



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Pecos District
Roswell Field Office
2909 W. Second
Roswell, New Mexico 88201

In reply refer to:
NM510(4160)

Certified Mail No 7000 0520 0025 1217 6004

Jack Hagelstein
P. O. Box 297
Dexter, NM 88230

NOTICE OF PROPOSED DECISION EA#NM510-2005-0004

Dear Mr. Hagelstein:

The Roswell Field Office has completed an Environmental Assessment EA#NM-510-2005-0004 for the renewal of a ten year grazing permit/lease for the Allotment #64055. The environmental assessment and the Finding of No Significant Impacts (FONSI) were sent to the permittee/lessee and all recognized interested public for a thirty (30) day comment period. No comments were received on the above referenced environmental assessment (EA).

My proposed decision is to implement the proposed action as described in the Environmental Assessment EA#NM-510-2005-0004 Alternative A, Proposed Action:

The proposed action is to authorize to Jack H. Hagelstein a ten (10) year grazing permit on Sinkhole Flats allotment # 64055 for 40 Animal Units (AU's) in active use at 94% federal range. This equates to 451 Animal Unit Months (AUM's) in active use. Grazing will be authorized from March 1 thru the last day of February of each year. The class of livestock is cattle.

Rationale

Resource conditions on the allotment are sufficient and sustainable to support the level of use outlined in the ten (10) year grazing permit.

Right of Protest and Appeal

Any applicant, permittee, lessee or other interested publics may protest a proposed decision under Sec. 43 CFR 4160.1 and 4160.2, in person or in writing to the Field Office Manager, 2909 West Second, Roswell, NM 88201 within 15 days after receipt of such decision. The

protest, if filed, should clearly and concisely state the reason(s) why the proposed decision is in error.

In accordance with 43 CFR 4160.3 (a), in the absence of a protest, the proposed decision will become the final decision of the authorized officer without further notice unless otherwise provided in the proposed decision.

In accordance with 43 CFR 4160.3 (b) upon a timely filing of a protest, after a review of protests received and other information pertinent to the case, the authorized officer shall issue a final decision.

Any applicant, permittee, lessee or other person whose interest is adversely affected by the final decision may file an appeal in accordance with 43 CFR 4.470 and 43 CFR 4160.3 and 4160 .4. The appeal must be filed within 30 days following receipt of the final decision, or within 30 days after the date the proposed decision becomes final. The appeal may be accompanied by a petition for a stay of the decision in accordance with 43 CFR 4.471 and 4.479, pending final determination on appeal. The appeal and petition for a stay must be filed in the office of the authorized officer, as noted above. The appellant must serve a copy of the appeal by certified mail on the Office of the Solicitor, U.S. Department of the Interior, P. O. Box 1042, Santa Fe, NM 87504 and person(s) named [43 CFR 4.421(h)] in the Copies sent to: section of this decision.

The appeal shall clearly and concisely state the reasons why the appellant thinks the final decision is in error, and otherwise complies with the provisions of 43 CFR 4.470.

Should you wish to file a petition for a stay, see 43 CFR 4.471 (a) and (b). In accordance with 43 CFR 4.471(c), a petition for a stay must show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied.
- (2) The likelihood of the appellant's success on the merits.
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

As noted above, the petition for stay must be filed in the office of the authorized officer and served in accordance with 43 CFR 4.473. If a petition for stay is not granted the decision will be put into effect following the 30-day appeal period. Appeals can be filed at the following address:

Field Office Manager
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, NM 88201

Any person named in the decision that receives a copy of a petition for a stay and/or an appeal see 43 CFR 4.472(b) for procedures to follow if you wish to respond.

If you have any questions, feel free to contact me at 505-627-0272.

/s/T. R. Kreager 3/22/05
T. R. Kreager
Assistant Field Manager, Resources

Copies sent to (by certified mail):

Planning & Environmental Service 700 0520 0025 1217 6011
Attn: PLAC
P. O. Box 1817
Roswell, NM 88202-1817

NM Department of Game and Fish 7099 3220 0002 6402 1694
Attn: Jan Ward
P. O. Box 25112
Santa Fe, NM 87504

Forest Guardians 7099 3220 0004 0017 3317
Attn: John Horning
312 Montezuma Suite A
Santa Fe, NM 87501

Audubon Society 7099 3220 0004 0017 3324
Attn: David Henderson
P. O. Box 9314
Santa Fe, NM 87504

NM Cattle Growers' Assn 7099 3220 0002 6402 1700
Attn: Caren Cowan
P. O. Box 7514
Albuquerque, NM 87194

Center for Biological Diversity 7099 3220 0002 6402 1717
P. O. Box 710
Tucson, AZ 85702

