



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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W-HOA 2/11/94



IN REPLY REFER TO:

4400.5 (NV-047)

FEB 11 1994

Wild Horse Organized Assistance
P. O. Box 555
Reno, NV 89504

Dear Sirs:

We appreciate your interest in being involved in the allotment evaluation consultation process. Enclosed for your information and review is the Moorman Ranch Allotment evaluation. This is your opportunity to provide allotment specific information and also provide comments to the evaluation which will be incorporated into Section VIII, Management Action Selection Report. We are especially interested in your input on the technical recommendations, in particular, management options we may have overlooked that would also provide for meeting management objectives for the allotment. We would appreciate receiving your information and/or comments by March 15, 1994, to allow adequate time to review all input and to adhere to our deadlines. All of the information received will be evaluated and considered in the final portion of the evaluation which is the selection of a management action.

We appreciate your participation and solicit your continued involvement in the consultation process.

Sincerely,

Michael W. McGinty
for

Gene L. Drais, Manager
Egan Resource Area

- 1 Enclosure
1. Moorman Ranch Evaluation

WHA

MOORMAN RANCH ALLOTMENT EVALUATION SUMMARY

I. INTRODUCTION

- A. Allotment Name and Number: Moorman Ranch Allotment (00802)
- B. Permittee: Bob Dickenson
- C. Selective Management Category: Improve

II. INITIAL STOCKING LEVEL

A. Livestock Use

The Moorman Ranch has a total grazing preference of 10,099 AUMs of cattle use subdivided into eleven areas (Table 1, Map 3). The average actual use over the past four years has been 4,976 AUMS.

Cattle grazing is yearlong with no formal grazing system. Traditionally, Long Valley and West Jakes use areas are used in the winter, and the other areas are used as spring, summer and fall range.

Each of these use areas will be evaluated and discussed separately. Preference demand by use area and class of livestock are based on 1945 adjudication maps. (Table 1)

Table 1. Preference demand (AUMs) for cattle by use area, Moorman Ranch Allotment.

<u>Unit</u>	<u>Preference (AUMs)</u>
Long Valley	3369
Antelope/Divide	2145
Burned Basin	713
Trench	499
W. Jakes	1115
E. Jakes	521
Townsend Seeding *	261
E. Jakes Seeding *	173
Moorman Ranch Seeding *	88
Buster Mountain	1130
Right of Way for HWY 50 fence	85**
	10099

* The original preference from the adjudication maps was done before the pastures were seeded. The above does not include additional AUMS for the Illipah seeding.

** These 85 AUMs are no longer available due to the construction of the right of way fence for Highway 50. The right of way fence was constructed to exclude livestock and the right of way is not considered to be a grazing use area. These 85 AUMs will be subtracted from the total preference since the fenced right of way is no longer available for livestock use. This places the new preference at 10,014 AUMs.

B. Wild Horse Use

The allotment includes the southeastern portion of the Buck and Bald Wild Horse Herd Management Area HMA and the extreme northeastern portion of the Monte Cristo HMA (Map 4). Estimated and censused wild horse numbers for those portions of the Buck and Bald HMA using the Moorman Ranch allotment are shown in Table 2. There was only one census report in 1985 of five wild horses on the Monte Cristo HMA portion of the Moorman Ranch Allotment.

Table 2. Buck & Bald HMA wild horse census data, Moorman Ranch Allotment.

<u>Year</u>	<u>Source</u>	<u>Number of animals</u>	<u>AUMs yearlong *</u>
1992	8/92 census	61	734
1991	7/91 census	54	650
1990	Estimate	57	656
1989	3/89 census	61	734
1988	Estimate	50	602

* Yearlong AUMs do not accurately reflect totals for use areas. This is due to seasonal movements of wild horses, some of which summer outside allotment boundaries. Seasonal movements are taken into account in the stocking rate calculations in following sections.

There are three distinct groups of wild horses which use the Moorman Ranch Allotment. The northeast group summers in the Butte Mountains and winters in Long Valley Canyon. The southwest group summers in the Antelope and Divide use areas and winters in southwest Long Valley. The third group summers in the Burned Basin/Butte Mountain area and winters with the cows in Long Valley (Table 3). Average summer use is considered to be 7 months, 4/16 to 11/15, and winter use is 5 months, 11/16 to 4/15. While these dates are not exact, they are close approximations based on field observations and allow for consideration of seasonal movements of wild horses between use areas. Wild horse use areas are shown in Map 3.

Table 3. Buck and Bald HMA Wild Horse Numbers by Group.

<u>Year</u>	<u>Source</u>	<u>Northeast</u>	<u>Southwest</u>	<u>Remainder</u>	<u>Total</u>
1992	8/92 census	27	18	16	61
1991	7/91 census	23	16	15	54
1990	Estimate	26	16	15	57
1989	3/89 census	29	16	16	61
1988	Estimate	21	16	13	50

C. Wildlife Use

The Rangeland Program Summary (RPS) objective for this allotment is to provide forage and habitat for 874 AUMs for mule deer and 20 AUMs for pronghorn antelope. Existing wildlife use listed in the RPS is 270 AUMs for deer and no AUMs for antelope. The Moorman Ranch Allotment has been identified by the Nevada Department Of Wildlife (NDOW) as

part of an area targeted for future reintroduction of pronghorn antelope. Estimated wildlife numbers for the allotment are from the Egan Resource Area Wildlife Biologist. The following is a summary of wildlife information and estimated actual use.

Mule deer

The Moorman Ranch Allotment contains portions of two NDOW mule deer management areas (MA), MA 10 and MA 13. Highway 50 splits the Moorman Ranch allotment into these two Management Areas. North of the highway is MA 10 and south is MA 13. Since the publication of the Rangeland Program Summary (RPS) in May of 1988, the deer populations in both MA's have declined due to the persistent drought, especially concerning snowpack. Browse production and vigor have declined, making for poor foraging conditions for deer. Fawn production has been limited and the fawns that survive until their first winter period are entering the winter in less than optimum condition. Since mule deer are browsers for the most part, and browse production has been poor, mortality in the fawn segment of the population has been high and recruitment to the population has been reduced below maintenance levels.

A very small portion of the mule deer summer range available in MA 13 is located within the allotment. It is estimated that approximately 30-40 deer summer on the allotment from April 1 through October 30 (40 AUMs).

The MA 10 portion of the allotment is fair mule deer summer habitat. There are several perennial water sources within the allotment, with resident deer use attendant to each source. The summer habitat available on the allotment is insignificant considering MA 10 is the largest management area in Nevada. Management Area 10 includes the Ruby Mountains as well as the east Humboldt Range. Since the publication of the RPS, the deer population in MA 10 has declined, due to the same reasons mentioned above. It is estimated that approximately 50-70 deer spend the entire year on the MA 10 portion of the allotment (144 AUMs).

