

**Bureau of Land Management, Roswell Field Office
Environmental Assessment Checklist, EA# NM-510-2008-0096**

Resources	Not Present on Site	No Impacts	May Be Impacts	Mitigation Included	BLM Reviewer	Date
Air Quality			X	X	/s/ Michael McGee SWA Spec/Hydro.	7/15/08
Soil			X	X		
Watershed Hydrology			X	X		
Floodplains	X					
Water Quality - Surface			X	X	/s/ Michael McGee Geologist/Hydrologist	7/15/08
Water Quality - Ground			X	X		
Cultural Resources		X			/a/Rebecca L. Hill Archaeologist	30Jun08
Native American Religious Concerns	X					
Paleontology	X					
Areas of Critical Environmental Concern	X				/s/J H Parman Plan & Env. Coord.	6/10/08
Farmlands, Prime or Unique					Realty	
Rights-of-Way						
Invasive, Non-native Species		X			Range Mgmt. Spec. /s/ Joseph M. Navarro	7/15/08
Vegetation		X				
Livestock Grazing		X				
Wastes, Hazardous or Solid		X			Nat. Resource Spec. /s/ Brian Novosak	7/8/08
Threatened or Endangered Species	X				/s/ D Baggao Biologist	7/5/08
Special Status Species		X				
Wildlife			X	X		
Wetlands/Riparian Zones	X					
Wild and Scenic Rivers	X				Outdoor Rec. Plnr. /s/Bill Murry	7/21/08
Wilderness	X					
Recreation		X				
Visual Resources			X			
Cave/Karst			X			
Environmental Justice		X			Nat. Resource Spec. /s/ Brian Novosak	7/8/08
Public Health and Safety		X				
Solid Mineral Resources		√			/s/ Jerry Dutchover Geo/SPS	06/26/08
Fluid Mineral Resources		X			/S/ David R. Glass Petroleum Engineer	07/23/2008

FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

EA No. NM-510-2008-0096

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

Brad Pendley
Assistant Field Manager, Resources

Date

**ENVIRONMENTAL ASSESSMENT
for
GRAZING AUTHORIZATION**

**ALLOTMENT 65079, SECTION 3
Portions of Township 14 South, Range 31 East**

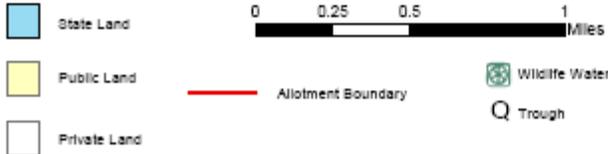
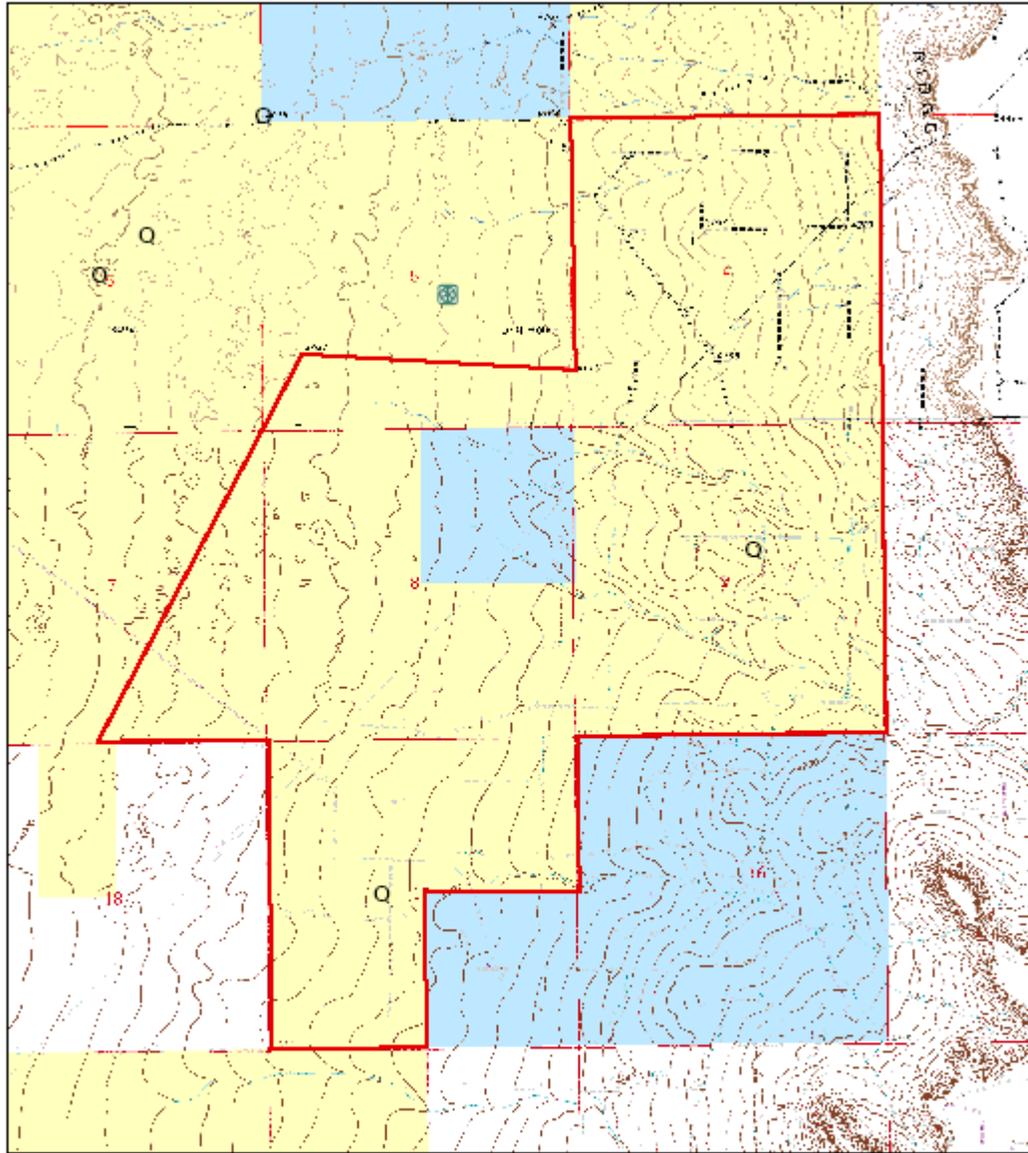
EA-NM-510-2008-0096

May 2008

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



S & S Corporation - 65079



T14S.R31E

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Produced by the RFO GIS Specialist on March 28, 2005.

1. 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 #65079.

The scope of this environmental assessment is limited to the effects of issuing a new 10 year grazing permit on Allotment #65079. 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. There are no current plans for additional management actions on this allotment.

A. Purpose and Need for the Proposed Action

The purpose of issuing a new grazing permit would be to authorize livestock grazing on public range on Allotment #65079. The permit/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. The current permit, which was issued under the Appropriation Act, expires on 2/28/2016.

B. 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 to the Record of Decision as required by 43 CFR 1610.5-5.

C. 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 (16 U.S.C. 1535 et seq.) as amended; the Federal Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management; and Executive Order 11990, Protection of Wetlands.

2. Proposed Action and Alternatives

A. Proposed Action:

This proposed action is to authorize a 10 year grazing permit on BLM allotment # 65079. This permit would authorize 33 Animal Units (AUs) at 94% public land for 372 Animal Unit Months (AUMs) yearlong. Grazing use would be from March 1 to the last day of February of each year and will be in accordance with a Livestock Use Agreement on 10/2/95. Cattle are the class of livestock proposed for authorization.

B. No Permit/Lease Authorization Alternative:

This alternative would be to not issue a new grazing permit for allotment #65079. No grazing would be authorized on federal land under this alternative. The No Grazing alternative was considered, but not chosen in the Rangeland Reform Environmental Impact Statement (EIS) Record of Decision (ROD) (p. 28). The elimination of grazing in the Roswell Field Office Area was considered but eliminated by the Roswell RMP/ROD (pp. ROD-2).

3. Affected Environment

A. General Setting

Allotment #65079 is located in Chaves County, about 28 miles due east of Hagerman, New Mexico in portions of Township 14 South, Range 31 East NMPM. This allotment consists of 2,461 acres public and 160 State. This allotment is in "M" Maintain category.

This allotment lies within the boundaries of the Roswell Grazing District established subsequent to The Taylor Grazing Act (TGA). Grazing authorization on public land inside the Grazing District boundary is governed by Section 3 of TGA. Normally, the permitted use on Section 3 permits is established by forage allocated by, or under guidance of, an applicable land use plan for livestock grazing in an allotment under a permit or lease and is expressed in AUM's. Vegetation monitoring studies will be continued and subsequent livestock adjustments will be based upon the Resource management Plan decisions and results of monitoring studies.

