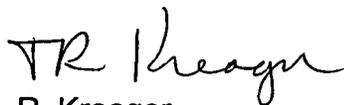


FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

EA No. NM-510-2005-0086

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).



T. R. Kreager
Assistant Field Manager, Resources

5/17/04

Date

**ENVIRONMENTAL ASSESSMENT
for
GRAZING AUTHORIZATION**

**ALLOTMENT 65038, SECTION 15
Portions of Township 8 & 9 South, Range 26, 27, & 28 East**

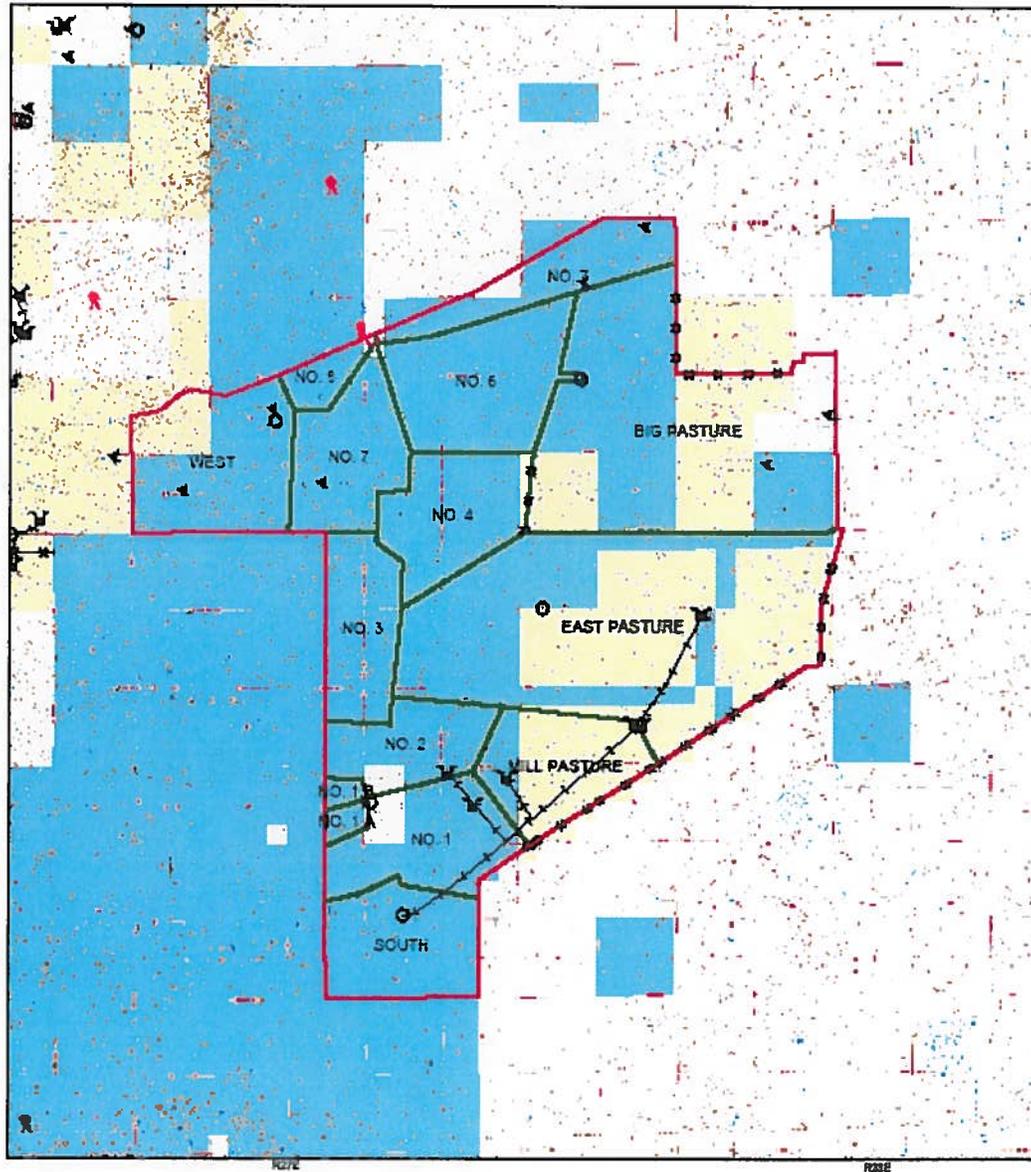
EA-NM-510-2005-0086

March 2006

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



L&L Cattle Co. - 65038



- Public Land
- State Land
- Private Land
- Allotment Boundary
- Pasture Fence
- Water Pipeline
- Base Waters in Red
- Water Well
- Windmill
- Retention Dam

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. Original data was compiled from various sources. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notification.

Produced by the RFO GIS Specialist on June 14, 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 65038.

The scope of this environmental assessment is limited to the effects of issuing a new 10 year grazing lease on Allotment #65038. Over time, 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 lease would be to authorize livestock grazing on public range on Allotment #65038. 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 lease expires on 2/28/2006.

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 with 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 L&L Cattle Co. (D. W. Luce) a 10 year grazing permit/lease on the L & L Cattle Co. allotment # 65038. This lease would authorize 1,122 AUMs at 21% public land for 441 AU's yearlong. Grazing use would be from March 1 to the last day of February of each year. Cattle and Horses are the class of livestock proposed for authorization.

B. No Permit/Lease Authorization Alternative:

This alternative, if selected, would be to not issue a new grazing lease for L & L Cattle Co. allotment #65038. 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 #65038 is located in Chaves County, about 17 miles northeast of Roswell in portions of Township 8 & 9 South, Range 26 & 27 East NMPM. This allotment was combined in 2004 with allotment #65538. This allotment was originally 2 separate allotments: a small section 3 allotment (65038) with only 400 acres public land and section 15 allotment (65538) with 7,524 acres public land with majority located outside the Grazing District Boundary. This request by the allottee was to put this allotment under a percentage control giving them capability to apply for varying levels of active use. This allotment now consists of 7,964 acres public, 840 private and 22,636 State.

Normally, the permitted use on Section 15 leases is established by the amount of forage produced on public land within the lease. Vegetation monitoring studies are now used to determine allowable number of livestock on this allotment.

A significant portion of the federal surface and private surface with federal minerals have been influenced by oil and gas development to some degree. 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 Northern 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 six major soil associations for this allotment: Blakenley-Ratliff association, Faskin fine sand, Jalmar-Roswell-Pyote association, Ratliff-Redona association, Roswell-Jalmar fine sand, and Sotim-Simona association.

Blakeney-Ratliff association, 0 to 5 percent slopes (BRB) Permeability of the unit soil is moderately rapid. Runoff of the unit soil is medium and the hazard of water erosion is moderate and the hazard of soil blowing is high.

Faskin-fine sand, 0 to 2 percent slopes (FaA) Permeability of Faskin soil is moderate. Runoff is medium and hazard of water erosion is moderate with a high hazard of soil blowing. Permeability of Malstrom soil is moderately rapid. Runoff of this unit is medium and hazard of water erosion is moderate with a high hazard of soil blowing.

