

DECISION RECORD

Environmental Assessment No. NM-060-00-071  
Section 3 Grazing Authorization  
Allotment 65008

It is my decision to issue a ten-year lease to Ms. Louise Van Eaton to graze cattle on Allotment 65008 based on the Proposed Action in Environmental Assessment NM-060-00-071. Permitted use will be for 35 animal units yearlong at 100 percent federal range, which corresponds to 420 animal unit months (AUMs). Permitted use will consist of 420 AUMs of active use and 70 AUMs of suspended use.

In accordance with 43 CFR §4160, a period of 15 days is allowed after the receipt of this proposed decision to protest it to the Authorized Officer in person or in writing. Points of protest should be specific. 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 §4.470, a period of 30 days is allowed following the date of the final decision to file an appeal and petition for a stay of the decision for the purpose of a hearing before an Administrative Law Judge. The specific points being appealed should be clearly and concisely stated. Appeals can be filed at the following address:

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

signed by T. R. Kreager 6/26/01  
Assistant Field Office Manager - Resources      Date

ENVIRONMENTAL ASSESSMENT  
for  
Section 3  
GRAZING AUTHORIZATION  
on  
ALLOTMENT 65008

Township 6 South, Range 27 East  
Sections 3-5, 7-23 (all or part)

EA-NM-060-00-071

March 2000

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

## **I.BACKGROUND**

### **A. Introduction**

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing permit on Allotment 65008.

### **B. Purpose And Need For The Proposed Action**

The purpose of issuing a new grazing permit would be to authorize livestock grazing on public range on Allotment 65008. The permit would be needed to specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR §§4130.3, 4130.3-1, and 4130.3-2.

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

The proposed action conforms with the Roswell Approved Resource Management Plan (RMP) and Record of Decision (BLM 1997) as required by 43 CFR 1610.5-3.

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

The proposed action and alternatives are consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (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 13112, Invasive Weeds; Executive Order 11988, Floodplain Management; and Executive Order 11990, Protection of Wetlands.

## **II. PROPOSED ACTION AND ALTERNATIVES**

### **A. Proposed Action - Current Livestock Management**

The proposed action is to issue Ms. Louise Van Eaton a ten-year permit to graze cattle on Allotment 65008. Permitted active use would be for 35 animal units (ALUs), year-long at

100 percent federal range, which corresponds to 420 animal unit months (AUMs)-1 An additional 70 AUMs of suspended use would also be permitted. The BLM bills the permittee for the forage used on public range on the allotment, but does not control overall livestock numbers.

Under the Proposed Action, management of the allotment would continue under the terms and

conditions of the current permit. No changes to livestock management or to existing range improvements would be required.

### **B. No Grazing Permit Alternative**

Under this alternative a new grazing permit would not be issued for Allotment 65008. No grazing would be authorized on federal land on this allotment.

## **III. AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS**

### **A. General Setting**

Allotment 65008 is in Chaves County, 29 miles northeast of Roswell. It extends to the uplands about nine miles east of the Pecos River, and includes the dissected terrain in the upper reaches of Bosque and Crockett draws. Elevations range from 3820 feet in a side-drainage of Bosque Draw, to 4158 feet at Haystack Butte.

The climate is semi-arid with normal monthly temperatures ranging from 20°F in January to 92°F in July at Fort Sumner (Owenby and Ezell 1992). Observed minimum and maximum temperatures were -27°F and 109°F, respectively. Average annual precipitation is 13.9 inches, primarily as rainfall. Average annual snowfall is 20 inches. Annual precipitation has ranged from 6.06 inches to 25.63 inches (Kunkel 1984).

### **B. Affected Resources**

The following resources or values are not present or would not be affected by the authorization of livestock grazing on Allotment 65008: Areas of Critical Environmental Concern, Cultural Resources, Floodplains, Riparian/Wetland Areas, Invasive Nonnative Species, Native American Religious Concerns, Prime or Unique Farmland, Minority/Low Income Populations, Hazardous or Solid Wastes, Wild and Scenic Rivers, and Wilderness. Affected resources and the impacts resulting from livestock grazing are described below.

For a cattle operation, an animal unit (AU) is defined as one cow with a nursing calf or its equivalent. An animal unit month (AUM) is the amount of forage needed to sustain that cow and calf for one month.

#### **1. Livestock Management**

##### Affected Environment

Ms. Van Eaton currently runs a Hereford-Angus herd and both breeds of bulls. Heifers are usually culled at 8 to 10 years of age. The allotment has four pastures and two traps. There are a total of 8598 acres, consisting of 5538 acres of controlled private land, 2260 acres of BLM land, 640 acres of state land, and 160 acres of uncontrolled private land.

