

## **DECISION RECORD**

Reference: Environmental Assessment(EA) for Grazing Authorization, NM-060-00-187.

**Decision:** it is my decision to authorize the issuance of a ten year grazing lease to Mitchell Dairy Inc. Allotment 65011. The lease will authorize 30 Animal Units at 100% Federal Range for 360 Animal Unit Months (AUM's) active use, and 13 AU's at 100% Federal Range for 156 AUM's suspended use. Any additional mitigation measures identified in the environmental impacts section of the referenced environmental assessment have been formulated into stipulations, terms and conditions. Comments made to this EA from the Wildlife Management Institute, New Mexico Natural History Institute, New Mexico Department of Game and Fish, and the Forest Guardians were considered and necessary changes have been incorporated into the EA and reflected in this Decision Record.

The **Proposed Action with Additional Terms and Conditions alternative** was selected and includes the following:

Authorize a grazing lease for 30 Animal Units, and Implement the following terms and conditions identified below:

1. Changes to these Terms and Conditions may be initiated by either party through the consultation and coordination process.

2. Robel's vegetative monitoring methodology will be conducted atleast once every three years. If prairie chicken habitat requirements are not being met or are moving towards prairie chicken parameters as a result of livestock grazing practices, changes will be implemented in cooperation and coordination with the permittee.

Prairie chicken parameters:

Shrub coverage - 25 to 30% composition of entire vegetative community.

Forb coverage - 10 to 15% composition of entire vegetative community.

Grass coverage - 60% composition of entire vegetative community; 10% with a visual obstruction reading (VOR) > or equal to 12 inches, an average VOR of 4.0 inches.

2. Livestock grazing management changes may be required as a result of sustained periods of drought and the vegetative condition resulting from these climatic changes.

Signed by T. R. Kreager  
Assistant Field Manager

1/25/01  
Date

**ENVIRONMENTAL ASSESSMENT  
for  
GRAZING AUTHORIZATION**

**ALLOTMENT 65011, Section 15**

**EA-NM-060-00-187**

**September, 2000**

**U.S. Department of the Interior  
Bureau of Land Management  
Roswell Field Office  
Roswell, New Mexico**

**A. Introduction**

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with

the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing lease on Allotment 65011.

The scope of this environmental assessment is limited to the effects of issuing a new grazing lease on Allotment 65011. Over time, the need could arise for subsequent management activities which relate to grazing authorization. These activities could include vegetation treatments (e.g., prescribed fires, herbicide projects), range improvement projects (e.g., fences, water developments), and others. Future management actions related to livestock grazing would be addressed in project-specific NEPA documents as they are proposed.

### **B. Purpose and Need for the Proposed Action**

The purpose of issuing a new grazing lease would be to authorize livestock grazing on public range on Allotment #65011. The lease would be needed to specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR 4130.3, 4130.3-1, and 4130.3-2.

### **C. Conformance with Land Use Planning**

Upon review of the Roswell Resource Management Plan/Environmental Impact Statement (Bureau of Land Management 1997), the proposed action was found to conform with the Record of Decision as required by 43 CFR 1610.5-5.

### **D. Relationships to Statutes, Regulations, or Other Plans**

The proposed action and alternatives are consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (ESA) (16 U.S.C. 1535 et seq.) as amended; the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management; and Executive Order 11990, Protection of Wetlands.

## **II. Proposed Action and Alternatives**

### **A. Proposed Action:**

To authorize the grazing lease on the Mitchell Dairy Inc. allotment # 65011 for 30 Animal Units at 100% Federal Range for 360 Animal Unit Months (AUM's) active use, and 13 AU's at 100% Federal Range for 156 AUM's suspended use. Specifically, to authorize a grazing

lease for 30 cows from March 1 to the last day of February of each year at 100% public land, **and**;

Continue current livestock management practices

**B. Proposed Action with additional Terms and Conditions:**

To authorize the grazing lease on the Mitchell Dairy Inc. allotment # 65011 for 30 Animal Units at 100% Federal Range for 360 Animal Unit Months (AUM's) active use, and 13 AU's at 100% Federal Range for 156 AUM's suspended use. Specifically, to authorize a grazing lease for 30 cows from March 1 to the last day of February of each year at 100% public land, **and**;

Implement the following terms and conditions. Changes to these terms and conditions may be initiated by either party under the consultation and coordination process.

