



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Winnemucca District Office
5100 East Winnemucca Boulevard
Winnemucca, Nevada 89445
702-623-1500

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In Reply Refer To:
(NV-22.11)
4120.2

May 6, 1997

Dear Interested Public:

Please find enclosed the Draft Deer Creek Allotment Re-evaluation Summary. This document analyzed, interpreted and evaluated data from 1994 to 1996 and three (3) livestock management alternatives.

Please provide your comments by June 7, 1997. If you have any questions, feel free to contact Richard Barry at (702) 623-1500.

Sincerely yours,

Colin P. Christensen
ADM, Renewable Resources

Deer Creek Draft
Allotment Re-evaluation

May 6, 1997

I. Introduction

This re-evaluation supplements the original Deer Creek Allotment Evaluation dated January 21, 1994. The Deer Creek Allotment Final Multiple Use Decision (FMUD) was issued on February 23, 1994. The decision recommended the existing permit be maintained at 754 AUMs with seasons of use from 03/01 to 04/30 and 10/01 to 11/30. Livestock management as established by the 1994 FMUD is as follows:

1. Livestock Management

A. Grazing Preference

1. The total number of animal unit months of specified livestock grazing 754 AUMs
2. Historical Suspended 1,089 AUMs
3. Season of Use: 03/01 to 04/30,
10/01 to 11/30

Kind and Class of Livestock: Cattle (cow/calf)
Percent Federal Land: 100%

Grazing System:

200 C 03/01 to 04/30	401 AUMs
176 C 10/01 to 11/30	<u>353 AUMs</u>
	Total 754 AUMs

The winter range will be used from 10/01 to 11/30 and 03/01 to 03/31.
The spring/summer range from 04/01 to 04/30.

The FMUD established the following terms and conditions:

Salt and/or mineral blocks shall not be placed within 1/4 mile of springs, meadows, streams, riparian habitat or aspen stands.

A certified actual use report is due 15 days after end of the authorized grazing period.

B. Other Information

On February 15, 1996, the permittee submitted a grazing application with the following request for the 1996 grazing year:

80 C	03/01 to 04/30	160 AUMs
75 C	05/01 to 09/30	377 AUMs
70 C	10/01 to 12/31	<u>211 AUMs</u>
	Total	749 AUMs

The Bureau initiated a consultation process with the permittee and interested publics due to the time periods of 05/01 to 09/30 and 12/01 to 12/31 being outside the season of use established in the February 23, 1994 Final Multiple Use Decision. The allotment has two creeks, Deer Creek and Pass Creek, which have intermittent to ephemeral water flows and little potential for supporting a fishery. Both creeks support fairly extensive riparian zones which consist mainly of woody riparian species such as willows and dogwood and small islands of herbaceous riparian species. The herbaceous species can be found at springs located along the creeks and are small components of the riparian community in both creeks. In order to ensure the short-term objective of 50% utilization for riparian habitats was met, and to reduce the impacts of hot season grazing to both riparian areas, the following term and condition was included on the grazing authorization for the 1996 summer grazing season:

"An allowable use level of 50% on herbaceous and/or woody riparian species along Deer Creek and Pass Creek will be enforced. This allowable use level will dictate livestock removal from the summer use area. To determine a removal date, the Bureau, in coordination and cooperation with the permittee and affected interests, shall inspect on or near July 15. Additional inspections may be required after the initial inspection date.

When the utilization level of riparian vegetation reaches 45%, the livestock operator will be given a five day notice in which to remove livestock from the summer use area."

Deer Creek and Pass Creek was inspected for utilization levels on July 17 and August 22, 1996. An end of season inspection was conducted on October 31, 1996. The summaries for both these inspections can be found in the Summary of Data, Utilization Section of this document. During the

August 22 inspection, it was found that utilization levels on both creeks were at or above the threshold of 45% utilization at which the permittee would be required to remove livestock from the summer use area. On August 23, the permittee was informed that utilization levels on both creeks were at the allowable use level and was given a five day notice in which to remove livestock. The cattle were removed by August 28, 1996.