The Moorman Ranch Allotment has provided crucial winter habitat to migratory mule deer in the past. During the severe winters of 1983-84 and in 1986-87 several thousand deer migrated from the Buck and Bald Mountain areas south along Dry Mountain into the Antelope Summit area and south on to Buster Mountain to spend the winter months. Some of these deer were observed moving east toward the Ruby Marshes road and wintered in the trench portion of the allotment. Also during these winters, deer were documented crossing Long Valley Wash into the Butte Mountain Range then migrating south to the Deer Spring area of north Jakes Valley. It is believed that resident deer do not migrate off the allotment but spend the entire year on the allotment. Mule deer winter use of the allotment is highly variable and all dependent on snowfall received to the north. It is estimated that in a normal winter that possibly 200-300 deer winter on the allotment from November 30 through March 31, 200 AUMs. Mule deer from MA 12 to the east of the allotment possibly move onto the allotment during the

winter months. During severe winters such as the winter of 1983-84, as many as 3000-4000 deer could move south from varying directions toward the allotment. It is estimated that during heavy snowfall winters that between 1500-2000 animals could spend the winter months on or in the direct vicinity of the allotment, November 30 through March 31. (1400 AUMs)

During the period of this allotment evaluation from 1988 through 1992, it is estimated that resident mule deer made approximately 380 AUM's of use on the allotment per year. Mule deer winter use has been down due to the relatively snow free winters. It is estimated that approximately 1000 Aum's of winter deer use was made per year.

Pronghorn Antelope

As mentioned earlier in the text, the Moorman Ranch Allotment is included in a much larger area NDOW has identified as a potential pronghorn antelope reintroduction area. No pronghorn antelope use takes place on the allotment at this time.

Ferruginous Hawks

There are 18 documented ferruginous hawk nest territories on the allotment. Yearly nest inspections since 1981 have demonstrated that as many as nine of the documented nest sites have been occupied in any one year.

Sage Grouse

There are 14 identified sage grouse leks on the allotment. The sage grouse population on the allotment appears to be declining as indicated by yearly lek counts. There are several factors that may have led to this apparent downward trend, such as the construction of the Townsend Seeding fence that passed within a few hundred yards of four occupied leks. In 1981, there were 75 male birds observed on these leks. The last two breeding seasons no birds have been observed. There has been a documented increase in the coyote population over the last two years (Mel Anderson, personal communication, 1992) which could have led to increased predation on sage grouse. Also, during the past four years of relatively snow free winters, sage grouse have not been confined to traditional valley winter areas and may have wintered at higher elevations. When the late winter, early spring breeding season commenced, the male birds strutted at higher elevations away from their traditional valley leks. When this takes place, and the observer arrives at the usual lek and only a few or no birds are observed it is assumed that the population is declining. When in actuality, the birds are out of sight strutting on a higher bench or ridge.

III. ALLOTMENT PROFILE

A. Description

The Moorman Ranch Allotment (00802) is a "I" category allotment, involving 123,491 federal acres and 2,320 private acres for a total of 125,811 acres. The allotment is located in western White Pine County. The allotment includes portions of Long Valley, Butte Mountains, and a small portion of the White Pine Range and Antelope Mountains. Map 1 illustrates the general location of the allotment within the Egan Resource Area and Map 2 depicts approximate allotment boundaries. The allotment consists of eleven use areas, three which are crested wheat grass seedings, one Russian wildrye seeding and seven areas of native range.

B. Allotment Specific Objectives

1. Land Use Plan (RMP) Objectives

- (a) Rangeland Management - "All vegetation will be managed for those successional stages which would best meet the objective of this proposed plan." (Egan Resource Area Record of Decision, p. 3)
- (b) Wild Horses - Wild horses will be managed at a total of 700 animals within the Buck and Bald HMA and 96 animals within the Monte Cristo HMA. (Egan ROD, p. 6)*
 - "Future adjustments in wild horse numbers will be based on data provided through the rangeland monitoring program." (Egan ROD, p. 6)
- * - The 700 wild horses and 96 wild horses yearlong identified in the ROD is no longer a valid appropriate management level (AML). The Interior Board of Land Appeals June 7, 1989 decision (IBLA 88-591, 88-638, 88-648, 88-679) ruled in part: "an AML established purely for administrative reasons because it was the level of wild horse use at a particular point in time cannot be justified under the statute." The IBLA further ruled that AML must be established through monitoring "in terms of the optimum number which results in a thriving natural ecological balance and avoids deterioration of the range."
- (c) Wildlife - "Habitat will be managed for "reasonable numbers" of wildlife species as determined by the Nevada Department of Wildlife." (Egan ROD, p. 6)
 - "Forage will be provided for "reasonable numbers" of big game as determined by the Nevada Department of Wildlife." (Egan ROD, p. 8)

- (d) Watershed - "Establish utilization limits to maintain watershed cover, plant vigor and soil fertility in consideration of plant phenology, physiology, terrain, water availability, wildlife needs, grazing system and aesthetic values." (Egan ROD, p. 44)

2. Rangeland Program Summary Objectives

- (a) "Provide forage for up to 5404 AUMs of livestock use."
- (b) "Improve vegetative cover and reduce erosion on the watershed upstream from Illipah Reservoir."
- (c) "Maintain the seedings (4) in good or better condition and provide for periodic rest."
- (d) "Maintain or improve ecological condition of native range with utilization levels not to exceed Nevada Rangeland Monitoring Handbook (NRMH) recommended allowable use levels. Allowable use levels for winterfat and perennial grass species is 50%."
- (e) Improve mule deer yearlong habitat to good or better condition by not exceeding utilization levels on native species as recommended in the NRMH. Manage rangeland habitat and forage condition to support 874 AUMs for mule deer.
- (f) Manage rangeland habitat and forage condition to support 20 AUMs for antelope.
- (g) Protect sage grouse breeding complexes by maintaining the big sagebrush sites within 2 miles of active strutting grounds for mid to low late seral stage with a minimum of 30% shrub composition by weight.
- (h) Protect ferruginous hawk nest sites by limiting utilization to 50% on winterfat flats within 2 miles of nest sites.
- (i) "Improve 5.2 miles of stream riparian habitat condition from poor/fair to good or better."
- (j) Manage rangeland habitat to support wild horses at an Appropriate Management Level (AML) as part of the Buck and Bald and Monte Cristo HMAs by not exceeding allowable use levels on native species as recommended in the NRMH. Initially, provide for 42 wild horses in the Buck and Bald HMA (503 AUMs) and for one wild horse in the Monte Cristo HMA (11 AUMs).*
- (k) "Improve and maintain habitat condition of meadows and riparian areas in fair/poor condition to good or better for mule deer and upland game."

* - The 43 wild horses yearlong identified in the RPS is no longer a valid AML. The Interior Board of Land Appeals June 7, 1989 decision (IBLA 88-591, 88-638, 88-648, 88-679) ruled in part: "an AML established purely for administrative reasons because it was the level of wild horse use at a particular point in time cannot be justified under the statute". The IBLA further ruled that AML must be established through monitoring "in terms of the optimum number which results in a thriving natural ecological balance and avoids deterioration of the range."

IV. KEY SPECIES IDENTIFICATION

Key upland forage plants for cattle, wild horses and wildlife for this allotment are as follows:

Seedings -Crested wheatgrass (Agropyron cristatum) - AGCR
-Russian wildrye (Elymus junceus) - ELJU

Native - Bitterbrush (Purshia tridentata) - PUTR (not a key species for wild horses)
Winterfat (Eurotia lanata) - EULA
Indian ricegrass (Oryzopsis hymenoides) - ORHY
Bottlebrush squirreltail (Sitanion hystrix) - SIHY
Needle and Thread (Stipa comata) - STCO

These species were chosen as key species because they provide the bulk of the available forage and are a significant component on the range sites under consideration.