ENVIRONMENTAL ASSESSMENT CHECKLIST

EA Number: NM-510-2005-0004 Serial No.: Preparer: John Spain		Action Type: Grazing Permit Renewal Project Name: Sinkhole Flats Allotment 64055			
Resource / Activity	Not Present	Not Affected	**May Be Affected	Reviewer	Date
Air Quality*			X	/s/ Michael McGee Hydrologist	12/2/04
Floodplains*	X				
Soils/Watershed			X		
Water Quality- Drinking/Ground*			X	/s/ Michael McGee Hydrologist/Geologist***	12/2/04
Vegetation			X	s/s hcjmiller	11/30/04
Livestock Grazing			X	Rangeland Management Spec	
Invasive, Nonnative Species*			X	/s/ hcjmiller Range Mgmt Spec/Nox. Weed Spec	11/30/04
Wastes, Hazardous or Solids*				Hazardous Waste Spec.	
Prime/Unique Farmlands*	X			Irene M. Gonzales	10/26/2004
Lands/Realty/ROW		X		Realty Specialist	
Fluid Minerals				Pet Eng/Geologist/Sur. Prot. Spec.	
Mining Claims		√		/s/ Jerry Dutchover	11/09/04
Mineral Materials		√		Geologist	
Threatened or Endangered Species*	X			/s/ D Baggao Wildlife Biologist	11/9/04
Wetlands/Riparian Zones*	X				
Wildlife Habitat			X		
Native American Religious Concerns*		X		Pat Flanary Archaeologist	10/28/04
Cultural Resources*		X			
Areas of Critical Environmental Concern*	X			J H Parman	11/2/04
Low Income & Minority Population Concerns		X		Planning & Env. Coordinator	
Wild/Scenic Rivers*	X			Bill Murry Outdoor Recreation Planner/NRS	11/2/04
Wilderness*	X				
Cave/Karst Resources			X		
Outdoor Recreation		X			
Visual Resources			X		
Access/Transportation	√☺			Environ. Prot. Spec. Richard G. Hill	11/5/04

* "Critical Element" - must be addressed in all NEPA documents.

** "Affected Element" - must be addressed in the attached Environmental Assessment.

*** "Hydrologist/Geologist" – Hydrologist will be the primary lead for "Water Quality- Drinking/Ground" with Resource projects such as fire, fuels, and grazing EA's etc... The Petroleum Geologist will be the primary lead for "Water Quality- Drinking/Ground" with Minerals or oil and gas projects such as Application For Permit To Drill and Sundry Notices etc.

FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

EA No. NM-510-2005-0004

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).

/s/ T. R. Kreager

1/28/2005

T. R. Kreager, Date
Acting Assistant Field Manager - Resources

Environmental Assessment for Grazing Authorization
Allotment #64055
EA# NM-510-2005-0004

Roswell Field Office
Bureau of Land Management
2909 West 2nd
Roswell, NM 88201

T9S R24E various sections

I. 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 permit on allotment #64055.

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 this allotment. The permit would 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.

B. Conformance with Land Use Planning

The Roswell Resource Management Plan/Environmental Impact Statement (October 1997) has been reviewed to determine if the proposed action conforms with the land use plan's Record of Decision as required by 43 CFR 1610.5-3. The proposed action is consistent with the RMP/EIS.

C. Relationships to Statutes, Regulations, or Other Plans

The proposed action and alternative is 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 (CWA)(33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (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:

The proposed action is to authorize to Jack H. Hagelstein a ten (10) year grazing permit on Sinkhole Flats allotment # 64055 for 40 Animal Units (AU's) in active use at 94% federal range. This equates to 451 Animal Unit Months (AUM's) in active use. Grazing will be authorized from March 1 thru the last day of February of each year. The class of livestock is cattle.

Jack Hagelstein recently acquired this allotment. The grazing permit will reflect yearlong (March 1 to February 28) use, however under his proposed grazing operation the grazing use will be from September thru February (primarily the dormant season). Approximately 80 head of yearling cattle (350-400 lbs) will graze on the allotment; the permitted use will remain at the permit level of 451 AUMs. To some extent, the livestock operation on this allotment will be linked with the Comanche Hill allotment #65037 that is also operated by Jack Hagelstein.

There are no projects planned for this allotment at this time. Any subsequent management activities will have a site specific analysis conducted at that time.

B. No Permit authorization alternative:

This alternative would be not to issue a new grazing permit. There would be no livestock grazing authorized on public land. 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).