2. Wildlife (Estimated Numbers)

Mule Deer	112 AUMs
Bighorn Sheep	58 AUMs

3. Wild Horses and Burros

The 1994 FMUD established an appropriate management level for that portion of the Jackson Mountain Herd Management within the Deer Creek Allotment at 10 horses and 120 AUMs.

II. Management Re-evaluation

A. Purpose

The purpose of this re-evaluation is to update the changes in grazing use on the Deer Creek Allotment which was implemented as a result of the Final Multiple Use Decision dated February 23, 1994. This re-evaluation is necessary to determine if the allotment objectives are being met under the change in livestock management.

B. Summary of Data

1. Livestock Actual Use

<u>Year</u>	<u>AUMs</u>
1994	163
1995	161
1996	668

2. Wildlife (Existing Numbers)

Table 1. Percentage of Reasonable Numbers for Mule Deer on Winter/Spring (11/01 to 04/30) and Summer/Fall (05/01 to 10/31) Habitats in the Deer Creek Allotment as compared to the whole hunt unit in NDOW Hunt Unit 035

<u>Species</u>	<u>Unit</u>	<u>Winter/Spring</u>	<u>Summer/Fall</u>
Mule			
Deer	035	2.3	1.1

Using this information, estimates of mule deer were derived by multiplying the above percentages for winter/spring (11/01 to 04/30) and summer/fall (05/01 to 10/31) habitat by the hunt unit estimate for mule deer populations. Next, the number of animals was multiplied by the number of months the animals were expected to be present to arrive at an estimated annual forage demand for the allotment (Table 2).

Table 2. Estimated Existing Numbers and Forage Demand for Mule Deer in the Deer Creek Allotment for Years 1989* Through 1995 - HU035.

Mule Deer

<u>Year</u>	<u>Est. Numbers</u>		<u>AUMS</u>		<u>Total AUMS</u>
	<u>Winter/Spring</u>	<u>Summer/Fall</u>	<u>Winter/Spring</u>	<u>Summer/Fall</u>	
1989	114	57	172	85	257
1990	109	55	165	82	247
1991	115	57	172	85	257
1992	87	43	130	65	195
1993	83	41	124	61	185
1994	117	58	176	87	263
1995	106	52	159	79	238

* Evaluation methods used by NDOW beginning in 1989 differed from methods employed prior to that, therefore, estimates prior to 1989 were not included.

Mule deer populations did not experience the large decline in numbers over the winter of 1992-93 that occurred in other parts of Northern Nevada. The significant change noted between 1993 and 1994 is due, in

part, to a modification by NDOW, to previous estimates of 1992/93 winter kill rates. It is now believed, that winter death rates were not as widespread.

These allotment population estimates are not intended to be used as indicators of habitat condition or actual use in an allotment due to the fact that several factors annually influence the actual distribution of mule deer throughout their range. These same factors effect the accuracy of the population estimates calculated by NDOW. This information is, however, adequate to make determinations of long term trend for the area or the hunt unit. By extrapolating the hunt unit population estimates to allotment sized units some accuracy is lost, however, the basic utility of these numbers in determining general trends is retained. Monitoring data is reserved for determination of specific allotment based trends.

Mule deer numbers have stayed within expectable fluctuations in populations with no great increases or decreases that could show gross improvement or degradation of habitat of their habitat.

Estimates of bighorn sheep numbers were not provided by the Nevada Division of Wildlife.

The Paradise-Denio Resource Area Grazing EIS and conversations with the Nevada Division of Wildlife indicates little to no sage grouse or sage grouse habitat is known to be present in the Deer Creek Allotment. The allotment is considered to be marginal or poor habitat due to topography, elevation, and vegetation potential.

