ENVIRONMENTAL ASSESSMENT
for
GRAZING AUTHORIZATION

ALLOTMENT 64013, SECTION 3

EA-NM-066-99-039

February, 1999

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

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/lease on allotment #64013.

The scope of this document is limited to the effects of issuing a 10 year grazing permit, other future actions such as range improvement projects will be addressed in a project specific environmental assessment. 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 lands on allotment #64013. 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. The proposed action is consistent with the RMP/EIS.

C. Relationships to Statutes, Regulations, or Other Plans

The proposed action 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 (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.

Proposed Action and Alternatives

A. Proposed Action:

The proposed action is to authorize H. W. Eppers Jr. a grazing permit for the East ranch. The permit would authorize 305 Animal Units (AU's) yearlong at 51 percent federal range for 1867 Animal Unit Months (AUM's). Cattle and Sheep are the classes of livestock proposed for authorization.

B. No Permit authorization alternative:

This alternative would not issue a new grazing permit. There would be no livestock grazing authorized on public land within allotment #64013.

III. Affected Environment

A. General Setting

Allotment #64013 is located in Chaves county, approximately 25 miles northwest of Roswell, New Mexico. The allotment consists of 7,091 acres of public land, 5,477 acres of state land, and 720 acres of private land.

This allotment lies within the boundaries of the Roswell Grazing District established subsequent to the Taylor Grazing Act (TGA). Grazing authorization on Public Lands inside the Grazing District boundary is governed by section 3 of the TGA. Livestock numbers for the ranch are controlled under this section 3 permit, the permittee is billed for the amount of forage available for livestock on federal land. Vegetation monitoring studies are used to determine the allowable number of livestock on the ranch.

The landscape is rolling, grass covered hills dissected by major drainages. The major drainages within this allotment are the Macho Arroyo, Cowboy Draw, and Fifteen Mile Draw. More detailed information of the area is discussed under the affected resources section.

The 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. Native American Religious Concerns. Cultural inventory surveys would continue to be required for public actions involving surface disturbing activities.

B. Affected Resources

1. Soils: In general, the soils in the area are Poquita-Alama-Hodgins series. The soils vary from very shallow to very deep, are well drained, and found on nearly level to moderately sloped areas. The soils are derived predominately from limestone. For in depth soil information, please refer to the Soil Survey of Chaves County New Mexico, Northern Part, published by the Natural Resource Conservation Service (NRCS). A copy of this publication may be reviewed at the BLM Roswell Field Office or at a local NRCS office.

2. Vegetation: Thie majority of this allotment is within the grassland vegetative community as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). The other community represented on the allotment is drainages, draws and canyons. 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 distinguishing feature for the grassland community is that grass species typically comprises 75% or more of the potential plant 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, past resource uses and the potential of the site.

Five rangeland monitoring studies have been in place on this allotment since 1983. Four monitoring sites are located on Shallow CP-4, and one site on Bottomland SD-3 ecological (range) site. Monitoring was conducted in 1983, 1987, 1992 and 1999. The following table summarizes monitoring data for the East allotment:

Pasture Name	Condition Score by year of study				Production (lbs./acre) by year of study			
	1983	1987	1992	1999	1983	1987	1992	1999
East	61	49	64	64	275	862	460	377
4 section	57	49	46	51	253	713	611	476
15 mile	54	43	52	43	190	444	436	936
Gallo #1	63	56	48	52	171	474	448	543
Gallo #2	90	63	59	85	825	889	1537	1578

The Roswell Resource Management Plan/Environmental Impact Statement (RMP) of October 1997 designated desired plant communities for each vegetative community. The two communities found on this allotment are the grassland community and

drainages, draws and canyons. The following table summarizes the current existing situation.

Monitoring Data Summary, Allotment Averages from 1983 to 1999							
Shallow CP-4 Ecological Sites (four study locations)							
	Grasses	forbs*	shrubs	trees	litter	bare ground**	rock
Percent composition of vegetative cover	89.25	0.83	8.33	1.58	N/A	N/A	N/A
Percent ground cover	12.44		3.41		7.68	67.53	8.93
Bottomland SD-3 Ecological Site (one study location)							
	Grasses	forbs*	shrubs	trees	litter	bare ground	rock
Percent composition of vegetative cover	90.67	1.00	1.34	0	N/A	N/A	N/A
Percent ground cover	32.11		0.83		46.62	20.44	0

*Forb percentages are not accurately reflected due to collection techniques. On pace point monitoring, only perennial species are recorded.
** Bare ground percentages are biased high due to collection techniques prior to 1999. In some cases small rock was recorded as bare ground.