A portion of the federal surface has been influenced by oil and gas development. Numerous oil and gas facilities, abandoned pads, caliche pits, pipelines and roads are located on this allotment.

Following resources or values are not present or would not be affected: Prime/Unique Farmland, Areas of Critical Environmental Concern, Minority/Low Income Populations, Wild and Scenic Rivers, Hazardous/Solid Wastes, Wetlands/Riparian Zones, Floodplains, and Native American Religious Concerns. Cultural inventory surveys would continue to be required for public actions involving surface disturbing activities.

B. Affected Resources

1. Soil: Based on the Southern Chaves County Soil Survey published by Natural Resource Conservation Service (NRCS), a copy of this publication may be reviewed at the BLM Roswell Field office or at the local NRCS office. The general soil mapping for this area shows five major soil associations for this allotment: Faskin fine sand, Roswell-Jalmar fine sand, Faskin-Malstrom deep sand, Faskin-Roswell fine sand & Ima Sandy.

Faskin fine sand (Fa)

The Faskin soil is deep and well-drained. 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. This soil is hummocky and typically has slopes of 0 to 2%.

Faskin-Malstrom (FM)

Soil is 50% Faskin loamy fine sand, 40% Malstrom loamy fine sand, and 10% less extensive soil. The Faskin soil is deep and well drained. 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. This soil is gently undulating and typically has slopes of 0 to 2%.

Roswell-Jalmar (RPD) fine sand, hilly

Roswell soil makes up 60 percent of the map unit. This map unit is in the Pecos-Canadian Plains and Valleys Major Land Resource Area. The runoff class is medium. The depth to a restrictive feature is greater than 60 inches. It is well drained. The slowest soil permeability within a depth of 60 inches is rapid. Available water capacity within a depth of 60 inches is low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 2%. In the soil profile, there are no saline horizons, and there are no sodic horizons. This component is in the Sand Hills and Deep Sand, ecological sites.

Faskin-Roswell complex, 1 to 5% slopes (FRB) Permeability of the unit soil is moderate. Runoff of the unit soil is medium and the hazard of water erosion is moderate and the hazard of soil blowing is high.

Ima (Im) fine sandy loam 1 to 5% slopes. This soil is deep and well-drained with moderate permeability. Available water capacity is 7 to 9 inches. Runoff is medium or slow with a severe water erosion hazard. Soil blowing is moderate with gullies caused by runoff from steep and higher lying areas.

2. Vegetation

This allotment lies within shinnery-oak dune and grassland plant communities as identified in Roswell Resource Management Plan. Primary features in shinnery oak dune (SOD) communities are topography influenced by aeolian and alluvial sedimentation on upland plains forming hummocks, dunes, sand ridges and swales and presence of shinnery oak (*Quercus havardii*). 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. Some dunes are stabilized with vegetation, while a number of them are unstable and shifting. Dune blowouts with shinnery oak, sand sage (*Artemisia filifolia*) and bluestem (*Andropogon* spp.), either isolated or in dune complexes are common in this community. Dominant grasses include sand bluestem (*Andropogon hallii*), little bluestem and threeawn (*Aristida* spp.).

Vegetative cover by percent composition objectives for shinnery oak dune (SOD) community are grasses 50-70 %, forbs 10-15%, shrubs & trees 25-40%. 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%.

Primary features in Grassland communities include grasses and forbs comprising the majority of vegetative cover by composition. Vegetative cover, by percent composition objectives for the Grassland (GR) community is: grasses 30-85 %, forbs 10-15%, shrubs & trees 1-10%. Ground cover objectives for this community are: bare ground 14-60%, litter 8-44%, small & large rock 0-30%, grass & forbs 15-52% and shrubs & trees 3-12%.

Primary ecological (range) sites on this allotment are Sand Hills, Deep Sand and Sandy Plains. Ecological site descriptions are available for review at Roswell BLM office or any Natural Resources Conservation Service office or may be accessed at www.nm.nrcs.usda.gov.

One permanent monitoring site was established in 1980 for this allotment. Most recent data was collected in 2004. These study data serve as basis for range trend analysis, ecological (range) condition ratings, track vegetation changes and assist in evaluation and comparison of stocking rates.

