



United States Department of the Interior
BUREAU OF LAND MANAGEMENT

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12/2/98 #

In Reply Refer To:
4130
(NV-032)

DEC 02 1998

Dear Interested Public:

Enclosed for your review is the Red-Burbank Allotment Evaluation. Please provide comments to the above address before January 4th, 1998.

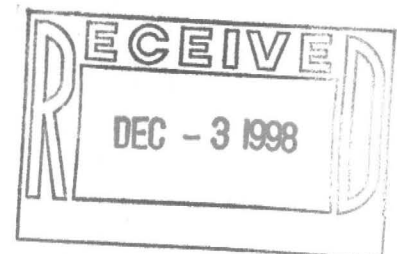
Sincerely,

Robert R. Mead
Rangeland Management Specialist
Carson City Field Office

Pine Nut HMA

1 Enclosure:

1. Red-Burbank Allotment Evaluation



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carson City Field Office
5665 Morgan Mill Road
Carson City, Nevada 89701

RED - BURBANK
ALLOTMENT EVALUATION

NOVEMBER, 1998



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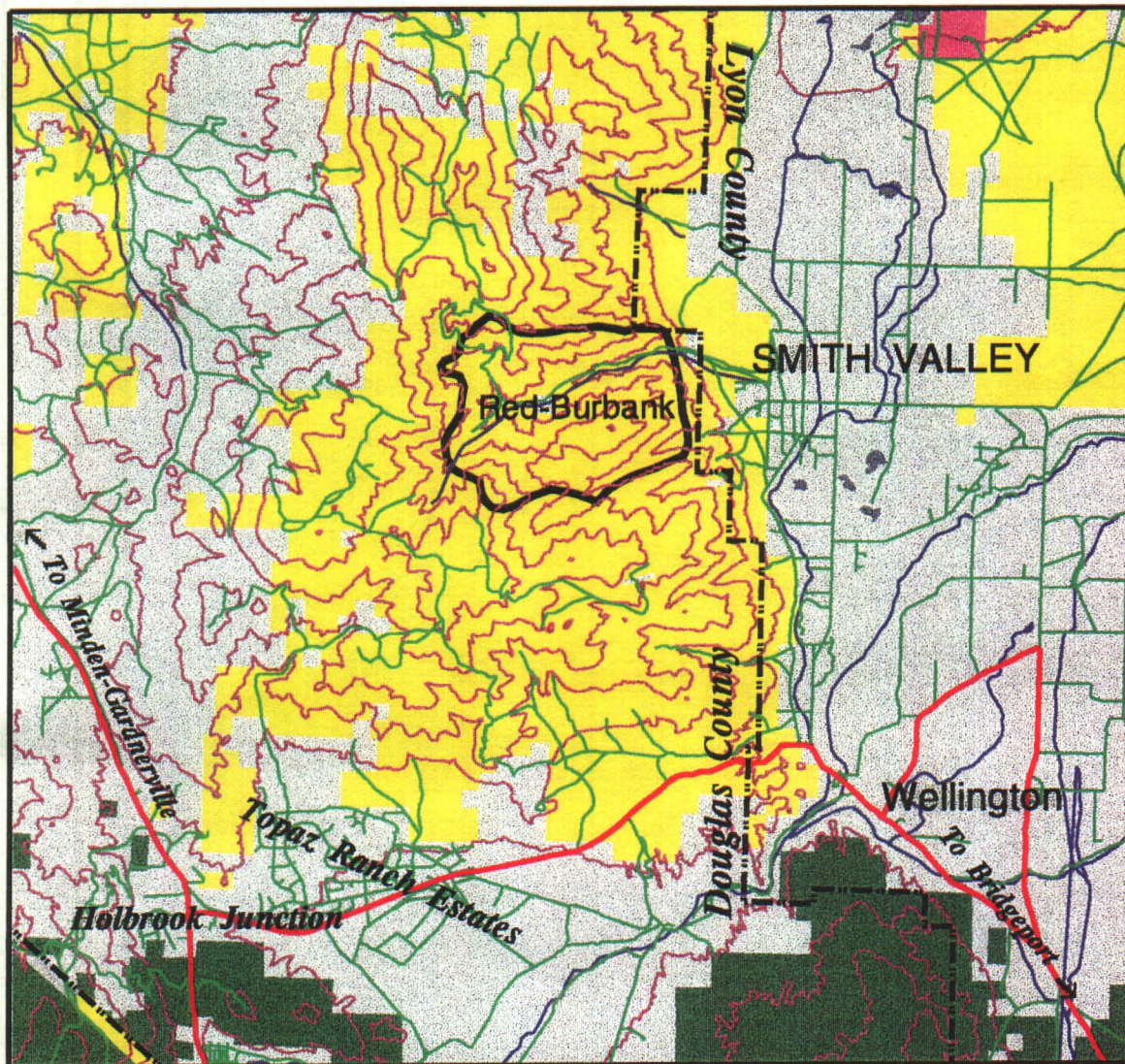
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- I. Maps
- II. Wildlife Habitat Characteristics - Red Canyon/Burbank Canyon
- III. Functionality - Red and Burbank Canyon Creeks
- IV. Ecological Sites





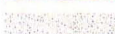

Red-Burbank Allotment General Location - Map No. 1



MAP LEGEND

-  County Boundary
-  Main Roads
-  Secondary Roads
-  Perennial Streams
-  Contour Lines
-  Allotment Boundary

LAND STATUS

-  BLM
-  County Parks
-  Fish and Wildlife Service
-  Nevada State Lands
-  Private Lands
-  Forest Service

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1 0 1 2 3 Miles



I. INTRODUCTION

This document contains the Red Burbank Allotment Evaluation, prepared by the staff of the Carson City Field Office (Refer to Map No. 1 on page *iii* for the general location of the allotment). Prior to 1996, the Carson City District was known as that, a District, which was divided into two Resource Areas (Walker and Lahontan). In 1996, the Resource Areas were consolidated into a single entity, the Carson City Field Office. Under the previous organization, the Red-Burbank Allotment was in the Walker Resource Area.

On February 12, 1997, Secretary of the Interior Bruce Babbitt approved the Standards and Guidelines for the Carson City and Winnemucca Field Offices. These standards for rangeland health and the guidelines for grazing management in these field offices were developed in consultation with the Sierra Front - Northwestern Great Basin Area Resource Advisory Council (RAC) to help ensure productive, sustainable rangelands. The implementation process for the standards and guidelines occurs in two separate steps. The first is the determination that the terms and conditions of grazing permits ensure compliance with the Standards and Guidelines. In the absence of other information, it is the position of the Bureau of Land Management (BLM) that terms and conditions of existing permits are in conformance. The second process is the allotment evaluation. Therefore, reference is made within this document to the standards and guidelines developed for the Red-Burbank Allotment¹.

A. Purpose

Prior to 1992, the Carson City Field Office had scheduled allotment evaluations on all "I"² category allotments. In June of 1992, the priority for the completion of allotment evaluations was changed by the issuance of the Strategic Plan for Management of Wild Horses and Burros on Public Land which required that appropriate management levels (AML's) be established in all Herd Management Areas (HMA's) within the jurisdiction of the Field Office.

¹ BLM (1997), copies are available at the Carson City Field Office.

² Final Grazing Management Policy issued in 1982 required that allotments be classified as either I, M, or C. "I" was applied to allotments in most need of improvement or needing more intensive management. "M" referred to allotments which had established proper management and wished to maintain current management. "C" referred to allotments of limited productivity, dominated by private lands, or other reasons that necessitated more "custodial" management.

The purpose of this evaluation is to determine if current grazing practices are consistent with attainment of Land Use Plan (LUP) objectives, allotment specific objectives and the standards and guidelines as set forth by RAC. If current grazing practices are not consistent with attainment of these objectives, appropriate changes in management will be identified and implemented.

- B. **Allotment Name and Number:** Red-Burbank Allotment - 03581 (Refer to Map No. 2 for more detailed information).
- C. **Permittee:** There is currently no Term Permit. The past permittee of record was Donald Shehady.
- D. **Evaluation Period:** The evaluation period is from 1985 through the summer of 1998.
- E. **Selective Management Category:** The allotment is classified as category "I".

II. **INITIAL STOCKING LEVEL**

A. **Livestock Use**

1. **Total Number Of Animal Unit Months Of Specified Livestock Grazing**

The current total number of animal units of specified livestock grazing is 180 AUMs for cattle. The allotment has a public land rating of 100%.

2. **Period of Use and Pasture System**

The period of use runs from 05/01 to 08/31. There are no fenced pastures.

B. **Wild Horse Use**

1. **Herd Management Area in the Allotment**

Complete removal of wild horses was identified for the Southern Pine Nut Herd Area in the Land Use Plan (1985). Approximately one-half of the allotment lies within this area. The area was declared "horse free."

2. **Appropriate Management Levels**

The Pine Nut Multiple Use Decision, dated August 18, 1995, established the AML for wild horses in the Pine Nut HMA. The HMA is located in the northern portion of the Pine Nut Mountain Range, which excludes the Red-Burbank Allotment. The southern portion of the HMA was reaffirmed as being "horse free."

C. **Wildlife Use**

1. **Mule Deer (*Odocoileus hemionus*)**

a. **Existing Numbers**

This big-game species inhabits both summer and winter ranges within the allotment (Refer to Map No. 3). The Walker Resource Management Plan (RMP - 1985) identified the following in regards to existing numbers:

<u>NUMBER OF ANIMALS</u>	<u>SEASON OF USE</u>	<u>MONTHS</u>	<u>AUMS</u>
101	05/15 TO 03/15	10.0	252

b. **Key and Crucial Areas**

Key summer range is contained within the allotment. Very little key winter range is present, primarily being located at the lower elevations on the eastern edge of the Pine Nut Mountains. No critical deer habitat exists in the allotment.

2. **Other Key or Crucial Management Areas**

a. **Aquatic Habitats**

Red Canyon Creek provides 3.5 miles of fishable stream in its lower reaches, located in the Red-Burbank allotment. It is extremely small with limited streamflow and supports a low population level of brook trout (*Salvelinus fontinalis*).

b. **Other Habitat**

A complete inventory of seasonal sage grouse (*Centrocercus urophasianus*) use areas and strutting

grounds is not available. They rely heavily on meadow riparian areas for nesting and brood rearing. This type of habitat is present in the allotment.

3. Wildlife - General

A variety of animal species typical of the mountains and alluvial fans of the Great Basin can be found in the Red-Burbank Allotment. Some of the more common furbearing species are coyote (*Canis latrans*), bobcat (*Felis rufus*), badger (*Taxidea taxus*), mountain lion (*Felix concolor*) and kit fox (*Vulpes macrotis*).

Upland game species include mountain cottontail (*Sylvilagus nuttallii*), desert cottontail (*Sylvilagus audubonii*), mourning dove (*Zenaidura macroura*), California quail (*Lophortyx californicus*), Mountain quail (*Oreortyx picta*) and chukar (*Alectoris chukar*).

Raptors include the prairie falcon (*Falco mexicanus*), red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chrysaetos*), and American kestrel (*Falco sparverius*).

Also present are a host of small mammals, birds, and reptiles. Refer to Appendix II for a more in depth discussion of wildlife species associated with the various vegetation types.

III. ALLOTMENT PROFILE

A. Description

The Red-Burbank Allotment is approximately 5 miles northwest of Wellington, Nevada, in the Pine Nut Mountains. Approximately two thirds of this allotment is located in the Burbank Canyons Wilderness Study Area (WSA), which is designated as a Scenic Area (Refer to Map No. 2).

1. Acreage and Land Status

Approximately 4,662 acres of public land is contained in the allotment along with 40 acres of deeded land. There are no Native American Allotted Lands located in the allotment (Refer to Map No. 2).

2. Topography, Elevation and Soils

The area is characterized by steep canyons with important riparian habitat located along Red Canyon and Burbank Canyon creeks. Elevations range from 5200 feet located at the mouth of Red Canyon to 8951 feet atop Eagle Mountain.

The soils are typical of the Western Great Basin and exhibit wide ranges in depth, drainage class, percent surficial and subsurface rock fragments, pH, and other diagnostic soil properties. Accelerated erosion, where present in the allotment, is mostly confined to small areas adjacent to seeps, springs, streams, shallow/lithic soils and steep slopes.

3. Water Resources

Appendix III contains the results of the 1988 streambank survey and a brief discussion of the functionality³ for Red and Burbank Canyon creeks. The Bureau's Riparian - Wetland Initiative for the 1990's, published in 1991, established four nationwide riparian-wetland goals (Refer to Appendix II for narrative). Riparian Area Management Technical References 1737-9 (1993) and 1737-11 (1994) provide the methodologies used to determine functionality of lotic and lentic riparain systems.

4. Vegetation

Specific ecological sites and plant species are identified in Appendix IV. A large portion of the allotment is pinon-juniper (*Pinus edulis and Juniperus monosperma*) woodlands, which are predominantly located on the lower and mid-level slopes of the Pine Nut Mountains. The higher mountain elevations are primarily

³Lotic (flowing water) riparian-wetland areas are functioning properly when adequate vegetation, landform, or debris is present to: 1) dissipate energies associated with wind action, wave action, and overland flow from adjacent sites, thereby reducing erosion and improving water quality; 2) filter sediment and aid floodplain development; 3) improve flood-water retention and ground-water recharge; 4) develop root masses that stabilize islands and shoreline features against cutting action; 5) restrict water percolation; 6) develop diverse ponding characteristics to provide the habitat and water depth, duration, and temperature necessary for fish production, waterbird breeding, and other uses; and 7) support greater biodiversity. Lentic riparian-wetland resources are defined the same way as lotic riparian-wetland resources, i.e., resources whose capabilities and potentials are defined by the interaction of three physical components: 1) vegetation, 2) landform-soils, and 3) hydrology.

low sagebrush (*Artemisia arbuscula*) intermixed with patches of mountain mahogany (*Cercocarpus ledifolius*). The lower foothills and the alluvial fan are a combination of big sagebrush (*Artemisia tridentata*), Anderson peach (*Prunus andersonii*), and rabbitbrush (*Chrysothamnus sp.*).

5. Range Improvement Projects

Two gap fences have been maintained near the mouths of Red and Burbank Canyons. Both are located (at least in part) within the Burbank Canyons WSA. In addition, a water development is in the upper reaches of Burbank Canyon. Many of the water projects located in the Pine Nut Mountains date back to the early 30's when multiple sheep operations were in existence.

B. Allotment Specific Objectives

The applicable objectives identified in the LUP are as follows:

1. Short Term

- a. Initially, authorize livestock use at the three year average licensed use level of 180 AUMs. There will be no initial change in grazing use.

2. Long Term

- a. Manage wildlife habitat for a long term goal of providing reasonable numbers of big game.
- b. Implement range improvement projects to protect and improve big game, sage grouse, and riparian habitat. This includes protection of 10.7 miles of fishable rivers and creeks. One mile was identified on Red Canyon Creek. Improve or maintain upland riparian ecological sites to late seral stage.
- c. The entire 13,395 acres of Burbank Canyons WSA will be designated as a Scenic Area.
- d. Manage big game habitat to fair to good condition to support big game populations (140 mule deer for 10 months from 05/15 through 03/15 for a total of 350 AUM's).