V. MANAGEMENT EVALUATION

A. Purpose

The purpose of this evaluation is to assess whether current management practices are meeting the multiple use objectives for the allotment and to determine the appropriate stocking level for the various pastures, for livestock, wildlife, and wild horses.

B. Summary of Studies Data

Utilization patterns were mapped in 1988, 1989, 1990 (spring only), 1991, and 1992 for the majority of the allotment. Use transects have been completed on various portions of the allotment since 1977. Actual use has been collected since 1988. There are 16 key areas identified for livestock on this allotment, five are in the seedings and 11 are on native range. There are three key areas identified for monitoring wildlife in North Jakes Valley, Long Valley and on Buster Mountain. Frequency trend studies have been established at seven of the native key areas and (ecological status condition) studies have been established at five of the native key areas. Map 5

shows the locations of identified key areas. Five of these trend transects have been read more than once, allowing an indication of trend.

Data will be analyzed and proper stocking levels calculated on a use area/pasture basis. Proper stocking levels will be based on monitoring information and calculated using the following formula:

$$\frac{\text{Actual Use (AUMs)}}{\text{Corrected Utilization (\%)*}} = \frac{\text{Proper Stocking Level (AUMs)}}{\text{Desired Utilization (\%)**}}$$

* Value from use pattern mapping, adjusted using yield index
 **Value from Nevada Rangeland Monitoring Handbook - modified depending on objectives and season-of-use.

In areas involving combined use by livestock and wild horses, this calculated proper stocking rate will be apportioned to the various users based on percentage of demand. Demand AUMs for a given area will be considered the total of livestock preference adjudicated to that area plus existing wild horse use, based on the latest census.

1. Precipitation Data

Data from the National Oceanic and Atmospheric Administration weather station located at Ely, Nevada is being used for this evaluation. Data from local rain gauges show similar trends in monthly/annual rainfall patterns. Precipitation data will be used to calculate a yield index for each year (Sneva et al. 1983). The yield index will be used to adjust the utilization levels for above or below normal precipitation (compared to long-term average). In calculating the yield index the first step is to calculate the crop yield (effective precipitation). For the Intermountain Big Sagebrush Region, this includes precipitation falling from September through June. The crop yield is then divided by the normal crop yield (long term average) to determine the precipitation index for each year. The yield index is then calculated using the linear regression equation $Y = -23 + 1.23x$, where Y is the yield index and x is the precipitation index. Table 4 shows the yield indices for Ely for the analysis years (data for the Ruby Valley Station was incomplete).

Table 4. Yield Indices, Ely station

<u>Year</u>	<u>Crop Yield</u>	<u>Precip. Index</u>	<u>Yield Index</u>
1986	9.76	126%	132%
1987	8.02	103%	104%
1988	8.17	105%	106%
1989	6.44	83%	79%
1990	7.12	92%	90%
1991	7.75	100%	100%
1992	7.10	92%	90%

2. Riparian Data

There are eighteen springs and one major stream riparian complex identified in the water inventory files for the Moorman Ranch Allotment. Seven of the eighteen springs are identified as having private land status and of the remaining eleven with public land status, only two are identified as having significant riparian value.

Illipah Creek - Illipah Creek is an important stream riparian complex. It originates at approximately 7650 feet on the east side of the White Pine Range and flows to approximately 6200 feet where it flows into the Illipah Reservoir. Total length of the stream is 10.9 miles to Illipah Reservoir. The riparian complex associated with this stream was rated as fair in a 1981 stream condition survey. This rating remains static with the reading taken in 1993.

Unnamed Illipah Creek - Unnamed Illipah Creek originates at 7,000 feet from springs on the east side of the Mokomoke Mountains (USFS). The creek's total length is 2.25 miles of which 2.0 miles (89%) total is on public land. The riparian complex associated with this stream was rated as poor in a 1981 stream condition survey. Recent surveys have shown no ephemeral flow.

Campbell #2 - Campbell #2 is a perennial spring with no additional water storage capabilities located at T19N., R59E. Sec. 32. In 1993 the associated meadow was rated in good condition according to off bank stream riparian condition surveys.

Sand Spring - Sand Spring is a small perennial spring located at T17N., R57E. Sec. 21. The springhead has been developed with a trough and overflow which diverts into a small pond. The pond is located within a one acre enclosure. No written condition survey has been done for this spring, however; ocular estimates rank it in the excellent category.

3. Use Pattern Mapping

Use patterns were mapped for the majority of the allotment in April of 1988, 1989, 1990, 1991, and 1992, for winter/spring use. Results by use class and percent of total usable acres mapped are shown in Table 5.

Table 5. Use pattern mapping summary - acres and (percent of usable acres) by use class for winter use areas (Long Valley and West Jakes) in the Moorman Ranch Allotment.

a. West Jakes

<u>Year</u>	<u>Light</u> <u>(21 - 40%)</u>	<u>Moderate</u> <u>(41 - 60%)</u>	<u>Heavy</u> <u>(61 - 80%)</u>	<u>Severe</u> <u>(>80%)</u>
1991	1742 (17)	1301 (12)	2718 (25)	4952 (46)
1990	1165 (13)	3893 (44)	1007 (11)	2835 (32)
1989	3235 (35)	1705 (19)	2224 (24)	1974 (22)
1988	4440 (38)	4498 (38)	2858 (24)	-

b. Long Valley

<u>Year</u>	<u>Light</u> <u>(21 - 40%)</u>	<u>Moderate</u> <u>(41 - 60%)</u>	<u>Heavy</u> <u>(61 - 80%)</u>	<u>Severe</u> <u>(>81%)</u>
1992	7290 (26)	1612 (6)	13560 (49)	5462 (19)
1991	6056 (22)	10379 (37)	9047 (32)	2626 (9)
1990	5215 (24)	9086 (43)	4787 (23)	2158 (10)
1989	4629 (27)	6042 (35)	5173 (30)	1457 (8)
1988	-	7640 (37)	12861 (63)	-

Use patterns were mapped for the majority of the allotment in October of 1988, 1989, 1991, and 1992, for summer/fall use. Results by use class and percent of total usable acres are shown in Table 6.

