

## Decision Record

Reference: Environmental Assessment (EA) for Grazing Authorization, #NM-060-99-099\*

\*Originally issued under #NM060-99-001, please note correction.

Decision: It is my decision to authorize the issuance of a ten-year grazing permit to Mike Corn for the Bureau of Land Management grazing allotments #63048 (Cedar Hill) and #64028 (Jones).

The permit for the Jones Ranch will authorize 270 Animal Units (AU's) yearlong at 45 percent federal range for 1,458 Animal Unit Months (AUM's). The permit for the Cedar Hill allotment will be for 96 AU's at 70 percent federal range for 806 AUM's/ The Cedar Hill allotment will have five Animal Units (42 AUM's) in suspended use. Cattle, sheep and goats are the classes of livestock authorized.

Stipulation included within the permit will be:

- Intensive rangeland monitoring will continue annually for the next three years (until 2003).
- A monitoring data evaluation will be conducted in 2003 and a decision will be made at that time, based on the monitoring data, as to whether the allotments are responding to current management practices. Range condition trends will indicate whether proper livestock numbers are on the allotment.

Rangeland monitoring methods will include reading all three transect lines of the established studies within both allotments until the year 2003. After the 2003 evaluation, the monitoring program will be designed to fit the needs of the allotment. The monitoring will incorporate, where possible, monitoring information for the allottee. The allottee will also report annually the actual use on the allotments.

To promote management flexibility, the allotments will be allowed to run livestock in excess of their respective permit numbers as long as the number of livestock do not exceed the total of both allotments. The total number of livestock allowed by the permits will be 366 AU's. If the base property for one of the allotments is sold by Mike Corn, the livestock numbers for each allotment will be as described as above.

The flexibility between the two allotments will promote land stewardship by allowing the livestock to be grouped into herds and rotated through the pastures of both allotments.

Management of the allotments will include pasture rest and rotation of livestock through the various pastures on both allotments. The primary concern at the present time are the two pastures within the Cedar Hills allotment, pastures number four and number six of the Jones allotment. These pastures are characterized by the sandy soils with brush species and juniper trees interspersed in them. Goals for management include increasing ground cover with herbaceous vegetation to stabilize soils, and to increase vegetative diversity and cover, primarily grass species.

Rotation of livestock will ensure growing season rest of a minimum of two pastures each year.

Pasures selected for rest each year will be selected cooperatively between the allottee and the BLM. Selection criteria for rest will include but not limited to: precipitation patterns, past growing season use, management goals such as brush control or prescribed fire, and vegetation conditions.

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

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.

Signed by T. R. Kreager  
Assistant Field Manager- Resources

8/24/99  
Date

**ENVIRONMENTAL ASSESSMENT  
for  
GRAZING AUTHORIZATION**

**ALLOTMENT 64028, SECTION 3  
AND  
ALLOTMENT 63048, SECTION 3**

**EA-NM-060-99-099**

**May, 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 on allotments #64028 and #63048.

The scope of this document is limited to the effects of issuing 10 year grazing permits, other future actions such as range improvement projects will be addressed in a project specific environmental assessment.

### **A. Purpose and Need for the Proposed Action**

The purpose of issuing new grazing permits would be to authorize livestock grazing on public lands on allotments #64028 and #63048. The permits 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, 4130.3-2 and 4180.1.

### **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.

### **D. Allotment Information and background**

The two allotments are actually run as one ranch, however the permittee desires to keep the allotments separated. This environmental assessment will describe the operation of both allotments and will incorporate, where possible, flexibility of overall permitted livestock numbers between the two allotments.

Allotment #64028 (Jones Ranch) is located in Chaves and Lincoln counties, approximately 25

miles northwest of Roswell, New Mexico. The allotment consists of 6,740 acres of public land, 1,220 acres of state land, and 4,870 acres of private land.

Allotment #63048 (Cedar Hill Ranch) is located in Lincoln county, northwest and adjacent to the Jones Ranch. This allotment consists of 4,145 acres of public land, 740 acres of state land and 1035 acres of private land. There is also approximately 25 acres of private land within the boundaries of the allotment that are owned by an individual other than the allottee.

Livestock numbers for the Jones Ranch and the Cedar Hill Ranch were set in 1988 by Rangeland Agreements. The Jones Ranch (allotment #64028) livestock numbers were set at 242 AU's active use and 28 AU's of Temporary Non-Use. Grazing preference is shown as 270 AU's. The livestock numbers have been kept at 242 AU's active use with the exception of a few times during high precipitation years when the non-use was activated. The Cedar Hill Ranch (allotment #63048) livestock numbers were set at 96 AU's Active Use and 5 AU's of Suspended Use.