Long-term monitoring data for this allotment indicates an average of 935 lbs/ac production on public land. Shinnery oak and yucca (*Yucca* spp.) together make up 60 percent of the long-term composition. Perennial grasses such as threeawn, dropseed (*Sporobolus* spp.) and grama (*Bouteloua* spp.) make up an additional 16 percent of the composition. Remainder of composition is mainly forbs and other shrubs. Recent data collected in 2004 indicates 302 lbs/ac with perennial grasses such as threeawn, dropseed and grammas comprising 14 percent of the total composition.

3. Wildlife:

At least 33 species of mammals occur on or utilize this allotment. A diversity of small mammals provide an excellent prey base for carnivores such as coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*), badger (*Taxidea taxus*), hooded skunk (*Mephitis macroura*) and striped skunk (*Mephitis mephitis*).

Mammals that provide a prey base include black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus auduboni*), spotted ground squirrel (*Spermophilus spilosoma*), pocket mice (*Perognathus flavus*), deer mouse (*Peromyscus maniculatus*), kangaroo rats (*Dipodomys* spp.), northern grasshopper mouse (*Onychomys leucogaster*), harvest mice (*Reithrodontomys* spp.) and white-throated woodrat (*Neotoma albigula*).

This allotment provides habitat for small animals, birds, rodents, and a sustainable population of mule deer (*Odocoileus hemionus*) and pronghorn (*Antilocapra americana*).

Other game species occurring within this area include mourning dove (*Zenaida macroura*), scaled quail (*Callipepla squamata*) and possibly bobwhite quail (*Colinus virginianus*).

Raptors that utilize this area and frequently associated with vegetation types on this allotment include Swainson's hawk (*Buteo swainsoni*), red-tailed hawk (*Buteo jamacensis*), ferruginous hawk (*Buteo regalis*), American kestrel (*Falco sparverius*), and rough-legged hawk (*Buteo lagopus*).

Numerous passerine birds utilize the grassland areas. Those most common include western meadowlark (*Sturnella neglecta*), mockingbird (*Mimus polyglottos*), horned lark (*Eremophila alpestris*), killdeer (*Charadrius vociferus*), loggerhead shrike (*Lanius ludovicianus*), and vesper sparrow (*Pooecetes gramineus*).

This warm prairie environment supports a large number of reptile species. More common reptiles include short-horned lizard (*Phrynosoma douglasii*), lesser earless lizard (*Holbrookia maculata*), eastern fence lizard (*Sceloporus undulatus*), coachwhip (*Masticophis flagellum*), bullsnake (*Pituophis melanoleucus sayi*), prairie rattlesnake (*Crotalus v. viridis*), and western rattlesnake (*Crotalus viridis*).

Special Status Species

Federal 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 two Federal Candidate or State listed species that may occupy or utilize portions of the allotment. These are the lesser prairie chicken, and sand dune lizard. The portions of the allotment that lie within the RMPA plan area are in T14S, R31E, Sections 5, 7, 8, and 17. There are no known records of occurrence for either species in this allotment. However,

if they should be found at some future date, the prescriptions described in the RMP and RMPA for either or both would apply.

4. Threatened/Endangered Species

There are no known Federal threatened and endangered species or critical habitat within this allotment. For a detailed description of range, habitats, and potential threats to affected species which do or might occur in the Roswell Field Office refer to the Biological Opinion (AP11-38) in the Roswell RMP.

5. Livestock Management

Base waters on this allotment are located on public land. There is one pasture in this allotment. This allotment is grazed by cattle as a cow/calf operation. Generally in allotments where shinnery oak dominates pastures, livestock are removed during periods that shinnery is toxic, normally mid March and April, to prevent livestock loss. Livestock water is located on State and public land.

6. Visual Resources

The allotment is located in a Class IV Visual Management Area. The Class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, these changes should repeat landscape basic elements.

7. Water Quality Drinking/Ground

No perennial surface water is found on public land on this allotment. Fresh water sources are available at in the Quaternary Shallow Alluvium Aquifer, Artesia Group, and the San Andres Aquifer.

8. Air Quality

This allotment is in a Class II area for 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 summer, and becoming southwesterly in winter and early spring. Winds average 10 miles per hour in fall and 16 miles per hour in spring, with peak velocities reaching 50 miles per hour.