Table 6. Use pattern mapping summary- acres and (percent of usable acres) by use class for summer use areas (Antelope, Divide, Trench, Buster Mountain, Burned Basin, East Jake, Townsend Seeding, East Jake Seeding, Moorman Ranch Seeding and Illipah Seeding) for the Moorman Ranch Allotment.

a. Antelope/Divide

<u>Year</u>	<u>Light</u> <u>(21 - 40%)</u>	<u>Moderate</u> <u>(41 - 60%)</u>	<u>Heavy</u> <u>(61 - 80%)</u>	<u>Severe</u> <u>(> 81%)</u>
1992	2112 (24)	3763 (42)	3082 (34)	-
1991	3350 (40)	2311 (27)	2808 (33)	-
1989	1252 (21)	2559 (43)	2125 (36)	-

b. Trench

<u>Year</u>	<u>Light</u> <u>(21 - 40%)</u>	<u>Moderate</u> <u>(41 - 60%)</u>	<u>Heavy</u> <u>(61 - 80%)</u>	<u>Severe</u> <u>(> 80%)</u>
1992	401 (43)	317 (34)	218 (23)	-
1991	147 (28)	347 (68)	19 (04)	-
1989	798 (54)	430 (29)	220 (15)	24 (2)

c. East Jake

<u>Year</u>	<u>Light</u> <u>(21 - 40%)</u>	<u>Moderate</u> <u>(41 - 60%)</u>	<u>Heavy</u> <u>(61 - 80%)</u>	<u>Severe</u> <u>(>80%)</u>
1992	3928 (61)	2058 (32)	424 (07)	-
1991	1558 (42)	1695 (46)	440 (12)	-
1989	2480 (39)	2493 (39)	1423 (22)	-
1988	1837 (26)	2234 (32)	2909 (42)	-

d. Buster Mountain

<u>Year</u>	<u>Light</u> <u>(21 - 40%)</u>	<u>Moderate</u> <u>(41 - 60%)</u>	<u>Heavy</u> <u>(61 - 80%)</u>	<u>Severe</u> <u>(> 80%)</u>
1992	1080 (32)	1215 (36)	706 (21)	375 (11)
1991	2617 (34)	1715 (22)	3994 (39)	346 (05)
1989	2204 (41)	1548 (29)	1166 (21)	513 (09)
1988	705 (40)	297 (17)	268 (15)	481 (28)

e. Moorman Ranch Seeding

<u>Year</u>	<u>Light</u> <u>(21 - 40%)</u>	<u>Moderate</u> <u>(41 - 60%)</u>	<u>Heavy</u> <u>(61 - 80%)</u>	<u>Severe</u> <u>(> 80%)</u>
1992	-	1447 (100)	-	-
1990	-	-	1447 (100)	-
1989	-	-	1447 (100)	-
1988	-	-	1447 (100)	-

f. Illipah Seeding

<u>Year</u>	<u>Light</u> <u>(21 - 40%)</u>	<u>Moderate</u> <u>(41 - 60%)</u>	<u>Heavy</u> <u>(61 - 80%)</u>	<u>Severe</u> <u>(> 80%)</u>
1992	-	1175 (100)	-	-
1991	-	242 (22)	188 (17)	659 (61)
1989	217 (19)	49 (04)	602 (52)	289 (25)
1988	-	-	286 (22)	993 (78)

g. East Jakes Seeding

<u>Year</u>	<u>Light</u> <u>(21 - 40%)</u>	<u>Moderate</u> <u>(41 - 60%)</u>	<u>Heavy</u> <u>(61 - 80%)</u>	<u>Severe</u> <u>(> 80%)</u>
1992	-	134 (12)	389 (34)	638 (54)
1990	123 (07)	179 (11)	261 (16)	1109 (66)
1989	-	238 (19)	252 (20)	795 (61)

h. Townsend Seeding

<u>Year</u>	<u>Light</u> <u>(21 - 40%)</u>	<u>Moderate</u> <u>(41 - 60%)</u>	<u>Heavy</u> <u>(61 - 80%)</u>	<u>Severe</u> <u>(> 80%)</u>
1992	-	-	-	4068 (100)
1990	-	-	-	4068 (100)
1989	-	-	-	4068 (100)

i. Burned Basin

<u>Year</u>	<u>Light</u> <u>(21 - 40%)</u>	<u>Moderate</u> <u>(41 - 60%)</u>	<u>Heavy</u> <u>(61 - 80%)</u>	<u>Severe</u> <u>(>80%)</u>
1992	172 (17)	685 (68)	154 (15)	-
1991	435 (58)	298 (39)	23 (03)	-
1989	1207 (46)	1221 (46)	219 (08)	-
1988	1083 (32)	1628 (48)	710 (20)	-

As presented in this table, usable acres do not include those areas mapped as slight. In all years, areas that rated slight were either unavailable to livestock and wild horses because of steep slopes or had minimal forage availability (Pinyon-juniper or big sage with little understory).

4. Ecological Status

Ecological status estimates the state of succession at a given site by measuring species composition and comparing it to the composition of the Potential Natural Community (PNC) or climax for that site. This is estimated as a percentage of PNC, and classifications include: 1. Early Seral (0-25%) 2. Mid-Seral (26-50%) 3. Late Seral (51-75%) 4. Potential Natural Community (76-100%).

Ecological condition has been determined for seven of the sixteen key areas on the Moorman Ranch allotment. Results are presented in Table 7, below.

Table 7. Ecological Status (condition) for native key areas, Moorman Ranch allotment.

<u>Key Area</u>	<u>Range Site</u>	<u>Veg Type</u>	<u>Ecol Status</u>
MR-5	28BY010NV	ARTR/ORHY/STCO	55% (Late-seral)
MR-6	28BY010NV	ARTR/ORHY/STCO	47% (Mid-seral)
MR-8	28BY010NV	ARTR/ORHY/STCO	56% (Late-seral)
MR-9	28BY010NV	ARTR/ORHY/STCO	61% (Late-seral)
MR-10	28BY013NV	EULA/ORHY	62% (Late-seral)

5. Trend

Frequency trend transects have been established on seven of the key areas. Species frequency has been measured twice on three of the seven key areas, providing an indication of trend in these areas. Statistical significance of changes was determined by comparison of confidence intervals at the .95 confidence level. Table 8 presents these results.

Table 8. Frequency Trend for Key Areas on Moorman Ranch Allotment. Range Studies:

<u>Key Area</u>	<u>Years Read</u>	<u>Significant Changes</u>	<u>Indicated Trend</u>
MR-1	1988/93	Decrease in SIHY Increase in EULA	UP
MR-5	1989/92	Decrease in ORHY Increase in POSE	DOWN

MR-6	1989/93	Decrease in SIHY Increase in ORHY	UP
MR-7	1988/93	-----	STATIC
MR-8	1989/92	Decrease in ORHY	DOWN
MR-9	1989/92	-----	STATIC
MR-10	1989/93	Decrease in SIHY Decrease in EULA	DOWN

Wildlife Study Summary

Three wildlife studies were established on the Moorman Ranch allotment to track species composition in key browse areas, and how the community is impacted in those areas over time. All three wildlife studies were analyzed using the Bureau's WILDIVE program. This program assigns a habitat condition rating to the vegetative study from a cover rating read while establishing the frequency. Statistical significance of changes was determined by comparison of confidence levels at the .95 confidence level.

Buster Mountain- T.17N., R.58E., Sec. 17 NE1/4

This wildlife frequency trend (vegetation) study was initially established in 7/83. The study was rated in a good habitat condition. The study was reread in 7/89. This reading produced a slight downward trend. There was a loss of forbs and evident hedging on key browse species.

North Jakes Valley- T.19N., R.60E., Sec. 30 SW1/4

This wildlife frequency trend study was established in 8/90. It was rated in a high fair habitat condition. Limiting factors which relate to this study include the loss of forbs from the extended drought and pinyon-juniper encroachment.