Grazing plans have been established on these allotments by the BLM and the Natural Resource Conservation Service. The oldest plan dates back to 1968 and was revised during the 1970's. A Great Plains contract was entered by Mike Corn in 1984 which helped the allottee with costs for construction of range improvements and established a grazing plan. Please refer to attachments #1 and #2 to review overall conditions of the vegetation since 1983.

The area encompassing these allotments are popular for recreation purposes. The Cedar Hill area in particular is heavily used for hunting, and roads associated with recreation are prominent.

## **Proposed Action and Alternatives**

### **A. Combination of allotment livestock numbers to promote flexibility:**

The proposed action is to authorize Mike Corn grazing permits for the Jones Ranch and the Cedar Hill ranch. The permit for the Jones ranch would authorize 270 Animal Units (AU's) yearlong at 45 percent federal range for 1458 Animal Unit Months (AUM's). The permit for the Cedar Hill Allotment would be for 96 AU's at 70 percent federal range for 806 AUM's. The Cedar Hill allotment will have 5 Animal Units (42 AUM's) in suspended use. Cattle, sheep and goats are the classes of livestock proposed for authorization.

Stipulations included within the permit will be:

- Intensive rangeland monitoring will continue annually for the next three years (until 2003).
- A monitoring data evaluation will be conducted in 2003 and a decision will be made at that time, based on the monitoring data, as to whether the allotments are responding to current management practices. Range condition trends will indicate whether proper livestock numbers are on the allotment.

Rangeland monitoring methods will include reading all three transect lines of the established studies within both allotments until the year 2003. After the 2003 evaluation, the monitoring program will be designed to fit the needs of the allotment. The monitoring will incorporate where

possible monitoring information from the allottee. The allottee will also report annually the actual use on the allotments.

To promote management flexibility, the allotments will be allowed to run livestock in excess of their respective permit numbers as long as the number of livestock do not exceed the total of both allotments. The total number of livestock allowed by the permits will be 366 AU's. If the base property for one of the allotments is sold by Mike Corn, the livestock numbers for each allotment will be as described above.

The flexibility between the two allotments will promote land stewardship by allowing the livestock to be grouped into herds and rotated through the pastures of both allotments.

Management of the allotments will include pasture rest and rotation of livestock through the various pastures on both allotments. The primary concern at the present time are the two pastures within the Cedar Hills allotment, pastures number four and number six of the Jones allotment. These pastures are characterized by the sandy soils with brush species and juniper trees interspersed in them. Goals for management include increasing ground cover with herbaceous vegetation to stabilize soils; and to increase vegetative diversity and cover, primarily grass species.

Rotation of livestock will ensure growing season rest of a minimum of two pastures each year. Pastures selected for rest each year will be selected cooperatively between the allottee and the BLM. Selection criteria for rest will include but not limited to: precipitation patterns, past growing season use, management goals such as brush control or prescribed fire, and vegetation conditions.

#### **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 allotments #63048 and 64028.

#### **C. Permit livestock as authorized since 1988:**

This alternative in effect, will leave the existing situation in place. The allotments will be required to operate separately and livestock numbers will be authorized as defined in the 1988 Rangeland Agreements.

### **III. Affected Environment**

#### **A. General Setting**

These allotments lie 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 ranches 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 ranches.

The landscape on the majority of the Jones allotment is rolling, grass covered hills dissected by arroyos and major drainages. The major drainage within the Jones allotment is the Middle Arroyo.

The Cedar Hill area is characterized by sandy soils and sandhills underlain with caliche material. Brush species such as juniper and sumac are prevalent in the area. The Salt Creek drainage traverses the Cedar Hill allotment. 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 Threadgill-Asparas-Gabaldon series and the Darvey-Deama-Pastura series. The soils vary from shallow to deep, are well drained, and found on hilly to nearly level 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, or the Soil Survey of Lincoln County, New Mexico, published by the Natural Resource Conservation Service (NRCS). A copy of these publications may be reviewed at the BLM Roswell Field Office or at a local NRCS office.

2. Vegetation: This area is within the grassland, shinnery oak dune, and mixed desert shrub vegetative communities 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 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.