1. Robel's vegetative monitoring methodology which has been adopted by the five state Lesser Prairie Chicken Interstate Working Group will be implemented to ensure that the lesser prairie chicken habitat requirements are met and maintained. This methodology is available for review at the Roswell Field Office. If prairie chicken habitat requirements are not being met as a result of livestock grazing practices, changes may be necessary.

Shrub coverage - 25 to 30% composition of entire vegetative community.  
Forb coverage - 10 to 15% composition of entire vegetative community.  
Grass coverage - 60% composition of entire vegetative community; 10% with a visual obstruction reading (VOR) > or equal to 12 inches, an average VOR of 4.0 inches.

2. Livestock grazing management changes may result from periods of abnormal climatic patterns and will depend upon the vegetative condition due to these climatic changes.

3. A range evaluation will take place every five years and adjustments or management changes will be made if necessary.

**C. No Permit/Lease authorization alternative:**

This alternative, if selected, would be to not issue a new grazing lease for the Ike Good allotment #65011. No grazing would be authorized on federal land under this alternative..

**III. Affected Environment**

## **General Setting**

A priority objective of the Roswell Field Office is to restore and maintain prairie chicken habitat. Overtime, we will develop grazing systems on allotments with a high potential for management actions that will maintain/enhance prairie chicken habitat. The plans will include grazing schemes tailored to meet specific management objectives. Generally, these are allotments where there are large blocked federal lands versus small isolated parcels. These are the category of prairie chicken allotments in the Caprock Wildlife Habitat Area we refer to on page 31 of the Final Roswell Resource Management Plan (RMP) .

If you refer to AP8-1, Section 9, of the RMP, you will see a list of allotments, which includes allotment 65011. These allotments contain a small percentage of federal land and/or the parcels are small and scattered. The Bureau may not take the lead in developing grazing management on these allotments, but will encourage coordination and cooperation between our agency, the Soil Conservation Service and State Land Office.

Allotment #65011 is located in Chaves County, about eight miles southeast of Kenna. The allotment is made up of seven pastures ranging from approximately 3 to 4 sections in size.. This allotment consists of 1,933 acres of Federal land, and is currently categorized as a “C” or Custodial allotment.

The public lands within this allotment are for the most part landlocked by private and state lands. Surface access to the larger parcel of public land along highway 70 is limited, but foot access is available for several miles.

This allotment lies outside the Roswell Grazing District Boundary established subsequent to the Taylor Grazing Act and is classified as a Section 15 Grazing Lease. Normally, the permitted use on Section 15 Leases is established by the amount of forage available for livestock on the public lands within the lease. The overall livestock numbers on the allotment are not established by the Bureau of Land Management. In southeast New Mexico, this is due primarily to either the small amount of public land and/or the public lands are situated in small or isolated tracts that can not be managed as efficiently as larger well blocked public lands.

Two primary vegetative communities exist within this allotment. They are the grassland and shinnery oak/dune plant communities. The primary features in the shinnery oak dune (SOD) community are topography influenced by aeolian and alluvial sedimentation on upland plains forming hummocks, dunes, sand ridges and swales and the presence of shinnery oak.

This is a unique community type found primarily below the Llano Estacado or Staked Plains, in an area known as Mescalero Sands. It lies in the Canadian Plains and Southern Desertic Major Land Resource Area, between the elevations of 4,100 feet and 4,300 feet. The topography is gently sloping and undulating sandy plains, with moderate to very steep hummocky dunes of up to ten feet and more in height scattered throughout the area. Some of the dunes are stabilized with vegetation, while a number of them are unstable and

shifting. Dune blowouts with shinnery oak and bluestem, either isolated or in dune complexes are common in this community. Annual precipitation for this region averages 12-13 inches.