C. Change in Season of Use alternative:

A change in the season of use from yearlong grazing to a six month season of use to coincide with the proposed management scheme was considered and discussed with the permittee. This alternative was dropped from further consideration. A shorter season of use can be accommodated under the yearlong permit and retain the option of returning to yearlong grazing should conditions change without the necessity of having to modify the permit during the term of the permit. This alternative will not be analyzed.

III. Affected Environment

A. General Setting

Allotment #64055 is located in Chaves county about 5 miles north-east of Roswell. This allotment contains 1675 acres of which 1240 acres are Federal land. The landscape is generally flat.

This allotment is located within the drainages, draws, and canyons (DDC) vegetative community as identified within the Roswell RMP. Short-grass, mid-grass, and tall-grass species may be found within this community. The community also includes shrub, half-shrub, and forb species. The percentages of grasses, forbs, and shrubs actually found at a particular location will vary with recent weather factors and past resource uses.

The following resources or values are not present or would not be affected: Prime/Unique Farmland, ACEC's, Minority/Low Income Populations, Wild and Scenic Rivers, Hazardous/Solid Wastes, Wetlands/Riparian Zones, Floodplains, Native American Religious Concerns. Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities. 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.

B. Affected Resources

1. Soils: The soil present within this allotment belongs to the Hollomex (Hha) general mapping unit. This soil is deep, well drained and nearly level to undulating. For more information, refer to [Soil Survey of Chaves County New Mexico, Northern Part](#). There is a certain amount of erosion that occurs naturally in this vegetation community. High winds in the spring and high intensity thunderstorms are the primary agents of soil transportation.
2. Vegetation: This allotment is within the desert, draws, and canyons (DDC) vegetative community as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Vegetative communities managed by the Roswell Field Office are identified and explained in the RMP/EIS. Appendix 11 of the draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community.

The dominant ecological (range) site on the allotment is Salt Flat SD-3. Ecological site descriptions are available for review at the Roswell BLM office or any Natural Resources Conservation Service office or may be accessed at www.nm.nrcs.usda.gov. Other ecological sites occurring on the allotment include Loamy and Gravelly SD-3 sites; Gyp Uplands SD-3 sites are intermingled throughout the Salt Flats site and often have gypsum outcrops exposed.

Within the Salt Flats ecological site, it is not uncommon to find monotypic stands of alkali sacaton (the alkali sacaton state as described in the ecological site guide). The long term monitoring data reflect this. However, the vegetative diversity throughout the allotment area is much greater than the monitoring indicates. The loamy areas support stands of blue grama and vine mesquite; the gravelly sites have black grama, bush muhly and dropseed species; and the gyp upland sites contain gyp grama, blue grama, and dropseed and muhly species. A variety of perennial and annual forbs are also present.

From 1978 to 1999 agencies were using the traditional range condition methodology to depict range condition. This compared collected rangeland monitoring **information with the potential vegetation community in terms of species composition by weight**. The rating is based on a scaled of 0 to 100 with 100 being the actual representative site.

In 1999 the National Resource Conservation Service (NRCS) 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 Salt Flats SD-3 ecological (range) site, the normal year production is about 800 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 range site.

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.

The percent bare ground and rock found on the allotment fall within the parameters established by the RMP/EIS for this vegetative community. Copies of the monitoring data and the analysis of the data are available at the Roswell Field Office.

Monitoring data has been collected in 1983, 1987, 1993 and 2003. Analysis of the monitoring data indicates range condition is good, range trend is up and that with a 45% use factor, there is sufficient forage (on a sustainable basis) for the number of AUs permitted.

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

3. Wildlife: Game species occurring within the area include mule deer, antelope, mourning dove, and scaled quail. Raptors that utilize the area on a more seasonal basis include the Swainson's, red-tailed, and ferruginous hawks, American kestrel, and great-horned owl. Numerous passerine birds utilize the grassland areas due to the variety of grasses, forbs, and shrubs. The most common include the western meadowlark, mockingbird, horned lark, killdeer, loggerhead shrike, and vesper sparrow.

The warm prairie environment supports a large number of reptile species compared to higher elevations. The more common reptiles include the short-horned lizard, lesser earless lizard, eastern fence lizard, coachwhip, bullsnake, prairie rattlesnake, and western rattlesnake.

In the early 1980's a prairie dog town was identified within the allotment and was located on both private and public land. During the 1990's the prairie dogs disappeared from this area but recently have repopulated this area.

For a general description of wildlife occupying or potentially utilizing the allotment area, refer to the Affected Environment Section (p. 3-62 to 3-71) of the Draft Roswell RMP/EIS (9/1984).