3. Wild Horses and Burros

Wild Horse Use

<u>Year</u>	<u>Numbers</u>	<u>AUMs</u>
1994	18	216
1995	21	252
1996	30	360

4. NOAA Precipitation Data collected from 1994 to 1996 at the Leonard Creek Ranch.

<u>Year</u>	<u>Growing Season</u>	<u>Yearly</u>
1994	2.14	8.31M
1995	NA	NA
1996	NA	NA

NA - Not Available

Growing Season - March through August

M - partial data

5. Utilization

- a. Monitoring data was collected conducting utilization transects using the Key Forage Plant Method and use pattern mapping.

The utilization classes are as follows:

No Use	0%
Slight	1-20%
Light	21-40%
Moderate	41-60%
Heavy	61-80%
Severe	81-100%

UPMs were completed in 1995 and 1996. Utilization transects were conducted on the Deer Creek and Pass Creek riparian areas in 1996. The following is a summary of this data.

The UPMs are summarized below on a pasture by pasture or use area basis. Actual use was utilized for AUM computations.

1995

Spring Use

Data Collected 10/31/95

80 C 03/01 to 04/30 160 AUMs

One hundred percent of the spring/summer use area was mapped.

Approximately 97% of the area had slight use while light use was found on a spring north of Deer Creek.

1996

Spring Use:

Data collected 04/01/96

80 C 03/01 to 03/30 79 AUMs

Approximately 50% of the winter/spring use area was use pattern mapped. Slight use was found in 100% of the area use pattern mapped.

Summer Use:

80 C 04/01 to 04/30 79 AUMs

75 C 05/01 to 08/28 303 AUMs
382 AUMs

On July 17, 1996, a mid-point utilization inspection was conducted on Deer Creek and Pass Creek. Utilization levels in both creeks were slight: Pass Creek - $\leq 5\%$ on both woody and herbaceous riparian species which are available to livestock use, Deer Creek - 10% on willows and dogwood which were available to livestock use.

On August 22, 1996, a mid-point utilization inspection was conducted on Deer Creek and Pass Creek. Utilization levels on woody riparian species were as follows:

Lower Deer Creek

SAEX	60%
ROSA	52%
COST	44%

N.F. of Deer Creek

SAEX	40%
ROSA	38%
AMAL	42%

S.F. of Deer Creek	
SAEX	44%
ROSA	40%
COST	40%

Small meadows and spring areas along Deer Creek and its forks received heavy utilization levels on herbaceous riparian species with less than 2" stubble height remaining. Use levels on the lower portion of Deer Creek was attributed to wild horse use.

Utilization in Pass Creek on woodies such as willows were moderate and herbaceous riparian was estimated to be heavy. A utilization transect was not conducted.

On October 31, 1996, 100% of the Deer Creek allotment summer use area was use pattern mapped. Of the area mapped, 50% received slight use, 35% light and 15% moderate. Slight use was found in the flats adjacent to the Jackson Creek road with light use being found in upland habitats leading into Pass Creek, Deer Creek, and upland habitats surrounding the Pass Creek riparian zone. Moderate use was noted in both the Deer Creek and Pass Creek riparian zones with moderate use in surrounding upland habitats in both drainages. Herbaceous riparian species such as Juncus and Carex had 3 to 4 inches of regrowth in both drainages in comparison to conditions observed during the August 22, 1996 mid-point inspection.

6. Trend

Trend data was not collected during the re-evaluation period.

7. Wildlife; Riparian Inventory

Wildlife inventory data, lotic and lentic riparian functionality has not been collected during the re-evaluation period.

8. Threatened/Endangered/Candidate/Sensitive species

There are no known threatened, endangered, or sensitive plant or animal species occurring in the Deer Creek Allotment. The spotted frog, a candidate species, may occur in the area.

The following U.S. Fish and Wildlife Service candidate species and BLM species of concern may occur within the region:

Pygmy rabbit
Burrowing owl
Small footed myotis
Long eared myotis
Fringed myotis
Long legged myotis
California bighorn sheep
Pacific Townsend's big eared bat
Pale Townsend's big eared bat
Northern Goshawk
Black tern
Least bittern
white faced ibis
windloving buckwheat
cordelia beardtongue

III. Conclusions

A. Short Term Objectives

1. Utilization of key plant species in wetland riparian habitats (Salix, ROWA, Juncus, Carex) is 50%. Utilization data will be collected at the end of the grazing period.