The following resources or values are not present or would not be affected by the authorization of livestock grazing on Allotment #65011; Prime/Unique Farmland, Native American Religious Concerns, Wild and Scenic Rivers, Hazardous Wastes, water quality, riparian/wetlands, floodplains, Areas of Critical Environmental Concern, and Minority/low Income populations.

Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities except where criteria to exempt surveys are met. Eligible and potential eligible sites would continue to be protected from damage or archaeologically treated to mitigate damage.

The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

## **A. Affected Resources**

1. Soils: The four primary soil units on this ranch are the Faskin fine sand, Jalmar-Roswell-Pyote association, Ratliff-Redona association, Roswell-Jalmar fine sands, and Sharvana dry Redona association.

### **Faskin fine sands**

This deep, well drained soil is on high terraces in the eastern part of the survey area. Permeability of this soil is moderate, available water capacity is high, runoff is medium, water erosion is moderate, while the hazard of soil blowing is very high. Potential plant community is mainly sand bluestem, little bluestem, sand dropseed, plains bristlegrass and shinnery oak.

### **Jalmar-Roswell-Pyote association**

Soils are 50% Jalmar fine sand, 20% Roswell fine sand, and 20% Pyote fine sand. Jalmar soils are deep and well drained. Permeability of this soil is moderate, water capacity is moderate, runoff is slow, water erosion is slight, while the hazard of soil blowing is very high. Roswell soils are deep and excessively drained. Permeability of this soil is rapid, water capacity is low, runoff is slow, water erosion is slight, and hazard of soil blowing is very high. Pyote soils are deep and well drained. Permeability of this soil is moderately rapid, water capacity is moderate, runoff is slow, water erosion is slight, and hazard of soil blowing is very high. Potential plant community contains bluestems, bristlegrass, dropseeds, and shinnery oak.

### **Ratliff - Redona association**

Occurs on high terraces, with 45% Ratliff fine sandy loam and 35% Redona fine sandy loam.

The soil is deep and well drained. Permeability of the Ratliff soil is moderate, water capacity is high, runoff is slow, water erosion is slight, and hazard of soil blowing is high. The Redona soil is deep and well drained. Permeability of the Redona soil is moderate, water capacity is very high, runoff is slow, water erosion is slight, and hazard of soil blowing is high. The potential plant community is mainly black grama, windmill grass, little bluestem and blue grama. Mesquite readily invades this unit as it deteriorates.

### **Roswell-Jalmar fine sands**

Is 60% Roswell fine sand and 35% Jalmar fine sands. The Roswell soil is hummocky sand dunes and the Jalmar sand is in depressional areas. The Roswell soil is deep and excessively well drained. Permeability is rapid and water capacity is low. Runoff is slow, and the hazard of water erosion is slight, while soil blowing is very high. The Jalmar soil is deep and well drained. Permeability is moderate and water capacity is moderate. Runoff is slow, and the hazard of water erosion is slight, while soil blowing is very high. Potential plant community is mainly bluestems, sand paspalum, and bristlegrass. As the unit deteriorates threeawns and shinnery oak are become more common.

### **Sharvana, dry Redona Association**

Is 50% Sharvana and 40% Redona fine sandy loam. Sharvana soil is on low ridges with Redona in depressional areas. The Sharvana soil is shallow and well drained. Permeability is moderate and water capacity is very low. Runoff is medium, and the hazard of water erosion is moderate, while soil blowing is high. The Redona soil is deep and well drained. Permeability is moderate and water capacity is very high. Runoff is medium, and the hazard of water is moderate, while soil blowing is high. Potential plant community is sideate grama, little bluestem, blue grama and soapweed. Mesquite is quite frequent in this type of unit.

## **2. Vegetation:**

The primary ecological (range) site on the public lands in the northwest pasture is Deep Sand CP-2. The primary ecological (range) site on the remainder of the allotment, which is predominately private and State lands is Sandy Plains CP-2. Key vegetation is shinnery oak with bluestem and dropseed grasses. The Deep Sand community is a unique ecological area dominated by tall and mid-grasses. In many areas, the shinnery oak community has shifted from a dominant sand bluestem/little bluestem/hairy grama grassland with varying amounts of shinnery oak, sand sage and yucca to a community dominated by sand dropseed, red and purple three-awn and hairy grama, with increasing annual forbs, shinnery oak, mesquite, sand sage and yucca. The RMP/EIS established resource objectives for the Shinnery Oak Dune community. The vegetative cover by percent composition objectives for the SOD community are grasses 50-70 %, forbs 10-15 %, shrubs & trees 25-40 %. The ground cover objectives for this community are: bare ground 5-20 %, litter 25-70 %, small & large rock 0-1 %, grass & forbs 16-40 % and shrubs & trees 3-17 %.