- e. Protect and maintain existing and potential fisheries habitat in good conditions along 3.5 miles of Red Canyon Creek by September, 1996. Limit use on streamside vegetation to 45%.
- f. Continue rangeland and watershed monitoring to determine if management objectives are being met and what future adjustments in grazing use are necessary.
- g. Maintain an acceptable allowable use level on key species.

C. Key Species Identification

1. Uplands

Decreaser⁴ perennial grasses: Indian ricegrass (*Oryzopsis hymenoides*), needlgrasses (*Stipa sp.*).

Increaser⁵ perennial grasses: Bottlebrush squirreltail (*Sitanion hystrix*), bluegrasses (*Poa sp.*), Basin wildrye (*Elymus cinereus*), and creeping wildrye (*Elymus triticoides*).

2. Riparian

Meadow grasses and grasslike: Nevada bluegrass (*Poa nevadensis*), Kentucky bluegrass (*Poa pratensis*), sedges (*Carex sp.*), basin wildrye, creeping wildrye, timothy (*Phleum sp.*), tufted hairgrass (*Deschampsia caespitosa*), and rushes (*Juncus sp.*).

Shrubs and trees: Coyote willow (*Salix exigua*), Pacific tree-willow (*Salix lasiandra*), Wood's wild rose (*Rosa woodsii*), golden currant (*Ribes aureum*), and silver buffaloberry (*Shepherdia argentea*).

Other: Quaking aspen (*Populus tremuloides*), Black cottonwood (*Populus trichocarpa*) and antelope bitterbrush (*Purshia tridentata*).

⁴ Decreaser - those plants that will decline in frequency under improper grazing (generally the more palatable species).

⁵ Increaser - those plants that will increase in frequency under improper grazing (generally the less palatable species).

D. Threatened and Endangered Species

1. Vegetation

No Sensitive⁶ species are known to occur in the allotment.

2. Wildlife

Sensitive species that may occur in the allotment are the pygmy rabbit (*Brachylagus idahoensis*), the Fletcher dark kangaroo mouse (*Microdipodops megacephalus nosutus*) and the spotted bat (*Euderma maculatum*).

The spotted bat spends daylight hours and reproduces in caves and among the rocks on cliffs and talus slopes. It generally feeds on flying insects in the vicinity of juniper/grasslands and tall sagebrush. The pygmy rabbit reproduces and feeds in sagebrush/grasslands and riparian habitats. The Fletcher dark kangaroo mouse is nocturnal, feeds mostly on seeds, but takes some insects. It is found in association with fine sandy soils with sagebrush and rabbitbrush. Since these habitats occur in the Pine Nut Mountains, there is a possibility that these species occur in the allotment.

Bald Eagles (*Haliaeetus leucocephalus*) inhabit the lower four (4) miles of Red Canyon Creek which is within a bald eagle wintering area.

No other threatened, endangered, candidate⁷, or sensitive species are known to inhabit the allotment.

IV. MANAGEMENT EVALUATION

A. Actual Use

The transfer of grazing privileges from Vernon F. Bryan to Donald Shehady was approved on May 9, 1988. Use from the 1988 through the 1990 grazing season was authorized as nonrenewable, pending

⁶State Sensitive species include plants and animals on which currently existing information indicates that federal listing may be warranted, but which substantial biological information to support a listing is lacking.

⁷Candidate species are those plant and animal species for which the United States Fish and Wildlife Service has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act.

completion of an allotment evaluation. The purpose of this evaluation is to determine if Red Canyon Creek is protected as a fishable stream in accordance with the Walker RMP. Since any decision that will affect livestock grazing in Red Canyon could effect management in the entire allotment, this evaluation will consider the entire allotment.

GRAZING YEAR	LIVESTOCK AUMS
1998	0
1997	0
1996	0
1995	70
1994	82
1993	69
1992	62 1/
1991	100
1990	180 2/
1989	180 1/ 2/
1988	180 2/
1987	0
1986	0
1985	0

- 1/ Based on actual use data submitted by the permittee.
- 2/ Part of this use was made in the Spring Gulch Allotment due to livestock drift. This was verified during use supervision checks.

During the 1988 grazing season, Mr. Shehady was authorized to graze between 06/01 to 09/31 on a temporary nonrenewable basis. In 1989 and 1990, Mr. Shehady ran 25 cattle in Red Canyon and 20 cattle in Burbank Canyon. Cows with calves were in Burbank Canyon and heifers were in Red Canyon. The turnout date was delayed until 06/01 in 1988 and 07/01 in 1989. For 1991, 1993, and 1995, all cattle were grazed in Burbank Canyon. For 1992 and 1994, all cattle were grazed in Red Canyon.

B. Precipitation

The annual precipitation shown in the following table is from Smith, Nevada, which is the closest station with consistent and reliable data. The mean annual precipitation is 6.87 inches. The Smith Valley Recording Station is located at an elevation of 5000 feet, which is lower than most of the ecological sites in the Red-Burbank Allotment. Due to the effects of orographic lifting⁸, sites at higher elevations will have higher annual precipitation than Smith Valley. This was documented throughout the state in the *Nevada Watershed Studies* (Houng-Ming Joung, etal, 1983).

<u>YEAR</u>	<u>PRECIPITAION (INCHES)</u>
1997	5.79*
1996	9.49
1995	13.22
1994	5.37
1993	5.74
1992	4.26
1991	5.86
1990	3.80*
1989	6.12
1988	3.95
1987	7.43
1986	7.06
1985	5.27*

* For 1985 ten months of data was available and for 1990 and 1997, eleven months of data was available.

⁸ Orographic lifting - means by which to estimate precipitation levels at higher elevations, particularly mountain ranges.

C. Utilization

Three key areas were established in 1988 to photographically document impacts of cattle grazing on riparian areas in Red Canyon. Initially, photos were taken at least three times during the year: at the time of establishment, half way through the grazing season, and at the end of grazing. Photos in 1989 and 1990 were taken at the end of the grazing season.

Utilization cages were initially placed on two of the key areas. However, these have either been moved or destroyed by unknown persons every year since 1989.

1. Livestock

The table below shows a breakdown of data by utilization class derived from use pattern mapping. For the purpose of this evaluation, the following utilization classes are used:

Slight	=	0-20% (midpoint = 10%)
Light	=	21-40% (midpoint = 30%)
Moderate	=	41-60% (midpoint = 50%)
Heavy	=	61-80% (midpoint = 70%)
Severe	=	81-100% (midpoint = 90%)

Year	Slight	Light	Moderate	Heavy	Severe	Severe + Heavy
1988	96 1/	<1	0	<1	3	4
1990	96	0	0	1	3	4

1/ A "No Use" class was included in 1988 as per Technical Reference 4400-3, (1984). All the 96% shown here was recorded as "no use."

The heavy and severe cattle use shown above was concentrated along Red Canyon and Burbank Canyon Creeks. A majority of the allotment is too steep for cattle grazing (which is supported by the high percentage of "slight use" in the above figures). Other observations made during the 1988 and 1990 use pattern mapping are as follows:

- 1) A mineral block was placed on the meadow in 1988 (Key Area No. 2). The permittee removed the block during the

- 1989 and 1990 grazing seasons.
- 2) Severe use on stream banks was concentrated mainly on areas accessible to watering livestock. Currently, much of the stream is protected by thick brush (physical destruction of brush from trampling opened up some areas along the creek in 1990).
 - 3) Collapsing stream banks and hoof damage on meadows ("punching") were noted on areas of severe use. In 1990, this damage had greatly accelerated and head cutting was observed (refer to photos).
 - 4) Cattle use along Red Canyon Creek does not go past where the allotment boundary is currently located due to the steep rocky streambanks and thick brush. A 0.9 mile portion of the creek west of the allotment boundary (i.e. in Spring Gulch Allotment) is ungrazed. The headwaters of Red Canyon Creek in Spring Gulch Allotment (west of this ungrazed portion) is currently being grazed by sheep.
 - 5) A considerable amount of cattle drift occurred up Burbank Canyon into the Spring Gulch Allotment. Heavy use levels were recorded by this unauthorized grazing.

Use supervision trips to the allotment during the 1991 through 1995 grazing seasons found a similar use pattern to those in 1988 and 1990. The riparian zones were being affected, though not to the extent of these earlier grazing periods. This was due in part to lower numbers of animals grazing and alternating the areas of use between Burbank and Red Canyons (Refer to Livestock Use, IV.A.).

2. Wildlife (Mule Deer)

Allotment specific data is not available on mule deer numbers to allow a comparison against projected reasonable numbers. Though the Division is aware that some use of this area is made by mule deer, it is not significant enough to warrant a monitoring effort.

3. Wild Horses

Red-Burbank is a horse free allotment.

D. Trend

1. Frequency

There are no frequency studies in the allotment. A Parker Cluster study and photo plot was established in the allotment. Since short term grazing impacts are being considered in this evaluation, the trend studies were not analyzed.

2. Photo Plots

One photo plot is located in the allotment. It was established in 1976 and has been photographed seven times. The area is located outside the riparian zone and it has been determined that trend has remained static over the evaluation period.

E. Ecological Status

An order 3 soil survey⁹ has been completed in the Walker Planning Unit which encompasses the Red-Burbank allotment. Ecological sites correlated from soil data are shown in Appendix IV. Although ecological sites were identified during the soil survey, ecological status¹⁰ was not determined.

F. Wildlife Habitat

Other than the Red Canyon Creek Stream Survey (refer to following section), no studies have been established in the allotment to monitor specific aspects of wildlife habitat.

⁹Moderately intense survey, corresponding to the range sites.

¹⁰ Ecological status is defined as the present state of vegetation of a range site in relation to the potential natural community (PNC) for the site. Ecological status is use dependent. It is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a plant community resemble that of the potential natural community. The four (4) ecological classes correspond to 0-25, 26-50, 51-75, and 76-100 percent similarity to the potential natural community and are called early seral, mid seral, late seral, and potential natural community, respectively.

G. Riparian Habitat

On July 19 and 20, 1988, 3.56 miles of Red Canyon Creek were surveyed using procedures found in Nevada State Office Manual Supplement 6671. It was determined that this data offers little in the way of short term impact analysis. A summation of the data from all the transects resulted in the values shown below for Priority "A": limiting factors. Appendix III shows stream survey data by survey station.

Percent of total stream width in pools	=	32
Pool-riffle ratio, percent optimum	=	64
Pool quality, percent optimum	=	54
Percent stream bottom with desirable materials	=	93
Bank cover, percent optimum	=	92
Bank stability percent optimum	=	92
Percent of habitat optimum	=	79

H. Range Survey Data

The 1956 range survey determined that a total of 199 AUM's of cattle forage existed in the Red-Burbank Allotment. Due to a voluntary reduction, the allotment was adjudicated at 180 AUM's.

V. CONCLUSIONS

A. Red Canyon Creek

As stated previously, the main purpose for this evaluation is to determine if Red Canyon Creek is being protected as a fishable stream (refer to Section IV, A.). Restated below are the three objectives from Section III that relate to the protection of Red Canyon Creek.

- 1) Implement range improvement projects to protect and improve big game, sage grouse, fisheries, and riparian habitat. This includes protection of 10.7 miles of fishable rivers and creeks. One mile was identified on Red Canyon Creek.
- 2) Protect and maintain existing and potential fisheries habitat along 3.5 miles of Red Canyon Creek by September, 1996.

The stream survey data was inconclusive based on two limiting factors: (1) the data was collected between July 19 and 20, 1988, which was less than half-way through the scheduled grazing season; and (2) even if the results were decisive, they would be

based on one year of grazing after three years of nonuse.

The photographs taken on key area photo stations and during the use pattern mapping show collapsing streambanks, severe reduction of streamside vegetation, head cutting, and hoof damage to meadows (punching) having occurred in areas of heavy and severe use (i.e., the banks are unstable and there has been a reduction of cover). This damage had greatly accelerated by 1990.

Severe use levels were recorded from the mouth of Red Canyon to 0.5 miles east of the allotment boundary. Nine tenths of a mile of the creek is ungrazed west of the allotment boundary. This means that 1.4 miles of the creek is being protected, which does not meet the 3.5 miles requirement.

Lastly, the Interim Management Policy for Lands Under Wilderness Review (IMP) as it addresses range improvement construction within Wilderness Study Areas, would likely preclude construction of range improvements.

The objectives have not been met.

3. Limit utilization of streamside vegetation to 45%.

Use pattern mapping has shown that utilization levels on streamside vegetation continually exceeded 45%. It was also shown that cattle concentrate on the streamside habitat due to the steep topography in the remainder of the allotment.

The objective has not been met.

B. Burbank Canyons WSA

Grazing is a "grandfathered" use allowed by section 603 of the Federal Land Policy and Management Act (FLPMA). The BLM Manual Handbook H-8550-1 (Interim Management Policy and Guidelines for Lands Under Wilderness Review) states the following:

"Grazing that existed on the date of approval of FLPMA (October 21, 1976) may continue in lands under wilderness review in the same manner and degree as on that date, **even if this impairs wilderness suitability**. These are 'grandfathered' uses, protected by the 'grandfather' clause of section 603 of FLPMA. **These uses must be**

regulated to ensure that they do not cause unnecessary or undue degradation of the lands."

To be in compliance with the IMP, it must be shown that 1) negative impacts from grazing have not exceeded levels experienced in 1976, and 2) that unnecessary or undue degradation is not occurring in the Burbank Canyons WSA.

Cattle were grazed at the maximum level in 1976, just as they were in 1988. Use pattern mapping done in 1976 showed that 4% of Red Burbank Allotment along Red Canyon and Burbank Canyon creeks received heavy and severe use. The 1988 data also showed that 4% of the allotment located along the creeks received heavy and severe use. Based on this information, it can be concluded that the impacts of grazing experienced in 1988 were the same as those received in 1976. It can also be concluded that unnecessary degradation is occurring.

This objective has not been met.

C. Burbank Canyons Scenic Area

In accordance with the LUP, all of the Burbank Canyons WSA has been identified as a Scenic Area. This means that the area will be managed under Visual Resource Management Class II¹¹.

The Class II designation could have an impact on livestock grazing. As per BLM Manual Handbook H-8410-1, "The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape."

The riparian areas along Red Canyon and Burbank Canyon Creeks form the distinctive characteristics in the landscape protected by the Class II designation. For the purpose of this evaluation, protection of riparian areas will meet the intention of the Class II objective.

¹¹ Class II - "Changes in the basic elements (form, line, color, texture) caused by a management activity should not be evident in the characteristic landscape. A contrast may be seen, but should not attract attention." (BLM Manual 8411.6)

It has already been shown that the objectives relating to Red Canyon Creek have not been met. Use pattern mapping and the related photos show that the same problems are occurring in Burbank Canyon.

This objective has not been met.

D. Authorizing Livestock Use

Initially authorized livestock use at the three year average licensed use level of 180 AUMs. There will be no initial change in active preference.