4. Threatened and Endangered Species: There are no known resident populations of threatened or endangered species on the allotment. A list of federal threatened, endangered and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell Approved RMP (AP11-2). Prairie dogs were removed from the listing in August 2004. There are no designated critical habitat areas within the allotment. There will be no further discussion of this resource.

5. Livestock Management: The allotment is grazed by cattle. The latest grazing permit was for 41 AUs in active use. Actual livestock numbers grazing the allotment have been less than the permitted use level; this use varied depending on vegetative and economic conditions. Previous permittees grazed the allotment yearlong.

Under the operator's proposed grazing scheme, groups of approximately 80 head of yearling cattle (350-450 lbs) will be grazed for three to four weeks (for each group) during the period of September thru February. The primary objective is to ready these animals for marketing.

The operator has withdrawn approximately 65 acres of private land from the allotment use area. This acreage is comprised of abandoned cropland with irrigation rights. This area will be used as irrigated native pasture and a holding area for supplemental feeding. The livestock will be herded through the allotment on a daily basis and returned to this area at night.

6. Visual Resources: The allotment is located within a Class III Visual Resource Management area. The Class III rating means that contrasts to the basic elements caused by a management activity may be evident and begin to attract attention in the landscape. The change however, should remain subordinate to the existing landscape.

7. Water Quality: No perennial surface water is found on this allotment.

8. Air Quality: Air quality in the region is generally good. 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. Class II areas allow a moderate amount of air quality degradation.

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

Legal and physical access to public land located in this allotment is through either a private land easement or county maintained roads. Off Highway Vehicle designation for public land within this allotment is classified as "Limited" to existing roads and trails.

10. Cave/Karst: Although this area has a high potential for cave/karst features, there are no known significant caves on this allotment. There will be no further discussion of this resource.

11. Noxious and Invasive species: A noxious weed is defined as a plant that causes disease or has other adverse effects on the human environment and is, therefore, detrimental to the public health and to the 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.

The list currently includes the following weeds: 1) African rue, 2) black henbane, 3) bull thistle, 4) camelthorn, 5) Canada thistle, 6) dalmatian toadflax, 7) goldenrod, 8) leafy spurge, 9) Malta starthistle, 10) musk thistle, 11) poison hemlock, 12) purple starthistle, 13) Russian knapweed, 14) Scotch thistle, 15) spotted knapweed, 16) teasel, 17) yellow starthistle, 18) yellow toadflax, 19) Russian olive, 20) Tamarix species, 21) Siberian elm.

Of the noxious weeds listed, the ones with known populations in the Roswell Field Office are African rue, non-native *Cirsium* spp. such as bull thistle and Canada thistle, leafy spurge, goldenrod, Malta starthistle, Russian knapweed, Tamarix species and Scotch thistle. Also "problem weeds" of local concern are cocklebur, buffalobur and spiny cocklebur. "Problem weeds" are those weeds which may be native to the 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 the 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 the federal tax base. Therefore, all citizens and taxpayers of the United States are directly affected when noxious weed control prevention is not exercised.

Goldenrod is found on this allotment.

12. Oil and Gas/Rights of Way: At present oil and gas/rights of way activities are limited on this allotment. Due to the increased exploratory activities within this area, there is the potential for new development. There will be no further discussion of this resource.

IV. Environmental Impacts

A. Impacts of the Proposed Action

1. Soil: Grazing activities will continue to have some impact to the soil. These impacts may include: removal of standing vegetation and litter; soil compaction along livestock trails or soil compaction may occur if livestock are concentrated during prolonged periods when the soil 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 the soil from further erosion. These adverse effects can be greatly reduced by maintaining an adequate vegetative cover on the soil.

With the timing and control of grazing use, proper utilization levels and grazing distribution patterns are expected to improve the vegetative cover on the allotment as a whole; this will maintain the stability of the soil. Positive affects from the proposed management include: improvement in soil stability, biotic integrity, hydrologic function and nutrient cycling; and a decrease in plant pedestaling.

Ongoing vegetation studies conducted on the allotment indicate that, at the level of grazing identified in the proposed action, the percent bare ground and rock found on the allotment fall within the parameters established by the RMP/EIS for this vegetative community. Proper utilization levels and grazing distribution patterns are expected to retain sufficient vegetative cover on the allotment as a whole and this will maintain the stability of the soil. Soil compaction and excessive vegetative use will occur at small, localized areas such as drinking locations, along trails and at bedding areas. Positive affects from the proposed action include the speeding up of the nutrient cycling process and chipping of the soil crust by hoof action.