No data was gathered on spring/summer and winter use areas in 1994. The objective was met in the spring/summer ranges in 1995 and 1996. However, mid-point utilization data collected during August in the Deer Creek and Pass Creek riparian indicated moderate utilization levels on woody riparian species with heavy use on herbaceous species. The lower end of Deer Creek received utilization levels above 50% on willows and rose. This was attributed to wild horse use. End of season monitoring indicated overall use in the drainages was moderate and herbaceous riparian species had 3 to 4 inches of regrowth.

The objective was met on the winter/spring range in 1996.

2. Utilization of key plant species (ELCI, SIHY, STTH, ATCO, EPNE) in upland habitats is 50%. Utilization data will be collected at the end of the grazing period.

No data was gathered on spring/summer and winter use areas in 1994. The objective was met on spring/summer ranges in 1995 and on winter/spring range and summer/fall range in 1996.

B. Long Term Objectives

1. Maintain and improve public rangeland conditions to provide forage on a sustained yield basis for big game, with a forage demand of 112 AUMs for mule deer and 58 AUMs for bighorn sheep.
 - a. Improve to and maintain 10,043 acres in good to excellent mule deer habitat condition.
 - b. Improve to and maintain 3,812 acres in good to excellent bighorn sheep habitat condition.

Monitoring data is not available to determine if this objective has been met.

2. Manage, maintain, and improve public rangeland conditions to provide forage on a sustained yield basis for livestock, with an initial stocking level of 754 AUMs.

Baseline and current trend data has not been collected to evaluate the achievement of this objective. Monitoring data indicates short term utilization objectives are being met which indicates this objective is being met under the current grazing season. This objective will be redefined/quantified with ecological status condition as information becomes available.

3. Improve range condition from poor to fair on 3,039 acres.

Baseline and current trend data has not been collected to evaluate the achievement of this objective. Monitoring data indicates short term utilization objectives are being met which indicates this objective is being met under the current grazing system. This objective will be redefined/quantified with ecological status condition as information becomes available.

4. Manage, maintain and improve public rangeland conditions to provide forage for a viable population of horses.

Although an AML of 10 horses is not considered a "viable" population, these horses are managed in conjunction with the rest of the wild horses on the north end of the Jackson Mountains. Movement of horses between Deer Creek Allotment and Happy Creek Allotment has been documented. Gene shuffling resulting from contact with Happy Creek horses should result in a genetically viable population. When these horses are gathered, a blood sample will be collected for genetic analysis and compared with the Happy Creek horses and other herds of horses to assure that genetic isolation is not a problem.

5. Improve to and maintain the state water quality criteria for Deer Creek.

Water quality data for Deer Creek has not been collected during the re-evaluation period.

6. Protect sage grouse strutting grounds and brooding areas. Maintain a minimum of 30% canopy cover of sagebrush for nesting and winter use.

No specific sage grouse or sage brush data were collected during this evaluation period. However, little to no sage grouse numbers or habitat are known to exist within the Deer Creek allotment. The allotment is considered poor or marginal habitat due to topography, elevation, and vegetative potential.

VI. Technical Recommendations

A. Wild Horses

Wild horses in the Deer Creek Allotment will be managed in conjunction with wild horses in Happy Creek, Bottle Creek, Wilder-Quinn, and the north Jackson Mountains Allotment. When AML's are established on all allotments, this total AML will be the management level for the North Jackson Mountain wild horses. When numbers reach the top end of this pre-determined range, a gather will be conducted to reduce them to the lower limit of the established range regardless of the allotment they occupy.

The Final Multiple Use Decision issued in 1994 established an AML of 10 in the Deer Creek Allotment. Data has not been collected which indicates this decision was in error.

Technical Recommendation

The AML in the Deer Creek Allotment will remain at 10 head or 120 AUM's.