Jalmar-Roswell-Pyote association, 0 to 15 percent slopes (JRC) Permeability of Jalmar soil is moderate. Runoff of this unit is slow and hazard of water erosion is slight with a high hazard of soil blowing. Permeability is rapid. Runoff is slow and hazard of water erosion is slight with a high hazard of soil blowing. Permeability is moderately rapid. Runoff is slow and hazard of water erosion is slight with a high hazard of soil blowing.

Ratliff-Redona association, 0 to 2 percent slopes (RBA) Permeability of this soil is moderate. Runoff is slow and hazard of water erosion is slight with a high hazard of soil blowing. Permeability of Redona soil is moderate. Runoff of Redona soil is slow and hazard of water erosion is slight and soil blowing is high.

Roswell-Jalmar fine sand, hilly., 0 to 25 percent slopes (RPD) Permeability of this Roswell soil is rapid. Runoff is slow and hazard of water erosion is slight and hazard of soil blowing is very high. Permeability of Jalmar soil is moderate. Runoff is slow and hazard of water erosion is slight with very high hazard of soil blowing.

Sotim-Simona association fine sandy loam, 0 to 5 percent slopes (SNB) Permeability of this Sotim soil is moderately slow. Runoff is medium and hazard of water erosion is moderate with a high hazard of soil blowing. Permeability of Simona soil is moderately rapid. Runoff is rapid and hazard of water erosion and soil blowing is high.

2. Vegetation

This allotment lies within shinnery-oak dune and grassland plant communities as identified in Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Appendix 11 of Draft RMP/EIS describes Desired Plant Community (DPC) concept and identifies components of each community. 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 (*Artemesia 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 are: 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 Shallow Sandy & 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.

Three permanent monitoring sites were established in 1981 for allotment #65538 and one established in 2001 for #65038. Most recent data was collected in 2002 for all sites. Long-term monitoring data indicates an average of 767 lbs/ac production for the three study sites comprising a majority of public land. Long-term production data for East Pasture is most productive with 879 lbs/ac with perennial grasses little bluestem, sand bluestem, threeawn, dropseed (*Sporobolus* spp.) and bush muhly (*Muhlenbergia porteri*) comprising 20 percent of the total composition. Shinnery oak and yucca (*Yucca* spp.) comprise an additional 22 and 24 percent of composition for this pasture respectively. Remainder of composition is mainly forbs and other shrubs. Threeawn in 2002 was 24 percent of the composition with other perennial grass comprising another 17 percent. Mill Pasture, over long-term averages 16 percent composition for perennial grass and another 39 percent for shrubs such as sand sage and shinnery oak. 2002 data indicates perennial grasses comprise another 22 percent composition with threeawn as the majority at 13.5 percent. Big Pasture over the long-term averages 677 lbs/ac with shinnery oak at 30 percent and shrubs, sand sage, snakeweed and yucca altogether comprising another 18 percent composition respectively. 2002 data for this pasture indicates dropseed and yucca at 30 and 21 percent of the composition respectively.

Additional data is available for review as attached, which include trends, vegetative and ground cover, condition ratings both for Traditional and Similarity index, etc.

The National Resource Conservation Service (NRCS) has revised the methodology for comparing the existing vegetation community with the potential vegetation community and

to aid in the determination of ecological condition. This methodology is called the Similarity Index (SI) the BLM is currently incorporating this revision into the monitoring and evaluation processes. The SI compares existing vegetation data (collected from rangeland monitoring) with the potential vegetation community described in the NRCS ecological site guide for that site. The index is based on a scaled of 0 to 100 with 100 being the actual representative site. For the Sandy Plains CP-2 ecological (range) site, the normal year production is about 2100 pounds per acre. The index takes into account vegetation species present and the relative amount of production for each species when compared to the potential for the ecological site.

Note: The individual ecological site guides are very broad and often cover several soil associations and that may support several different plant communities that differ in both plant composition and production potential. These differences must be factored in when evaluating the indices associated with both the range condition and similarity index. The similarity index rating because of the tie with production (lb/ac) may be influenced by precipitation. The ratings for individual years may vary significantly due to precipitation; this variability may be reduced by using the long term moving averages as shown on the production data sheets at the end of this document.

The RFO is currently in the process of integrating the revised methodology into current monitoring and evaluation processes. The traditional range condition rating method (used from 1980 to 1998) is retained for comparison purposes. This data is included at the end of this document.

Vegetative production is influenced by many factors; however, precipitation in amount and timing is the most critical factor. Southeast New Mexico has been in a drought stage the last few years.

The long term vegetative production, ground cover and trend data for the allotment is shown at the end of this document.

3. Wildlife:

At least 33 species of mammals occur on or utilize this allotment. The 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 the 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*).

The area does contain brush or tree species that could provide quality cover for larger animals.

Other game species occurring within the area include mourning dove (*Zenaida macroura*), bobwhite (*Colinus virginianus*) and scaled quail (*Callipepla squamata*). Raptors that utilize the area and frequently associated with the vegetation types on this allotment include the Swainson's hawk (*Buteo swainsoni*), red-tailed hawk (*Buteo jamaicensis*), ferruginous hawk (*Buteo regalis*), American kestrel (*Falco sparverius*), rough-legged hawk (*Buteo lagopus*), and common nighthawk (*Chordeiles minor*).

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

The warm prairie environment supports a large number of reptile species. The more common reptiles include the 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*).

4. Threatened/Endangered Species

The only known Federal threatened and endangered species that may occur within the allotment area is the bald eagle (wintering); there is no critical habitat within the allotment.

5. Livestock Management

There are several pastures in which livestock are rotated through with Big, East and Mill as the major pastures utilized. This allotment is grazed by cattle and horses with a majority 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.

6. Visual Resources

This 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

Water Quality Drinking/Ground

No perennial surface water is found on public land on this allotment. Fresh groundwater sources are in the Quaternary Alluvium and the Artesia Group. Depth to fresh water has been found at approximately 100 to 180 feet in the area (New Mexico State Engineer Office data).

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

Recreation opportunities are limited in this grazing allotment because the public has limited physical access to public lands. The parcels of Public lands within this allotment are scattered. The public lands in this allotment have legal/physical access through state lands and/or county or state roads.

Recreational activities that may occur on these public lands are within this allotment are: hunting, sightseeing, Off Highway Vehicle Use, primitive camping, mountain biking, horseback riding and hiking. Due to the fact that public land boundaries are not marked adequately or identified by signs and/or fences the general recreationist is reluctant to use the public lands in fear of being trespassed. Off Highway Vehicle designations for public lands within this allotment are classified as "Limited" to existing roads and trails.

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

10. Caves and Karst

A complete significant cave or karst inventory has not been completed for the public land 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 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. Oil & Gas/ Rights of Ways

Portions of the federal surface and private surface (both private and federal minerals) have been influenced by oil and gas development to some degree. Numerous oil and gas facilities, abandoned pads, caliche pits, pipelines and roads are located on this allotment. Oil and gas activities are expected to continue within this area.