2. Vegetation: Vegetation will continue to be grazed and trampled by domestic livestock as well as other herbivores. The area has been grazed by livestock since the early part of the 1900's, if not longer. Ecological condition and trend is expected to remain stable and/or improve over the long term at the permitted number of livestock. Vegetation monitoring indicates that there is an adequate amount of forage on a sustainable basis to support the proposed number of livestock and for wildlife.

Shortening the grazing period from twelve (12) months to six (6) months and grazing during the dormant season will benefit the vegetative resources. The deferment during much of the growing season (May-August) will allow for plants

to reach maturity and set seed; grazing after this period will promote seed distribution and seedling establishment. The grazing of yearlings should benefit the vegetative resources; yearling typically consume 40 to 50% less forage than a mature cow with calf and forage consumption will be further reduced by the permittee's supplemental feeding program.

3. Wildlife: Wildlife will continue to compete with domestic livestock for forage and browse. Cover and other habitat requirements for wildlife will remain the same as the existing situation. With proper utilization levels there will be adequate cover and forage for wildlife species; resulting in sustainable wildlife populations for those species that occupy the area. Maintenance and availability of existing waterings will continue to prove a dependable water source for wildlife, as well as livestock.

4. Livestock Management: A change from yearlong grazing to six months dormant season grazing by yearlings will provide positive benefits to the permittee. Under the proposed management scheme, the permittee will apply more intensive management in achieving his objectives. During the six month period, the permittee could market approximately 400 head of yearlings (80 head per group) as opposed to a calf crop of 35 head in a yearlong grazing operation. This should provide a positive economic benefit to the operator; Chaves County will benefit from an increase in tax revenue from the livestock operation.

If during the term of the permit, the permittee reverts back to yearlong grazing the benefits would be reduced. Livestock would continue to be at the permitted use level of 40 AUs yearlong. Actual livestock numbers would fluctuate, depending on vegetative and economic conditions. No adverse impacts are anticipated.

Rayless goldenrod (*Haplopappus heterophyllus*), a poisonous plant is present within the allotment. If grazed extensively during the dormant season some loss of livestock can be anticipated. This adverse impact to the livestock operation may be minimized by the supplemental feeding program the operator is proposing to do.

5. 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.

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

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

8. Recreation: Grazing should have little or no impact on the dispersed recreational opportunities within this allotment, since the recreational use of the public land is relatively low. The evidence or presence of livestock can negatively affect visitors who desire solitude, unspoiled landscape views or hike without seeing signs of livestock. However, grazing can benefit some forms of recreation, such as hunting, by creating new water sources for game animals.

9. Non-native and Invasive species: Grazing should have little or no impact on the goldenrod population found within this allotment. Livestock will generally avoid grazing this plant as it is generally low in palatability. An adequate supply of good feed during harsh times when livestock are more prone to consume goldenrod may reduce its consumption. Most precaution should be taken in winter when snowfall covers the better forage plants and goldenrod is the only plant available. The spread of the plant is generally done by creeping roots and some seed dispersal.

B. Impacts of the No Livestock Grazing Alternative.

1. Soil: The no grazing alternative may provide some benefit to the soil by reducing the potential of soil compaction in areas of the allotment. The ecological site guide (www.nm.nrcs.usda.gov) describes some of the potential adverse impacts that could occur. If the present alkali sacaton community is maintained no adverse affects are likely to occur however, if this community degrades over time an increase in bare ground and subsequent increase in soil erosion may occur.
2. Vegetation: In the short term the present plant community would remain as it is now. In the long term there may be small changes in the relative percentages of these species. Plant vigor and health may decline due to the decreased grazing. Vegetation will continue to be utilized by wildlife. There would be an increase in the amount of standing vegetation.
3. Wildlife: Wildlife would have no competition with livestock for forage and cover. There would be no maintenance of livestock waters. As these waters became inoperable, water availability could become a critical limiting factor for many wildlife species.
5. Livestock management: The forage from public land would be unavailable for use by the permittee. This would have a significant adverse economic impact to the livestock operation. With the small amount of private land that is associated with this allotment it would become uneconomical for the permittee to have sustainable agricultural production.
6. Visual Resources: There would be no change in the visual resources.
7. Water Quality: There could be a slight improvement in water quality due to the minor reductions in sediment loading during storm flow.
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: Those recreationists who desire solitude and no livestock would be benefited from this alternative. Hunters may not benefit from this alternative if livestock waters are not maintained, which would affect hunting opportunities.
10. Non-native and Invasive species: There would be no change in the existing non-native/invasive species populations.

V. Public Land Health

Public Land (Rangeland) Health assessments were completed on the allotment during 2003. Based on the assessments and monitoring data a Determination was made that public land within this livestock grazing allotment is in conformance with the 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.