Monitoring data indicates that the vegetative conditions on allotment #64013 achieve, or are moving towards, the multiple resource objectives established in the Roswell RMP. Livestock stocking levels are within the allowable vegetation utilization range. Monitoring data and analysis are available for review at the Roswell Field Office.

3. Wildlife: This allotment is within the Macho Habitat Management Area, this ranch is fenced with net-wire. Game species occurring within the area include mule deer, 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.

A general description of wildlife occupying or potentially utilizing the proposed action area is located in the Affected Environment Section (p. 3-62 to 3-71) of the Draft Roswell RMP/EIS (9/1994).

4. Threatened and Endangered Species: There are no known resident populations of threatened or endangered species on this allotment. A list of federal threatened, endangered, and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell RMP (AP11-2). Of the listed species, avian species such as the bald eagle and peregrine falcon may be observed in the general geographic area during migration or the winter months. There are no known records of these species having occurred on the allotment, and no designated critical habitat areas are within the allotment.

5. Livestock Management: The allotment is operated as a cow/calf, yearling cattle and sheep ranch. The East ranch consists of four pastures and one trap, which aid in livestock movement and restraint. Water wells, pipeline systems and earthen reservoirs provide livestock water throughout the allotment. Rotation of livestock through the pastures is used to promote proper grazing and vegetation conservation. Precipitation patterns play a role in determining the rotation pattern, dry areas are allowed to rest as much as possible. The allotment operator stays flexible with livestock numbers and maintains conservative stocking rates.

6. Visual Resources: The allotment is located within a Class IV Visual Resource Management area. This means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

7. Water Quality: No perennial surface water is found on the Public Land 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 public 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 these lands. Recreational activities that may occur include hunting, caving, sightseeing, Off Highway Vehicle Use, primitive camping, horseback riding and hiking.

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

Due to the fact that pubic land boundaries are not marked adequately or identified by signs and/or fences, the general public may be reluctant to use these public lands in fear of being in trespass on private land.

10. Cave/Karst: This allotment is located within a designated area of high karst and cave potential. A complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment. No significant caves or karst features are known to exist within this allotment.

11. Floodplains: Within this allotment, floodplains exist that are recorded on Federal Emergency Management Agency maps. The identified floodplains are the major drainages named in the general setting above. Water pipelines, fences and roads cross the floodplains, no adverse impacts have resulted from these improvements. Future permanent structures or improvements will be analyzed on a site specific basis prior to approval within the floodplains.

IV. Environmental Impacts

A. Impacts of the Proposed Action

1. Soils: Proper utilization levels and grazing distribution patterns are expected to retain sufficient vegetative cover on the allotment, this will maintain the stability of the soils. Soil compaction and excessive vegetative use will occur at small, localized areas such as bedding areas, watering locations, and along trails. Positive affects from the proposed action may include acceleration of nutrient cycling, and chipping of the soil crust by hoof action may stimulate seedling growth and water infiltration.

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. The area evolved with large ungulate animal species and native vegetation is accustomed to herbivory. Ecological condition and trend is expected to remain stable and/or improve over the long term with the proposed authorized number of livestock and existing pasture management. Rangeland monitoring data indicates that there is an adequate amount of forage for the multiple resource use objectives.

3. Wildlife: Wildlife will continue to utilize forage and browse along with domestic livestock. 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.

4. T&E species: Livestock grazing resulting from issuing a grazing lease, may affect, but not likely to adversely affect the bald eagle. 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 the peregrine falcon since important riparian nesting sites are not found on this allotment.

5 Livestock Management: No adverse impacts are anticipated under the proposed action.

6. Visual Resources: The continued grazing of livestock would not affect the form or color of the landscape. The primary appearance of the vegetation within the allotment will remain the same.

7. Water Quality: 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. 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.