12. 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 knapweed, 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.

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 and this 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 lease 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, forage and browse. 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.

4. Threatened/Endangered Species

Livestock grazing resulting from issuing a grazing lease, may affect, but not likely to adversely affect bald eagles. It is expected that habitat and range condition would be maintained or improved by authorizing grazing conducive with multiple resource vegetative production goals. Habitat for wintering bald eagles would not be negatively impacted by livestock grazing. There would be no impact to peregrine falcons since important riparian nesting sites are not found on this allotment

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. All new range facilities such as water tanks shall be painted olive drab in accordance to the BLM color chart to blend into the environment.

7. Water Quality/Drinking Ground

Direct impacts to surface water quality would be minor, short-term impacts during stormflow. 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

Grazing should have little or no affect on the recreational opportunities in this allotment. Recreation activities that could occur within this grazing allotment are limited or due to land patterns and the inadequate marking of public land boundary lines.

10. Significant Caves/Karst

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

11. Oil and Gas/Rights of Way

Oil and gas/rights of way activities are expected to continue within the allotment area. It is anticipated that no adverse impacts to livestock grazing would occur. Current policies in place by state and federal agencies emphasize the reduction and reclamation of disturbed areas associated with these activities.

12. Noxious and Non-native Invasive Species

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

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 lessee. 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. Remaining 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. **Oil & Gas/Rights of Ways**

Impacts would be the same as the proposed action.

12. **Non-native and Invasive Species:** There would be no change in existing non-native/invasive species populations.

V. Public Land Health

Public Land (Rangeland) Health assessments were completed on this allotment during 2003. Based on these assessments and monitoring data a Determination was made that public land within this livestock grazing allotment is in conformance with New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management. A copy of this assessment can be accessed at www.nm.blm.gov/rfo/index.htm.

V. Cumulative Impacts

All allotments that have permits/leases with BLM will undergo scoping and analysis in conformance with NEPA. Allotment #65038 is surrounded by others that will undergo this process. If this proposed action is selected, there would be no change in cumulative impacts since it does not vary from current situations.

If the no livestock grazing alternative is selected, there would be little change in cumulative impact as long as surrounding allotments continue to be stocked at their current level. If permitted numbers are reduced on surrounding ranches as well, economics of surrounding communities and/or minority/low income populations would be negatively impacted.

The No Grazing alternative was considered, but not chosen in Rangeland Reform Environmental Impact Statement (EIS) Record of Decision (ROD) (p. 28). Elimination of grazing in the Roswell Field Office Area was also considered but eliminated by the Roswell RMP/ROD (pp. ROD-2).

VI. 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. All new stock tanks should be painted Olive Drab in accordance to the BLM Color chart to blend into the environment.

X. BLM TEAM MEMBERS

John Spain - Rangeland Management Specialist
Helen Miller - Rangeland Management Specialist
Joseph Navarro - Rangeland Management Specialist
Dan Baggao - Wildlife Management Biologist
Jerry Dutchover - Geologist
Paul Happel – Natural Resource Specialist
Michael McGee - Watershed Specialist
Pat Flannary – Archaeologist
Howard Parman – Environmental Planner
Tim Kreager – Assistant Field Office Manager, Resources

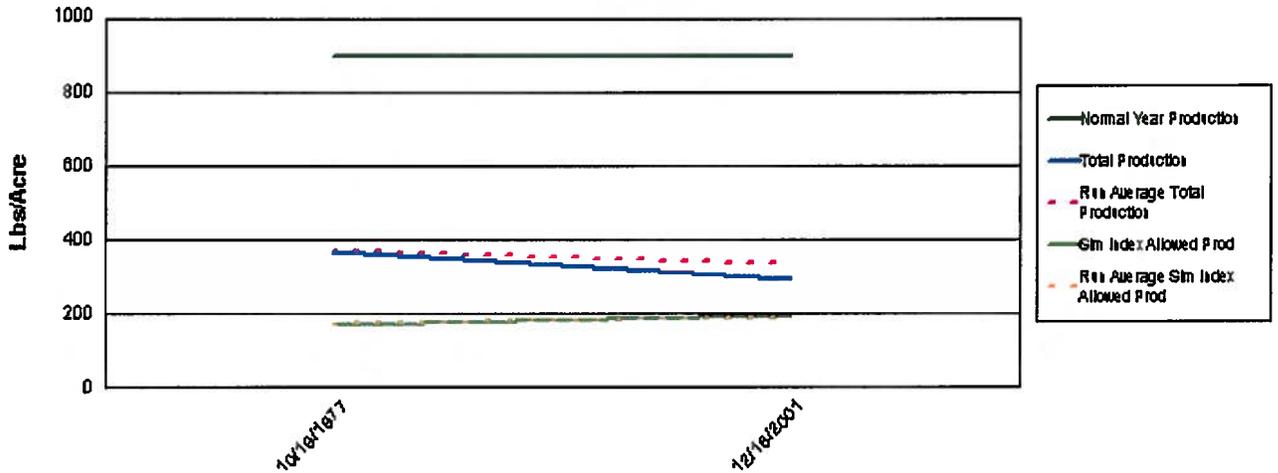
Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID:	347					Date Printed:	3/22/2006	
Allot No.	Allotment		Ecosite ID	Ecosite Name		Site Name		
65038	L & L CATTLE COMPANY		042CY002NM	SHALLOW SANDY SD-3		65038-BIG-D091-SEC 3		
Location:	T. 0080S	R. 0260E	Sec. 25	QtrQt	NWSE	UTM-N	3716718.71425	
CHAVES	County, NM					UTM-E	569875.79415	
Soil Sur No	Soil Map Unit		Soil Tax		Soil Association			
NM644	SNB		SOTIM		SOTIM-SIMONA			

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
10/19/1977	29.96	18.67	900	369.00	369.00	168.00	168.00
12/18/2001	48.93	22.00	900	293.00	331.00	198.00	183.00