VI. Cumulative Impacts

Cumulative impacts of the grazing and no grazing alternatives were considered in Chapter 4 of Rangeland Reform '94 Draft Environmental Impact Statement and in Chapter 4 of the Roswell Resource Area Proposed RMP/EIS. The no livestock grazing alternative was not selected in either document. On the allotment specific level, there will be no cumulatively significant impacts from the proposed action or from the no grazing alternative.

VII. Residual Impacts

The area has been grazed by livestock since the early part of the 1900's, if not longer. 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.

VIII. Socio-Economic Impacts

A description of the 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. The impacts of authorizing grazing for this allotment under the Proposed Alternative on the economic, social and cultural conditions of southeast New Mexico would be positive. On a smaller scale, the impacts of authorizing grazing for this allotment under the Proposed Action on the economic, social and cultural conditions of Chaves County would also be positive.

IX. Mitigating Measures

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

Dan Baggao, John Spain, Irene Gonzales-Salas, Jerry Dutchover, Rand French, Pat Flannery, Tim Kreager and Howard Parman.

XI. PERSONS AND AGENCIES CONSULTED

Chaves County Public Land Use Advisory Committee
Jack Hagelstein - Permittee
New Mexico Department of Game and Fish
New Mexico Energy, Minerals, and Natural Resources Department
- Forestry and Resource Conservation Division
New Mexico Environment Department - Surface Water Quality Bureau
New Mexico State Land Office
U.S. Fish and Wildlife Service - Ecological Services
U.S. Fish and Wildlife Service - Fishery Resources Office

Production (lbs/ac) Data for Allotment

VEGID: 788

64055 SINKHOLE FLATS

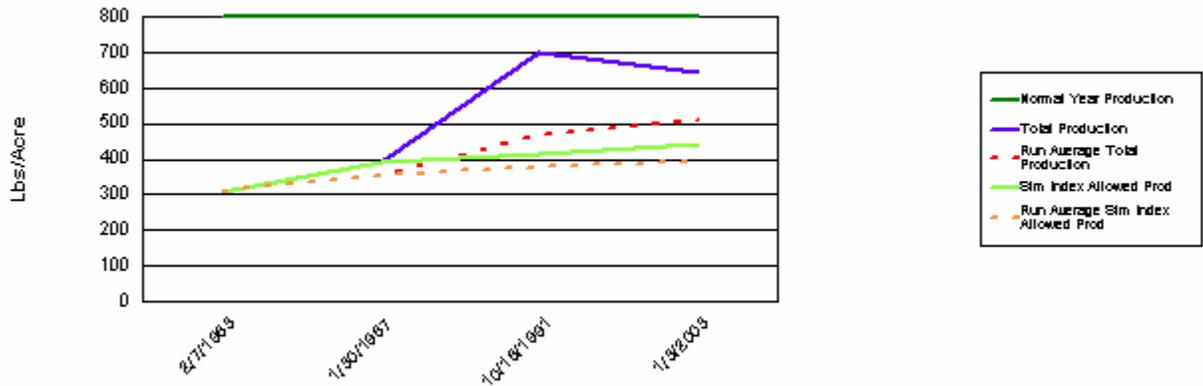
64055-#1-F045

SALT FLATS SD-3

042CY036NM

Date	Range Cond.	Similarity Index	Normal Year Production	Total Production	Running Average Production	Sim Index Allowed Production	Running Average Sim Index Allowed Production
02/07/1983	50.65	38.38	800	307.00	307.00	307.00	307.00
01/30/1987	50.00	49.25	800	394.00	350.50	394.00	350.50
10/16/1991	52.00	52.00	800	697.00	466.00	416.00	372.33
01/03/2003	56.75	55.25	800	644.00	510.50	442.00	389.75