There were 180 AUM's licensed during the 1988 through 1990 grazing seasons. Subsequently, the amount of use has been substantially less, with the period of 1996 through 1998 resulting in no use. During the period of 1991 through 1995, the permittee voluntarily kept numbers below the normal operation, so as to evaluate the potential effectiveness of cattle grazing treatments discussed under the Technical Recommendations section of this evaluation.

This objective has not been met.

Maintain an acceptable allowable use level on key species.

As shown in A above, the 45% use level established for streamside vegetation has been exceeded.

The objective has not been met.

E. Other Allotment Objectives

Manage wildlife habitat for a long term goal of providing reasonable numbers of big game.

Manage big game habitat to fair to good condition to support big game populations (140 mule deer for 10 months from 05/15 to 03/15 for a total of 350 AUMs).

The riparian areas are extremely important to big game. Though the impacts by cattle grazing have been adverse, conditions have remained suitable to provide for reasonable numbers of big game. This conclusion is based on the amount of area being impacted along the riparian zones and also comparing the total amount of habitat contained within the allotment.

The objective is being met.

The entire 13,395 acres of Burbank Canyon WSA will be designated as a Scenic Area.

Through the Walker RMP and subsequent Record of Decision (1986), the entire acreage was designated as a Scenic Area.

The objective has been met.

Continue rangeland and watershed monitoring to determine if management objectives are being met and what future adjustments in grazing use are necessary.

Monitoring data continues to be gathered.

This objective has been met.

VI. TECHNICAL RECOMMENDATIONS

Discussed below are three alternatives along with their advantages and disadvantages. It is important to first address the various factors restricting cattle use of the Red-Burbank Allotment.

Because of the steep topography, cattle will continue to concentrate along Red Canyon and Burbank Canyon Creeks. Cattle prefer the riparian areas during the warmer and drier months of the year. Based on the analysis of climatological data from Smith, Nevada, the lowest precipitation is expected between April and October. Maximum temperatures can be expected between June and September. This coincides with the current period of use (05/01 to 08/31).

There is more danger of hoof damage to streambanks in the spring (March to May) due to increased soil moisture. Since this is a period of peak stream runoff, the streambanks will be most susceptible to erosion.

Due to the steep canyon walls, sunlight will be restricted from the bottom of Red and Burbank Canyons from late fall to early spring. In 1989, snow remained from late October to early March, covering much of the livestock forage. This scenario was repeated during 1995, 1996, and 1997. Temperatures in the canyon bottom are generally cooler because of this shading affect, which may cause greater stress on cattle during periods of extreme cold. These factors may preclude grazing in fall and winter.

If the current period of use is maintained, it is recommended that the period of cattle grazing be followed by a minimum of one season of rest to allow for the recovery of riparian and fisheries habitat. Use should be split between Red and Burbank Canyons.

A. Graze Cattle at a Maximum Level Followed by a Year of Rest

The permittee would be allowed to graze at the maximum level (180 AUMs) from 05/01 to 07/15. Use would be split between the two canyons for the grazing year. This would be followed by complete rest in the allotment the following year:

BURBANK CANYON	GRAZE	REST	GRAZE	REST
RED CANYON	GRAZE	REST	GRAZE	REST

YEAR 1 YEAR 2 YEAR 3 YEAR 4

To control livestock drift into Smith Valley, the fences at the mouth of Red and Burbank Canyons will have to be maintained under a Cooperative Agreement. Due to traffic up Red Canyon, a cattleguard should be installed. Additional fencing should be constructed up Burbank Canyon on the western allotment boundary and at the headwaters of Red Canyon Creek. The alternative to these projects would be an active compliance and unauthorized use program by Field Office personnel.

An allotment evaluation should be completed four years after the implementation of this alternative.

Advantages: The period of rest would be advantageous in maintaining streambank stability and allow for recovery after grazing.

Disadvantages: Construction and maintenance of the range

improvement projects by the Bureau and the permittee along with the restrictions associated with construction activities within Wilderness Study Areas.

B. Graze Cattle at Half the Maximum Level Every Year

The permittee would be allowed to graze half the maximum level (90 AUMs) in one canyon from 05/01 to 07/15 while the other canyon is rested completely. The following year, this treatment is reversed:

BURBANK CANYON	GRAZE	REST	GRAZE	REST
RED CANYON	REST	GRAZE	REST	GRAZE

YEAR 1 YEAR 2 YEAR 3 YEAR 4

This alternative would include the same projects as addressed in the previous alternative. The alternative to these projects would be an active compliance and unauthorized use program by Field Office personnel. An allotment evaluation should be done four years after the implementation of this alternative.

Advantages: The rest periods would be advantageous in maintaining streambank stability and allowing for recovery after grazing. This will allow the permittee to graze every year, although at a reduced preference.

Disadvantages: Construction and maintenance of the range improvement projects by the Bureau and the permittee along with the restrictions associated with construction activities within Wilderness Study Areas.

C. Convert the Allotment from Cattle Grazing to Sheep Grazing

Use in the allotment would be converted from cattle to sheep. The total amount of grazing use (180 AUMs) would be available each year. Use would take place in both Burbank and Red Canyon. Use would be available anytime between 05/01 and 07/15. By limiting the use period to an ending date of 07/15, use in the riparian zone before the "hot season" would occur, providing adequate time for regrowth and regeneration.

An allotment evaluation should be completed four years after the implementation of this alternative.

Advantages: Sheep are easily herded and can be kept off the riparian zone for most of the grazing period. Use would be more evenly distributed since sheep can use terrain that cattle cannot. This alternative would not require the construction and maintenance of any additional range improvement projects.

Disadvantages: Sheep may not be able to keep portions of the stream channel from being overcrowded from deciduous vegetation. This may restrict access to the creeks.

D. Graze the Allotment with Sheep on a Nonrenewable Basis

Use in the allotment by sheep could be a management tool authorized on a nonrenewable basis, in conjunction with cattle grazing under the alternatives (A. or B.) above. The total number of animal unit months of authorized use (180 AUMs) and the period of use (05/01 - 07/15) would remain the same. This alternative would include the same projects as addressed under the alternatives (A. and B.) above. The alternative to these projects would be an active compliance and unauthorized use program by Field Office personnel.

Advantages: Sheep are easily herded and can be kept off the riparian zone for most of the grazing period. Use would be more evenly distributed since sheep can use terrain that cattle cannot.

Disadvantages: Construction and maintenance of the range improvement projects by the Bureau and the permittee along with the restrictions associated with construction activities within Wilderness Study Areas.

E. Modifications to the Term Grazing Permit

The following Terms and Conditions will be made a part of any Term Permit authorizing use in the Red-Burban Allotment.

1. Grazing Management shall be authorized in a manner that will make progress towards meeting the Standards as set forth by the Sierra Front-Northwestern Great Basin RAC, 1997.
2. Pursuant to 43 CFR 10.4(g) you must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of

human remains, funerary items, sacred objects, or objects of cultural patrimony. Pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.

3. Salt and/or supplements will be placed at least 1/4 mile from live waters (spring/streams), and outside of associated riparian areas, permanent livestock watering facilities, wet or dry meadows and aspen stands. Also salt/and or supplements will not be placed in known historic properties.

4. It is your responsibility to maintain all assigned range improvements in good working order and an aesthetic state. In the event that the improvements are not in good working order prior to the authorized period of use, livestock will not be allowed to enter the allotment until the needed repairs are completed.

5. Bureau personnel have the right of ingress and egress over any lands you own or control.

6. In the event that sheep grazing is allowed in the allotment, night bedding of sheep will be located at least 1/4 mile from live waters, streams, springs, seeps, associated riparian areas, wet or dry meadows, and aspen stands.

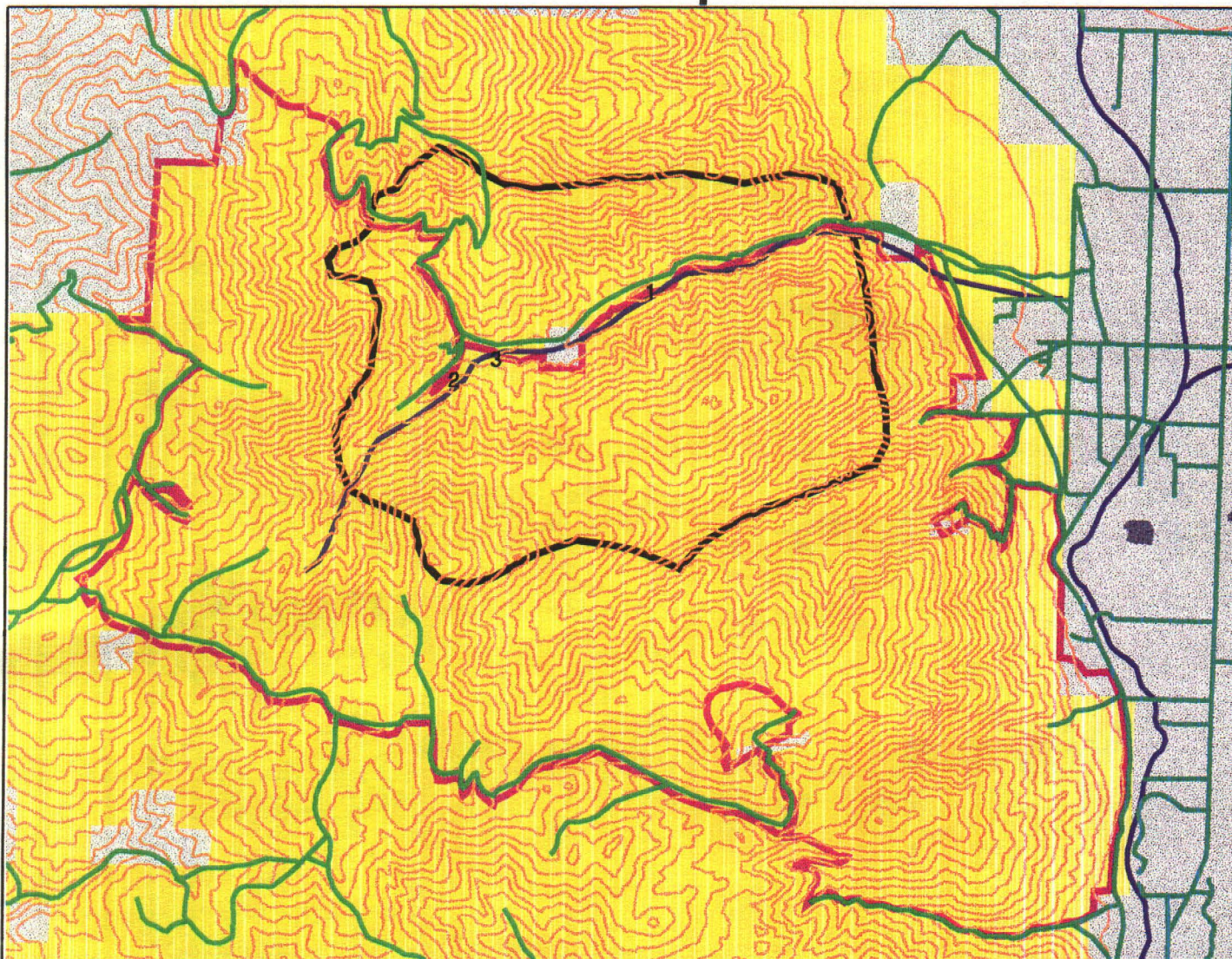
F. Noxious Weed Inventory

The Allotment will be inventoried for noxious weeds initially before the year 2003 and will be monitored every five years thereafter.

APPENDIX I

MAP NO. 1	GENERAL LOCATION (Page iii)
MAP NO. 2	LAND STATUS, WILDERNESS STUDY AREA, KEY AREA PHOTO PLOT LOCATIONS
MAP NO. 3	WILDLIFE USE AREAS (MULE DEER, QUAIL)

Red-Burbank Allotment Map No. 2



MAP LEGEND

- 1 Key Area Photo Plots
- WSA Boundary
- Secondary Roads
- Perennial Streams
- Contour Lines
- Allotment Boundary

LAND STATUS

- BLM
- County Parks
- Fish and Wildlife Service
- Nevada State Lands
- Private Lands
- Forest Service

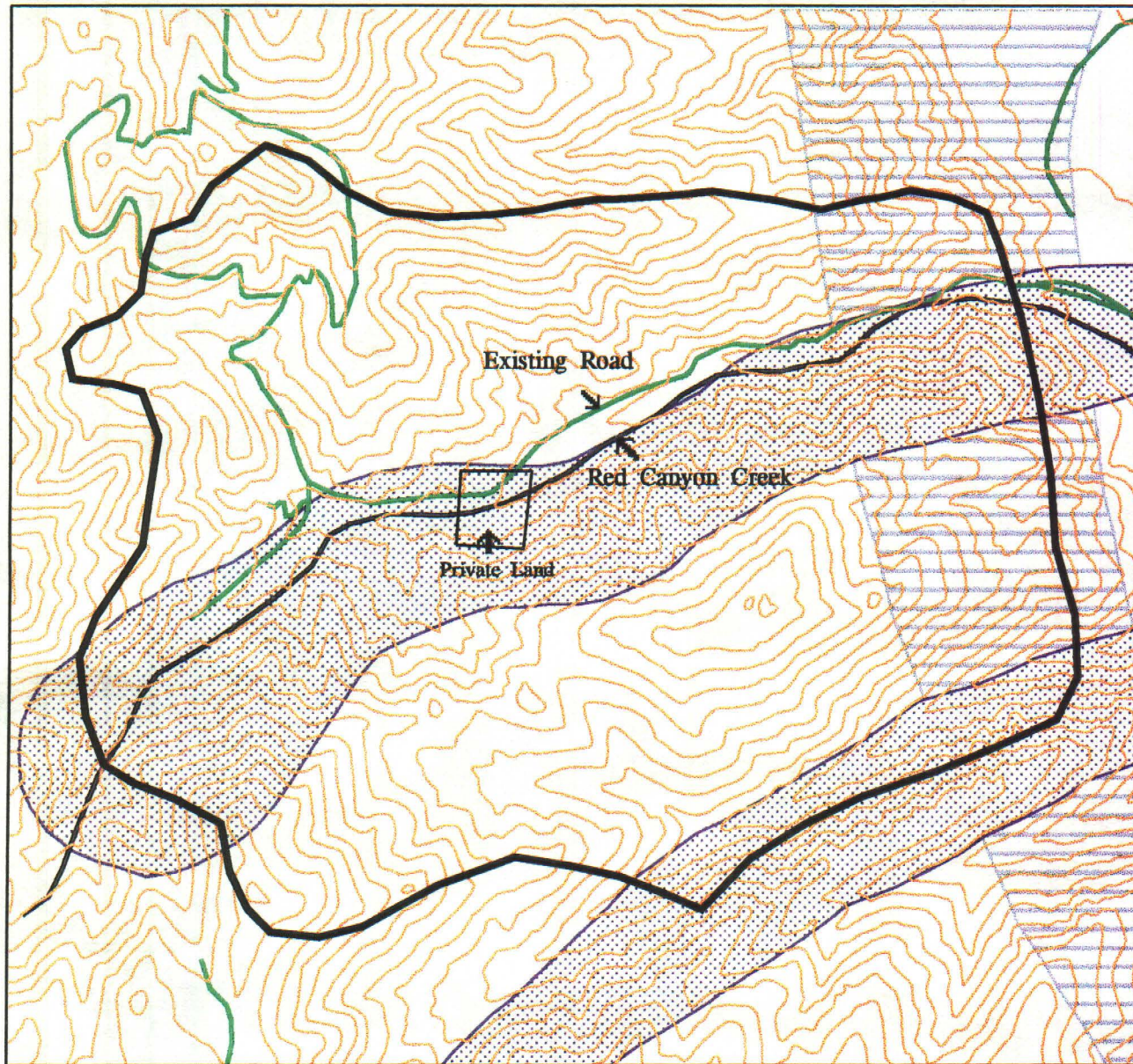


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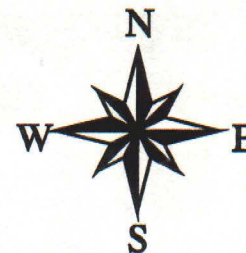


Red-Burbank Allotment Map No. 3



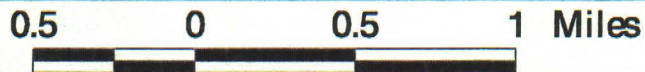
MAP LEGEND

-  Key Mule Deer Winter Area
-  Mountain Quail Habitat
-  Secondary Roads
-  Perennial Streams
-  Contour Lines
-  Allotment Boundary



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APPENDIX II

Wildlife Habitat Characteristics - Red Canyon/Burbank Canyon

Wildlife habitats in the riparian zone of the two canyons fall into four distinct types: Tall shrub, Aspen/Cottonwood, wet meadow, and dry meadow. Types are separated primarily by habitat structure.