Seven rangeland monitoring studies have been in place on the Jones allotment, and two monitoring studies on the Cedar Hill allotment since 1983. The monitoring studies are located within the following ecological range sites: Deep Sand CP-2 (four studies), Loamy CP-4 (three studies), Shallow CP-4 (one study), and Very Shallow CP-4 (one Study). Monitoring was conducted in 1983, 1987, 1992, 1998, and 1999. Attachment 1 summarizes the rangeland

monitoring data. Monitoring data and analysis are available for review at the Roswell Field Office.

The Roswell Resource Management Plan/Environmental Impact Statement (RMP) of October 1997 designated desired plant communities for each vegetative community. The communities found on this allotment are the grassland, shinnery oak dune, and pinon juniper. Attachment 2 summarizes the current existing situation for each allotment and shows RMP desired plant communities.

Monitoring data indicates that the vegetative conditions on allotments #64028 and #63048 are relatively stable, but a few pastures are in a lower seral stage than desired.

3. Wildlife: This allotment is within the Macho Habitat Management Area, the two allotments are 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).

The Jones and Cedar Hill allotments are located within the Cedar Hill Mule Deer management area as identified by the Roswell RMP. Aerial surveys conducted by the New Mexico Department of Game and Fish indicates that the mule deer population remains stable, but the buck/doe/fawn ratios have slightly declined in the past eight years. The primary goal is to maintain or improve habitat utilized by big game to provide sufficient quantity and quality of food, water, cover and space while providing for livestock grazing. Adequate forage (browse) and water are the critical elements for mule deer within these two allotments. Utilization of key browse species by livestock may need to be monitored to ensure forage is available for wildlife. Future habitat developments may be implemented to improve the habitat for deer in the area. Examples of the developments are the construction new water locations and prescribed fire to stimulate more palatable forage.

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 allotments are operated as a cow/calf, sheep and goat ranch. The Cedar Hill allotment consists of two pastures (previously one of the pastures was split by an electric fence) and one trap; the Jones allotment consists of seven pastures and three traps. The various pastures and traps aid in livestock movement and restraint. Water wells, pipeline systems and earthen reservoirs provide livestock water throughout the allotments. During periods of drought, livestock numbers are reduced on the allotment for conservation of forage.

The various classes of livestock complicate rotation patterns due to the differing needs throughout the year.

6. Visual Resources: The allotments are located within a Class III and IV Visual Resource Management areas. The class III areas are along NM Highway 48 (Pine Lodge Road), and the Class IV areas are located in the interior of the allotment. 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 changes, however should remain subordinate to the existing landscape. The class IV rating 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 (on existing roads and trails), primitive camping, horseback riding and hiking.

Legal and physical Access to public lands located in this allotment are through state lands, county maintained roads and roads existing on public lands. Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails.

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 those mentioned under the general setting above. Water pipelines and fences cross the floodplains within this allotment. Any 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 or increase 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 pasture management. Rangeland monitoring data indicates that there is an adequate amount of forage for the multiple resource use objectives.
3. Wildlife: Domestic livestock will continue to utilize vegetative resources needed by a variety of wildlife species for life history functions within this allotment. The magnitude of livestock grazing impacts on wildlife is dependent upon the species of wildlife being considered, and it's habitat needs. In general, livestock stocking rate adjustments have been made in the past to minimize the direct competition for those vegetative resources needed by a variety of wildlife species. Cover habitat for wildlife would be expected to benefit under this alternative. Existing water locations provide dependable water sources for wildlife, as well as livestock.
4. T&E species: Livestock grazing resulting from issuing a grazing permit, may affect, but not likely 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: There would be a change of management on the allotments under this alternative. Allowing flexibility between the two allotments would be a benefit for planning pasture rotations. Pasture rest as described under this alternative would benefit the operation by stabilizing soils and increasing forage production. However the pasture rest would also require added input effort by the operator.

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. Alternative A 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 will benefit some forms of 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.

### **C. Impacts of the Permit livestock as authorized since 1988**

1. Soils: Impacts would be similar to those under alternative A. A slight increase in compaction and soil loss due to erosion may occur due to less vegetative ground cover as compared to alternative A.

2. Vegetation: Impacts would be similar to those under alternative A. Ecological condition and ground cover would remain the same as the present, no improvement would be expected, but conditions would remain stable.

3. Wildlife: Impacts would be similar to those under alternative A. The difference would be that cover habitat may not benefit and would remain the same as the existing situation.