9. Recreation

Recreational pursuits are considered to be either facility-based or dispersed. The Roswell Field Office Area offers opportunities in both categories. Dispersed recreation occurs throughout the approximately 1.5 million surface acres of public land in the Resource Area. Most of the visitation in the Field Office Area comes from dispersed recreational activities such as hunting, caving, fishing, sightseeing, Off Highway Vehicle Use, primitive camping,

mountain biking, horseback riding and hiking. Hunting is the most popular outdoor sport on public land in southeast New Mexico. Hunting for big game, waterfowl, and upland birds is estimated to provide in excess of 267,122 visitor hours each year.

Since this allotment has no facility based recreational activities only dispersed recreational opportunities occur on this land. Recreational activities that occur include hunting, caving, sightseeing, Off Highway Vehicle Use, primitive camping, horseback riding and hiking.

Legal and physical access to public land located in this allotment is through private land and county maintained roads on adjacent allotments. Off Highway Vehicle designation for public land within this allotment is classified as "Limited" to existing roads and trails. The majority of public land in this allotment can only be accessed by foot (hiking, or walking).

10. Cave/Karst

A complete significant cave or karst inventory has not been completed for public land located on 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 land 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

11. Noxious/Invasive Weeds

A noxious weed is defined as a plant that causes disease or has other adverse effects on human environment and is, therefore, detrimental to public health and to agriculture and commerce of the United States. Generally, noxious weeds are aggressive, difficult to manage, parasitic, are carriers or hosts of harmful insects or disease, and are either native, new to, or not common in the United States. In most cases, however, noxious weeds are non-native species.

This list currently includes the following weeds: 1) African rue (*Peganum harmala*), 2) black henbane (*Hyoscyamus niger*), 3) bull thistle (*Cirsium vulgare*), 4) camelthorn (*Alhagi pseudalhagi*), 5) Canada thistle (*Cirsium arvense*), 6) dalmatian toadflax (*Linaria genistifolia* ssp. *Dalmatica*), 7) goldenrod, (*Solidago Canadensis*) 8) leafy spurge (*Euphorbia esula*), 9) Malta starthistle (*Centaurea melitensis*), 10) musk thistle (*Carduus nutans*), 11) poison hemlock (*Conium maculatum*), 12) purple starthistle (*Centaurea calcitrapa*), 13) Russian knapweed (*Centaurea repens*), 14) Scotch thistle (*Onopordum acanthium*), 15) spotted knapweed (*Centaurea maculosa*), 16) teasel (*Dipsacus fullonum*), 17) yellow starthistle (*Centaurea solstitialis*), 18) yellow toadflax (*Linaria vulgaris*), 19) Russian olive (*Elaeagnus angustifolia*), 20) Saltcedar (*Tamarix chinensis*), 21) Siberian elm (*Ulmus pumila*).

Of those noxious weeds listed, those ones with known populations in the Roswell District are African rue, non-native thistles (*Cirsium* spp.) such as bull thistle and Canada thistle, leafy spurge, goldenrod, Malta starthistle, Russian olive, Saltcedar, poison hemlock, teasel, Russian knapweed, Siberian elm and Scotch thistle. Also "problem weeds" of local concern are cocklebur (*Xanthium* spp.), buffalobur (*Curcubita foetidissima*) and spiny cocklebur (*Xanthium spinosum*). "Problem weeds" are those weeds which may be native to those area but whose populations are out of balance with other local flora.

Infestations of noxious weeds can have a disastrous impact on biodiversity and natural ecosystems. Noxious weeds affect native plant species by out-competing native vegetation for light, water and soil nutrients. Noxious weeds cause estimated losses to producers \$2 to \$3 billion annually. These losses are attributed to: (1) Decreased quality of agricultural products due to high levels of competition from noxious weeds; (2) decreased quantity of agricultural products due to noxious weed infestations; and (3) costs to control and/or prevent the noxious weeds.

Further, noxious weeds can negatively affect livestock and dairy producers by making forage either unpalatable or toxic to livestock, thus decreasing livestock productivity and potentially increasing producers' feed and animal health care costs. Increased costs to operators are eventually borne by consumers. Noxious weeds also affect recreational uses, and reduce realty values of both directly influenced and adjacent properties.