Production Data For Study Site



64055 SINKHOLE FLATS

#1

Vegid#: 788

64055-#1-F045

788

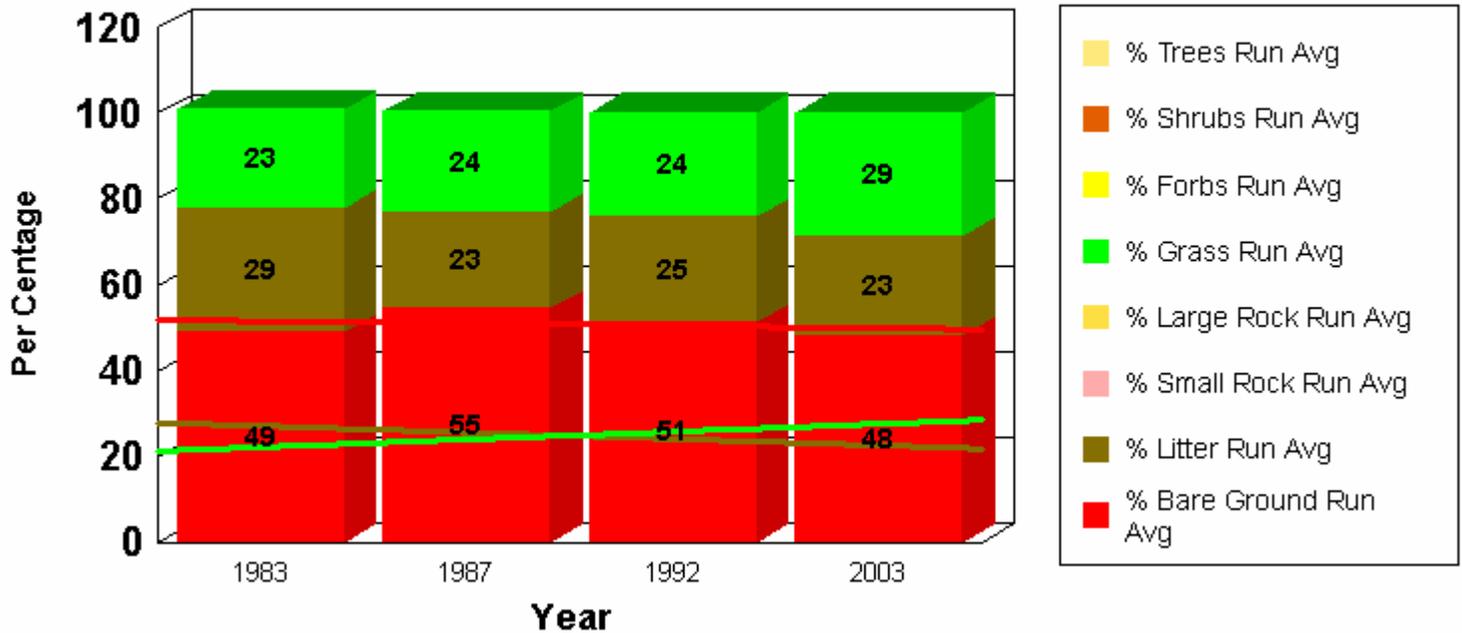
Ecological Site No.: 042CY036NM

Location: Township: 0090S Range 0240E Section 27 QtrQtr: SWNE
 64055 SINKHOLE FLATS 64055-#1-F045

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
1983	49.00	29.00				23.00			49.00	29.00				23.00		
1987	60.00	16.00				24.00			54.50	22.50				23.50		
1992	45.00	29.00				26.00			51.33	24.67				24.33		
2003	39.00	19.00				42.00			48.25	23.25				28.75		