Production Data For Study Site



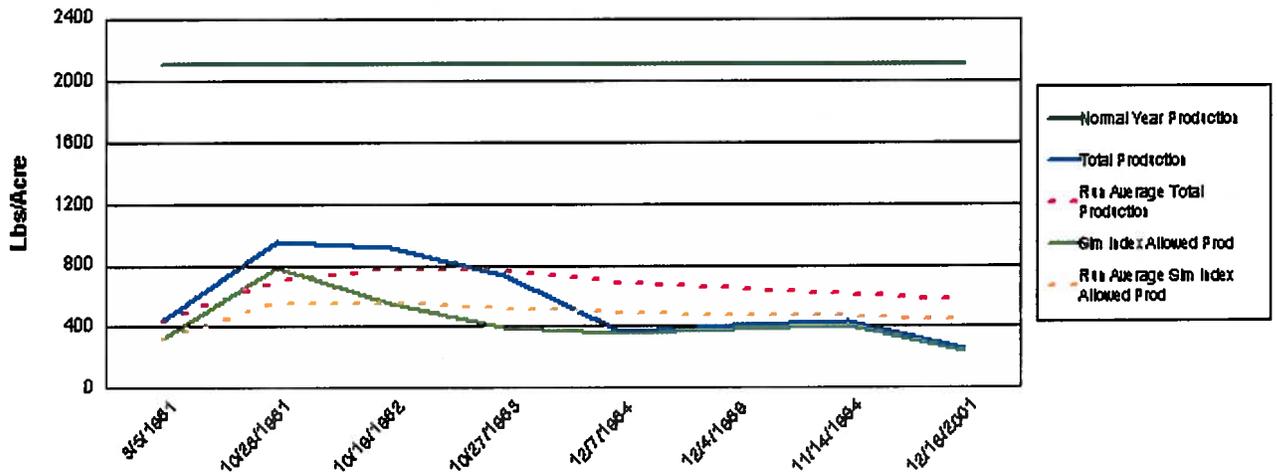
Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID:	506		Date Printed:			3/22/2006	
Allot No.	Allotment	Ecosite ID	Ecosite Name		Site Name		
65038	L & L CATTLE COMPANY	070BY055NM	SANDY PLAINS CP-2		65038-MILL-D250		
Location:	T. 0090S	R. 0270E	Sec. 23	QtrQt	NWNW	UTM-N	3709701.33192
CHAVES	County, NM				UTM-E	577359.33192	
Soil Sur No	Soil Map Unit	Soil Tax		Soil Association			
NM644	FaA	FASKIN		FASKIN			

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
03/05/1981	35.38	14.81	2,100	436.00	436.00	311.00	311.00
10/28/1981	48.68	37.00	2,100	956.00	696.00	777.00	544.00
10/19/1982	40.49	26.10	2,100	914.00	768.67	548.00	545.33
10/27/1983	21.75	18.76	2,100	728.00	758.50	394.00	507.50
12/07/1984	52.59	17.00	2,100	373.00	681.40	357.00	477.40
12/04/1989	41.00	18.10	2,100	405.00	635.33	380.00	461.17
11/14/1994	44.00	19.33	2,100	433.00	606.43	406.00	453.29
12/18/2001	44.94	11.19	2,100	252.00	562.13	235.00	426.00

Production Data For Study Site



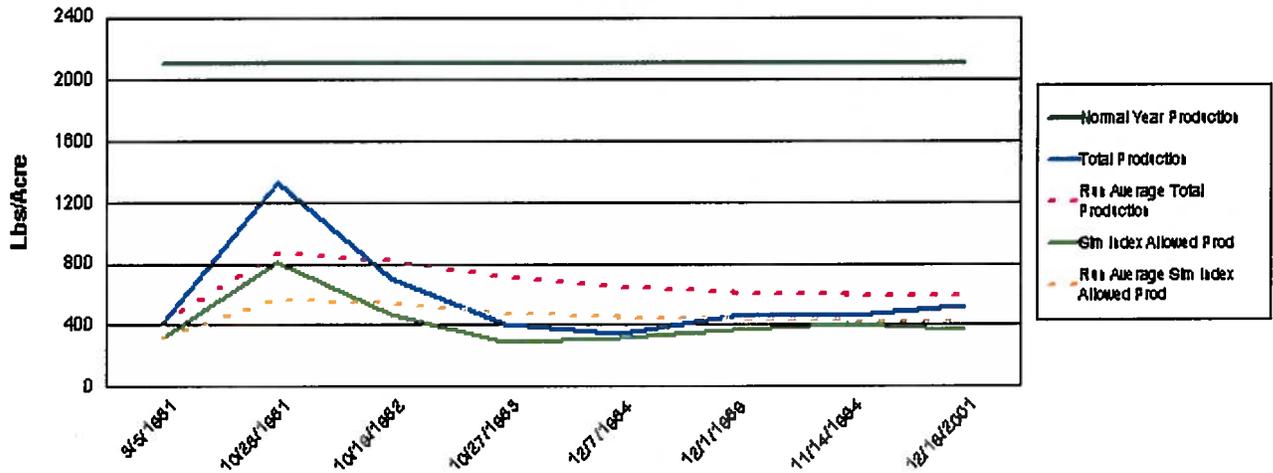
Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID:	507					Date Printed:	3/22/2006
Allot No.	Allotment	Ecosite ID	Ecosite Name		Site Name		
65038	L & L CATTLE COMPANY	070BY055NM	SANDY PLAINS CP-2		65038-EAST-D251		
Location:	T. 0090S	R. 0270E	Sec. 02	QtrQt	SESE	UTM-N	3713129.16304
CHAVES	County, NM				UTM-E	578413.34290	
Soil Sur No	Soil Map Unit	Soil Tax		Soil Association			
NM644	FaA	FASKIN		FASKIN			

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
03/05/1981	27.93	14.86	2,100	403.00	403.00	312.00	312.00
10/28/1981	46.17	38.76	2,100	1,322.00	862.50	814.00	563.00
10/19/1982	35.34	22.38	2,100	704.00	809.67	470.00	532.00
10/27/1983	27.68	13.81	2,100	408.00	709.25	290.00	471.50
12/07/1984	44.65	14.81	2,100	335.00	634.40	311.00	439.40
12/01/1989	43.00	17.52	2,100	460.00	605.33	368.00	427.50
11/14/1994	48.00	19.29	2,100	463.00	585.00	405.00	424.29
12/18/2001	33.31	17.24	2,100	519.00	576.75	362.00	416.50

Production Data For Study Site



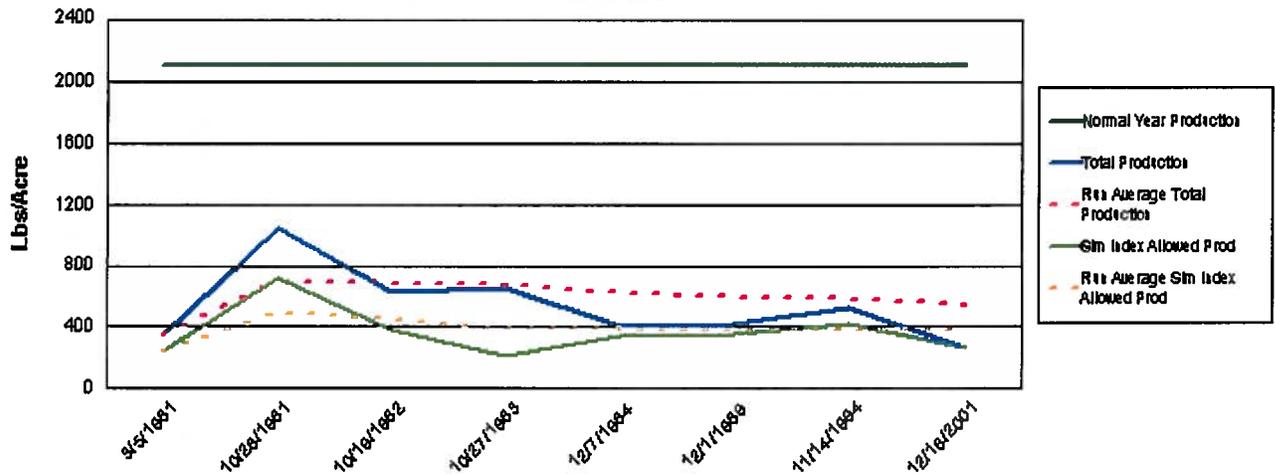
Production (lbs/ac) Data Trends

(Data Extracted From VMAP System)