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

12. Oil & Gas/Rights of Way

At present oil and gas/right of ways activities are occurring on this allotment. Due to increased exploratory activities within this area, there is potential for new development. There are several oil and gas pads and associated infrastructure throughout this allotment and adjacent area.

IV. Environmental Impacts

A. Impacts of the Proposed Action

1. Soil

Grazing activities will continue to have some impact to soil. These impacts may include: removal of standing vegetation and litter; soil compaction along livestock trails or compaction may occur if livestock are concentrated during prolonged periods when it is wet. These effects can lead to reduced infiltration rates and increased runoff. Reduced vegetative cover and increased runoff can result in higher erosion

rates and soil losses, making it more difficult to produce forage and to protect soil from further erosion. These adverse effects can be greatly reduced by maintaining adequate vegetative cover on the soil.

Proper utilization levels and grazing distribution patterns are expected to retain sufficient vegetative cover on this allotment as a whole which would maintain soil stability. Soil compaction and excessive vegetative use would occur at small, localized areas such as drinking locations, along trails and at bedding areas. Positive affects from this proposed action include expediting nutrient cycling processes and soil crust chipping by hoof action stimulating seedling growth and water infiltration.

2. Vegetation

The continuance of permitted use at current use levels authorized by the expiring permit is not anticipated to have any adverse impact to current vegetative conditions. Vegetation will continue to be grazed and trampled by domestic livestock as well as other herbivores such as pronghorn, mule deer, lagomorphs, rodents and insects. Ecological condition and trend is expected to remain stable or improve over long-term with the proposed action.

3. Wildlife:

Under the proposed action, wildlife will continue to compete with domestic livestock for space and forage. With proper livestock management and carrying capacities, there will be adequate cover and forage for wildlife species; resulting in sustainable wildlife populations for those species that occupy or utilize the area. Maintenance and availability of existing waterings will continue to prove a dependable water source for wildlife, as well as livestock.

Special Status Species

Special status species such as the lesser prairie chicken and sand dune lizard would not be adversely impacted by issuing a grazing permit. None currently present on this allotment.

4. Threatened/Endangered Species

No impacts, none present.

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. It would also be anticipated that this area would continue to receive rest when implementing a rest rotation system.

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. The VRM Class within this allotment is Class IV.

7. Water Quality/Drinking Ground

Direct impacts to surface water quality would be minor, short-term impacts during storm-flow. Indirect impacts to water-quality related resources, such as fisheries, would not occur. This proposed action would not have a significant effect on ground water. Livestock would be dispersed over the allotment, and soil would filter potential contaminants.

8. Air Quality

Dust levels under this proposed action would be slightly higher than under the no grazing alternative due to allotment management activities. Levels would be within limits allowed in a Class II area for Prevention of Significant Deterioration of air quality.

9. Recreation

Recreation activities that could occur within this grazing allotment are: hunting, sightseeing, primitive camping, biking, horseback riding and hiking. Because this area is a large block of public land the recreation potential of the area is limitless.

Off Highway Vehicle designation for public land within this allotment is classified as "Limited" to existing roads and trails.

10. Significant Caves/Karst

No known significant caves or karst features are known to exist on public land located within this allotment. Grazing would not affect the karst resources. Cave/Karst occurrence rating within this allotment is low.

11. Noxious and Non-native Invasive Species

There are no known noxious weed populations found within this allotment.

12. Oil & Gas Rights of Ways

Grazing will have minimal affect on these activities.

13. Cultural Resources

Cultural resources are not usually adversely affected by livestock grazing. Although concentrated livestock activity such as around livestock water troughs can have adverse

effects on the cultural resource. As such all livestock water troughs should not be located within 100 feet of a known archaeological site.