### 3. Wildlife:

The Caprock Wildlife Habitat Area (WHA) includes the Good Allotment (65013). The Caprock WHA provides diverse habitat for more than 54 birds species, 33 species of mammals, and 36 species of reptiles and amphibians.

Raptors that are frequently associated with the vegetation types on this allotment are the red-tailed hawk, Swainson's hawk, ferruginous hawk, roughlegged hawk, common nighthawk, and the American kestrel.

Game bird species in this areas include the lesser prairie chicken, scaled and bob white quail, and the mourning dove.

Other bird species that are usually observed are the turkey vulture, roadrunner, chihuahuan raven, great-horned owl, burrowing owl, northern flicker, loggerhead shrike, western meadowlark, western kingbird, pyrrhuloxia, horned lark, and other passerine birds.

At least 33 species of mammals occur on or utilize this allotment. The diversity of small mammals provide for an excellent prey base for carnivores such as the coyote, gray fox, bobcat, raccoon, badger, hooded skunk and striped skunk.

Mammals that provide a prey base include the black-tailed jack rabbit, desert cottontail, spotted ground squirrel, pocket mice, deer mouse, kangaroo rats, northern grasshopper mouse, harvest mice, and the white throated woodrat.

Two big game species that occur on the allotment are pronghorn antelope and mule deer.

Reptiles and amphibians that inhabit the area are the dune sagebrush lizard, southern prairie lizard, lesser earless lizard, side-blotched lizard, longnose leopard lizard, sixlined racerunner, tree lizard, skinks, western diamond back, western rattlesnake, coachwhip, spadefoot toads, western box turtle, and the yellow mud turtle.

### 4. Threatened/Endangered Species

There are no known federally threatened or endangered species occurring within the proposed action area.

#### **Special Status Species:**

Federal threatened, endangered and candidate species as well as state-listed threatened or endangered species potentially occurring within the proposed project area will be analyzed in this document. Candidate species and State listed species do not receive protection under the ESA until proposed. However, within the act and under BLM policy the bureau has an obligation to ensure actions do not contribute to the need to list these species.

There are several Federal Candidate species that occupy or utilize the area. These include the swift fox, lesser prairie chicken, and the mountain plover. For a detailed description of the range, habitat and potential threats to the swift fox and the mountain plover, refer to the Biological Opinion (AP11-38) in the Roswell RMP.

### Dune Sagebrush Lizard

The dune sagebrush lizard is listed by the New Mexico Department of Game and Fish as Endangered, Group 2 and by the U. S. Fish and Wildlife Service as a Category 2, Notice of Review species. The dune sagebrush lizard only occurs in the southeastern corner of New Mexico and the western region of Texas. Within that range its habitat is restricted to active sand dunes and their peripheries (Degenhardt and Jones 1972). Shinnery oak is the dominate plant species that surrounds the top edge of the active sand dune, with a small composition of grasses inside the blowout area.

During 1991 a study was begun to examine the effects of the removal of shinnery oak on lizard habitat. Through five years of research it was demonstrated that there were 70%-94% fewer lizards in treated pastures as compared to non-treated pastures.

### Lesser Prairie Chicken

Recently a petition was filed with the U. S. Fish and Wildlife Service (FWS) to list the prairie chicken as threatened. On June 1, 1998 the FWS announced a finding for the petition. After review of all available scientific and commercial information, the Service finds that listing this species is warranted but precluded by other higher priority actions to amend the Lists of Endangered and Threatened Wildlife and Plants. The lesser prairie chicken is added to the Service's candidate species list.