VEGID:	508		Date Printed:		3/22/2006		
Allot No.	Allotment	Ecosite ID	Ecosite Name		Site Name		
65038	L & L CATTLE COMPANY	070BY055NM	SANDY PLAINS CP-2		65038-BIG-D253		
Location:	T. 0080S	R. 0270E	Sec. 25	QtrQt	NWNE	UTM-N	3717703.84947
CHAVES	County, NM					UTM-E	579184.88421
Soil Sur No	Soil Map Unit	Soil Tax	Soil Association				
NM644	FaA	FASKIN	FASKIN				

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
03/05/1981	29.25	11.52	2,100	345.00	345.00	242.00	242.00
10/28/1981	38.79	33.90	2,100	1,039.00	692.00	712.00	477.00
10/19/1982	27.46	18.05	2,100	632.00	672.00	379.00	444.33
10/27/1983	20.13	9.86	2,100	652.00	667.00	207.00	385.00
12/07/1984	42.95	16.00	2,100	402.00	614.00	336.00	375.20
12/01/1989	46.00	16.86	2,100	425.00	582.50	354.00	371.67
11/14/1994	37.00	19.86	2,100	517.00	573.14	417.00	378.14
12/18/2001	39.83	12.33	2,100	265.00	534.63	259.00	363.25

Production Data For Study Site



Traditional Range Condition and Similarity Index Data

VEGID: 347

65038 L & L CATTLE COMPANY

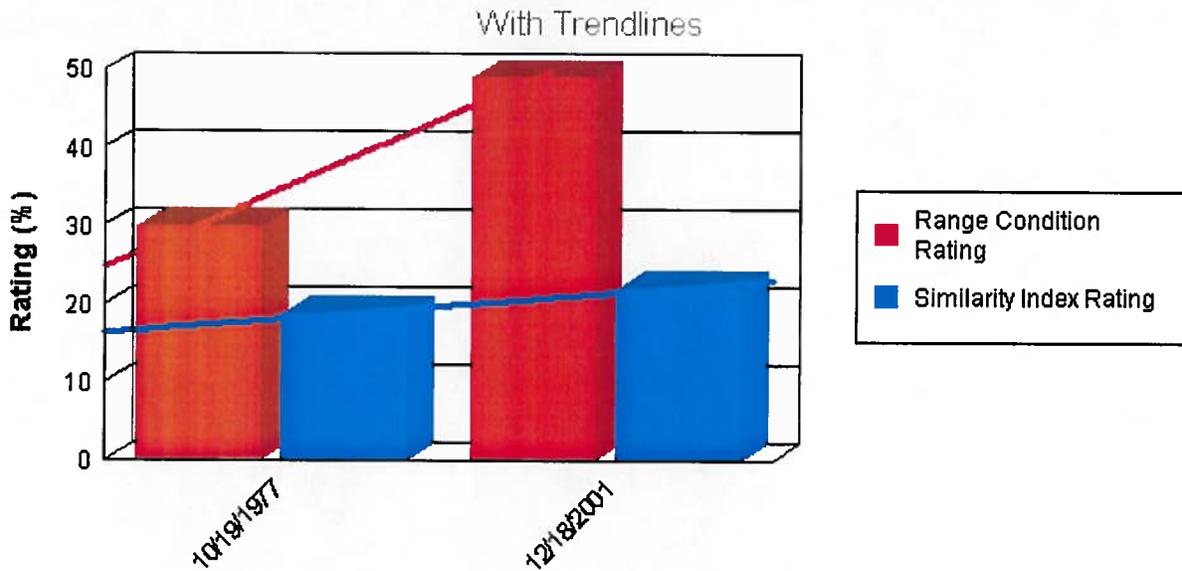
65038-BIG-D091-SEC 3

SHALLOW SANDY SD-3

042CY002NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
10/19/1977	29.96	18.67	369.00	900
12/18/2001	48.93	22.00	293.00	900

Traditional Range Condition vs Similarity Index



Traditional Range Condition and Similarity Index Data

VEGID: 506

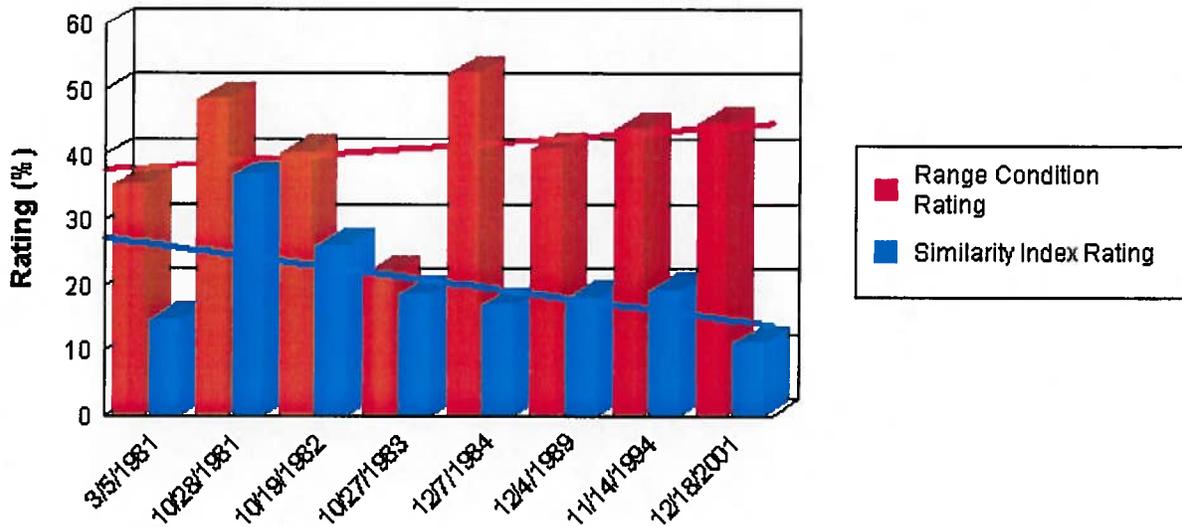
65038 L & L CATTLE COMPANY 65038-MILL-D250

SANDY PLAINS CP-2 070BY055NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
03/05/1981	35.38	14.81	436.00	2,100
10/28/1981	48.68	37.00	956.00	2,100
10/19/1982	40.49	26.10	914.00	2,100
10/27/1983	21.75	18.76	728.00	2,100
12/07/1984	52.59	17.00	373.00	2,100
12/04/1989	41.00	18.10	405.00	2,100
11/14/1994	44.00	19.33	433.00	2,100
12/18/2001	44.94	11.19	252.00	2,100