The tall shrub type contains willow, buffalo berry, and chokecherry up to fifteen feet tall. The understory often consists of woods rose and scattered red osier dogwood which provides a basic two layer habitat structure. Species most dependent on this type are those which make their nests or feed or roost in the branches of dense shrubbery. Bird species most commonly found in this type can include the following:

Yellow Warbler	Yellow-breasted chat	Yellow-rumped Warbler
Wilson's Warbler	Common Yellowthroat	Audubon's Warbler
Rufous-sided Towhee	Green-tailed Towhee	House Finch
Song Sparrow	Black-billed Magpie	Great-horned Owl
Long-eared Owl	House Wren	Mountain Quail
Scrub Jay		

The Aspen/Cottonwood type is structurally dominated by aspen or cottonwoods up to fifty plus feet tall. Often a two layer understory of tall shrubs is present in the narrow patches of habitat which allow greater sun infiltration. This habitat type will likely serve as habitat for all of the above species as well as additional species which prefer the taller habitat structure or are cavity nesters. These species include the following:

American Robin	Hermit Thrush	Western Bluebird
Mountain Bluebird	White-breasted Nuthatch	Common Flicker
Hairy Woodpecker	Yellow-bellied Sapsucker	European Starling
Western Tanager	Dark-eyed Junco	Western Wood Peewee
Olive-sided Flycatcher	Western Screech Owl	Cooper's Hawk
Sharp-shinned Hawk	Goshawk	Red-tailed Hawk
Golden Eagle		

Wet Meadow types depending upon their size can provide habitat for species such as the following:

Wilson's Snipe	Short-eared Owl	Marsh Hawk
----------------	-----------------	------------

Dry Meadow and Wet Meadow types may both serve as important brood habitat for sage grouse. In addition the dry meadow types can support grassland species such as the Western Meadowlark.

In the situation observed in both Red and Burbank Canyon's the different habitat types are small enough that most species will likely overlap all four. Little information is available on

mammal species in the habitat types. Mule deer will make use of all four types. The complex of types provides valuable escape cover and fawning habitat. Evidence of mountain lion was found in aspen groves in both canyons. Mammals likely to occur are the following:

Coyote
Chipmunk
Shrews

Bobcat
Pocket gophers

Cottontail Rabbit
Harvest mice

No evidence of obligate riparian species such as beaver, muskrat, or otter was found.

The only reptiles observed were the Great Basin rattlesnake, bull snake, and garter snake. Others species of lizards and snakes are likely to occur.

Other species commonly found associated with surrounding pinyon/juniper woodlands also use the riparian zone but are not included in the above lists.

No fish sampling or detailed habitat measurements were conducted. Red Canyon, as mentioned in the evaluation, supports a small population of Eastern brook trout. Habitat conditions for fish appear to be good with sufficient pools and good shading. The main limiting factor for fish, both in terms of populations and size of individuals, appears to be the quantity of water flow.

APPENDIX III
FUNCTIONALITY
RED AND BURBANK CANYON CREEKS

The Riparian-Wetland Initiative for the 1990's is a strategy that complements other Bureau plans for the future of public lands. Four nationwide riparian-wetland goals have been established:

"Restore and maintain riparian-wetland areas so that 75 percent or more are in properly functioning condition by 1997. The overall objective is to achieve and advanced ecological status, except where resource management objectives, including proper functioning condition, would require and earlier successional stage."

"Protect riparian-wetland areas and associated uplands through proper land management and avoid or mitigate negative impacts. Acquire and expand key areas to provide for their maximum public benefit, protection, enhancement, and efficient management."

"Ensure and aggressive riparian-wetland information/outreach program, including providing training and research."

"Improve partnerships and cooperative restoration and management processes in implementing the riparian-wetland initiative."

Shown below is the 1988 stream survey data presented by recording station. Each category is explained in more detail below the table.

Survey Station	Average of All Transects per Station			
	Cover 1/	Stability /2	Landform Gradient 3/	Ungulate Damage (Class Range) 4/
1	1.75	1.80	14.7	I to III
2	1.75	1.70	12.6	I to II
3	1.75	1.80	12.7	I to III
4	2.00	1.90	10.9	I to II
5	1.80	1.85	6.5	I to II
6	1.95	1.90	7.2	I
7	1.90	1.90	6.1	I to II

1/ Cover This value relates to the living streamside vegetation in close proximity to the stream. Numerical values are given to four vegetative classes (NSO Manual Supplement 6671, .14C6b):

- 2.0 - (Forested) if bank is medium to heavily covered with trees and/or tall shrubs.
- 1.5 - (Brush) if banks have scattered trees and/or tall brush.
- 1.0 - (Grass) if bank is medium to heavily covered with low shrubs, forbs, or grasses, or a combination of these plants.
- 0.5 - (Exposed) if bank is covered with scattered low shrubs, forbs, or grasses, or a

combination of these plants, or is exposed.

- 2/ Stability This value is a measure of streambank stability based on degree of erosion. It is recognized that no streams exist that do not have some degree of erosion. Numerical values are given to four stability classes (NSO Manual Supplement 6671, .14C7):

- 2.0 - if bank is totally stable. No evidence of bank erosion at any flow condition.
- 1.5 - if fifty percent or more of the bank is stable, but not totally stable. Some erosion is present but usually associated with high flows. Banks are recovering naturally.
- 1.0 - if less than fifty percent is stable, but not totally unstable. Moderate to heavy erosion, and bank sloughing during high and low flows. Conditions are from land management practices.
- 0.5 - if totally unstable. Heavy erosion and bank sloughing occurring on most of the streambank length. Erosion constant.

- 3/ Landform Gradient This is the percent slope, used to determine Erosion susceptibility. Listed below are the slope gradient and erosion susceptibility classes (NSO Manual Supplement 6671, .14C7a):

- Class I - Bank is stable and undamaged. Partial or no evidence of bank damage; Ninety to one-hundred percent of the bank area is free from damage/use. Little or no unnatural bank erosion or sloughing is present.
- Class II - Bank damage is less than twenty percent. Banks are eighty to ninety percent free from use/damage. Some erosion and sloughing but recovery present after a season of rest.
- Class III - Bank damage is forty percent or less. Banks received twenty to forty percent damage from livestock use. Moderate to heavy bank erosion and sloughing occurring during the season of use and continues during the rest period. Conditions do not allow for natural recovery of banks to sixty percent stability.
- Class IV - Bank damage is excessive. Banks are exhibiting greater than forty percent damage from use. Severe bank erosion and accelerated erosion and sloughing occurs over virtually entire bank surveyed. No evidence of bank recovery, erosion is constant.

At the time of the survey, the Riparian functionality checklist for Lentic/Lotic systems was not in place. Based on the results of the stream surveys and photographic analysis, the creeks were in Properly Functioning Condition. Since that time, considerably less use has occurred in the allotment. Between 1992 and 1995, less than half of the total amount of authorized grazing use was made. From 1996 through the summer of 1998, no use was made. The result is an improving trend for both creeks.

Shown below are the major phenology stages of several key riparian species found along Red Canyon and Burbank Canyon Creeks. The data was derived from Nevada Phenological Data (BLM, 1976 - 1979), using information collected originally in the Carson City Field Office.

A. Grass and Grasslike

<u>Species</u>	<u>Growth Starts</u>	<u>1/2 Vegetative Growth</u>	<u>Flower Stalks Appear</u>	<u>Flower Heads Out</u>	<u>Hard Seed</u>
<i>Agropyron sp.</i>	04/15	05/01 to 05/15	06/01 to 06/30	07/01	08/15
<i>Carex sp.</i>	05/01	05/01 to 05/15	06/01 to 06/15	08/15	09/01
<i>Juncus sp.</i>	04/01	04/15 to 05/15	06/01 to 06/15	07/15	09/01
<i>Poa pratensis</i>	04/01 to 04/15	04/15 to 05/15	06/01 to 06/15	06/15	07/15

B. Shrubs

<u>Species</u>	<u>Leaf Growth Starts</u>	<u>Full Leaf Growth</u>	<u>Twig Growth Appear</u>	<u>First Heads Out</u>	<u>Seed Seed</u>
<i>Ribes sp.</i>	04/01 to 04/15	06/01	07/15	05/01	08/15
<i>Rosa woodsii</i>	04/01 to 04/15	*	06/01	06/30	08/15

* No data available.

APPENDIX IV - ECOLOGICAL SITES

Ecological Site #	Ecological Site Name	Potential Dominant Vegetation	Potential Yield (Lbs/Acre) Fav.-Nor.-Unf.	Elevation Range (feet)	Public Land Acres	Percent of Allotment
026XY003N	Wet Meadow 10-14" P.Z.	PONE3-CAREX	4000-3000-2000	5000-7000	65	1.39%
026XY005N	Loamy 12-14" P.Z.	ARVA2-PUTR2/STIPA-BRCA5-ELCI2	1300-1100-800	6000-9500	1306	28.01%
026XY009N	Mahogany Savannah	CELE3/ARVA2/STIPA-LEKI2	1700-1300-900	7500-9000	47	1.01%
026XY010N	Loamy 10-12" P.Z.	ARTR2/STTH2	1100-800-600	5500-6500	56	1.20%
026XY011N	Granitic Slope 12-14" P.Z.	ARTRW-EPVI-SADOC2/STSP3	800-600-400	6000-7200	196	4.20%
026XY026N	Granitic Slope 10-12" P.Z.	ARTR1-PUTR2/STTH2-STSP3	800-600-400	4500-6500	84	1.80%
026XY028N	Mountain Ridge	ARAR8/STLE4	300-150-75	8500-11000	93	1.99%
026XY038N	Loamy Slope 14+ " P.Z.	ARVA2/STOC2	1600-1100-700	8000-9500	278	5.96%
026XY073NV	Streambank	SALU2/SHAR/ELTR3-PONE3	6500-6000-5000	5000-6000		
026XY074NV	Woodland	POBAT/ARVA2-ROWO/DECE-AGTR	Nor. 1000-2000	5500-6500		
	Pinyon-Juniper Woodlands	PIMO/JUOS			2042	43.80%
	Rock Outcrops				495	10.62%
					4662	99.98%

Ecological sites described in the appendix were correlated from soils data published in the Lyon County and Douglas County Soil Surveys. The types of information presented in Table II are described below. Note that some of the technical terms used below are referenced in the body of the Evaluation.

Column
Number Description

1. Ecological Site Number. This number can be used to reference a site to the Natural Resources Conservation Service(formerly known as the Soil Conservation Service) Descriptions for Major Land Resource Area (MLRA) numbers 26 and 27. The information presented in columns 2 to 5 are derived from these descriptions.
2. Ecological Site Name. P.Z. means Precipitation Zone and is measured in inches
3. Potential Dominant Plant Species. These are the major plant species found in the Potential Natural Community(PNC). Plant codes are identified below.

Plant Code	Scientific Name	Common Name	Plant Type
AGTR	Agropyron trachycaulum	slender wheatgrass	native grass (Perennial)
ARAR8	Artemisia arbuscula	low sagebrush	native shrub
ARTR2	Aremesia tridentata	sagebrush	native shrub
ARTRW	Artemisia tridentata wyomingensis	Wyoming big sagebrush	native shrub
ARVA2	Artemisia vaseyana	mountain big sagebrush	native shrub

BRCA5	<i>Bromus carinatus</i>	mountain brome	native grass (Perennial)
CAREX	<i>Carex</i> sp.	sedges	native
CELE3	<i>Cercocarpus ledifolius</i>	littleleaf mtn. mahogany	native shrub/tree
DECE	<i>Deschampsia cespitosa</i>	tufted hairgrass	native grass (Perennial)
ELCI2	<i>Elymus cinereus</i>	basin wildrye	native grass (Perennial)
ELTR3	<i>Elymus triticoides</i>	creeping wildrye	native grass (Perennial)
EPVI	<i>Ephedra viridis</i>	green teabrush	native shrub
JUOS	<i>Juniperus osteosperma</i>	Utah juniper	native tree
LEKI2	<i>Leucopea kingii</i>	spike fescue	native grass (Perennial)
POBAT	<i>Populus balsamifera trichocarpa</i>	black cottonwood	native tree
PONE3	<i>Poa nevadensis</i>	Nevada bluegrass	native grass (Perennial)
PUTR2	<i>Purshia tridentata</i>	antelope bitterbrush	native shrub
ROWO	<i>Rosa woodsii</i>	rose	native shrub
SADOC2	<i>Salvia dorrii carnosa</i>	purple sage	native shrub
SALU2			
STCO4	<i>Stipa comata</i>	needle-and-thread grass	native grass (Perennial)
SHAR	<i>Shepherdia argentea</i>	silver buffaloberry	native shrub
STIPA	<i>Stipa</i> sp.	needlegrasses	native grass (Perennial)
STLE4	<i>Stipa lettermanii</i>	Letterman needlegrass	native grass (Perennial)
STSP3	<i>Stipa speciosa</i>	desert needlegrass	native grass (Perennial)
STTH2	<i>Stipa thurberana</i>	Thurber needlegrass	native grass (Perennial)

4. Potential Yield, measured in pounds per acre. This is the amount of live matter that will be produced during agrowing season. The three figures are for favorable, normal and unfavorable years.
5. Elevation Range, measured in feet. Elevation range the specified ecological site may be found.
6. Public Land Acres. Acres of public land covered by a specific ecological site.
7. Percent of Allotment. Percentage of the allotment covered by the specific ecological site.