In southeastern New Mexico, lesser prairie chickens exist in the shrub-dominated High Plains Bluestem Subtype by using mixed stands of tall grass and shinnery oak.

Male prairie chickens visit or establish booming grounds (leks) from early March to late May, with the peak booming activity occurring around the middle of April. Booming grounds can be found in mesquite shortgrass, shinnery oak grasslands, shinnery oak dunes, abandoned oil/gas pads, pipelines and roads. The basic requirement for lek sites is visibility of the immediate surroundings (shortgrass and topography)..

Female prairie chickens prefer range in excellent condition for nesting. In areas of shinnery oak, nesting studies (Copelin 1963, Riley 1978) indicate that these birds prefer shinnery oak rangeland habitat dominated by mid and tall grass species. Wisdom (1980) demonstrated that nesting success was enhanced by the presence of tall, wide clumps of sand bluestem, which are found in a few near-climax areas in the shinnery oak-grassland, while areas devoid of sand bluestem were not highly conducive to nesting success. In areas where sand bluestem is scarce, little bluestem apparently serves as an acceptable substitute. (Merchant 1982). Riley et al. (1992) found that most successful nests occurred where basal composition of sand bluestem was greater and the height of vegetation above successful

nests averaged 67 cm, while height of vegetation above unsuccessful nests averaged 35 cm. Copelin (1963) found that the most successful nests were placed between clumps of grass residue left from the previous year's growth that provided overhead cover.

Brooding areas are often within habitats which are in lower seral stages usually having a high proportion of bare ground and annual forbs (Riley et al. 1992, Jones 1963).

Food requirements vary among the seasons. Prairie chickens rely heavily (97%) on forbs and other green plant material during the spring and invertebrates in the summer. The early fall diets consist of invertebrates and green plant material, while winter diets consist of mast from shinnery oak.

Above is a general description of prairie chicken habitat requirements. As with most wildlife species, especially upland game birds, precipitation plays a large role in population fluctuations and habitat conditions. Precipitation patterns have fluctuated drastically for the last twenty years. During the middle eighties precipitation was above normal and chicken populations responded very well. With the exception of two years, precipitation has been well below normal during the 1990's.

Current lesser prairie chicken habitat within the allotment is in fair condition (marginal Subtype 2). Most of the bluestems that would provide some nesting habitat are located on private land. Mono-typic stands of shinnery and deeper sandhills exist in the northwestern part of the allotment. Most of the public land lies within this large pasture and would be considered a Subtype 3 according to the habitat descriptions in the Davis study (1979).

### Population Monitoring Data

The Roswell Field Office has actively monitored prairie chicken booming grounds, population trends and habitat since the early seventies depending upon workload and availability of personnel to conduct the census. Historically in New Mexico, the Lesser prairie chicken occupied most of the eastern plains. However, numbers and occupied range of the species are much reduced since pre-settlement times; apparently in response to prolonged heavy grazing and brush control in combination with the great drouths of the 1930's and 1950's. It has been reported that currently the Lesser prairie chicken occupies approximately one half their original range in New Mexico. In southeast New Mexico, in our prairie chicken habitat, we received above normal rainfall during the mid-80s. We experienced higher chicken numbers in relation to the grass response, conversely we have witnessed a decline in chicken populations due to the drought conditions we have been in for the past several years.

Since the early 1970's Lesser prairie chicken populations have fluctuated up and down with the highest period occurring during the middle 1980's. On this specific allotment 6 known booming grounds have been documented and monitored, when feasible, for over 25 years. Lesser prairie chicken lek activity has fluctuated over the years. In 1986, when the

population appeared to be at its highest, 4 out of the 6 booming grounds were active with an average of number of 13.5 birds per lek. Since that time lek activity has declined. Up to the middle 1990's, one or two leks have been known to remain active with an average number of six males per lek. In the later part of the 1990's there was little to no lek activity within the allotment. This past year (2000) two leks were active with a total of 16 birds being observed.

#### 5. Livestock Management:

The allotment is grazed by cattle. As was stated earlier, the BLM does not set the total livestock numbers for a Section 15 Lease. Current allotment information reflects the present livestock operation is a cow-calf and/or yearling herd. The lessee utilizes a best pasture/deferred rotation system. In shinnery oak dominated pastures livestock are removed during the period that shinnery is toxic, normally mid March and April, to prevent livestock loss.