Traditional Range Condition vs Similarity Index

With Trendlines



Traditional Range Condition and Similarity Index Data

VEGID: 507

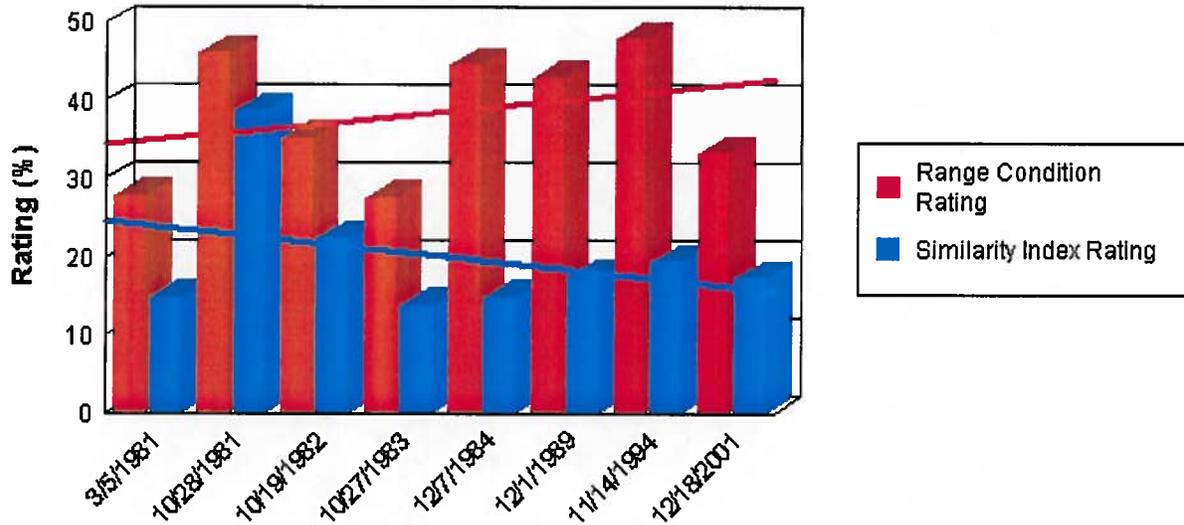
65038 L & L CATTLE COMPANY 65038-EAST-D251

SANDY PLAINS CP-2 070BY055NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
03/05/1981	27.93	14.86	403.00	2,100
10/28/1981	46.17	38.76	1,322.00	2,100
10/19/1982	35.34	22.38	704.00	2,100
10/27/1983	27.68	13.81	408.00	2,100
12/07/1984	44.65	14.81	335.00	2,100
12/01/1989	43.00	17.52	460.00	2,100
11/14/1994	48.00	19.29	463.00	2,100
12/18/2001	33.31	17.24	519.00	2,100

Traditional Range Condition vs Similarity Index

With Trendlines



Traditional Range Condition and Similarity Index Data

VEGID: 508

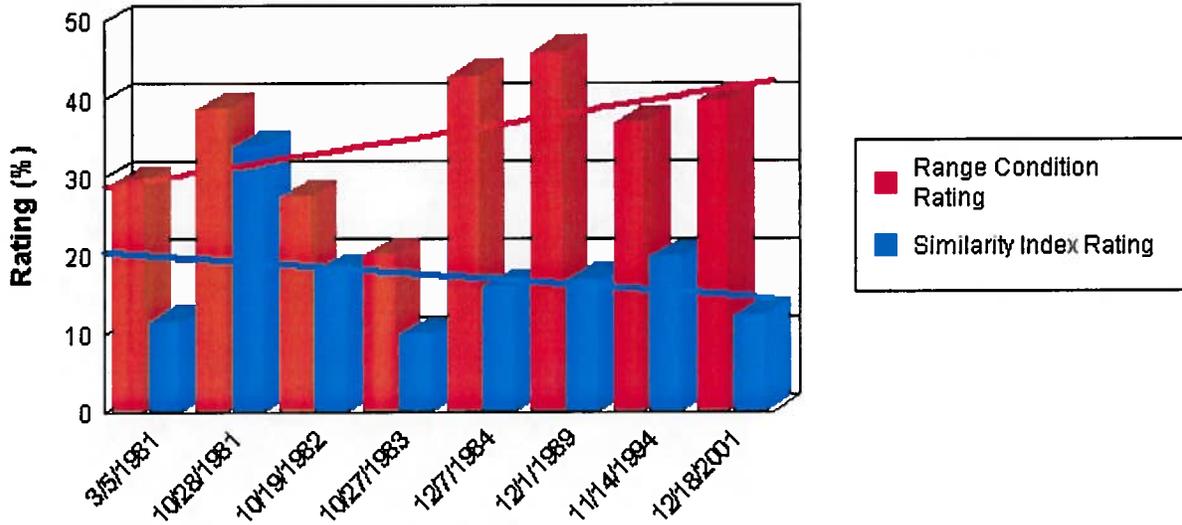
65038 L & L CATTLE COMPANY 65038-BIG-D253

SANDY PLAINS CP-2 070BY055NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
03/05/1981	29.25	11.52	345.00	2,100
10/28/1981	38.79	33.90	1,039.00	2,100
10/19/1982	27.46	18.05	632.00	2,100
10/27/1983	20.13	9.86	652.00	2,100
12/07/1984	42.95	16.00	402.00	2,100
12/01/1989	46.00	16.86	425.00	2,100
11/14/1994	37.00	19.86	517.00	2,100
12/18/2001	39.83	12.33	265.00	2,100