RED-BURBANK ALLOTMENT EVALUATION
ERRATA AND ADDITIONS

Please incorporate the following corrections to your copy of the allotment evaluation. Also add the new Section VII (Consultations) and Section VIII (Management Actions Selected) to your copy of the Red-Burbank Allotment Evaluation. Place these sections immediately after Technical Recommendations Section (page 22)..

Page 3, Initial Stocking Level Section, C.2.a. Modify "low population of brook trout" to read "reasonable number of brook trout based upon its potential."

Page 2, Other Key or Crucial Management Areas, C.2.b. Replace the existing narrative with the following: "Information provided by the Nevada Division of Wildlife identifies the western half of the allotment as a Sage Grouse Area, that is they could potentially inhabit the area. There are no lek or strutting grounds identified in the allotment."

Page 5, Allotment Profile Section, 4. Vegetation. Correct species are *Pinus monophylla* and *Juniperus osteosperma*.

Page 8, Threatened and Endangered Species, III.D.2 Delete all references to the Fletcher dark kangaroo mouse. Add the following: "Sage grouse, a BLM Sensitive Species, may be present in the allotment. The potential also exists for Mountain Quail, another Sensitive Species, to also be present."

Based upon information provided by the Nevada Division of Wildlife (April of 1993 and April of 2000), no active sage grouse lek or strutting grounds are known to occur with the boundary of the allotment. The nearest lek/strutting ground is located to the south within the Spring Gulch Allotment. On April 15th, 2000, at 6:29 a.m., two unidentified sage grouse were observed flying from the location of a previously identified strutting ground (April of 1993). The flight was ended with conditions of the sun fairly high, thus providing good light conditions but any strutting activity had likely ceased. After the initial sighting, they were unsuccessful in the sighting of any other sage grouse. The survey was conducted during the time when the moon was almost full and it is known that sage grouse will strut under a full moon and cease activity at moonset. It is widely agreed by Division biologists that sage grouse breeding activity declines considerably toward the end of April. This certainly appeared to be the case in areas like Powell Mountain, Aurora, and the Pine Nuts (1993).

Mountain Quail was submitted for listing to the United States Fish and Wildlife Service on March 15th, 2000. The process is supposed to take approximately two years but other listings have taken as long as five to seven years. "It is Bureau policy to treat Sensitive Species as if they are already listed."

VII. CONSULTATIONS..... 24

VII. Consultations

On December 1, 1997, a letter was sent to persons and organizations for the purpose of developing an interested public list for specific actions on specific allotments administered by the Carson City Field Office. This information was used to identify the list of interested public's who expressed a desire to be included in the evaluation process for the Red-Burbank Allotment.

Sections I (Introduction) through VI (Technical Recommendations) of this evaluation were sent out for public review on December 2, 1998. The evaluation was sent to all persons and organizations who had expressed an interest in the allotment. *Ten copies* were provided to the Nevada State Clearinghouse for distribution among state agencies. The following individuals/organizations were also sent copies of the evaluation:

Donald Shehady (former permittee)	Catherine Barcomb
Nevada Cattlemen's Association	Resource Concepts, Inc.
Friends of Wilderness	Trout Unlimited

Copies of the Evaluation was also sent to the Yerington Paiute Tribe and the Washoe Tribe.

The following Wilderness Interim Management Policy mailing list was utilized to notify other individuals/organizations of the actions being proposed within the Red-Burbank Allotment:

N.O.R.A	Sierra Club, Toiyabe Chapter	The Wilderness Society (2)
Joe McGloin	National Wildlife Federation	Homestake Mining Company
Paul Clifford	Nevada Wilderness Assn.	The Nature Conservancy
Ann Kersten	Rose Strickland	EHNI Enterprises
Churchill County	National Audubon Society	The Sierra Club
NRDC	John Davis	
Lura Weaver		

Pertinent comments were received from the Nevada Division of Wildlife, Friends of Nevada Wilderness, and Lura Weaver.

Nevada Division of Wildlife

Comment: We are surprised that Bureau of Land Management wild horse policies overrode the integrity of the land use plan schedule as required by the Federal Land Policy and Management Act of 1976.

Response: The Land Use Plan was designed with multiple use management in mind. FLPMA instructed the Secretary to manage the public lands under principles of multiple use and sustained yield. Multiple use requires management of the public lands and their numerous natural resources so that they can be used for economic, recreational, and scientific purposes without the infliction of permanent damage. Sustained yield is defined as the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with sustained yield. The Carson City Field Office, being mandated to support a multiple-use concept while managing for a healthy ecosystem, took the initiative to address the wild horse issue within its boundaries. It is important to seek management goals that are fair to the majority of interests while maintaining or improving the health of the range.

Comment: The Division surveys Red Mountain Creek. Data Collected in 1987 and 1995 might be compared to determine the status of the fishery. We do not agree that the stream supports a "low" population of brook trout. Our data indicates trout densities were up to 576 fish per mile and considered "reasonable" for its potential.

Response: We appreciate you providing us with this information. From this point forward, Red Canyon Creek will be recognized as having a reasonable number of brook trout based upon its potential.

Comment: It is our understanding that the recent wild fire emergency plan did not replace the protective fence for Red Canyon Creek.

Response: The fence you are referring to was located in the Spring Gulch Allotment. Visits to the area over the past several years showed an immensely improved condition. With the implementation of the preferred alternative chosen for the Red-Burbank Allotment, it is felt that re-construction was not warranted. The remnants of the fence were removed during the summer of 1999.

Comment: Allowable use level objectives for key species should be considered short term objectives for the guidelines to achieve long term objectives to improve and maintain the cold water fishery. It is obvious that these limitations were not enforced during years of grazing Red Canyon Creek.

Response: They can be considered both short and long term objectives as a means to reach other long term objectives. The use level objective of 45% for streambank vegetation was monitored to evaluate whether in this instance

it could be met. As a result of the evaluation, it was determined under the existing situation the goal could not be consistently meant. It is further noted that for a majority of the streambank, the 45% level was not exceeded, primarily due to inaccessibility.

Experience has taught us that use levels could exceed the 45% value while still meeting the objectives to improve and maintain the cold water fishery, though this strategy was not encouraged in this instance. This could be achieved by allowing early season use when the weather is cool. Removing livestock prior to the beginning of the hot season would allow regrowth that would in turn shade the stream and maintain the cooler temperatures required by the fisheries. Irrespective of the discussion of use levels, the reasoning behind cutting off grazing prior to July 15 is to allow for protection of the fisheries.

Comment: Red Canyon Creek must be considered a key management area by virtue of the land use plan, riparian policies and Range Reform Standards. As a key management area, the entire allotment must be managed for the welfare of this area. Due to the topography of the Pinenut Range, the slope aspect and water distribution severely limits the allotments suitability for cattle.

Response: As stated on page 9 of the evaluation, since any decision that will affect livestock grazing in Red Canyon could affect management in the entire allotment, the evaluation will consider the entire allotment. Within the Technical Recommendations section of the evaluation, alternatives were offered that addressed the critical area of the allotment, that being primarily Red Canyon Creek but also addressing Burbank Canyon.

Comment: The use pattern mapping suggest that the 1988 grazing decision to alter use in Red Canyon and Burbank Canyons was not implemented. Based on historical data, 45% utilization limit could not have been achieved in either canyon during years of use. Weight averaging the riparian use pattern mapping data against the data collected on the steep canyons will abolish the effects of over-grazing in the carrying capacity computations.

Response: As noted on page 12 and compared to AUM's harvested on page 9, changes were experimented with during the years of 1991 through 1995. For 1991, 1993, and 1995, all grazing occurred in Burbank Canyon. For 1992 and 1994, all grazing occurred in Red Canyon. Similar use patterns were occurring during this period within the riparian zones that were grazed and similar affects were present, though not to the extent they were

in 1988 and 1990. A point which was inadvertently excluded in the evaluation is that only the open portions of the riparian zones were being used at a heavy/severe use level. A large portion of the riparian areas is vegetated to the extent that livestock cannot use it.

Comment: It is difficult to understand that the Act would allow any activity that degraded Rangeland Health or wilderness qualities.

Response: It was stated on page 15 that these uses, which include grazing, must be regulated to ensure that they do not cause unnecessary or undue degradation of the lands. This leads to the conclusion that the Act does not advocate activities that would lead to degradation of rangeland health nor wilderness qualities. It does allow for activities, when they can be shown to enhance the value of wilderness qualities, to be implemented.

Comment: We support prescriptive grazing that will achieve 45% utilization of riparian habitat. It would appear that Alternative D has the greatest potential.

Friends of Nevada Wilderness

To begin with, the Bureau would like to thank the organization for supplying data they have collected for Red Canyon Creek. Four study sites with accompanying information were provided out of a total of six study sites. To paraphrase, the stream survey data was based on reaches that were surveyed with 25 transects spaced at 1 to 1.5 times the channel width. The conclusions they reached were that "Pool area has been somewhat stable through the time period. This is because of the structural component of the pool formative feature. Livestock grazing has very little impact on this type of pool. With one exception, the stability of the reaches as shown in the figure is also fairly high and unchanging. There was a problem noted with this analysis in the field, however. Incision has lowered the stream several feet below the surrounding flood plain. Except for crossings, livestock cannot get to the stream easily, therefore many meters of stream bank are undamaged. The low damage noted in the ratings only reflect the inaccessibility rather than the good management. Station 5, the noted exception, dropped from 70% to about 50% in 1995. This was caused by high water rather than ungulate damage."

Comment: We believe strongly that not all areas are suitable for grazing and that the BLM is responsible for weighing grazing values with other values during an allotment evaluation and management plan process. This requirement for grazing suitability analysis was applied to the Comb Wash in southern Utah by the Interior Board of Land Appeals (National Wildlife Federation v. BLM 140 IBLA 85 (1997)). It requires that you consider multiple use

of the land in question and weigh the values of grazing with other values. These other values include wilderness and the values to other species including mule deer and mountain quail. Additional values include recreation. Red Canyon is heavily used for day trips, biking, and camping.

Comment: Red Canyon is a very narrow canyon. As noted in the evaluation, a majority of the allotment is too steep for cattle grazing (page 11). This leads to severe grazing damage on very small portions of the allotment near the streams (page 11). My own observations also confirm this observation.

Response: Your observation is appreciated.

Comment: A point not mentioned in the document is that the previous permittee had been using Texas Longhorn steers. They are very hardy and tend to stay up away from the creeks. The standard breed of cow would be more prone to using the riparian vegetation near the creeks.

Response: You are correct that Texas Longhorns were grazed in the allotment. Hereford cattle were grazed in 1988, but after that time, Longhorns were the breed of livestock using the allotment.

Comment: Burbank Canyon is not as steep as Red Canyon. The upper portions have almost perennial reaches of water and a broader valley. I would expect that conditions there are much better for livestock grazing.

Response: We are in agreement that conditions within Burbank Canyon are more conducive to grazing than Red Canyon.

Comment: The conclusions in the evaluation do not lead to the recommendations. Many of the conclusions are that targets have not been met even with AUMs reduced below the allowed 180/y. For example, BLM concluded that protection and maintenance of existing or potential fisheries objectives were not met (pages 14 and 15). Another conclusion is that streamside vegetation utilization objectives have not been met. BLM also concludes that unnecessary degradation, in excess of that allowed by the wilderness IMP, is occurring. Also, objectives pertaining to the Burbank Canyons Scenic Area visual resources have not been met.

All of these objectives were not met with use occurring below the allowed 180 AUMs. Indeed, actual AUMs were less than 90 between 1992 and 1995. Yet, the recommendations just consider various rotation of rest scenarios with an average AUMs of 90/y. They also recommend various

range improvements, including fencing, while acknowledging that they would violate the wilderness IMP.

Response: The four recommendations contained in the evaluation reflect a range of options/opinions that are present for the allotment, including re-iterating essentially the existing situation. The purpose for this type of analysis was to determine if any of the interested publics might perhaps have additional ideas that could be incorporated into the existing situation that would substantially reduce the effects that cattle are having within those portions of the riparian zone being affected. It is our responsibility to allow all publics the opportunity to supply input. Referring to Alternatives C. and D. within the Technical Recommendations, please note that one reflects a conversion to sheep while the other reflects using sheep and/or cattle as a management tool on a temporary non-renewable basis.

By converting the allotment to sheep, being a herded animal, the amount of time spent watering the animals compared to utilizing the more rugged terrain, which they are adapted for, would meet the multiple management goals for the allotment. By implementing option D., the thought was that we recognize the area is used heavily by recreationalists. If the streambank vegetation were allowed to grow unchecked, that is without any grazing by cattle for example, the potential exists for the entire riparian zone to become more inaccessible to fishermen.

In regards to the construction of range improvements, we are currently in an Interim Policy. This area has been recommended not to be included within the Wilderness System. In addition, the language in the evaluation stated that the IMP would "likely preclude" this type of action to occur, although these actions can be taken if they were to show a benefit to the value of the area. In other words, this type of action, though unlikely, is not prohibited. If the area is indeed dropped from potential wilderness inclusion, actions such as range improvements can be built. Therefore, based upon the current situation, both scenarios must be considered.

Comment: For these reasons, we believe that you should close the Red Canyon portion of this allotment to future grazing. The Burbank Canyon portion could be added to the allotment bordering on the south. There is apparently not a fence between Burbank Canyon and the Spring Gulch allotment in that drift across the boundary has occurred. The recommendations herein would require a fence to be constructed at the upper end of Burbank Canyon; this would likely violate the IMP. Adding Burbank Canyon to this other allotment will allow grazing to continue in places where it might be suitable. Closing Red Canyon at this time also

makes sense because it is currently rested and has no active permittee. It would also eliminate the need to spend money upgrading the fence at the mouth of Red Canyon and to add a cattle guard on the road where it goes through this fence.

Response: For the time being, it is the Bureau's intention to maintain the Red-Burbank Allotment. The reasoning being that this allotment contains the majority of the WSA/Scenic Area. It is felt that management of the area is better facilitated while being maintained as a separate unit.

The proposed modification of sheep being the primary animal using the allotment along with the treatments/schedules adopted in the Management Action Selection Report, analyzed in the Environmental Assessment, and brought forward in the Proposed Multiple Use Decision should provide a management tool that can meet all resource objectives within the allotment.

Lura Weaver

Comment: Because of the steepness of the terrain and the difficulty in fencing the area, I believe that converting the area to sheep grazing in place of cattle is wise. Using the area from May to July 15 seems like a wise plan as well.

Response: We thank you for your comment.

Comment: However, I think that annual grazing should still be considered. If the weather in the fall and winter gives us a lot of moisture, then there would be adequate vegetation for annual grazing. Also certain winters produce an abundance of weeds that could be controlled by the sheep. An arbitrary rule of every other year would not meet these problems. I would urge you to consider annual grazing.