B. Livestock Grazing Management

1. The following terms and conditions will be in all alternatives:

Salt and/or mineral blocks shall not be placed within 1/4 mile of springs, meadows, streams, riparian habitat or aspen stands.

The permittee is required to perform normal maintenance on range improvements as per the signed cooperative agreements/section 4 permits prior to turning out in a pasture or use area scheduled for livestock use.

A certified actual use report is due 15 days after the end of the authorized grazing period.

2. Grazing Alternatives

Alternative 1 (current grazing system):

Continue with the current grazing system as implemented in the 1994 Final Multiple Use Decision.

Rationale:

Monitoring data indicates that short term utilization objectives will be met with this alternative. Little impact will occur to the Deer Creek and Pass Creek riparian areas due to livestock removal by 04/30. The early removal date provides a significant regrowth period for upland species in both the winter and summer use areas.

Alternative 2:

On February 20, 1996, the permittee submitted the following proposal:

Grazing Preference

- | | | |
|----|---|----------------|
| 1. | The total number of animal unit months of specified livestock grazing | 754 AUMs |
| 2. | Historical Suspended | 1,089 AUMs |
| 3. | Season of Use | 03/01 to 12/31 |

Kind and Class of Livestock:	Cattle (Cow/Calf)
Percent Federal Land:	100%

Grazing System:

82 C	03/01 to 04/30	165 AUMs
75 C	05/01 to 09/30	377 AUMs
70 C	10/01 to 12/31	<u>212 AUMs</u>
	Total	754 AUMs

A fence which parallels the Jackson Mountain Road divides the winter/early spring grounds from the late spring/summer use area. The use area west of the fence is the winter/early spring grounds. This area will be grazed from 10/01 to 12/31 and 03/01 to 03/30 each year. The use area east of the fence leading into the Jackson Mountains is the late spring/summer use area. This area will be grazed from 04/01 to 09/30 each year.

Rationale:

The permittee proposes to keep a base herd of approximately 70 - 82 head on the allotment from 03/01 to 12/31. Monitoring data indicates that short term utilization objectives will be met with in the spring/winter use area during the periods of 03/01 to 03/30 and 10/01 to 12/31.

Monitoring data indicates that livestock use from 04/01 to 09/30 will not meet utilization objectives in the spring/summer use area. Utilization data gathered in 1996 indicates that livestock use in August and September will cause unacceptable use levels in riparian habitats and associated uplands in the Deer Creek and Pass Creek drainages due to hot season use.

Grazing until 09/30 will not allow for regrowth of herbaceous riparian species and increase impacts to the creeks such as reduced age recruitment of woody riparian species and reduced vegetative cover on the creeks.

Alternative 3:

Grazing Preference

- | | | |
|----|---|----------------------------------|
| 1. | The total number of animal unit months of specified livestock grazing | 754 AUMs |
| 2. | Historical Suspended | 1,089 AUMs |
| 3. | Season of Use | 03/01 to 07/31
10/01 to 12/31 |

Kind and Class of Livestock:	Cattle (Cow/Calf)
Percent Federal Land:	100%

Grazing System:

94 C	03/01 to 03/30	93 AUMs
94 C	04/01 to 07/31	377 AUMs
94 C	10/01 to 12/31	<u>284 AUMs</u>
	Total	754 AUMs

A fence which parallels the Jackson Mountain Road divides the winter/early spring grounds from the late spring/summer use area. The use area west of the fence is the fall/winter/early spring grounds. This area will be grazed from 10/01 to 12/31 and 03/01 to 03/30 each year. The use area east of the fence leading into the Jackson Mountains is the late spring/summer use area. This area will be grazed from 04/01 to 07/31 each year.

The following will be implemented as a term and condition on the grazing permit:

"An extension of livestock use will be considered after 07/31 as long as utilization levels on woody and/or herbaceous riparian species on Deer Creek and Pass Creek are below 40%. An extension will not be authorized if utilization levels are above 40%. The BLM, permittee, and interested publics shall inspect the Deer Creek and Pass Creek on or before 07/31. The inspection will determine if an extension can be authorized based on

utilization levels in both creeks and the length of the extension, if any. The length of the extension may vary in accordance to utilization levels observed but will not exceed two weeks. Additional extensions will be considered as long as utilization levels are below 40% in both creeks. These will not exceed two weeks and will require inspections. The permittee will be given a five (5) day notice in which to remove livestock when utilization levels exceed 40%".