B. Impacts of the No Livestock Grazing Alternative.

1. **Soil:** Soil compaction would be reduced on this allotment around old trails and bedding grounds. There would be a small reduction in soil loss on this allotment.
2. **Vegetation:** It is expected that number of plant species found within this allotment will remain, however there would be small changes in relative percentages of these species. Vegetation will continue to be utilized by wildlife. There would be an increase in amounts of standing vegetation.
3. **Wildlife:** Conflicts between wildlife and livestock for habitat and dietary needs would not exist under this alternative.
4. **T&E Species:** There would be no impacts to threatened or endangered species or habitat.
5. **Livestock Management:** Forage from public land would be unavailable for use by the permittee. This would have a significant adverse economic impact to the livestock operation. If the No Grazing alternative is selected, the livestock owner would be responsible for ensuring that livestock do not enter Public Land [43 CFR 4140.1(b)(1)]. Intermingled land status on this allotment makes it economically unfeasible to fence out public land and use only private. The remaining state or private land could not support current authorized livestock numbers and lower numbers would not provide a level of potential income operators are accustomed to.
6. **Visual Resources:** There would be no change in visual resources.
7. **Water Quality:** There could be a slight improvement in water quality due to minor reductions in sediment loading during stormflow.
8. **Air Quality:** There would be a slightly less dust under this alternative versus the proposed alternative, but this would be negligible when considering all sources of dust.
9. **Recreation:** Impacts would be very minor under this alternative. No positive impacts from livestock watering locations would occur.
10. **Caves/Karst:** Impacts would be the same as the proposed action if no significant caves are found.
11. **Non-native and Invasive Species:** There would be no change in existing non-native/invasive species populations.

12. **Oil/Gas Rights of Ways:** Impacts would be minor under this alternative and there would be very little change.

V. Public Land Health

Public Land (Rangeland) Health assessments are yet to be completed on this allotment. Based on these assessments and monitoring data a Determination will be made that public land within this livestock grazing allotment is or is not in conformance with New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management. A copy of this assessment when completed can be accessed at www.nm.blm.gov/rfo/index.htm.

VI. Cumulative Impacts

Approximately 48 allotments within the field office contain lesser prairie-chicken habitat. These allotments contain 951,462 acres land in all ownerships (State, public, private) of which 437,525 acres is public land. This land has 14,370 animal units (AU) associated with it.

Permitted livestock use numbers on these allotments have not had a significant change in past 25 years. Adjustments of numbers have been made based on monitoring data. The range condition of these allotments is generally fair to good showing an upward trend.

Implementing the 2001 New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing in the Planning Area would produce the same social and economic impacts as described in its environmental impact statement. Long-term impacts of implementing Standards for Rangeland Health would be a positive benefit to livestock operators. The short term impacts would be expected to be localized to certain allotments or pastures and would not occur throughout the field office.

Implementation of New Mexico Standards for Public Land Health also takes into account the uses of the land and evaluates their impact to biotic communities through the analysis of biotic indicators. When indicators are not meeting the biotic standard, and the causal factor is livestock grazing, the Guidelines for Livestock Grazing would be implemented to mitigate those impacts. This would result in improved rangeland conditions and promote wildlife habitat and future wildlife populations.

Livestock grazing would be maintained at a level consistent with the seasonal nesting and brood-rearing habitat requirements of the lesser prairie chicken. Within lesser prairie-chicken habitat ranch operators voluntarily participating in a conservation program would agree to try to meet these standards through the adoption of a suitable grazing program for their land or lease allotment. Such a program may involve an overall reduction in AUM's or acreage grazed, modification of fences and water sources, brush control, implementation of a more conservative, deferred or rotational grazing system that rests breeding areas in key seasons to ensure adequate residual grass cover for nesting, and other related changes in management.

No long-term negative impacts are expected as a result of the livestock grazing program as proposed. Necessary adjustments to stocking rates or implementation of management prescriptions, utilizing rangeland and wildlife monitoring data, would have positive impacts to wildlife habitat.

VII. Residual Impacts

Vegetative monitoring studies have shown that grazing, at current permitted numbers of animals, is sustainable. If mitigation measures are enacted, then there would be no residual impacts to this proposed action.

VIII. Socio-Economic Impacts

A description of economic, social and cultural conditions by geographic region within New Mexico can be found in 2000 New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management Final EIS. Impacts of authorizing grazing for this allotment under the Proposed Alternative on economic, social and cultural conditions of southeast New Mexico would be positive. On a smaller scale, impacts of authorizing grazing for this allotment under the Proposed Action on economic, social and cultural conditions of Chaves County would also be positive.

IX. Mitigating Measures And/Or Permit/Lease Conditions

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

X. BLM TEAM MEMBERS

Helen Miller - Rangeland Management Specialist
Joseph Navarro - Rangeland Management Specialist
Dan Baggao-WildLife Specialist
Sheryl Post-Rangeland Management Specialist
Kyle Arnold-Rangeland Management Specialist
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Pat Flanary – Archaeologist
Rebecca L. Hill – Archaeologist
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