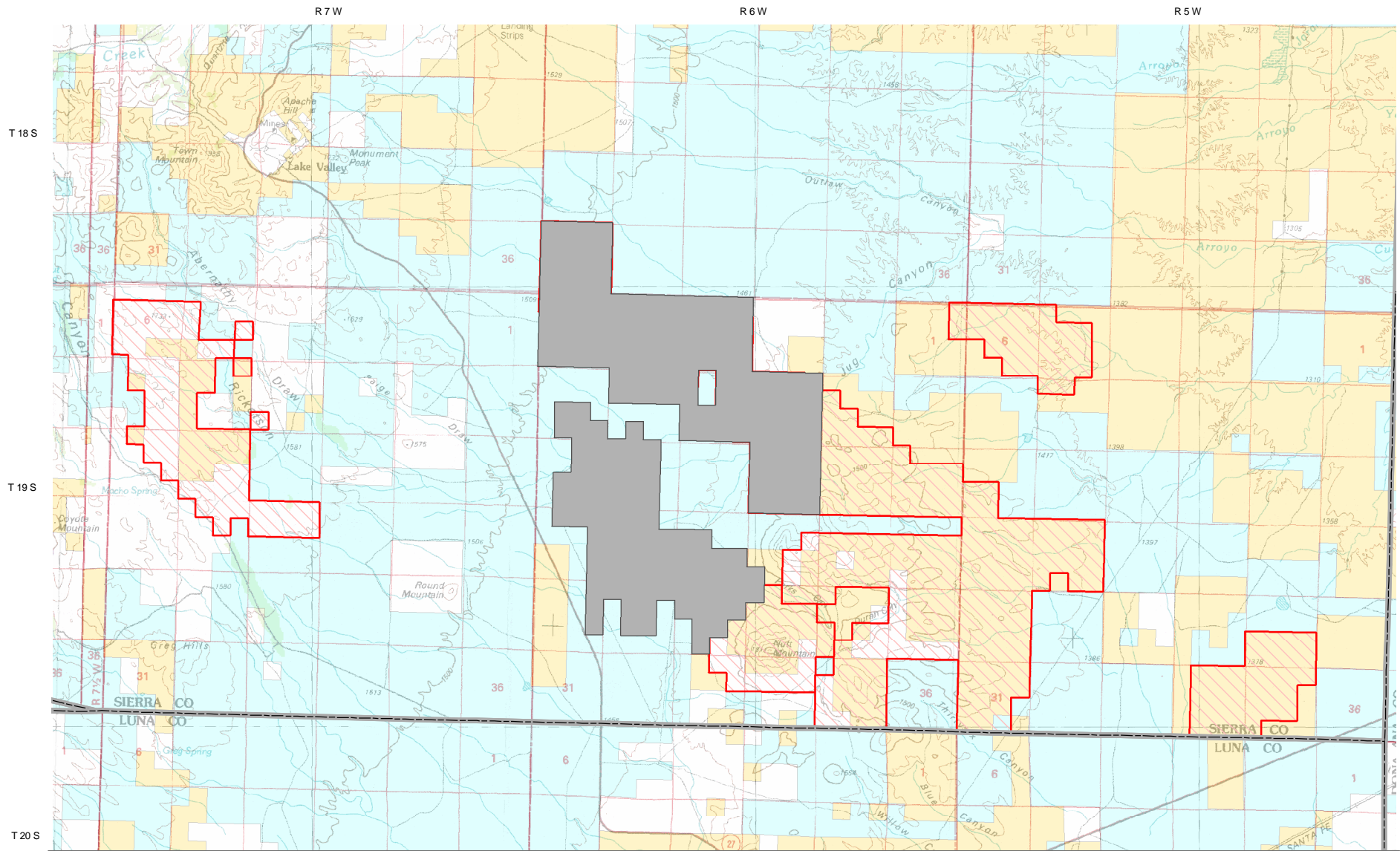
Otero Mesa Grassland Map 1



No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.