Rationale:

Monitoring data indicates that short term utilization objectives for upland and riparian habitats in the fall/winter/early spring grounds will be met with this grazing system.

Monitoring data indicates that short term utilization objectives will be met with this alternative in the spring/summer use area. Utilization data gathered in 1996 indicates that livestock removal on 07/31 will not cause unacceptable utilization levels in riparian habitats and associated uplands in the Deer Creek and Pass Creek drainages. This alternative will allow for regrowth of herbaceous riparian species following livestock removal and reduce hot season grazing impacts to woody riparian species in both drainages. The term and condition stated above allows the permittee flexibility in extending livestock use in the spring/summer use area past 07/31 as long as utilization levels in the Deer Creek and Pass Creek drainages are below 40%. This will require riding and herding by the permittee throughout the spring/summer use period.

3. Objectives

a. Revise the short term objectives to the following:

The objective for utilization of key upland plant species (SIHY, ELCI, STTH2, AGSP) is 50%.

The objective for utilization of key wetland/streambank riparian plant species (CAREX, JUNCUS, PONE3, SALIX, ROSE, Dogwood) is 50%.

b. Remove the following the long term objective:

Protect sage grouse strutting grounds and brooding areas. Maintain a minimum of 30% canopy cover of sagebrush for nesting and

winter use.

Rationale:

No sage grouse habitat has been identified within the Deer Creek Allotment in the Winnemucca District Unit Resource Analysis. No sage grouse strutting grounds, brooding areas or winter use area are known to exist within the allotment. Other allotments within the Jackson Mountains provide sage grouse habitat support populations of the birds. Because of vegetation potential, topography and elevations sage grouse habitats are not suitable or marginal at best in the Deer Creek Allotment.

C. Monitoring

The following types of monitoring data are needed to make a determination of allotment objectives.

1. Utilization
2. Actual Use
3. Climate
4. Wildlife habitat evaluation/condition
5. Trend
6. Ecological Status
7. Wild Horse Census
8. Water quality
9. Lotic and Lentic Riparian Functionality

The next evaluation is scheduled for 2006 unless monitoring data indicates another re-evaluation is required sooner.



COMMISSION FOR THE
PRESERVATION OF WILD HORSES

1105 Terminal Way

Suite 209

Reno, Nevada 89502

(702) 688-2626

May 28, 1997

Mr. Pete Christensen
Paradise-Denio Resource Area
Bureau of Land Management
5100 East Winnemucca Blvd.
Winnemucca, Nevada 89406

Subject: Deer Creek Allotment Re-Evaluation - Jackson HMA

Dear Mr. Christensen:

Thank you for consulting the Commission for the Preservation of Wild Horses concerning the Deer Creek Allotment Re-evaluation. We encourage the District to complete all evaluations to establish an appropriate management level for the Jackson Mountain Wild Horse Herd.

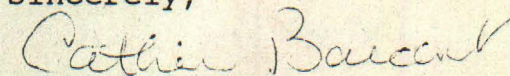
Temporary authorization for summer cattle use did not meet the riparian objectives for the allotment. Since the District adequately monitored this use, it should not be difficult to determine the proper season of use for livestock.

No specific data were presented to validate or adjust the appropriate management level for this portion of the herd.

We would suggest the rangeland monitoring data collected on the lower end of Deer Creek be applied to determining an appropriate management level for wild horses. It may be necessary to establish a key management area and allowable use level for forage allocation to wild horses.

We appreciate the effort to determine if the appropriate management level represents a viable herd. We assume that this portion of the herd or subherd must be able to contribute to the entire gene pool to survive over the long term.

Sincerely,


CATHERINE BARCOMB
Executive Director