Permitted use on the allotment is for 35 AUs(420 AUMs), with an additional 70 AUMs of suspended use. Active use had been 490 AUMs until 1980 when it was adjusted to 351 AUMs to bring stocking rates in line with forage production on federal lands. Active use was adjusted again in 1990 to the present amount based on the 1980-90 East Roswell Rangeland Monitoring Studies.

The allotment was placed in the "C" category (i.e., a "custodial" allotment) upon completion of the Roswell Resource Area Management Framework Plan Amendment/Environmental Impact Statement (BLM 1984). The BLM proposed no changes in management or authorized use.

### Environmental Impacts

Under the Proposed Action, current livestock grazing management would continue on the allotment. Because grazing would be sustainable under current management, no impacts to the livestock operation would occur.

Under the No-Grazing Alternative, no livestock grazing would be authorized on BLM lands. If livestock grazing were to continue on adjacent privately owned lands, the BLM land would have to be fenced apart to prevent trespass on public lands (43 CFR 41140.11(b)(1)). The expense of fencing would be borne by the private landowner.

Cumulative impacts of the grazing and no grazing alternatives were analyzed in Rangeland Reform '94 Draft Environmental Impact Statement (BLM and USDA Forest Service 1994) and in the Roswell Resource Area Draft RMP/EIS (BLM 1994). The no livestock grazing alternative was not selected in either document.

## **2. Vegetation**

### Affected Environment

Allotment 65008 is divided equally between the Grasslands and Mixed Desert Shrub community types. General objectives for the communities are described in the Roswell Approved RMP and Record of Decision (BLM 1997), and the Roswell Draft RMP/EIS (BLM 1994).

The allotment has a variety of ecological sites, but two rangeland monitoring locations on BLM land are found on a Sandy SD-3 site in the Breaks Pasture, and a Gravelly CP-2 in the Adams Pasture.

Common ground cover species observed on the allotment include threeawn; silver bluestem; plains brome; sand, ring, and bush muhly; mesa and sand dropseed; blue and black grama; and annual forbs and grasses. Various perennial forbs are also present. Shrub species include sand sagebrush, honey mesquite, and broom snakeweed.

### Environmental Impacts

Under the Proposed Action, vegetation would continue to be grazed and trampled by livestock, primarily those species preferred as forage. However, the current level of use which has been adjusted in the past, appears to be sustainable.

Under the No-Grazing Alternative, vegetation condition might improve somewhat. Grasses would increase initially, but plant vigor could decline from the lack of vegetation removal, making ground species rank.

### **3. Soils**

#### Affected Environment

The Soil Survey of Chaves County, New Mexico, Northern Part (USDA Soil Conservation Service 1983) was used to describe and analyze the impacts to soils. Allotment 65008 is within the Redona-Ratliff-Blakeney general soil map unit. These soils are well-d rained, and range in depth from shallow to deep. They formed in calcareous alluvium and eolian deposits, with surface textures that are typically fine, sandy loam. Runoff is generally slow and the water erosion hazard is slight to moderate. The soils are susceptible to wind erosion.

#### Environmental Impacts

Under the Proposed Action, livestock would remove some of the cover of standing vegetation and litter, and compact the soil by trampling. If livestock management were inadequate, these effects could be severe enough to reduce infiltration rates and increase runoff, leading to greater water erosion and soil losses (Moore et al. 1979, Stoddart et al. 1975). Producing forage and protecting the soil from further erosion would then be more difficult. The impacts of removing vegetation and trampling would be greatest in areas of concentrated livestock use, such as trails, waters, feeders, and shade. Soils on the allotment are highly vulnerable to wind erosion. Removal of the vegetative cover also increases the exposure of soils to the erosive force of wind.

Though livestock impacts are possible, monitoring data indicate that the current level of grazing is sustainable and should maintain an adequate vegetative cover to protect soils from erosion. Periodic rangeland monitoring would help ensure an adequate vegetative cover to protect soils from wind or water erosion by indicating when and where changes to livestock management are needed in the future.

Under the No-Grazing Alternative, any risk of overgrazing would be eliminated. However, removing grazing animals from an area where they were a natural part of the landscape could result in poor use of precipitation and inefficient mineral cycling (Savory 1988). Bare soil could be sealed by raindrop impact, and vegetation could become decadent, inhibiting new growth. Therefore, the results of no grazing could be similar to those of overgrazing in some respects.