#### 6. Visual Resources:

That portion of the allotment adjacent to Highway 70 is in the Class III Visual Resource Management Class, while the remainder of the allotment are in Class IV.

#### 7. Air Quality:

The allotment is in a Class II area for the Prevention of Significant Deterioration of air quality as defined in the federal Clean Air Act, which allows a moderate amount of air quality degradation. Air quality is generally good, Winds are typically southeasterly during the summer, and becoming southwesterly in the winter and early spring. Winds average 10 miles per hour in the fall and 16 miles per hour in the spring, with peak velocities reaching 50 miles per hour. These conditions rapidly disperse air pollutants in the region.

#### 8. Recreation:

Recreation opportunities are very limited (inaccessible) in this grazing allotment because the public has limited legal/physical access to public lands. The parcels of Public lands within this allotment are scattered and are generally surrounded by private lands. The public lands adjacent to highway 70 are available by foot access only. Mule deer, pronghorn antelope, and game birds such as quail and dove are taken during hunting seasons set by the New Mexico Department of Game and Fish.

#### 9. Caves and Karst:

A complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment. Presently, no known significant caves or karst features have been identified within this allotment. If at a later date, a significant cave or karst feature is located on public lands within this allotment, that cave or feature may be fenced to exclude livestock grazing and Off Highway Vehicle Use. A separate Environmental analysis would be prepared to construct this enclosure fence.

This allotment is located within a designated area of Low Karst or Cave Potential.

## **IV. Environmental Impacts**

### **A. Impacts of the Proposed Action**

#### 1. Soils:

The permitted use as described in the proposed action is not anticipated to have any adverse impact to the current soil conditions. Some soil loss would continue to occur due to the windy conditions that prevail in this region during parts of the year. If vegetative cover remains stable soil loss may be minimized.

Changes in vegetative ground cover is often linked to the amount and timing of precipitation events. This assessment is based on the assumption that the area will receive at least the long term average in precipitation both in timing and amount.

#### 2. Vegetation:

The continuance of the permitted use (30 AU's) as established by the amount of forage available for livestock on public land within the lease is not anticipated to have any adverse impact to the current vegetative conditions. The vegetation will continue to be grazed and trampled by domestic livestock as well as other herbivores such as rabbits, rodents and insects. Under the proposed action, it is not anticipated that a significant change in the vegetative composition or amount available for use will occur. The continuance of the present livestock management practices is not anticipated to alter the vegetative composition. The pastures will continue to get some deferment as outlined in the affected environment. Ecological condition and trend is expected to remain stable over the long term at this permit number.

#### 3. Wildlife:

Under the proposed action, domestic livestock will continue to utilize vegetative resources needed by a variety of wildlife species for life history functions within this allotment. The magnitude of livestock grazing impacts on wildlife is dependent upon the species of wildlife being considered, and it's habitat needs. In general, livestock stocking rate adjustments have been made in the past to minimize the direct competition for those vegetative resources needed by a variety of wildlife species. Cover, and other habitat requirements for wildlife will remain the same as the existing situation. The existing situation on the public lands in the Northwest pasture is such that wildlife species requiring a certain amount of grasses for cover, roosting, nesting and forage would continue to be negatively impacted. Maintenance and operation of existing waterings will continue to provide dependable water sources for wildlife, as well as livestock.

#### 4. Threatened/Endangered Species:

Under the proposed action there would be no affect to Federal threatened and endangered species since there are no known T/E occurrences within this allotment.

### Special Status Species

Under the proposed action, there would be minimal impacts to the sanddune lizard due to the dispersal of livestock. Areas where there is a concentration of livestock (waterings and fence corners) the habitat may be of lower quality, but these areas are small in nature. Range improvements (pipelines) may enhance lizard habitat by creating open dunal areas that are usually bordered by shinnery oak.