4. T&E Species: Impacts would be the same as alternative A.

5. Livestock management: This alternative would not change the management of the allotments. No benefit of flexibility of livestock numbers between allotments would occur. This alternative would be the easiest to implement by the operator since it involves no changes.

6. Visual Resources: There would be no change in the visual resources.

7. Water Quality: Impacts would be the same as under Alternative A.

8. Air Quality: There would be a slightly more dust under this under this alternative versus

alternative A, but this would be negligible when considering all sources of dust.

9. Recreation: Impacts would be similar to those listed under alternative A.

10. Caves/Karst: Impacts would be the same as alternative A if no significant caves are found.

11. Floodplains: Impacts would be the same as alternative A.

## **V. Cumulative Impacts**

All of the allotments that have permits/leases with the BLM will have to go through scoping and analysis under NEPA. Allotments #64028 and #63048 are surrounded by allotments that will be undergoing this process. If the alternative C 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.

Alternative A would not have a significant cumulative impacts since the authorized number of livestock would remain the same as the existing situation.

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 as outlined under alternative A. This adjustment will be determined after consultation, coordination and cooperation with the allottee as outlined in 43 CFR §4100. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

## **VIII. Fundamentals of Rangeland Health**

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

## **IX. BLM Team Members**

Jim Schroeder, John Spain, Tim Kreager, Irene Gonzales-Salas, Jerry Dutchover, Rand French, Pat Flanary, Paul Happel, Howard Parman, Chuck Schmidt.

Attachment 1

The following tables summarize ecological condition and vegetative production monitoring data for the Jones and Cedar Hills allotments:

**Jones Allotment #64028**

Pasture Name	Condition Score by year of study					Production (lbs./acre) by year of study				
	1983	1987	1992	1998	1999	1983	1987	1992	1998	1999
#1	60	60	57	50	64	852	685	618	1510	635
#2	51	57	82	70	66	164	239	514	727	460
#3	51	47	71	64	63	210	379	364	754	451
#4	44	43	49	43	45	227	371	229	487	301
#5	40	56	57	63	50	147	134	359	569	397
#6	45	46	43	36	46	168	259	146	577	296
#7	60	44	49	43	55	132	265	278	579	499

**Cedar Hill Allotment #63048**

Pasture Name	Condition Score by year of study					Production (lbs./acre) by year of study				
	1983	1987	1992	1998	1999	1983	1987	1992	1998	1999
North	43	43	40	41	40	154	394	170	506	349
South	37	37	47	34	40	110	209	159	267	283

## Jones Allotment #64028 Vegetative Resource Data

RANGELAND MONITORING STUDIES LOCATED IN THE GRASSLAND COMMUNITY, LONG TERM ALLOTMENT AVERAGE OF VEGETATION COVER AND COMPOSITION										
ALLOTMENT : 64028 GRASSLAND COMMUNITY 68% of Allotment		PERCENT COVER OBJECTIVES					VEGETATIVE COVER BY PERCENT COMPOSITION OBJECTIVES			
PASTURE/ ECOLOGICAL SITE	ECOLOGICAL NAME	BARE GROUND (14 -60%)	LITTER (8 -44%)	SMALL & LARGE ROCK (0 -30%)	GRASS & FORBS*	SHRUBS & TREES (3 -12%)	GRASSES (30 -85%)	FORBS* (10-15%)	SHRUBS (1 -10%)	TREES ( - %)
#1		18.15	45.08	0.00	34.24	2.53	94.07	0.33	5.60	0.00
070DY153NM	LOAMY CP-4									
#2		39.28	32.41	0.13	22.32	5.85	83.56	0.40	16.04	0.00
070DY153NM	LOAMY CP-4									
#3		26.13	43.66	0.53	25.65	4.02	85.89	0.80	12.38	0.94
070DY153NM	LOAMY CP-4									
#5		38.09	13.93	19.29	24.93	3.37	86.60	0.60	12.60	0.20
070DY152NM	SHALLOW CP-4									
<b>ALLOTMENT COMMUNITY AVERAGE</b>		<b>30.41</b>	<b>33.77</b>	<b>4.99</b>	<b>26.79</b>	<b>3.94</b>	<b>87.53</b>	<b>0.53</b>	<b>11.66</b>	<b>0.29</b>