Response: The 1999 fire season has been the largest on record. In many instances, within the jurisdiction of the Carson City Field Office, the changes in management that were made over the years produced an abundance of fuels. These actions also improved the overall resource conditions within the allotments that burned. In the event that fuel loading becomes an issue in the allotment, more intense use by livestock will certainly be a tool that will be applied. This type of action may require issuance of temporary non-use in those years in which total rest is the prescription.

VIII. Management Action Selection Report

Due to the topography of Red Canyon, use by cattle is restrictive. Though the stream channel for the majority of its length is in proper functioning condition, cattle tend to either congregate in the few open areas along the stream or move up the canyon and out of the allotment.

On the other hand, use by domestic sheep will result in use of the steeper portions of the canyon and this use can be made without the construction of fences. They can be herded away from the stream thus alleviating the pressure and resultant punching of the area and realistically meet the streambank utilization objective.

Burbank Canyon can be used by either cattle or sheep since it is not nearly as restrictive as Red Canyon. Cattle will continue to have a tendency to concentrate in the canyon bottom more so than sheep. They will have an inclination to move up the canyon and out of the allotment. The Interim Management Policy for Wilderness Study Areas allows for the construction of improvements if they will enhance the value of said area(s). It is the opinion of the Bureau that in this circumstance, constructing gap fences to contain cattle within Red Canyon or Burbank Canyon will not meet this criteria.

Based upon the Allotment Evaluation and information/responses received from the interested public, the following actions will be adopted in the Proposed Decision.

A. Livestock Management

Adopt a combination of the Technical Recommendation contained on pages 19-21 of the Evaluation. This will allow for the conversion of cattle to sheep while at the same time retaining cattle as a tool on a temporary nonrenewable basis, if the need should arise in order to meet current or future management goals and objectives as policies dictate.

1. The total amount of AUMs for the allotment shall be 180 for sheep and the period of use changed from 05/01 - 08/31 to 05/01 - 07/15. Use would be split between the two canyons for the grazing year. This would be followed by complete rest in the allotment the following year:

BURBANK CANYON	GRAZE	<i>REST</i>	GRAZE	<i>REST</i>
RED CANYON	GRAZE	<i>REST</i>	GRAZE	<i>REST</i>

YEAR 1 YEAR 2 YEAR 3 YEAR 4

In this manner hot season grazing is eliminated, better livestock distribution can be achieved and the change in the type of animal grazing will lessen the impacts to the riparian zone.

2. Cattle could be authorized on a temporary nonrenewable basis in Burbank Canyon with a limit of 60 AUMs. The season of use shall be changed from 05/01 - 08/31 to 05/01 - 07/15. The following treatment/schedule will be followed:

BURBANK CANYON	GRAZE	<i>REST</i>	GRAZE	<i>REST</i>
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YEAR 1 YEAR 2 YEAR 3 YEAR 4

Hot season grazing is again eliminated under this type of action. If it is determined that cattle could be used as a tool to keep some access open to the creek for recreational purposes or remove excessive vegetation as fire preventative measure, grazing could be authorized in Red Canyon on a temporary non-renewable basis.

3. No more than 180 AUMs will be authorized in any one period of authorized use by sheep and/or cattle.
4. Grazing use shall be monitored closely for a period of six years so as to determine the effectiveness of management in meeting the allotment objectives as well as the Standards and Guidelines that have been adopted by the Carson City Field Office, as well as the potential to authorize sheep use on an annual basis.

B. Terms and Conditions for Grazing within the Red-Burbank Allotment:

1. By accepting this Grazing Permit, the permittee agrees that the authorized officer or his representatives and contractors shall have the right of ingress and egress over lands controlled by the permittee for the purpose of achieving the management objectives and orderly administration of public rangelands under this Grazing Permit.
2. Grazing management shall be authorized in a manner that will make progress towards meeting the Standards as set forth by the Sierra Front - Northwestern Great Basin RAC, 1997.
3. Pursuant 43 CFR 10.4(g) the permittee must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.
4. Salt and/or mineral supplements will be placed at least 1/4 mile from live waters (springs/ streams), and outside of associated riparian areas, permanent livestock watering facilities, wet or dry meadows and aspen stands. Also salt and/or mineral supplements should not be placed in known historic properties. This must be strictly adhered to. Prior approval from the authorized officer is required before this type of action can be taken.
5. It will be the permittees responsibility to maintain all range improvements in good working order and an aesthetic state.
6. Night bedding of sheep will be located at least 1/4 mile from live waters, streams, springs, seeps, associated riparian areas, wet or dry meadows, and aspen stands.
7. Participation in rangeland monitoring is encouraged and certified actual grazing use report(s) is required to be submitted within 15 days from the end of the grazing period or year.

**RED-BURBANK ALLOTMENT MULTIPLE USE DECISION/
ENVIRONMENTAL ASSESSMENT DECISION RECORD/
FINDING OF NO SIGNIFICANT IMPACT
EA-NV-030-99055**

The Record of Decision for the Walker Environmental Impact Statement and the Resource Management Plan (RMP) was issued on June 6, 1986. These documents established the multiple use goals and objectives which guide management of public land in the Red-Burbank Allotment. The Walker Rangeland Program Summary (RPS), issued in November 1989, identified allotment objectives specific to the Red-Burbank Allotment.

As identified in the Walker RMP and Walker RPS, monitoring has been conducted on the Red-Burbank Allotment to determine if existing multiple uses for the allotment were consistent with the attainment of the objectives established by the RMP. An allotment evaluation was sent out for public review in November of 1998. Data has been analyzed through the allotment evaluation process to determine what changes in existing management are required in order to meet specific multiple use objectives for this allotment along with meeting the Standards and Guidelines that were developed by the Sierra Front-Northwestern Great Basin Resource Advisory Council and approved by the Secretary of the Interior on February 12, 1997.

Through consultation, coordination and cooperation (CCC), input from State agencies responsible for managing resources within the area, and the interested public has been considered. Based on the analysis of the monitoring data, technical recommendations contained within the allotment evaluation, and the beneficial input provided through the CCC process, it is my decision to implement the Proposed Action addressed in Environmental Assessment No. NV-030-99055.

**MANAGEMENT ACTIONS
RED-BURBANK ALLOTMENT
LIVESTOCK GRAZING MANAGEMENT**

Decisions relating to the grazing of livestock on public lands in the Red-Burbank Allotment are:

- A. In accordance with 43 CFR §4130.3-1 (a), convert the primary use from cattle to sheep and establish the ***grazing use*** at 180 AUMs for sheep.
- B. In accordance with 43 CFR §4130.3-1 (a), adjust the authorized period of use from 05/01 - 08/31 to 05/01 - 07/15.

The grazing treatments and schedules for authorized sheep use will be as follows:

BURBANK CANYON	GRAZE	<i>REST</i>	GRAZE	<i>REST</i>
RED CANYON	GRAZE	<i>REST</i>	GRAZE	<i>REST</i>
	YEAR 1	YEAR 2	YEAR 3	YEAR 4

The grazing schedule through one cycle is as follows:

	<u>Red Canyon</u>	<u>Burbank Canyon</u>
Year 1	05/01 to 07/15	05/01 to 07/15
Year 2	REST	REST
Year 3	05/01 to 07/15	05/01 to 07/15
Year 4	REST	REST

- C. In accordance with 43 CFR §4130.3-3, maintain the option to graze cattle. If cattle are authorized, on a temporary nonrenewable basis, in Burbank Canyon, they will be limited to a maximum of 60 AUMs. The following treatment/schedule will be followed:

BURBANK CANYON	GRAZE	<i>REST</i>	GRAZE	<i>REST</i>
	YEAR 1	YEAR 2	YEAR 3	YEAR 4

Any use considered within Red Canyon will be evaluated on a case by case basis and must be resource objected grounded (i.e., reduction of fuel loading in years when fire danger is extreme).

No more than 180 AUMs will be allowed in any one period of authorized use by sheep and/or cattle.

Grazing use shall be monitored closely over two full grazing cycles, to determine the effectiveness of management in meeting the allotment objectives as well as the Standards and Guidelines that have been adopted for the Carson City Field Office, as well as the potential to authorize sheep use on an annual basis.

- D. In accordance with 43 CFR §4130.3-1 (a) 43 CFR §4180, additional Terms and Conditions for Grazing within the Red-Burbank Allotment will be as follows:
1. By accepting this Grazing Permit, the permittee agrees that the authorized officer or his representatives and contractors shall have the right of ingress and egress over lands controlled by the permittee for the purpose of achieving the management objectives and orderly administration of public rangelands under this Grazing Permit.
 2. Grazing management shall be authorized in a manner that will make progress towards meeting the Standards as set forth by the Sierra Front - Northwestern Great Basin RAC, 1997.
 3. Pursuant 43 CFR 10.4(g) the permittee must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.
 4. Salt and/or mineral supplements will be placed at least 1/4 mile from live waters (springs/streams), and outside of associated riparian areas, permanent livestock watering facilities, wet or dry meadows and aspen stands. Also salt and/or mineral supplements should not be placed in known historic properties. This will be strictly adhered to. Prior to approval from the authorized officer is required before this type of action can be taken.
 5. It will be the permittees responsibility to maintain all range improvements in good working order and an aesthetic state.
 6. Night bedding of sheep will be located at least 1/4 mile from live waters, streams, springs, seeps, associated riparian areas, wet or dry meadows, and aspen stands.
 7. Participation in rangeland monitoring is encouraged and certified actual grazing use report(s) is required to be submitted within 15 days from the end of the grazing period or year.
- E. In accordance with §4120.2, the treatments and schedules, along with the stipulations listed above, will be incorporated into an Allotment Management Plan (AMP), or the functional equivalent of an AMP.
- F. In accordance with §4130.8-1 (e), the billing of any grazing occurring in the allotment shall be on an "after the fact" basis.

- G. In accordance with §4130.6-2, temporary nonrenewable use may be authorized during the period of scheduled rest, if it is determined that this type of management would provide the opportunity to reduce fire hazards, for example.

RATIONALE

The range survey identifies a total of 265 AUMs available to sheep within the boundaries of the allotment. A conservative approach is desired in establishing the amount of recognized use so as to evaluate the effectiveness of the proposed action.

By eliminating hot season grazing (07/16 to 08/31), adverse effects, particularly to the riparian plant community are limited. Grazing during a majority of the growing season is eliminated, enhancing the opportunity for regrowth. The beneficial shading effects and aesthetic values to the riparian zone are increased.

A relatively large portion of the allotment has not received any measurable grazing use due to the topography and the inability of cattle to utilize these areas. Many forage species become decadent due to non-use or extremely low use levels. Grazing can promote increased growth, vigor, and seedling establishment. Animal impact (i.e., grazing/trampling) on the lower producing sites may also result in increased forage production and diversity. With the conversion to sheep, a much greater portion of the allotment will be utilized.

The treatments/schedules shown for sheep and cattle will run concurrently. That is if either animal is authorized to be grazed during any one year, the next year will result in complete rest. If during one year, cattle are grazed, 60 AUMs of use are available and only 120 AUMs of sheep use are available, resulting in 180 AUMs of total use. Variations occur on a yearly basis in precipitation amounts, precipitation timing, fluctuations in forage production levels, and the time frame when growth occurs. Flexibility is an integral part of any basic operation that is needed in order to link management more closely with these ever changing conditions.

The Terms and Condition identified under D. are standard, for the most part, in all Term Grazing Permits.

The proposed action conforms to subpart §4120.2 which identifies the specific information required in order to be considered an Allotment Management Plan or its functional equivalent. Along with action, the option allows for the payment of grazing fees upon completion of the grazing use. Actual Use Reports are required to be submitted within fifteen days of completing said grazing use.

Weather in the fall and winter can provide an abundance of moisture, which can result in an inordinate amount of vegetative production the following growing season. With the increasing number of homes being built along the eastern foothills of the Pine Nut Range, the potential for a catastrophic fire event is ever increasing. By allowing temporary nonrenewable grazing in those years of high production which

are also scheduled for non-use, the risk of wildfire reaching these dwellings can be reduced.

AUTHORITY

Authority for this decision is found in Title 43 of the Code of Federal Regulations, which states in pertinent parts:

§4100.0-8: "The authorized officer shall manage livestock grazing on public lands under the principle of multiple use and sustained yield, and in accordance with applicable land use plans. Land use plans shall establish allowable resource uses (either singly or in combination), related levels of production or use to be maintained, areas of use, and resource condition goals and objectives to be obtained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan as defined at 43 CFR 1601.0-5(b)."

§4110.3: The authorized officer shall periodically review the permitted use specified in a grazing permit or lease and shall make changes in the permitted use as needed to manage, maintain, or improve rangeland productivity, to assist in restoring ecosystems to properly functioning condition, or to conform with the provisions of **subpart** 4180 of this part. These changes must be supported by monitoring, field observations, ecological site inventory or other data acceptable to the authorized officer."

§4110.3-2 (b): "When monitoring or field observations show grazing use or patterns of use are not consistent with the provisions of **subpart** 4180, or grazing use is otherwise causing an unacceptable level or pattern of utilization, or when use exceeds the livestock carrying capacity as determined through monitoring, ecological site inventory or other acceptable methods, the authorized officer shall reduce permitted grazing use or otherwise modify management practices."

§4110.3-3 (a): "After consultation, cooperation, and coordination with the affected permittee or lessee, the State having lands or managing resources within the area, and the interested public, reductions of permitted use shall be implemented through a documented agreement or by decision of the authorized officer. Decisions implementing Sec. 4110.3-2 shall be issued as proposed decisions pursuant to Sec. 4160.1, except as provided in paragraph (b) of this section."

§4120.2: State in part that "Allotment management plans or other activity plans intended to serve as the functional equivalent of the allotment management plans may be developed by permittees or lessees, other Federal or State resource management agencies, interested citizens, and the Bureau of Land Management. When such plans affecting the administration of grazing allotments are developed, the following provisions apply:

- (1) Include terms and conditions under Sections 4130.3, 4130.3-1, 4130.3-2, 4130.3-3, and **subpart** 4180 of this part;
- (2) Prescribe the livestock grazing practices necessary to meet specific resource objectives;
- (3) Specify the limits of flexibility, to be determined and granted on the basis of the operator's demonstrated stewardship, within which the permittee(s) or lessee(s) may adjust operations without prior approval of the authorized officer; and
- (4) Provide for monitoring to evaluate the effectiveness of management actions in achieving specific resource objectives of the plan."

§4130.2 (b): "The authorized officer shall consult, cooperate and coordinate with affected permittees or lessees, the State having lands or responsible for managing resources within the area, and the interested public prior to the issuance or renewal of grazing permits and leases.

§4130.2 (d): States in part that "The term of grazing permits or leases authorizing livestock grazing on the public lands and other lands under the administration of the Bureau of Land Management shall be 10 years unless....."

§4130.2 (f): "The authorized officer will not offer, grant or renew grazing permits or leases when the applicants, including permittees or lessees seeking renewal, refuse to accept the proposed terms and conditions of a permit or lease."

§4130.3: "Livestock grazing permits and leases shall contain terms and conditions determined by the authorized officer to be appropriate to achieve the management and resource condition objectives for the public lands and other lands administered by the Bureau of Land Management, and to ensure conformance with the provisions of **subpart** 4180 of this part."