Legend

- Desert Grassland 5% Stip.
- ACEC
- Core Habitat Area
- VRM Class 2
- Townships
- Ownership**
- Bureau of Land Management
- Private
- State



Locator Map



Nutt Grassland Map 2



No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.

Legend

- Desert Grassland 5% Stip.
- Core Habitat Areas
- Townships
- Ownership**
- Bureau of Land Management
- Private
- State

OTERO MESA ADDENDUM

1.5.2.3 Chihuahuan Desert Grasslands (Otero Mesa And Nutt)

Delete the last paragraph in this section and replace with the following three paragraphs:

“The BLM determined the modified Alternative A is within the range of alternatives analyzed in the Draft and Final EISs based on the anticipated level of surface disturbance projected in the Reasonable Forseeable Development (RFD).

The modified Alternative A would apply additional Best Management Practices (BMP) as listed in the Final EIS, and would apply additional BMPs developed as conditions of approval resulting from site specific NEPA analysis, new data collected between the time of RMP approval and consideration of submitted Applications for Permit to Drill (APD), and additional State and national policy on the use of BMPs.

The following is the re-analysis that BLM used to support the determination that no significant changes to impacts result from changes between the Draft EIS and the Final EIS.”

1.5.2.3.1 Further Analysis of Existing Data

Delete all the existing narrative and replace with the following:

“At the Application for Permit to Drill (APD) permitting stage, additional BMPs and the 5 percent limitation would now apply to unitized acreages and provide substantial reduction in impacts. The total area developed would then be subject to the most intensive mitigation.

Application of BMPs would reduce impacts to the following resources as described:

- Wildlife habitat fragmentation by limiting the number of well pads, roads, pipelines, utility corridors, production facilities, and average daily traffic stemming from oil and gas operations
- Direct and indirect impacts to wildlife through reduced footprint of industrial facilities, burial of utilities, and reduced road traffic
- Soil erosion from limitations on total disturbance and the economic benefit to the operators to accelerate re-vegetation
- Grassland loss through limiting surface disturbance and requiring successful reclamation
- Visual resources by minimizing the total amount of surface disturbance that would remain during production of the well(s)

Additionally, the 1,600 acres of disturbance used as a baseline in the RFD assumed traditional oil field practices in all cases. This results in substantial increased

disturbance as compared to application of BMPs. For example, the RFD assumes a disturbed area of 2.4 acres per well over the life of that well (see Table 4-1 in the FEIS). With new BMPs this amount of disturbance would be unlikely to exceed 0.75 acres for a single oil and gas well. This amount could be as little as 0.2 acres with successful interim reclamation of the unused portion of operating oil and/or gas well pads.

Application of current and anticipated new BMPs in combination with the 5 percent maximum disturbance and mandatory unitization stipulation would reduce the 1,600 acre disturbance area by at least two-thirds. The net result is that it is highly unlikely that the modified Alternative A would ever approach the 1,600 acres of disturbance associated with full field development over the entire planning area.

BLM has also limited the intensity of development that can occur within a given lease or unitized area with the application of the 5 percent disturbance stipulation. In traditional development as described in the No Action Alternative, the amount of disturbance can exceed 15 percent of the leasehold. The imposition of the 5 percent limit requires a combination of reduction in the "footprint" allowed by oil and gas operations as well as necessitating careful planning of utilities and infrastructures to minimize disturbance. Managing the amount of surface disturbance is now in the operator's best interest if future permits are to be obtained. The mandatory unitization has an added mitigating effect in that fewer off lease rights of way would be issued as all operator actions within the unit boundary would be treated as a unit operation and therefore subject to the 5 percent disturbance limitation.

The BLM has ample authority to impose as conditions of approval, mitigating measures at the APD permitting stage. The combination of the 5 percent disturbance limit, unitization stipulation, improved effectiveness of BMPs, and the retained permitting authority assure that impacts from the modified Alternative A are well within the range of impacts analyzed in the Draft and Final EIS."