Running Average Ground Cover Trends

With Trendlines



Traditional Range Condition and Similarity Index Data

VEGID: 788

64055 SINKHOLE FLATS

64055-#1-F045

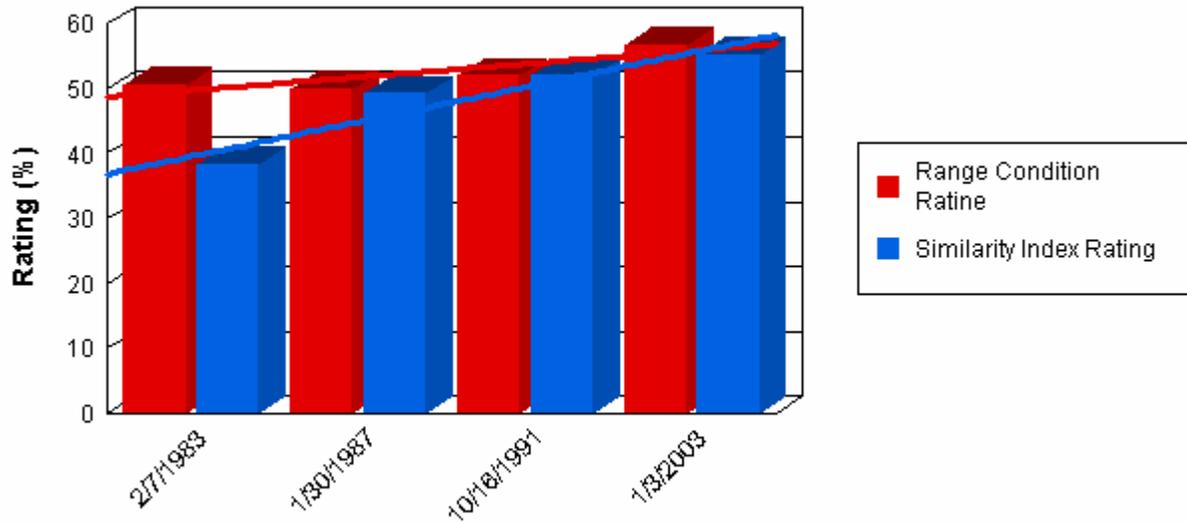
SALT FLATS SD-3

042CY036NM

Date	Range Cond.	Similarity Index	Total Production	Normal Year Production
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01/30/1987	50.00	49.25	394.00	800
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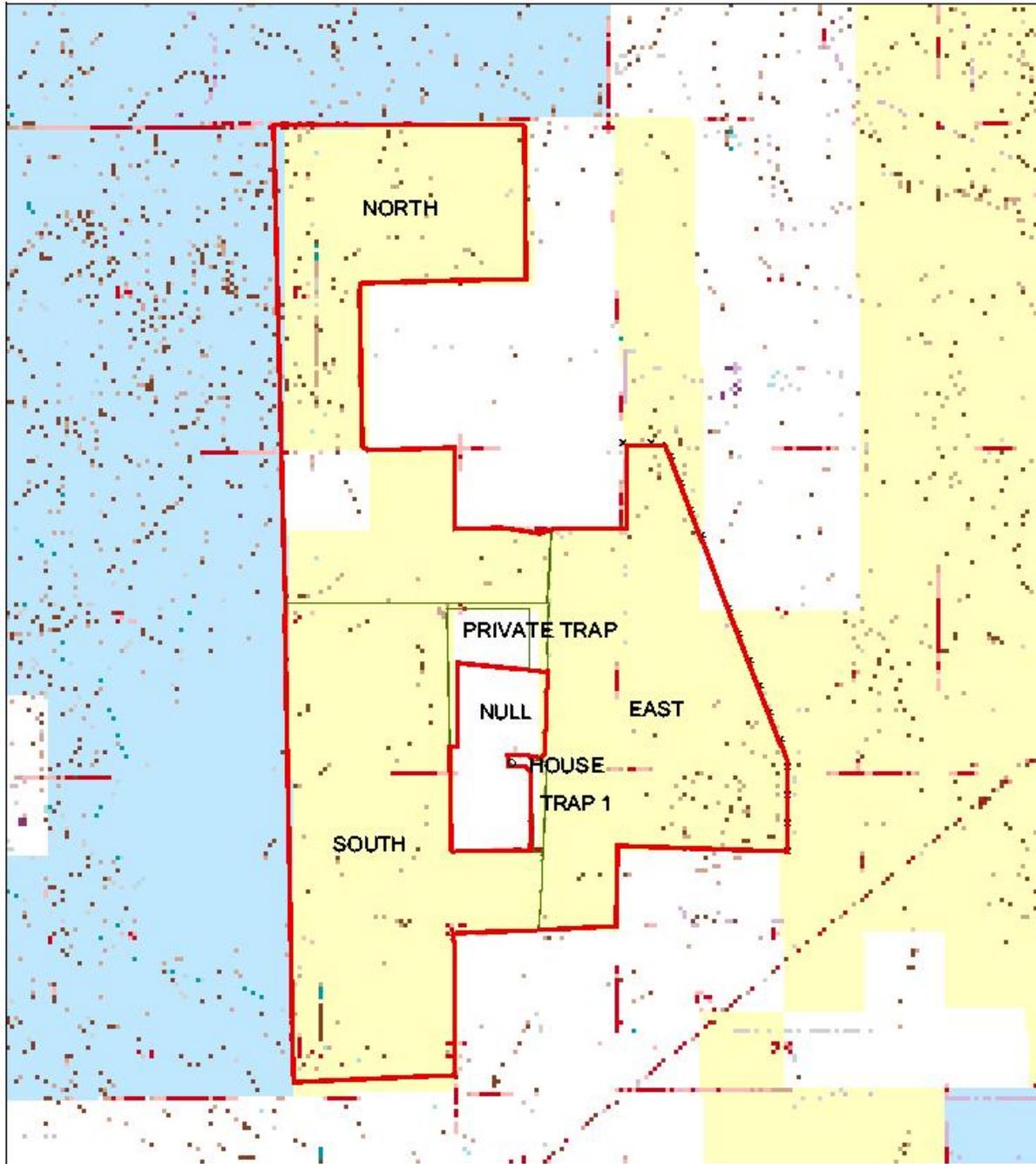
Traditional Range Condition vs Similarity Index

With Trendlines





Sinkhole Flats - 64055



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Produced by the RFG GIS Specialist on Oct. 22, 2004.