### **4. Water Quality**

#### Affected Environment

There are no perennial waters on the allotment, though Crockett and Bosque draws are major ephemeral drainages that reach the Pecos River about five miles to the west. Base waters include three wells and four dirt tanks, none of them on BLM land.

#### Environmental Impacts

The No-Grazing Alternative might reduce sediment loading to Crockett and Bosque draws

slightly during storm flow. The reduction would not be significant compared to all sediment sources. No secondary impacts would occur to resources such as fisheries. No impacts to ground water would be expected.

## **5. Wildlife**

### Affected Environment

Allotment 65008 provides diverse habitat for more than 54 bird species, 33 mammal species, and 36 species of reptiles and amphibians. Raptors that are frequently associated with the vegetation types on the allotment include the red-tailed hawk, Swainson's hawk, ferruginous hawk, rough-legged hawk, common nighthawk, and the American kestrel.

Game bird species include scaled and bobwhite quail, and mourning dove. Other bird species that are commonly observed are the turkey vulture, road runner, Chihuahuan raven, great horned owl, burrowing owl, northern flicker, loggerhead shrike, western meadowlark, western kingbird, pyrrhuloxia, horned lark, and other passerine birds.

A diversity of small mammals provide an excellent prey base for carnivores such as coyote, gray fox, bobcat, raccoon, badger, hooded skunk, and striped skunk. They prey species include black-tailed jack rabbit, desert cottontail, spotted ground squirrel, pocket mouse, deer mouse, northern grasshopper mouse, harvest mouse, kangaroo rat, and white-throated woodrat. Two big game species that occur on the allotment are the pronghorn antelope and the mule deer.

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

### Environmental Impacts

Under the Proposed Action, wildlife would continue to compete with domestic livestock for space, forage, and browse. With proper livestock management and stocking rates, there would be adequate cover and forage for most wildlife species, resulting in sustainable populations for those wildlife species that occupy or use the area.

## **6. Threatened and Endangered Species**

### Affected Environment

A list of federal threatened, endangered and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell Approved RMP (BLM 1997). No known threatened or endangered species of plant or animals or designated critical habitat areas occur on Allotment 65008.

The mountain plover, however, has been recently proposed for listing as an endangered species. It is associated with shortgrass and shrub-steep landscapes throughout its breeding

and wintering range. Historically, on the breeding range, it occurred on nearly denuded prairie dog towns and in areas of major bison concentration. The mountain plover is strongly associated with sites of heaviest grazing pressure to the point of excessive surface disturbance. Short vegetation, bare ground, and a flat topography are now recognized as habitat-defining characteristics at both breeding and wintering locales.

Mountain plover surveys were conducted in New Mexico by Lawry Sager in 1995, for the New Mexico Department of Game and Fish (Sager 1996). No breeding populations were found south of 34° north latitude, which generally follows the Chaves/DeBaca County line north of the allotment. No birds were reported in DeBaca or Chaves counties. Only one observation was reported in Lincoln County (near Lon). In addition, mountain plover surveys were conducted in 1998 at BLM selected sites by the New Mexico Natural Heritage Program (DeLay and Johnson 1998). No mountain plovers were observed at the sites.

### Environmental Impacts

Because the mountain plover prefers short vegetation and actually seeks out grazed pastures, cumulative impacts from grazing are not anticipated to adversely affect the bird. Grazing practices which maintain or improve ground cover could possibly decrease mountain plover habitat. The Proposed Action would continue to emphasize proper watershed management, but is unlikely to adversely affect this species or its habitat in the mixed desert shrub area. Since no known wintering locales or breeding sites have been found, and no known prairie dog towns are located within the allotment, proper grazing management is not likely to jeopardize, destroy, or adversely modify the habitat. No change in the mountain plover habitat would result if the No-Grazing Alternative were selected.

## **7. Visual Resources Management**

### Affected Environment

The entire allotment is in a Class III area for visual resources management. In a Class III area, contrasts to the basic elements (e.g., form, line, color, or texture) caused by a management activity may be evident and begin to attract attention in the landscape. The changes, however, should remain subordinate in the existing landscape.

### Environmental Impacts

The basic elements of the landscape would not change within the allotment under either management alternative. Potential impacts to visual resources would be analyzed and mitigated if new allotment management activities are proposed in the future.

## **8. Recreation**

### Affected Environment

Since Allotment 65008 has no facility based recreational activities, only dispersed recreational opportunities occur on these lands. These include hunting, sightseeing, bird watching, off-

highway vehicle use, primitive camping, mountain biking, horseback riding, and hiking. Hunting is the most popular outdoor sport on public lands in southeast New Mexico.