§4130.3-1(a): "The authorized officer shall specify the kind and number of livestock, the period(s) of use, the allotment(s) to be used, and the amount of use, in animal unit months, for every grazing permit or lease. The authorized livestock grazing use shall not exceed the livestock carrying capacity of the allotment."

§4130.3-1(c): "Permits and leases shall incorporate terms and conditions that ensure conformance with subpart 4180 of this part.

§4130.3-2: States in part that "The authorized officer may specify in grazing permits or leases other terms and conditions which will assist in achieving management objectives, provide for proper range

management or assist in the orderly administration of the public rangelands..."

§4130.3-2 (d): "A requirement that permittees or lessees operating under a grazing permit or lease submit within 15 days after completing their annual grazing use, or as otherwise specified in the permit or lease, the actual use made;"

§4130.3-2 (h): "A statement disclosing the requirement that permittees or lessees shall provide reasonable administrative access across private and leased lands to the Bureau of Land Management of the orderly management and protection of the public lands."

§4130.3-3: "Following consultation, cooperation and coordination with the affected lessees or permittees, the State having lands or responsible for managing resources within the area, and the interested public, the authorized officer may modify terms and conditions of the permit or lease when the active grazing use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provisions of subpart 4180. To the extent practical, the authorized officer shall provide to affected permittees or lessees, States having lands or responsibility for managing resources within the affected area, and the interested public an opportunity to review, comment and give input during the preparation of reports that evaluate monitoring and other data that are used as a basis for making decisions to increase or decrease grazing use, or to change the terms and conditions of a permit or lease."

§4130.6-2: "Nonrenewable grazing permits or leases may be issued on an annual basis to qualified applicants when forage is temporarily available, provided this use is consistent with multiple-use objectives and does not interfere with existing livestock operations on the public lands. The authorized officer shall consult, cooperate and coordinate with affected permittees or lessees, the State having lands or responsible for managing resources within the area, and the interested public prior to the issuance of nonrenewable grazing permits and leases."

§4130.8-1 (e): "Fees are due on due date specified on the grazing fee bill. Payment will be made prior to grazing use. Grazing use that occurs prior to payment of a bill, except where specified in an allotment management plan, is unauthorized and may be dealt with under subparts 4150 and 4170 of this part. If allotment management plans provide for billing after the grazing season, fees will be based on actual grazing use and will be due upon issuance. Repeated delays in payment of actual use billings or noncompliance with the terms and conditions of the allotment management plan and permit or lease shall be cause to revoke provisions for after-the-grazing-season billing."

§4180.1: "The authorized officer shall take appropriate action under subparts 4110, 4120, 4130, and 4160 of this part as soon as practicable able but not later than the start of the next grazing year upon determining that existing grazing management needs to be modified to ensure that the following conditions exist.

(a) Watersheds are in , or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow.

(b) Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.

(c) Water quality complies with State water quality standards and achieves, or is making significant progress towards achieving established BLM management objectives such as meeting wildlife needs.

(d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species."

§4180.2 (b) "The Bureau of Land Management State Director, in consultation with affected Bureau of Land Management resource advisory councils, shall develop and amend State or regional standards and guidelines. The Bureau of Land Management State Director will also coordinate with Indian tribes, other State and Federal land management agencies responsible for the management of lands and resources within the region or area under consideration, and the public in the development of State or regional standards and guidelines. Standards and guidelines developed by the Bureau of Land Management State Director must provide for conformance with the fundamentals of § 4180.1. State or regional standards or guidelines developed by the Bureau of Land Management State Director may not be implemented prior to their approval by the Secretary. Standards and guidelines made effective under paragraph (f) of this section may be modified by the Bureau of Land Management State Director, with approval of the Secretary, to address local ecosystems and management practices."

RED-BURBANK ALLOTMENT
WILDLIFE & RIPARIAN/WETLAND MANAGEMENT

Decisions relating to wildlife on public lands in the Red-Burbank Allotment are:

- A. The AUMs for reasonable numbers of mule deer in the Red-Burbank Allotment will continue to be recognized as 350.
- B. Streamside utilization levels of 45% will be monitored to determine the effectiveness of the conversion of cattle to sheep.

RATIONALE

The AUMs for reasonable numbers of mule deer should continue to be available as well as the objective to meet the 45% utilization goal along the streambank with the proposed changes in management.

GUIDANCE

Pine Nut Habitat Management Plan, 1988

Walker Resource Management Plan, Record of Decision, 1986

Sierra Front-Northwestern Great Basin Area Resource Advisory Council, Standards and Guidelines

**Red Burbank Proposed Multiple Use Decision
Environmental Assessment
EA-NV-030-99055**

A. CHAPTER I - INTRODUCTION/PURPOSE AND NEED

1. Introduction

This Environmental Assessment (EA) is being prepared to evaluate the Proposed Multiple Use Decision (PMUD) for the Red-Burbank Allotment. Sections VII (Consultations) and VIII (Management Actions Selected-MAS) of the Evaluation are being sent with the EA and PMUD for the allotment. After a fifteen day protest period in accordance with Title 43, Code of Federal Regulations, §4160.2, a Final Multiple Use Decision will be issued. These are the concluding steps in the process that began with the issuance of the Red-Burbank Allotment Evaluation in November, 1998.

This EA analyzes the impacts resulting from the use of the Red-Burbank Allotment for grazing purposes. It analyzes the impacts that are anticipated to result from the implementation of the proposed action, as identified in the Management Actions Selected, and the No Action Alternative. This EA relies on and incorporates by reference portions of the Red-Burbank Allotment Evaluation which was provided to you earlier and the Standards and Guidelines (S & G's) developed by the Sierra Front - Northwestern Great Basin Resource Advisory Council, as approved on February 12, 1997, by Secretary of the Interior Bruce Babbitt.

S & G's are being implemented through two processes; (1) Determination that the terms and conditions of grazing permits are consistent with the S & G's applicable to the allotment and; (2) The Allotment Evaluation (AE)/Environmental Assessment (EA) process to determine whether or not the current or proposed grazing treatments and schedules are expected to achieve the specific resource goals and objectives identified for the Red-Burbank Allotment in the applicable Land Use Plan (LUP).

2. Purpose and Need

The purpose of the proposed action is twofold:

- 1. Administer grazing and implement grazing practices in the Red-Burbank Allotment in a manner consistent with the attainment of site specific objectives for the allotment found in the Walker Resource Management Plan and Environmental Impact Statement Record of Decision, dated June 6, 1986, and the*

Walker Rangeland Program Summary (RPS - 1989).

2. Analyze and implement grazing practices that will ensure compliance with the S & G's for Rangeland Health and Grazing Management.

Based upon the MASR, a need exists to evaluate the potential impacts of the proposed action compared to the alternative. From this point forward, portions of the AE and/or MAS are ***incorporated by reference*** where appropriate in the EA.

The need for the proposed action stems from society's demand for food products supplied, in part, by livestock utilizing Bureau of Land Management (BLM) grazing allotments and BLM mandates to conduct grazing activities in an ecologically sound manner. Grazing use of the Red-Burbank Allotment, as well as requirements to conduct grazing activities in a manner consistent with the principles of multiple use and sustained yield and in an ecologically sound manner, are found in the provisions of the Taylor Grazing Act (TGA) of 1934 as amended, the Federal Land Policy Management Act (FLPMA) of 1976, the recently adopted S & G's for Rangeland Health and Grazing Management (February, 1997), as well as various other federal laws and regulations.

3. Land Use Plan Conformance

The proposed action and alternatives described below are in conformance with the *Draft Walker Resource Management Plan and Environmental Impact Statement, Walker Resource Area (1984), Final Walker Proposed Resource Management Plan and Environmental Impact Statement, Walker Resource Area (1985), Walker Resource Management Plan and Environmental Impact Statement, Record of Decision (1986), Walker Resource Area Rangeland Program Summary (1989), and the Red-Burbank Allotment Evaluation (1998).*

Initially, authorize livestock use at the three year average licensed use level of 180 AUM's. There will be no initial change in grazing use.

Manage wildlife habitat for a long term goal of providing reasonable numbers of big game.

Implement range improvement projects to protect and improve big game, sage grouse, and riparian habitat. This includes protection of 10.7 miles of fishable rivers and creeks. One mile was identified on Red Canyon Creek. Improve or maintain upland riparian ecological sites to late seral stage.

The entire 13,395 acres fo Burbank Canyons WSA will be designated as a Scenic Area.

Manage big game habitat to fair to good condition to support big game populations (140 mule deer for 10 months from 05/15 through 03/15 for a total of 350 AUM's).

Protect and improve existing and potential fisheries habitat in good condition along 3.5 miles of Red Canyon Creek by September, 1996. Limit use on stream side vegetation to 45%.

Continue rangeland and watershed monitoring to determine if management objectives are being met and what future adjustments in grazing use are necessary.

Maintain an acceptable allowable use level on key species.

In the long-term, the range monitoring program would provide data on which to base future adjustments in livestock and wild horse use and to identify additional range improvements. All future adjustments and improvements would be designed to achieve the objectives of this alternative.

The following activity plan(s) apply to the geographic area of the proposed action and alternatives:

Pine Nut Habitat Management Plan (revised 1987).

B. CHAPTER II - PROPOSED ACTION AND ALTERNATIVES

1. Proposed Action

The proposed action is to convert the use from cattle to sheep while retaining the option to use cattle as a management tool. A total of 180 AUM's¹ would be available for sheep, although under the proposed action, grazing would be authorized every other year versus the current situation of grazing occurring on an annual basis. The grazing season is proposed to be shortened from 05/01 - 08/31 to 05/01 - 07/15. If cattle are authorized to use the allotment, a total of 60 AUM's would be available, being grazed in the manner identified for sheep. No more than 180 AUM's may be authorized in any one year, regardless of whether sheep and/or cattle utilize the allotment. (Refer to Red-Burbank Management Actions Selected, pages 32 through 34). This action would result in the issuance of a Term Permit to a qualified individual for a period of ten years.

¹Animal Unit Month - the amount of forage necessary for the sustenance of one cow or its equivalent for a period of one (1) month.

2. Alternatives

The No Action alternative would be to maintain the season of use from 05/01 to 08/31 and authorize cattle grazing on an annual basis in the amount of 180 AUM's.

C. CHAPTER III - AFFECTED ENVIRONMENT

1. Scoping and Issue Identification

Sections I (Introduction) through VI (Technical Recommendations) of the evaluation was sent to those interested publics who responded to the scoping letter of December 1, 1997, in addition to the individual who controls the base property to which the grazing AUM's for the allotment are attached. Respondents to the evaluation included the Nevada Division of Wildlife (NDOW), the Friends of Nevada Wilderness, and Lura Weaver. Comments and responses are found in Section VII., Consultations, of the evaluation process.

Internal scoping with BLM staff occurred during the development of the Allotment Evaluation and this EA. The Allotment Evaluation was reviewed by BLM staff members in September/October of 1998. The EA was provided to the staff in May of 1999.

2. Proposed Action

The allotment addressed in this EA lies within the southern portion of the Pine Nut Mountain Range, near the communities of Smith and Wellington, Nevada.

The following critical elements of the human environment are not present or are not affected by the proposed action or alternatives in this EA: (Specifically required by statute, regulation, executive order, etc.)

Air Quality	Internal Scoping
Areas of Critical Environmental Concern	Internal Scoping
Environmental Justice	Internal Scoping
Native American Religious Concerns	Internal Scoping
Prime or Unique Farm Lands	Internal Scoping
Floodplains	Internal Scoping
Paleontology	Internal Scoping
Threatened & Endangered Plants	Internal Scoping
Wastes (hazardous or solid)	Internal Scoping
Wild and Scenic Rivers	Internal Scoping
Wild Horses	Internal Scoping

Bureau specialists have further determined that the following resources, although present in the project area, are not affected by the proposed action:

Cultural Resources

Internal Scoping

During Section 106 review, a Class I literature search was conducted for this grazing allotment. No concerns were identified (CCFO-CR-99-210). For further details regarding the assessment of grazing impacts upon cultural resources refer to the *Carson City Field Office's Protocol for Rangeland Activities in Compliance with Section 106 of the National historic Preservation Act per Washington Office IM No. 99-039 and Nevada State Office IM No. NV-99-021.*

Water Quality

Internal Scoping

The State of Nevada, Bureau of Water Quality Planning, is in the process of developing Best Management Practices (BMP's), for non-point sources such as, but limited to, agricultural drainage and/or runoff (includes irrigation, grazing, dairies, etc.), for example. The changes in management proposed within this EA should be consistent with the intent of the BMP's (i.e., reducing potential sediment load (dissolved oxygen for fisheries, shading (temperature))).

Forestry

Internal Scoping

Geologic Resource

Internal Scoping

Lands

Internal Scoping

Water Rights

Internal Scoping

Since the proposed action appears to neither impact nor be impacted by these resources, no further discussion will be included.

The following resources are present in the project area and brought forward for analysis:

a. Vegetation

Refer to page 5 of the evaluation in addition to Appendix IV for a detailed description of the vegetation. A large portion of the allotment is pinyon/juniper woodlands mixed with various grasses, shrubs and forbs, which is predominantly located on the lower and mid-level slopes of the Pine Nut Mountains. The higher mountain elevations are primarily composed of low sagebrush intermixed with patches of mountain mahogany, grasses, shrubs, and

forbs. The lower foothills and the alluvial fan are a combination of big sagebrush, grasses, forbs, bitterbrush, and Anderson peach and rabbitbrush. An errata is included with Sections VII. and VIII. of the allotment evaluation as a result of the inadvertent inclusion of incorrect species identification of pinon pine and juniper in the evaluation.

b. Range/Livestock

The current total number of animal units of specified livestock grazing is 180 AUM's for cattle. The allotment has a public land rating of 100% and the period of use runs from 05/01 to 08/31. There are no fenced pastures.

c. Wildlife

Mule deer is the primary big-game species that inhabits both the summer and winter ranges within the allotment. Red Canyon Creek provides approximately 3.5 miles of brook trout habitat. A variety of other wildlife inhabit the allotment and a full description can be found on page 4 of the allotment evaluation.

d. Visual Resources

The allotment has been designated as a Scenic Area by the Carson City Field Office. It is closed to Off-Road Vehicle (ORV) use except on designated existing roads. It is managed within a Class I Visual Management objective where actions may be seen but should not attract the attention of the casual observer. The level of change to the characteristic landscape should be low.

e. Recreation

Most public lands remain open to OHV recreation within the boundary of the Walker LUP with the exception of all public lands contained within Burbank Canyons WSA/Scenic Area. This area is subject to the non-impairment criteria outlined in the Interim Management Policy for lands under Wilderness Review (IMP). Essentially, this limits OHV use to existing roads and ways.

f. Soils

The soils are typical of the Western Great Basin and exhibit wide ranges in depth, drainage class, percent surficial and subsurface rock fragments, pH, and

other diagnostic soil properties. Accelerated erosion, where present in the allotment, is mostly confined to small areas adjacent to seeps, springs, streams, shallow/lithic soils and steep slopes. Refer to Appendix IV of the Evaluation for a detailed which list of Ecological Sites.

g. Noxious Weeds

Refer to page 22, under the Technical Recommendations Section, of the evaluation. During the stream classification of the late eighties and early nineties, as well as subsequent visits to the allotment, no noxious weeds² were identified.

h. Threatened & Endangered Animals

BLM sensitive species that may occur in the allotment are the pygmy rabbit, Mountain Quail, and the spotted bat. There are no recorded sightings of either the pygmy rabbit or the spotted bat in the allotment. The western half of the allotment has been classified as a sage grouse use area. There are no known lek or strutting grounds within the boundaries of the allotment. Bald Eagles, a federally listed Threatened Species, inhabits the lower four (4) miles of Red Canyon Creek which is identified within a bald eagle wintering area. Refer to page 8, under the Allotment Profile Section, of the allotment evaluation, for a description of habitat needs.

i. Wetlands/Riparian

Red Canyon Creek and its feeder springs are present in the allotment. Surface flow of the creek is approximately 3.5 miles. These areas support a variety of vegetation, including but not limited to sedges, willows, rushes, and wild rose. Based on the results of the stream surveys and photographic analysis, the wetland/riparian zone is in proper functioning condition. With the exception of the small portions of the meadows that were affected from "punching action" of cattle, the vast majority of the riparian zone has adequate stability present to provide bio-diversity for both plants and animals; maintain root masses that stabilize streambanks; filter sediment; and dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality. The result is an improving condition with an upward trend.