Long Valley- T.20N., R.59E., Sec. 29 NE1/4

This study was initially established in 9/89. The study was coordinated with NDOW as well as the range and wild horse programs. The study was placed in Long Valley, which is a potential pronghorn antelope re-introduction area. A pronghorn habitat rating was derived by reading a cover rating while establishing the frequency study. The

study rated as low-fair habitat after being analyzed through the Bureau's WILDIVE program. The study was re-read in 7/92 and showed a downward trend. There was a significant decrease in the number of perennial grasses, forbs and shrubs at a .95 Confidence Interval (CI). On the initial reading a line intercept was read on the first 50 feet of the 100 foot baseline. As a result, 36 feet and 2 inches (72%) of the reading was bare ground. On the 7/92 reading 41 feet and 9 inches (84%) of the first 50 feet were bare ground. This represents a 5 foot 7 inch (12%) increase in bare ground over a three year period.

6. Utilization, Actual Use, and Stocking Rate Calculations by Use Area.

Proper Stocking Level is calculated using the following formula:

$$\frac{\text{Actual Use (AUMs)}}{\text{Corrected Utilization (\%)}} = \frac{\text{Proper Stocking Level (AUMs)}}{\text{Desired Utilization (\%)}}$$

The Desired Utilization or Allowable Use Level (AUL) used in these calculations varies by use area, due to objectives for vegetation types and current conditions. Based on current literature, 50% utilization is used as allowable use for winterfat and native perennial grasses in those areas where objectives are to maintain current condition and prevent deterioration.

The raw utilization figures used in these calculations are either the mid-point of the highest significant use zone or the average of actual transect readings within the highest significant use zone.

a. **Townsend Seeding**

Actual use breakdown (AUMs)

<u>Year</u>	<u>Total AUMs</u>
1992	196
1991	274
1990	738
1989	512
1988	1197

Utilization/stocking rate calculations:

<u>Year</u>	<u>Raw Utilization</u>	<u>Yield Index</u>	<u>Corrected Utilization</u>	<u>Actual Use AUMs</u>	<u>Proper * Stocking Level AUMs</u>
1992	82%	.90	74%	196	159
1990	90%	.90	81%	738	547
1989	87%	.79	69%	512	445
1988	90%	1.06	95%	1197	756

*calculated using 60% as desired utilization

The average proper stocking level is 477 AUMs. Since this pasture is entirely fenced and not within a wild horse HMA the stocking level will be available entirely for cattle.

b. **East Jake Seeding**

Actual use breakdown (AUMs)

<u>Year</u>	<u>Total AUMs</u>
1992	118
1990	132
1989	256
1988	299

Utilization/stocking rate calculations:

<u>Year</u>	<u>Raw Utilization</u>	<u>Yield Index</u>	<u>Corrected Utilization</u>	<u>Actual Use AUMs</u>	<u>Proper * Stocking Level AUMs</u>
1992	90%	.90	81%	118	87
1990	90%	.90	81%	132	98
1989	90%	.79	71%	256	216
1988	61%	1.06	65%	299	276

*calculated using 60% as desired utilization

The average proper stocking level is 169 AUMs. Since this seeding is entirely fenced and not within a wild horse HMA the stocking level will be available entirely for cattle.

c. **Illipah Seeding**

Actual Use Breakdown (AUMs)

<u>Year</u>	<u>Total AUMs</u>
1992	98
1990	182

Utilization/stocking rate calculations:

<u>Year</u>	<u>Raw Utiliz.</u>	<u>Yield Index</u>	<u>Corrected Utilization</u>	<u>Actual Use AUMs</u>	<u>Proper * Stocking Level AUMs</u>
1992	57%	.90	51%	98	115
1990	90%	.90	81%	182	135

* calculated using 60% as desired utilization

The average proper stocking level is 125 AUMs. These AUMs are completely available to cattle since this is not within a wild horse HMA.

d. **Moorman Ranch Seeding**
Actual Use Breakdown (AUMs)

<u>Year</u>	<u>Total AUMs</u>
1992	300
1990	639
1989	121
1988	333

Utilization/stocking rate calculations:

<u>Year</u>	<u>Raw Utilization</u>	<u>Yield Index</u>	<u>Corrected Utilization</u>	<u>Cattle Actual Use AUMs</u>	<u>Proper * Stocking Level AUMs</u>
1992	56%	.90	50%	300	360
1990	70%	.90	63%	639	609
1989	70%	.79	55%	121	132
1988	70%	1.06	74%	333	270

*calculated using 60% as desired utilization

The average proper stocking level is 343 AUMs, and since this area is not within a wild horse HMA, all AUMs will be available for cattle use.

e. **Buster Mountain**
Actual use breakdown (AUMs)

<u>Year</u>	<u>Cattle</u>	<u>Wild Horses</u>	<u>Total AUMs</u>
1992	361	0	361
1991	517	0	517
1990	390	0	390
1989	615	0	615

Utilization/stocking rate calculations:

<u>Year</u>	<u>Raw Utilization</u>	<u>Yield Index</u>	<u>Corrected Utilization</u>	<u>Actual Use AUMs</u>	<u>Proper * Stocking Level AUMs</u>
1992	70%	.90	63%	361	287
1991	70%	1.00	70%	517	369
1990	60%	.90	54%	390	361
1989	70%	.79	55%	615	559

* Calculated using 50% as desired utilization.

The average proper stocking level is 394. These AUMs are completely available to cattle since wild horses make only incidental use of this area.

f. **Antelope/Divide**

Actual Use breakdown (AUMs)

<u>Year</u>	<u>Cattle</u>	<u>Wild Horses*</u>	<u>Total AUMs</u>
1992	890	126	1016
1991	363	112	475
1990	407	112	519
1989	408	112	520

* AUMs for wild horses were based on a 7 month (summer) use period.

Utilization/Stocking Rate Calculations:

<u>Year</u>	<u>Raw Utilization</u>	<u>Yield Index</u>	<u>Corrected Utilization</u>	<u>Actual Use AUMs</u>	<u>Proper* Stocking Level AUMs</u>
1992	70%	.90	63%	1016	806
1991	70%	1.00	70%	475	339
1990	61%	.90	55%	519	472
1989	70%	.79	55%	520	473

* Calculated using 50% as desired utilization

The average proper stocking level is 523. Since this is combined use the stocking level will be proportioned to cattle and wild horses based on preference demand for livestock and existing use by wild horses as follows:

Cattle Preference = 2145

Wild Horse Use = 18 animals for 7 months = 126 AUMs

Cattle	2145 AUMs (94%)
Wild Horses	<u>126 AUMs (06%)</u>
Total	2271 AUMs

Cattle - 94% demand x 523 = 492 AUMs

Wild Horses - 06% demand x 523 = 31 AUMs (4 wild horses for 7 mo.)

g. **East Jake**

Actual Use Breakdown (AUMs)

<u>Year</u>	<u>Total AUMs</u>
1992	162
1991	129
1988	252

Utilization/Stocking Rate Calculations:

<u>Year</u>	<u>Raw Utilization</u>	<u>Yield Index</u>	<u>Corrected Utilization</u>	<u>Actual Use AUMs</u>	<u>Proper* Stocking Level AUMs</u>
1992	50%	.90	45%	162	180
1991	70%	1.00	70%	129	92
1988	70%	1.06	74%	252	170

* Calculated using 50% as desired utilization.