Under the proposed action no negative impacts to Lesser Prairie chickens are anticipated, except during prolonged drought conditions, pastures may need to be rested to ensure adequate nesting habitat remains available. An increase in birds this year is an indication that the habitat is still available.

### 5 Livestock Management:

Under the proposed action there would be no impacts to the current livestock management. The allotment would continue to be grazed in the same manner as it is currently. The larger block of public land in the northwest portion of the allotment would continue to be deferred during the period that shinnery oak is toxic. It would also be anticipated the area would continue to have periodic deferral during other periods of the year.

### 6. Visual Resources:

The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

### 7. Air Quality:

The impacts to air quality would not change from the current situation. A moderate amount of air quality degradation would continue.

### 8. Recreation

Grazing would have little or no affect on the recreational opportunities, since the recreating public has no legal or physical access to this parcel of public land. Recreation activities that could occur within this grazing allotment are limited or non-existent due to land patterns.

### 9. Significant Caves/Karst

No known significant caves or karst features are known to exist on the public lands located within this allotment. Grazing would not affect the karst resources.

## **B. Proposed action with new Terms and Conditions Alternative**

Impacts to all resources would remain the same as the proposed action with the exception of Special Status Species (lesser prairie chicken). By implementing the Robel Pole vegetative monitoring and the new terms and conditions, lesser prairie chicken habitat would be maintained with management changes cooperatively made during drought periods to minimize impacts on nesting habitat.

## **V. Cumulative Impacts**

A cumulative impact is defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR 1508.7).

The analysis of cumulative impacts is driven by major resource issues. The action considered in this environmental assessment (EA) is the authorization of livestock grazing on Allotment 65004, and the major issue includes:

The protection of special status threatened or endangered species and its habitat within the allotment area, primarily the lesser prairie chicken. The incremental impact of issuing a grazing permit on these resources must be analyzed in the context of impacts from other actions. Other BLM actions that could have impacts on the identified resource include: Livestock authorization on other allotments within the adjacent shinnery oak dune habitat type, some oil and gas development and activities, rights-of-ways dissecting the area, and recreational use, primarily hunting and subsequent cross country driving.

All authorized activities which occur on BLM land can also take place on state and private lands, with the possibility of decreased management towards resource these resource concerns. Many of the actions which could contribute to cumulative impacts have occurred over many years. Impacts from open-range and yearlong livestock grazing in the last century are still being addressed today and may continue on adjacent land owners.

The proposed action and alternatives would not add incrementally to the cumulative impacts to sensitive species or to the overall rangeland health. The conclusion that impacts to these resources from grazing authorization would not be significant are discussed in Section IV of the EA.

If the No-Grazing alternative were chosen, some adverse cumulative impacts to resource would be eliminated, but others would continue. Grazing would no longer be available as a vegetation management tool, and BLM lands within the allotment would be less intensively managed. For example, preferred grasses (bluestems) would likely to become decadent without some livestock use.

## **VI. Residual Impacts**

The area has been grazed by livestock since the early part of the 1900's if not longer. Recent vegetative monitoring studies have shown that grazing, at the current permitted numbers of animals is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action or alternatives.

## **VII. Mitigating Measures And/Or Permit/Lease Conditions**

Vegetation monitoring and lesser prairie chicken studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary.

## **VIII. Fundamentals of Rangeland Health**

The fundamentals of rangeland health are basic components of healthy rangelands and guiding principles for the development of standards and guidelines for livestock grazing. The fundamentals are identified in 43 CFR 4180.1 and pertain to watershed function, ecological processes, water quality and habitat for threatened and endangered species or other special status species. Based on the best available data and professional judgement. This EA addresses the fundamentals of Rangeland Health.

### **Field Office Staff Involvement/Review**

John Spain - Rangeland Management Specialist  
Rand French - Wildlife Management Biologist  
Jerry Ballard - Outdoor Recreation Planner  
Jim Shroeder - Watershed Specialist  
Pat Flannary - Archeologist

FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the proposed action and alternatives will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rationale for Recommendations: The proposed action and alternatives would not result in any undue or unnecessary environmental degradation. The proposed action and alternatives will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997).

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T. R. Kreager,  
Assistant Field Office Manager - Resources

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Date