² Nevada Administrative Code (NAC) 555.010

j. **Wilderness**

The Wilderness Study Area (WSA) was not recommended as suitable for wilderness designation in the 1986 Walker Record of Decision. The area, comprising approximately 13,395 acres, was designated as a Scenic Area. It averages 3.5 miles in length, north to south; and five miles in width, east to west. It is basically comprised of three major canyon drainages on the east slope of the Pine Nut Mountain Range.

k. **Socio-economics**

The allotment authorization is currently for 180 cattle AUMs to be harvested annually from 05/01 to 08/31. Direct economic benefits are derived from the sale of livestock products (yearling cattle). This money, in turn, is introduced into the local economy through wages, purchasing of supplies, taxes, etc.

Indirect effects include increased real estate values of the base property due to the attached BLM grazing permit. This benefits a permittee upon selling the base property or using the property as a security for a loan. This could also be a liability to a permittee in the form of increased property taxes based on the appraised value of a ranch. However, the increased tax revenue would be a benefit to the community, which in turn might indirectly benefit a permittee through improved roads, school facilities, fire and police protection, etc.

3. **Alternatives**

The description of the affected environment for the No Action or other alternatives would be the same as that for the proposed action.

Refer to pages 18 through 21 of the Allotment Evaluation for alternatives to the proposed action. The no action alternative is the current use. The Affected Environment is the same for all alternatives.

D. **CHAPTER IV - ENVIRONMENTAL CONSEQUENCES**

1. **Proposed Action**

Environmental Impacts:

a. **Vegetation**

The conversion to sheep grazing and adopting the grazing treatment/schedule identified in Section VIII (Management Actions Selected) would provide for improved distribution of both animals and their associated impacts. A greater variety of forage, particularly away from the drainage bottoms and more to the upland sites would be utilized, thereby taking pressure off the riparian zone. This in turn would provide the opportunity to heal those portions of the meadow areas that were previously adversely impacted by cattle and maintain them in a proper functioning condition. Vegetation in the upland sites that rarely received use and may be in a decadent state, would incur grazing, improving health and possibly resulting in increased recruitment. Overall condition of the vegetative resource throughout the entire allotment would improve. This alternative would be implemented for a period of six years, after which time a determination would be made as to viability of continuing to authorize sheep grazing in the Red Canyon portion of the allotment, as well as the potential to authorize sheep use on an annual basis. ***This action will make significant progress towards meeting Standard 4: Plant and Animal Habitat; Standard 2., Riparian/Wetlands; as well as meeting the Guidelines for Grazing Management and Proper Functioning Condition of the Riparian Zone.***

Maintaining cattle as an option under temporary nonrenewable use, following the treatment/schedule identified in Section VIII (Management Actions Selected), will not limit the options available to the Bureau to meet current or future management objects as a result of policy changes.

b. **Range/Livestock**

Converting the primary grazing use to sheep, while maintaining the option to allow cattle grazing on a temporary nonrenewable basis, under the treatments/schedules identified under the MASR, will result in fewer AUMs being harvested as compared to the existing situation (No Action). Whereas currently 180 AUMs could potentially be taken on an annual basis, the

proposed action limits this to 180 AUMs every other year. The shortened period of authorized use eliminates “hot season” impacts as opposed to continuing with the existing situation which potentially could result in “hot season³” grazing resulting every year. If cattle were authorized to use the allotment, meadow punching would likely occur, though not on a yearly basis as before. Grazing would primarily occur in the canyon bottoms, thereby maintaining openings alongside the stream channel.

c. **Wildlife**

Longhorn cattle grazing created a detrimental effect on small portions of the riparian zone as pointed out by the Friends of Wilderness. Relieving pressure by using predominantly sheep grazing should allow the riparian zone and associated wetlands to heal and should serve to protect and enhance wildlife habitat. Maintaining or improving stream bank shading should continue to provide a water temperature regime beneficial to fisheries. Keeping cattle grazing as an optional tool could serve to keep certain portions of the stream channel open to people who fish the stream. Overall, implementation of the Proposed Action should not adversely affect the wildlife using the allotment. *Eliminating use after July 15 and alternating the canyons being used will enhance progress towards meeting Standard 2: Riparian/Wetlands and will benefit any sage grouse using the meadows.*

d. **Visual Resources**

Implementation of the Proposed Action should have a positive effect on the visual aspect of the allotment, particularly Red Canyon. The overall appearance and condition of the riparian zone should improve. Hoof punching of meadow areas and bank sloughing should be reduced dramatically. The Class I Visual Rating Criteria should be met which is that natural ecological changes and very limited management activity are allowed. Any contrast created within the characteristic landscape must not attract attention.

BLM Manual 8400 -Visual Resource Management states in section 8400.06, A.4., that “... VRM objectives (classes) provide the visual management standards for the design and development of future projects and the rehabilitation of existing projects.” and in section 8400.06 A.5., that “Visual

³ Hot season grazing occurs from the middle of July, usually throughout the month of August. This does not allow adequate time for regrowth of riparian vegetation.

design considerations shall be incorporated into all surface disturbing projects regardless of size or potential impacts.”

Allotment evaluations generally will not require VRM review. Any projects which might be proposed within the allotment would be analyzed for VRM considerations and IMP compliance at the time the project specific EA would be prepared. An evaluation activity, such as the Proposed Action will generally have no impacts on visual resources.

e. **Recreation**

Converting to sheep use and eliminating grazing after 7/15 should allow for improved vegetative cover, age structure, and modification of the temperature regime for Red Canyon Creek. This should provide a more enjoyable experience for recreational users to the area. Keeping cattle as an option may provide the periodic opportunity to maintain open areas (access) of the stream for people who enjoy fishing the Red Canyon Creek.

f. **Soils**

Modifying the amount of time that large grazing animals (cattle) are in contact with the riparian zone, converting to an animal (domestic sheep) that will utilize a much greater portion of the allotment, and distributing these impacts should provide for a healthier environment. The impact to the streambanks will be minimized. This in turn should reduce the danger of unnecessary sediment loading, which will maintain adequate dissolved oxygen content to maintain and/or improve fisheries. *This action should enhance progress towards meeting Standard 1; Soils.*

g. **Noxious Weeds**

At this time, no noxious weeds are known to exist in the allotment. In the future, noxious weed seeds could be spread by sheep, cattle, mule deer, recreationalists, blowing wind, or by vehicles. The source of noxious weeds listed under **NRS 555.010** could likely come from the agricultural lands in Smith Valley, among other places.

h. **Threatened & Endangered Animals**

Implementation of the Proposed Action should relieve pressure on the riparian zone. The spotted bat (if present) should not benefit since neither cattle or

sheep utilize the areas inhabited by this mammal. With use being made on the sagebrush plants, particularly, by sheep, younger, more tender shoots should be stimulated to grow, benefitting sage grouse and the Mountain Quail, if present. *This action taken with the grazing management should enhance progress towards meeting Standard 5: Special Status Species Habitat.*

i. **Wetlands/Riparian**

Implementation of the Proposed Action will provide the benefits as identified under Range/Livestock, Wildlife, Soils and Threatened and Endangered Animals above.

j. **Wilderness**

Although the area has been recommended not to be included within the Wilderness System, until such time as Congress acts upon this recommendation, the area is still a WSA and must be managed accordingly. Implementation of the Proposed Action should have the positive impacts as outlined under Vegetation, Wildlife, Visual Resources, and Threatened and Endangered Animals above.

k. **Socio-economics**

The Proposed Action, although maintaining 180 AUMs of use within the allotment, does have an adverse impact on the livestock operation and the economic and social benefits to the community, as identified on page 7 of this Environmental Assessment. The amount of AUMs that can be harvested are reduced by 50% due to the grazing treatments/schedules adopted. The conversion from cattle to sheep would have an impact on the former permittee, if he were to re-apply for a grazing permit in the allotment.

2. **Alternatives (No Action)**

Environmental Impacts:

a. **Vegetation**

Continuing with the existing situation, without active management such as riding and herding, will continue to damage the small areas located in the meadow areas and along the streambank. The upland sites would continue to be under-utilized. The overall health of the vegetative resources would not benefit, as

they would under the proposed.

b. Range/Livestock

Implementation of the No Action Alternative would allow for the current situation to continue and the same scenario would be present as discussed in the Conclusion Section of the evaluation, pages 14-18. In summary, this would continue to allow for 180 AUM's of cattle use to be authorized on a yearly basis, with grazing occurring throughout the "hot season." Punching of meadows would continue to be a problem for those area currently affected.

c. Wildlife

Implementation of the No Action Alternative would not affect the number of big-game utilizing the allotment. However, continuing to authorize 180 AUM's of cattle use, on a yearly basis, might have the potential to affect the sage grouse use area but it is uncertain whether the impacts would be positive or negative in nature.

d. Visual Resources

Implementation of the No Action Alternative would not affect the overall integrity of the visual resources. Those localized spots that are impacted under the existing situation would continue and may even expand if the existing livestock use were again to be authorized on an annual basis.

e. Recreation

The existing situation would continue to result in the punching of meadows and heavy/severe use of those areas alongside the streambank that are accessible to cattle. This would likely result in a lower quality of enjoyment for recreationists.

f. Soils

Continuing with the existing situation would result in cattle concentrating in the riparian zone. Bank sloughing, where it has occurred on small portions of the allotment, would continue. Decreased root mass and soil surface cover could result in an increase in erosion.

g. Noxious Weeds

At this time, no noxious weeds are known to inhabit the area based on earlier visits. In the future, noxious weeds could continue to be spread by livestock, mule deer, recreationalists, blowing wind, vehicles, insects or birds. The source of noxious weeds listed under **NRS 555.010** would likely come from the agricultural lands in Smith Valley.

h. Threatened & Endangered Animals

If the existing situation were to continue in the manner in which it could be authorized, pressure on those portions of the riparian zone would continue, possibly having an increased impact on this potential habitat. This would include the hoof punching of meadows as well as excessive use of the associated vegetation. Inadequate time would remain for plant regrowth, having the potential to alter plant species composition. The potential for the loss of meadow sites, in turn would decrease the desirable habitat for the area identified as a Sage Grouse Use Area.

i. Wetlands/Riparian

Those impacts mentioned under Vegetation, Recreation, and Soils above would occur under continuation of the existing situation. In the long term, the functionality of the stream channel could be affected by increased removal of vegetation, loss of bank stabilization, and the potential of increasing sediment loading. These actions could have a detrimental affect upon the fisheries habitat.

j. Wilderness

The existing situation, if it were authorized on an annual basis, would potentially have a negative impact on the quality of the Scenic Area. This would be the result of the impacts noted under Vegetation, Recreation, and Soils above.

k. Socio-economic

Continuation of the existing situation would have no Socio-economic impacts on the grazing permit. The term grazing permit would continue to allow 180 AUM's of cattle grazing use annually on the allotment. The benefits, both direct and indirect, would be the same as those discussed on page 7 of this

Environmental Assessment.

3. **Mitigating Measures**

a. **Proposed Action**

Environmental consequences were considered during the creation of the Technical Recommendations (Section VI) of the Allotment Evaluation, along with public input (Consultations, Section VII) and the Management Actions Selected (Section VIII). These management actions form the basis of the proposed action (the Proposed Multiple Use Decision). Since environmental mitigation was engineered into the proposed action, no additional mitigation is necessary.

b. **No Action**

1. Implement an active management strategy (daily riding and the herding of cattle) to push them out of the canyon bottoms.
2. Upon achievement of the 45% utilization level on those areas open to livestock alongside the streambank, all livestock must be removed from Red Canyon immediately. This will likely result in less than 90 AUMs being harvested. A final AUM value would be determined after six years of gathering data.
3. No more than 90 AUMs would be available in Burbank Canyon.

4. **Residual Impacts**

A. **Proposed Action**

The proposed action would have impacts including improved distribution, improved condition of riparian and upland sites, and maintenance and/or improvement in water quality. These impacts would be beneficial in nature and have been addressed within the body of this Environmental Assessment.

B. **No Action**

This would result in continued concentration of cattle on the riparian area, cattle moving out of the allotment into trespass situations, and a lack of distribution amongst the uplands sites of the allotment.

5. **Cumulative Impacts**

All resource values have been evaluated for cumulative impacts. It has been determined that cumulative impacts would be negligible as a result of the proposed action or alternatives.

6. **Monitoring**

Resource monitoring would be increased in the allotment during the six years which are being proposed as the test period for the analysis of the effectiveness of the management changes identified under the Proposed Action. This would include allotment wide use pattern mapping, actual use reports, and photo point documentation in conjunction with the data being gathered by the Friends of Wilderness.

E. CHAPTER V - CONSULTATION AND COORDINATION

a. List of Preparers

Robert R. Mead 8/11/00
Robert Mead Date
Rangeland Management Specialist

James M. Gianola 8-14-00
Jim Gianola Date
Senior Rangeland and Wild Horse Specialist

William R. Brigham 21 Aug 00
William R. Brigham Date
Wildlife Biologist/ T&E Coordinator

Rebecca Lasell 8/16/00
Rebecca Lasell Date
Historic Archeologist

Jim deLaureal 8/25/00
Jim deLaureal Date
Noxious Weeds Coordinator

Mike McQueen 8/28/00
Mike McQueen Date
Planning and Environmental Coordinator

Terry Knight 8/25/2000
Terry Knight Date
Wilderness Specialist/Recreation/Visual Resources

b. **Persons, Groups or Agencies Consulted**

Donald Shehady, Former Permittee
Catherine Barcomb
Nevada Cattlemen's Association
Resource Concepts, Inc.
Friends of Wilderness
Trout Unlimited, Sagebrush Chapter
Nevada State Clearing House (10 copies provided for distribution)