8. 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 be within the limits allowed in a Class II area for the Prevention of Significant Deterioration of air quality.

9. Recreation: Grazing should have little or no impact on the dispersed recreational opportunities within this allotment. Public lands are accessible via county maintained roads. The evidence or presence of livestock can negatively affect visitors who desire solitude, unspoiled landscape views, or to hike without seeing signs of livestock. However, grazing can benefit some forms or recreation, such as hunting, by creating new water sources for game animals.

10. Caves/Karst: No known significant cave or karst features are known to exist on this allotment. There is a high potential that caves do exist in the area. If a significant cave is found, protection measures would be placed into effect.

11. Floodplains: No impacts to the floodplains are known, by keeping structures out of floodplains, impacts should not occur.

B. Impacts of the No Livestock Grazing Alternative.

1. Soils: Soil compaction would be reduced on the allotment around old trails and bedding grounds, there would be a small reduction in soil loss on the allotment.

2. Vegetation: It is expected that the number of plant species found within the allotment will remain the same, however, there would be small changes in the relative

percentages of these species. 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.

4. T&E Species: There would be no impacts to threatened or endangered species or habitat.

5. Livestock management: The 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 owner of the livestock would be responsible for ensuring that livestock do not enter Public Land [43 CFR 4140.1(b)(1)]. The intermingled land status on the allotment makes it economically unfeasible to fence out the public land and use only the private land. The remaining private and state land could not support the number of livestock currently authorized and the lower number of livestock would not provide the level of potential income the operator is accustomed to.

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 stormflow.

8. Air Quality: There would be a slightly less dust under this 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 the 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. Floodplains: Impacts would be the same as the proposed action.

V. Cumulative Impacts

All of the allotments that have permits/leases with the BLM will have to go through scoping and analysis under NEPA. Allotment #64013 is surrounded by allotments that will be undergoing this process. If the proposed action is selected, there would be no change in the cumulative impacts since it does not vary from the current situation.

If the no livestock grazing alternative is selected, there would be little change in the cumulative impact as long as the surrounding allotments continue to be stocked at their current level. If the permitted numbers are reduced on the surrounding ranches

as well, the economics of the surrounding communities and/or minority/low income populations would be negatively impacted.

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 also considered but eliminated by the Roswell RMP/ROD (pp. ROD-2).

VI. Residual Impacts

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.

VII. 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.

FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the **proposed action** 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

T. R. Kreager,
Acting Associate Field Office Manager - Resources

3/11/99
Date

DECISION RECORD

Reference: Environmental Assessment (EA) for Grazing Authorization, #NM-066-99-039

Decision: It is my decision to authorize the issuance of a ten year grazing permit to H.W. Eppers Jr. for the Bureau of Land Management grazing allotment #64013 (East Ranch). The permit will authorize 305 Animal Units (AU's) yearlong at 51 percent federal range for 1867 Animal Unit Months (AUM's). Cattle and sheep are the classes of livestock authorized.

Any additional mitigation measures identified in the environmental impacts sections of the referenced environmental assessment have been formulated into stipulations, terms and conditions.

The fundamentals of rangeland health are identified in 43 CFR §§4180.1 and pertain to watershed function, ecological processes, water quality and habitat for threatened and endangered (T&E) species or other special status species. Based on the best available data and professional judgement, the evaluation by this environmental assessment indicates that the fundamentals of rangeland health exist on allotment 64013.

If you wish to protest this proposed decision in accordance with 43 CFR 4160.2, you are allowed 15 days to do so in person or in writing to the authorized officer, after the receipt of this decision. Please be specific in your points of protest. In the absence of a protest, this proposed decision will become the final decision of the authorized officer without further notice, in accordance with 43 CFR 4160.3. A period of 30 days following receipt of the final decision, or 30 days after the date the proposed decision becomes final, is provided for filing an appeal and petition for the stay of the decision, for the purpose of a hearing before an Administrative Law Judge (43 CFR 4.470).

The appeal shall be filed with the office of the Field Office Manager, 2909 West Second, Roswell, NM, 88201, and must state clearly and concisely your specific points.

TR Kreager

T. R. Kreager,
Assistant Field Manager-Resources

8/12/99
Date