The average proper stocking level is 147. These AUMs are completely available for cattle since this is not within a wild horse HMA.

h. **Trench**

Actual Use Breakdown (AUMs)

<u>Year</u>	<u>Cattle</u>	<u>Wild Horses*</u>	<u>Total AUMs</u>
1992	379	56	435
1991	92	56	148
1990	0	56	56
1989	0	56	56
1988	0	49	49

* AUMs for wild horses were based on a 7 month (summer) use period.

Utilization/Stocking Rate Calculations:

<u>Year</u>	<u>Raw Utilization</u>	<u>Yield Index</u>	<u>Corrected Utilization</u>	<u>Actual Use AUMs</u>	<u>Proper * Stocking Level AUMs</u>
1992	70%	.90	63%	435	345
1991	50%	1.00	50%	148	148
1989	30%	.79	24%	56	117

* Calculated using 50% as desired utilization

The average proper stocking level is 203 AUMs. Since this is combined use, the stocking level will be proportioned to cattle and wild horses based on preference demand for livestock and existing use by wild horses.

Cattle preference = 499 AUMs

Wild Horse Use = 8 animals for 7 months = 56 AUMs

Cattle	499 AUMs (90%)
Wild Horses	<u>56 AUMs (10%)</u>
Total	555 AUMs

Cattle - 90% demand x 203 AUMs = 183 AUMs
 Wild Horses - 10% demand x 203 AUMs = 20 AUMs (3 wild horses for 7 mo.)

i. **Burned Basin**

Actual Use Breakdown (AUMs)

<u>Year</u>	<u>Cattle</u>	<u>Wild Horses*</u>	<u>Total AUMs</u>
1992	163	56	219
1991	183	49	232
1990	0	49	49
1989	0	56	56
1988	0	42	42

* AUMs for wild horses were based on a seven month (summer) use period.

Stocking Rate Calculations:

<u>Year</u>	<u>Raw Utilization</u>	<u>Yield Index</u>	<u>Corrected Utilization</u>	<u>Actual Use AUMs</u>	<u>Proper * Stocking Level AUMs</u>
1992	70%	.90	63%	219	174
1991	50%	1.00	50%	232	232
1989	50%	.79	40%	56	70

* Calculated using 50% as desired utilization.

The average proper stocking level is 159 AUMs. Since this is combined use the stocking level will be proportioned to cattle and wild horses based on preference demand for livestock and existing use by wild horse numbers as follows:

Cattle Preference = 713 AUMs

Wild Horse Use = 8 animals for 7 months = 56 AUMs

Cattle	713 AUMs (93%)
Wild Horses	<u>56 AUMs (07%)</u>
Total	769 AUMs

Cattle - 93% demand x 159 AUMs = 148 AUMs

Wild Horses - 07% demand x 159 AUMs = 11 AUMs (2 wild horse for 7 mo.)

h. **West Jake**
Actual Use Breakdown (AUMs)

<u>Year</u>	<u>Total AUMs</u>
1991	1144
1990	1152
1989	589
1988	1003

Utilization/Stocking Rate Calculations:

<u>Year</u>	<u>Raw Utilization</u>	<u>Yield Index</u>	<u>Corrected Utilization</u>	<u>Actual Use AUMs</u>	<u>Proper * Stocking Level AUMs</u>
1991	88%	1.00	88%	1144	650
1990	90%	.90	81%	1152	711
1989	78%	.79	62%	589	475
1988	64%	1.06	68%	1003	738

* Calculated using 50% as desired utilization.

The average proper stocking level is 644 AUMs. Since this area is not within a wild horse HMA all AUMs will be available to cattle.

i. **Long Valley**

There are three groups of wild horses which use the Long Valley portion of the Moorman Ranch Allotment during the winter. The Northeast group and Southwest group use portions of the allotment that cattle do not utilize. The remaining group winters with the cows in Long Valley. For stocking rate calculation purposes the Northeast and Southwest groups will be calculated separately.

a. **Wild Horses**
Actual Use Breakdown (AUMs)

Northeast Group

<u>Year</u>	<u>Wild Horse #</u>	<u>Total AUMs*</u>
1992	27	135
1991	23	115
1990	26	130
1989	29	145
1988	21	105

Southwest Group

<u>Year</u>	<u>Wild Horse #</u>	<u>Total AUMs</u>
1992	18	90
1991	16	80
1990	16	80
1989	16	80
1988	16	80

* AUMs for wild horses were based on a 5 month (winter) use period.

Utilization/Stocking Rate Calculations:

Northeast Group

<u>Year</u>	<u>Raw *</u> <u>Utilization</u>	<u>Yield</u> <u>Index</u>	<u>Corrected</u> <u>Utilization</u>	<u>Actual</u> <u>Use AUMs</u>	<u>Proper **</u> <u>Stocking</u> <u>Level AUMs</u>
1991	90%	1.00	90%	115	64
1990	90%	.90	81%	130	80
1989	90%	.79	71%	145	102
1988	90%	1.06	95%	105	55

* Raw utilization was based on the mid-point of the use class within the area used by this wild horse group.

** Calculated using 50% as desired utilization.

The average proper stocking level for the Northeast band is 75 AUMs (15 wild horses/5 mo.)

Southwest Group

<u>Year</u>	<u>Raw *</u> <u>Utilization</u>	<u>Yield</u> <u>Index</u>	<u>Corrected</u> <u>Utilization</u>	<u>Actual</u> <u>Use AUMs</u>	<u>Proper **</u> <u>Stocking</u> <u>Level AUMs</u>
1991	76%	1.00	76%	80	53
1990	84%	.90	76%	80	53
1989	54%	.79	43%	80	93
1988	45%	1.06	48%	80	83

* Raw utilization was based on actual transects conducted within the area used by this wild horse group.

** Calculated using 50% as desired utilization.

The average proper stocking level for the Southwest band is 71 AUMs (14 wild horses/5 mo.)

b. Wild horses/cattle
Actual Use Breakdown (AUMs)

<u>Year</u>	<u>Cattle</u>	<u>Wild Horses</u>	<u>Total AUMs</u>
1991	2114	75	2189
1990	1282	75	1357
1989	2640	80	2720
1988	1960	65	2025

* Calculated using 50% as desired utilization.

Stocking rate calculations:

<u>Year</u>	<u>Raw Utilization</u>	<u>Yield Index</u>	<u>Corrected Utilization</u>	<u>Actual Use AUMs</u>	<u>Proper Stocking Level AUMs</u>
1991	90%	1.00	90%	2189	1216
1990	70%	.90	63%	1357	1077
1989	90%	.79	71%	2720	1915
1988	70%	1.06	74%	2025	1368

* Calculated using 50% as desired utilization.