Access to public lands on the allotment crosses state lands along county maintained roads. The allotment is classified as "limited to existing roads and trails" for the use of off-highway vehicles. The majority of public lands in this allotment can only be accessed on foot.

#### Environmental Impacts

Grazing would have little impact on dispersed recreational opportunities within this allotment because recreational use of the public lands is relatively low. The presence of livestock can negatively affect visitors who desire solitude, unspoiled landscape views, and hiking without seeing signs of livestock. Grazing can benefit some forms of recreation, however, such as hunting. Livestock waters also benefit game animals.

### **9. Significant Caves and Karst**

#### Affected Environment

Allotment 65008 is in an area of medium potential for the occurrence of caves and karst. No caves or major karst features have been reported for the allotment, though a comprehensive inventory has not been completed.

#### Environmental Impacts

Because no caves or major karst features are known to exist on the allotment, impacts to these resources are not expected to be significant under either alternative. It is possible that cave or karst features exist on the allotment, but have not yet been discovered. If a feature is discovered in the future, protective measures could be required to mitigate adverse impacts to the feature. Fencing to exclude livestock and off-highway vehicles might be prescribed to prevent soil erosion, vegetation trampling, and livestock effluent from reaching the cave. A separate environmental analysis would be prepared prior to fence construction.

### **10. Air Quality**

#### Affected Environment

The allotment is in a Class 11 area for the Prevention of Significant Deterioration of air quality as defined by the federal Clean Air Act. Class 11 areas allow a moderate amount of air quality degradation.

Air quality in the region is generally good, with winds averaging 10 to 16 miles per hour depending on the season. Peak velocities reach more than 50 miles per hour in the spring. These conditions rapidly disperse air pollutants in the region.

#### Environmental Impacts

Dust levels resulting from allotment management activities would be slightly higher under the Proposed Action than the No-Grazing Alternative. The cumulative impact on air quality from the allotment would be negligible compared to all pollution sources in the region.

#### **IV. CUMULATIVE IMPACTS**

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

The incremental impact of issuing a grazing permit on these resources must be analyzed in the context of impacts from other actions. Other BLM actions that could have impacts on the identified resources include: livestock authorization on other allotments; oil and gas activities; rights-of-way; and recreation use. All authorized activities which occur on BLM land can also take place on state and private lands.

Many of the actions which could contribute to cumulative impacts have occurred over many years. Impacts from open-range livestock grazing in the last century are still being addressed today, and oil and gas activities began in the early part of the 20th century.

These activities and others are still occurring today, and are expected to continue into the foreseeable future to some degree.

The Proposed Action would not add incrementally to the cumulative impacts. The basis for this conclusion is the discussion of potential impacts in Section III of the EA.

#### **V. MITIGATION MEASURES**

Mitigation measures are actions which could be taken to avoid or reduce impacts likely to result from the Proposed Action or the No-Grazing Alternative. The following mitigation measures address possible impacts from livestock grazing under the Proposed Action.

Vegetation monitoring studies would continue if a new grazing permit were issued. Changes to livestock management would be made if monitoring data show that adverse impacts to upland or riparian vegetation are occurring.

It is possible that unforeseen impacts to other resources could occur during the term of the permit. If adverse environmental impacts are observed, action would be taken to mitigate those impacts at that time.

#### **VI. RESIDUAL IMPACTS**

Residual impacts are direct, indirect, or cumulative impacts that would remain after applying the mitigation measures. Residual impacts following authorization of livestock grazing would be insignificant if the mitigation measures are properly applied.

## **VII. FUNDAMENTALS OF RANGELAND HEALTH**

Through the Rangeland Reform '94 initiative, the BLM developed new regulations for grazing administration on public lands. With public involvement, fundamentals of rangeland health were established and written into the new regulations. The fundamentals of rangeland health are identified in 43 CFR §4180.1, and pertain to (1) watershed function; (2) ecological processes; (3) water quality; and (4) habitat for threatened, endangered, and other special status species. Based on available data and professional judgement, the evaluation by this environmental assessment indicates that conditions identified in the fundamentals of rangeland health exist on Allotment 65008.

## **VIII. BLM INTERDISCIPLINARY TEAM**

Dan Baggao  
Pat Flanary  
Howard Parman  
Jerry Ballard  
Tim Kreager  
Irene Salas  
Jerry Dutchover  
Helen Miller  
Jim Schroeder

## **IX. PERSONS OR AGENCIES CONSULTED**

Ms. Louise Van Eaton - Permittee  
Chaves County Public Land Use Advisory Committee  
Forest Guardians  
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

## **X. LITERATURE CITED**

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