Traditional Range Condition vs Similarity Index

With Trendlines

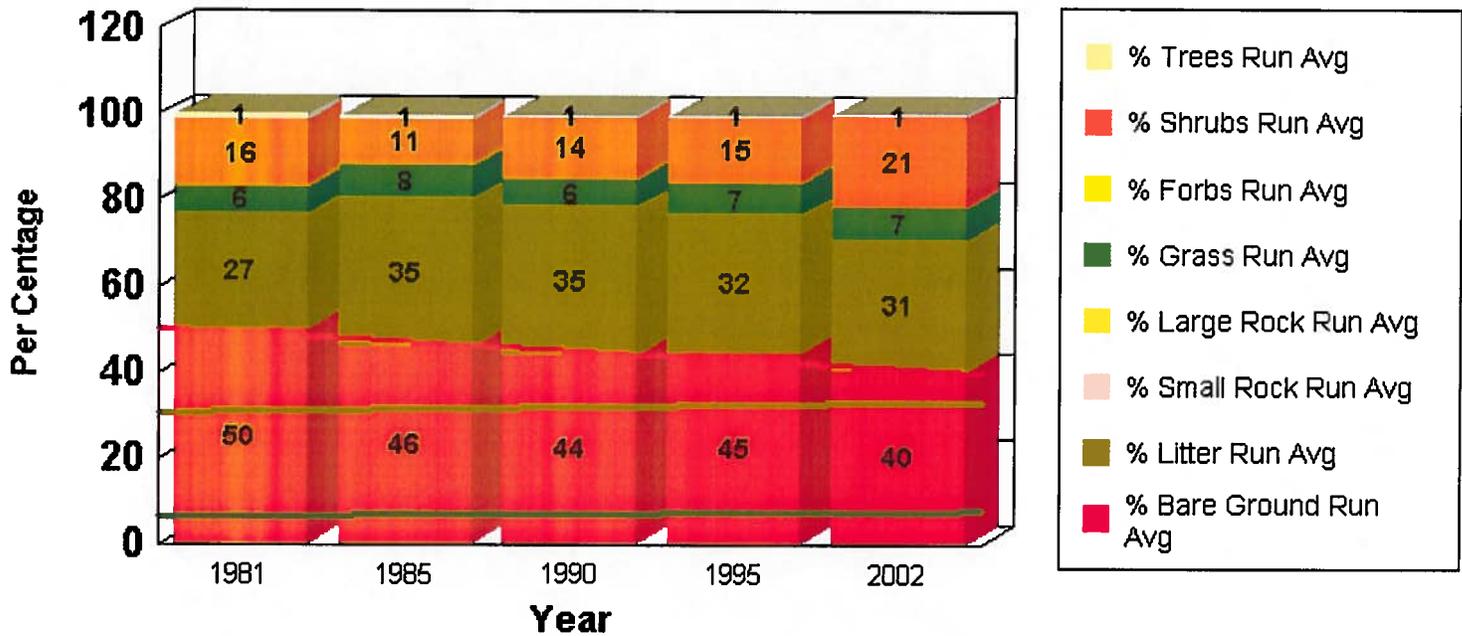


Location: Township: 0090S Range 0270E Section 23 QtrQtr: NWNW

Year	Bare Ground	Litter	Small Rock	Large Rock	Forbs	Grass	Shrubs	Trees	Running Average Bground	Running Average Litter	Running Average Srock	Running Average Lock	Running Average Forb	Running Average Grass	Running Average Shrubs	Running Average Trees
1981	50.00	27.00				6.00	16.00	1.00	50.00	27.00				6.00	16.00	1.00
1985	42.00	42.00				9.00	6.00	0.00	46.00	34.50				7.50	11.00	0.50
1990	40.00	35.00				4.00	21.00		44.00	34.67				6.33	14.33	0.50
1995	46.00	25.00				10.00	18.00	1.00	44.50	32.25				7.25	15.25	0.67
2002	24.00	24.00				8.00	45.00	0.00	40.40	30.60				7.40	21.20	0.50

Running Average Ground Cover Trends

With Trendlines

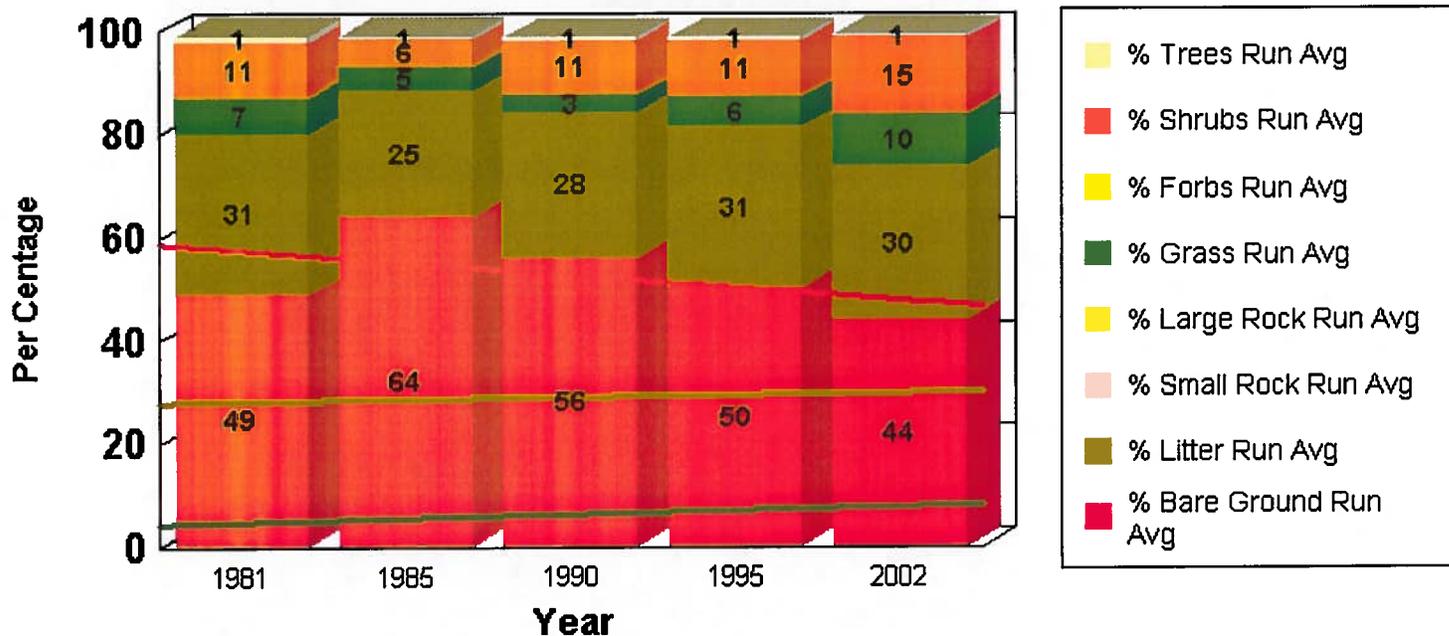


Location: Township: 0090S Range 0270E Section 02 QtrQtr: SESE

Year	Bare Ground	Litter	Small Rock	Large Rock	Forbs	Grass	Shrubs	Trees	Running Average Bground	Running Average Litter	Running Average Srock	Running Average Lrock	Running Average Forb	Running Average Grass	Running Average Shrubs	Running Average Trees
981	49.00	31.00				7.00	11.00	1.00	49.00	31.00				7.00	11.00	1.00
985	79.00	18.00				2.00	0.00	0.00	64.00	24.50				4.50	5.50	0.50
990	40.00	36.00				1.00	21.00		56.00	28.33				3.33	10.67	0.50
995	33.00	40.00				13.00	12.00	1.00	50.25	31.25				5.75	11.00	0.67
002	19.00	24.00				28.00	30.00	0.00	44.00	29.80				10.20	14.80	0.50