The average proper stocking level is 1394 AUMs. Since this is combined use, the stocking level will be proportioned to cattle and wild horses based on preference demand for livestock and existing use by wild horses as follows:

Cattle preference = 3369
Wild Horse use = 15 animals for 5 months = 75 AUMs

Cattle	3369 AUMs (98%)
Wild Horses	<u>75 AUMs (02%)</u>
Total	3444 AUMs

Cattle - 98% of demand x 1394 AUMs = 1366 AUMs
Wild Horses - 02% of demand x 1394 AUMs = 28 AUMs (6 wild horses for 5 months)

Therefore, total AUMs for wild horses in the Long Valley Use Area would be 174 (35 wild horses for 5 months winter use) and AUMs for cattle would be 1366.

VI. CONCLUSIONS

A. Land Use Plan Objectives

III. B. 1. (a) - Met

Rationale: Although the majority of existing vegetation is in acceptable successional stages, long term objectives would not be met if short term use continues to exceed allowable levels.

In recent years large areas of the winter use areas have been in heavy or severe use classes. Summer use areas also show heavy to severe use on those areas utilized by wild horses and cattle. If full preference were used, these areas of overuse would be more extensive.

III. B. 1. (b) - Not Met

Rationale: Allowable use levels have been exceeded on portions of the allotment grazed by wild horses and livestock.

III. B. 1. (c) - Not Met

Rationale: Although mule deer numbers have fluctuated with drought and severe winter conditions, our monitoring data indicates livestock and wild horse use has contributed to an apparent downward trend in mule deer habitats as well as potential pronghorn antelope habitat.

III. B. 1. (d) - Not Met

Rationale: Allowable use levels have been exceeded on portions of the allotment.

B. Rangeland Program Summary Objectives

III. B. 2. (b) - Not Met

Rationale: Utilization levels have been exceeded on three of the four years during monitoring on areas upstream from Illipah Reservoir. This could result in decreased vegetative cover and could increase the potential for erosion in sensitive riparian areas.

III. B. 2. (c) - Not Met

Rationale: Use on three of the four seedings has been heavy/severe every year.

III. B. 2. (d) - Not Met

Rationale: Utilization levels have exceeded NRMH allowable use levels on portions of the allotment. In recent years, large portions of both winter and summer use areas have been in heavy or severe use classes. If full preference were used, these areas of overuse would be more extensive.

III. B. 2. (e) - Not Met

Rationale: Allowable use levels on the majority of mule deer habitat have been exceeded on a regular basis.

III. B. 2. (f) - Met

Rationale: There are no antelope on the Moorman Ranch Allotment at this time; however, there is sufficient forage to support 20 antelope AUMs. The Nevada Department of Wildlife is considering future re-introductions of antelope into the Jakes Valley and Long Valley areas of the Moorman Ranch Allotment.

III. B. 2. (g) - Met

Rationale: Big sagebrush sites within two miles of strutting grounds are being maintained in mid-late seral stages with a minimum of 30% sagebrush cover.

III. B. 2. (h) - Not Met

Rationale: Allowable use levels on winterfat have been exceeded within two miles of the majority of ferruginous hawk nest sites on this allotment, due to cattle and wild horse use.

III. B. 2. (i) - Not Met

Rationale: Illipah Creek is the only stream riparian complex on the Moorman Ranch Allotment. It was rated as fair in a 1976 stream inventory and remains static according to the latest readings taken in 1981 and 1993.

III. B. 2. (j) - Not Met

Rationale: allowable use levels on key forage species have been exceeded on portions of the allotment by wild horses.

III. B. 2. (k) - Not Met

Rationale: Illipah Creek is the major riparian complex on the Moorman Ranch Allotment. It was rated as fair in a 1976 stream inventory and remains static according to the latest readings taken in 1981 and 1993.

VII. TECHNICAL RECOMMENDATIONS

A. Problem

The major resource problem on the Moorman Ranch Allotment is the overutilization of key species by livestock and wild horses. The cause can be attributed to excessive numbers, poor distribution, and yearlong grazing. This has led to a decrease in carrying capacity and deterioration of the range resource.

B. Solution

1. Short Term

Long Valley Use Area

- 1) Reduce adjudicated preference for livestock from 3369 AUMs to 1366 AUMs as indicated by monitoring studies.
- 2) Establish wild horse AML at 174 AUMs (35 animals/5 mo. winter use) as indicated by monitoring in the Buck and Bald HMA.
- 3) Limit livestock use to the winter use period with a season of use from 10/15 to 4/15.
- 4) Maintain and pump all wells on a regular basis to promote livestock distribution.
- 5) No salt or supplements will be allowed within 1/2 mile of stock waters or in winterfat vegetation.

West Jake Use Area

- 1) Reduce adjudicated preference for livestock from 1115 AUMs to 644 AUMs.
- 2) Limit livestock use to the fall/winter use period with a season of use from 9/1 - 4/15.
- 3) No salt or supplements will be allowed within 1/2 mile of stock waters or in winterfat vegetation.

Illipah Seeding

- 1) There are no adjudicated AUMs for the Illipah Seeding. By using actual use and utilization data, the stocking rate will be set at 125 AUMs.
- 2) Limit livestock use to (5/1 - 6/15) and (9/1 - 10/31).

East Jake Use Area

- 1) Reduce adjudicated preference for livestock from 521 AUMs to 147 AUMs.
- 2) Limit livestock use to the summer/fall use period with a season of use from 5/16 - 10/15.

Buster Mountain Use Area

- 1) Reduce adjudicated preference for livestock from 1130 AUMs to 394 AUMs.
- 2) Limit livestock use to the summer/fall use period with a season of use from 5/16 - 10/15.
- 3) Establish wild horse AML at 0 AUMs, since wild horses from the Monte Cristo HMA make only incidental use of this use area.

Antelope/Divide Use Area

- 1) Reduce adjudicated preference for livestock from 2145 AUMs to 492 AUMs.
- 2) Establish wild horse AML at 31 AUMs (4 animals/7 mo. summer use) as indicated by monitoring in the Buck and Bald HMA.
- 3) Limit livestock use to the summer/fall use period with a season of use from 5/16 - 10/15.

Burned Basin Use Area

- 1) Reduce adjudicated preference for livestock from 713 AUMs to 148 AUMs.
- 2) Establish wild horse AML use at 11 AUMs (2 animals/7 mo. summer use) in the Buck and Bald HMA.
- 3) Limit livestock use to the fall/winter use period with a season of use from 9/1 - 4/15.

Trench Use Area

- 1) Reduce adjudicated preference for livestock from 499 AUMs to 183 AUMs.
- 2) Establish wild horse AML at 20 AUMs (3 animals/7 mo.) in the Buck and Bald HMA.
- 3) Limit livestock use to the summer/fall use period with a season of use from 5/16 - 10/15.