RANGELAND MONITORING STUDIES LOCATED IN THE SHINNERY OAK DUNES COMMUNITY, LONG TERM ALLOTMENT AVERAGE OF VEGETATION COVER AND COMPOSITION										
ALLOTMENT : 64028 SHINNERY OAK DUNE COMMUNITY 20% of allotment		PERCENT COVER OBJECTIVES					VEGETATIVE COVER BY PERCENT COMPOSITION OBJECTIVES			
PASTURE/ ECOLOGICAL SITE	ECOLOGICAL NAME	BARE GROUND (5 -20%)	LITTER (25 -70%)	SMALL & LARGE ROCK (0 -1%)	GRASS & FORBS*	SHRUBS & TREES (3 -17%)	GRASSES (50 -70%)	FORBS* (10-15%)	SHRUBS (25 -40%)	TREES ( - %)
#4		39.64	43.11	0.00	10.59	6.66	75.15	0.60	21.26	2.99
042CY005NM	DEEP SAND SD-3									
#6		48.08	27.45	0.13	16.18	8.17	69.86	6.97	21.36	1.81
070BY063NM	DEEP SAND CP-2									
<b>ALLOTMENT COMMUNITY AVERAGE</b>		<b>43.86</b>	<b>35.28</b>	<b>0.07</b>	<b>13.39</b>	<b>7.42</b>	<b>72.51</b>	<b>3.79</b>	<b>21.31</b>	<b>2.40</b>

\*Forb percentages are not accurately reflected due to collection techniques. On pace point monitoring, only perennial species are recorded.

### Jones Allotment #64028 Vegetative Resource Data continued

RANGELAND MONITORING STUDIES LOCATED IN THE MIXED DESERT SHRUB COMMUNITY, LONG TERM ALLOTMENT AVERAGE OF VEGETATION COVER AND COMPOSITION										
ALLOTMENT : 64028 MIXED DESERT SHRUB COMMUNITY 12% of allotment		PERCENT COVER OBJECTIVES					VEGETATIVE COVER BY PERCENT COMPOSITION OBJECTIVES			
PASTURE/ ECOLOGICAL SITE	ECOLOGICAL NAME	BARE GROUND (10 -40%)	LITTER (1 -12%)	SMALL & LARGE ROCK (0 -30%)	GRASS & FORBS* (15 -52%)	SHRUBS & TREES (3 -12%)	GRASSES (55 -75%)	FORBS* (10 -20%)	SHRUBS (15 -20%)	TREES (1 -10%)
#7		35.20	26.08	13.36	21.44	3.94	81.56	0.82	17.55	0.07
070DY158NM	VERY SHALLOW CP-4									
<b>ALLOTMENT COMMUNITY AVERAGE</b>		<b>35.20</b>	<b>26.08</b>	<b>13.36</b>	<b>21.44</b>	<b>3.94</b>	<b>81.56</b>	<b>0.82</b>	<b>17.55</b>	<b>0.07</b>

\*Forb percentages are not accurately reflected due to collection techniques. On pace point monitoring, only perennial species are recorded.

### Cedar Hill Allotment #63048 Vegetative Resource Data

RANGELAND MONITORING STUDIES LOCATED IN THE SHINNERY OAK DUNES COMMUNITY, LONG TERM ALLOTMENT AVERAGE OF VEGETATION COVER AND COMPOSITION										
ALLOTMENT : 63048		PERCENT COVER OBJECTIVES					VEGETATIVE COVER BY PERCENT COMPOSITION OBJECTIVES			
PASTURE/ ECOLOGICAL SITE	ECOLOGICAL NAME	BARE GROUND (5 -20%)	LITTER (25 -70%)	SMALL & LARGE ROCK (0 -1%)	GRASS & FORBS* (16 -40%)	SHRUBS & TREES (3 -17%)	GRASSES (50 -70%)	FORBS* (10-15%)	SHRUBS (25 -40%)	TREES ( - %)
NORTH		32.27	38.03	0.07	21.27	8.36	46.09	0.52	53.40	1.07
070BY063NM	DEEP SAND CP-2									
SOUTH		40.84	38.25	0.20	8.94	11.77	32.01	2.77	65.16	0.07
070BY063NM	DEEP SAND CP-2									
<b>ALLOTMENT COMMUNITY AVERAGE</b>		<b>36.56</b>	<b>38.14</b>	<b>0.14</b>	<b>15.11</b>	<b>10.07</b>	<b>39.05</b>	<b>1.65</b>	<b>59.28</b>	<b>0.57</b>

\*Forb percentages are not accurately reflected due to collection techniques. On pace point monitoring, only perennial species are recorded.