Running Average Ground Cover Trends

With Trendlines

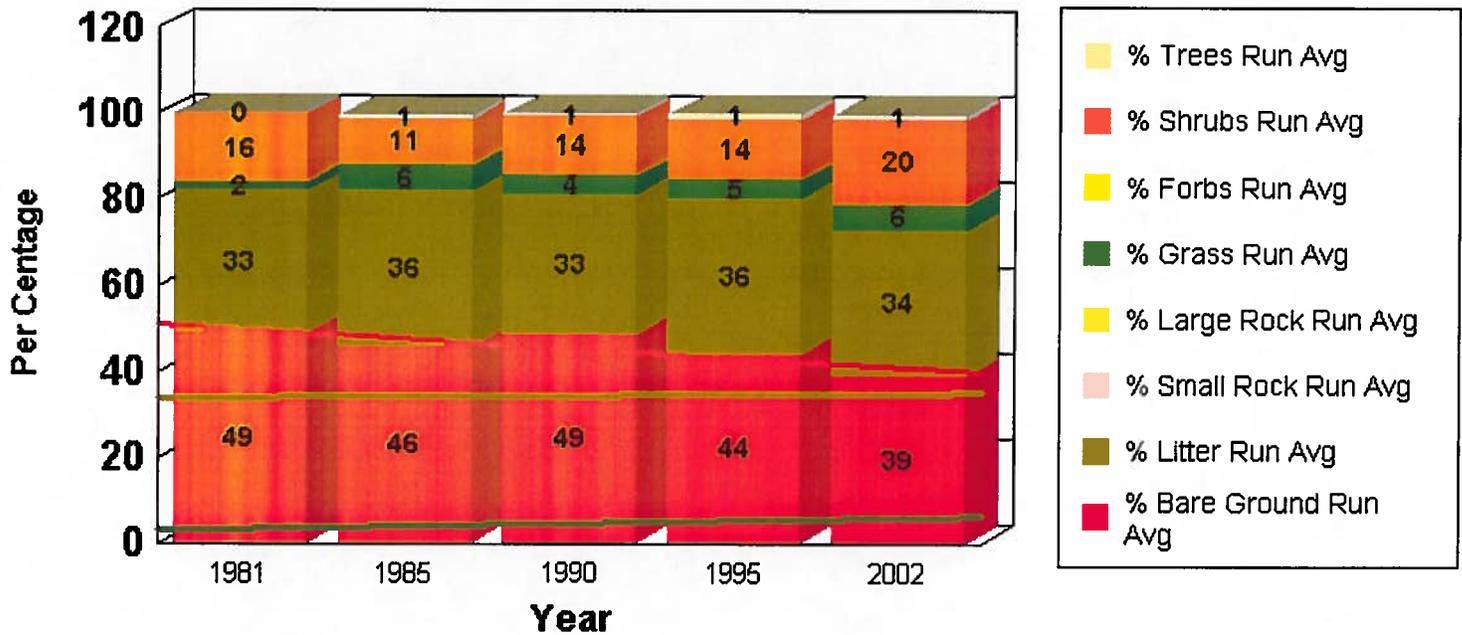


Location: Township: 0080S Range 0270E Section 25 QtrQtr: NWNE

Year	Bare Ground	Litter	Small Rock	Large Rock	Forbs	Grass	Shrubs	Trees	Running Average Bground	Running Average Litter	Running Average Srock	Running Average Lrock	Running Average Forb	Running Average Grass	Running Average Shrubs	Running Average Trees
1981	49.00	33.00				2.00	16.00	0.00	49.00	33.00				2.00	16.00	0.00
1985	43.00	39.00				10.00	6.00	1.00	46.00	36.00				6.00	11.00	0.50
1990	54.00	26.00				1.00	20.00		48.67	32.67				4.33	14.00	0.50
1995	30.00	47.00				5.00	15.00	2.00	44.00	36.25				4.50	14.25	1.00
2002	19.00	25.00				12.00	43.00	0.00	39.00	34.00				6.00	20.00	0.75

Running Average Ground Cover Trends

With Trendlines



Allotment Weighted Average Range Condition and Similarity Index

NM06000

Date Printed: 3/22/200

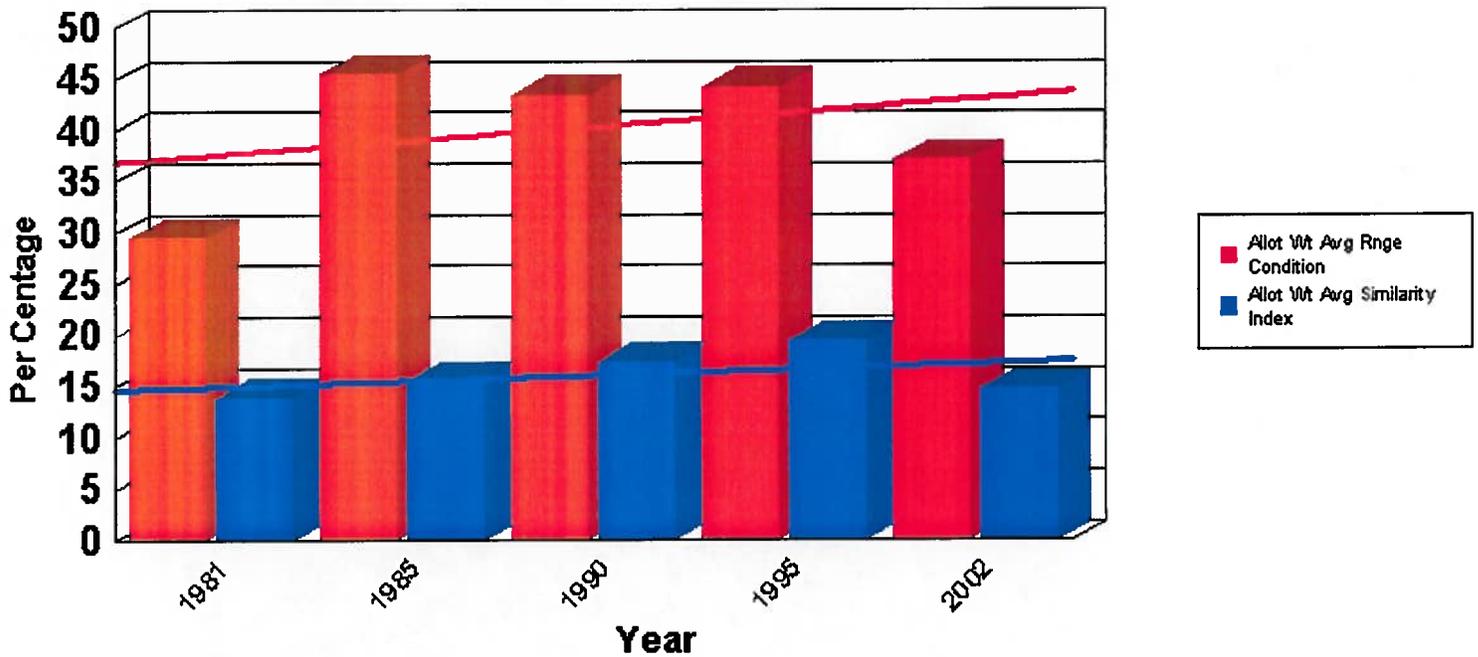
65538 L & L SECTION 15

Data Information presented below is based on the allotment weighted average of range condition and similarity index ratings for the years included in the allotment monitoring evaluations. The trendline is based on linear regression for each data set.

Year	Range Condition	Similarity Index
1981	29.61	13.93
1985	45.59	15.53
1990	43.47	17.44
1995	44.29	19.47
2002	37.15	14.82

Weighted Average Range Condition vs Similarity Index

With Trendlines



Allotment 65038