Townsend Seeding

- 1) Increase adjudicated preference for livestock from 261 AUMs to 477 AUMs. This increase is a result of the fact that the original preference was adjudicated before the pasture was seeded.
- 2) Limit livestock use to (5/1 - 6/15) and (9/1 - 10/31) or (4/15 - 6/15) in the seeding. (See Appendix map 6)

East Jake Seeding

- 1) Reduce adjudicated preference for livestock from 173 AUMs to 169 AUMs.
- 2) Limit livestock use to (5/1 - 6/15) and (9/1 - 10/31) or (4/15 - 6/15) in the seeding. (See Appendix map 6)

Moorman Ranch Seeding

- 1) Increase adjudicated preference for livestock from 88 AUMs to 343 AUMs. This increase is a result of the fact that the original adjudication was done prior to the seeding.
- 2) Limit livestock use to (5/1 - 6/15) and (9/1 - 10/31) or (4/15 - 6/15) in the seeding. (See Appendix map 6)

General (all pastures)

Total active preference for livestock on the Moorman Ranch Allotment for Bob Dickenson would be 4488 AUMs licensed separately for the 11 use areas as outlined in previous sections. Active preference and wild horse AUMs for each of the use areas is summarized as follows:

<u>Use Area</u>	<u>Cattle AUMs</u>	<u>Wild Horse AML</u>
Long Valley	1366	174 (Buck & Bald HMA)
West Jake	644	0 (Not Applicable)
Antelope/Divide	492	31 (Buck & Bald HMA)
Trench	183	20 (Buck & Bald HMA)
Burned Basin	148	11 (Buck & Bald HMA)
Townsend Seeding	477	0 (Not Applicable)
M. Ranch Seeding	343	0 (Not Applicable)
Illipah Seeding	125	0 (Not Applicable)
East Jake	147	0 (Not Applicable)
East Jake Seeding	169	0 (Not Applicable)
<u>Buster Mountain</u>	<u>394</u>	<u>0 (Monte Cristo HMA)</u>
Total	4488	236 (Buck and Bald HMA) 0 (Monte Cristo HMA)

Overall, this is a 56% reduction in cattle preference.

2. Long Term

Regardless of which short term option or combination of options is selected, the following long term solutions should be implemented:

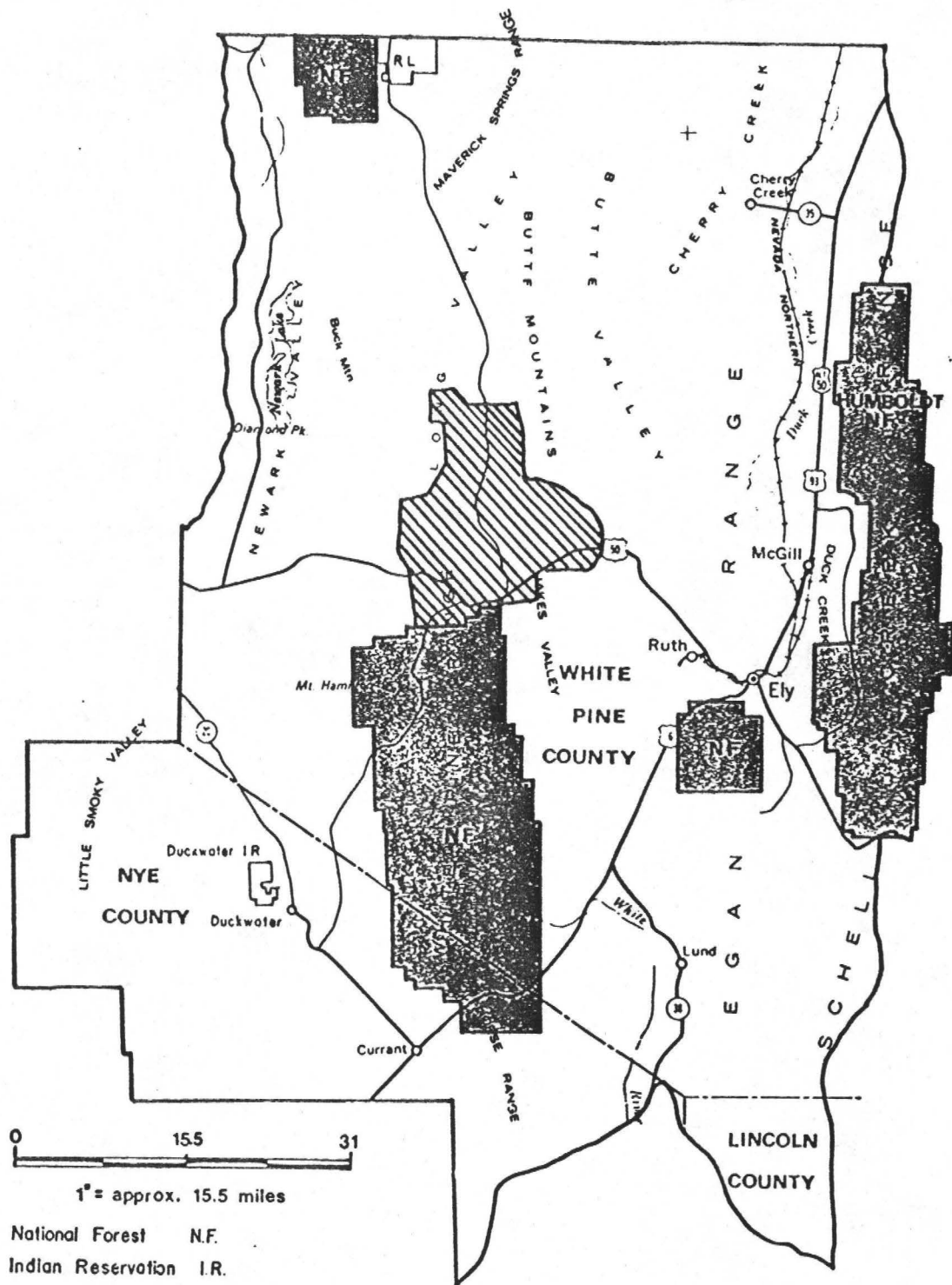
- (a) Continue to monitor to determine if further adjustments to livestock and wild horse use areas are necessary, including rereading existing studies, yearly and seasonal utilization checks, horse censuses, and other studies as needed.
- (b) Manage wild horses numbers at a level which will maintain a thriving natural ecological balance as determined through monitoring. Establish AML for that portion of the Buck and Bald HMA within the Moorman Ranch Allotment at 236 AUMs; establish AML for that portion of the Monte Cristo HMA within the Moorman Ranch Allotment at 0 AUMs since wild horses make only incidental use of this area.
- (c) Maintain the Moorman Ranch, Townsend, and East Jake Seedings.
- (d) Fence private land around Indian Spring to control livestock access onto public lands.
- (e) Install approximately 4 miles of fence between the Burned Basin Use Area and West Jakes Use Area to control drift of cattle onto the West Jakes Use Area.

- (f) Install a drift fence at the summit between the Burned Basin and Long Valley Use Area to prevent cattle from drifting back into Long Valley after winter use.
- (g) Fence public land along Illipah Creek in order to meet riparian objectives.
- (h) Fences will be constructed as needed to exclude livestock from the day use and overnight recreation facilities at Illipah Reservoir as specified in the Loneliest Highway Recreation Area Management Plan, approved 9/12/91.

3. Additional Monitoring Data Required

- (a) Continue to conduct use pattern mapping, key area utilization, and re-read frequency studies.
- (b) Continue to conduct aerial census of wild horses to monitor movements and actual use.
- (c) Continue to monitor livestock and wildlife actual use. Require area-specific actual use from the livestock operator.

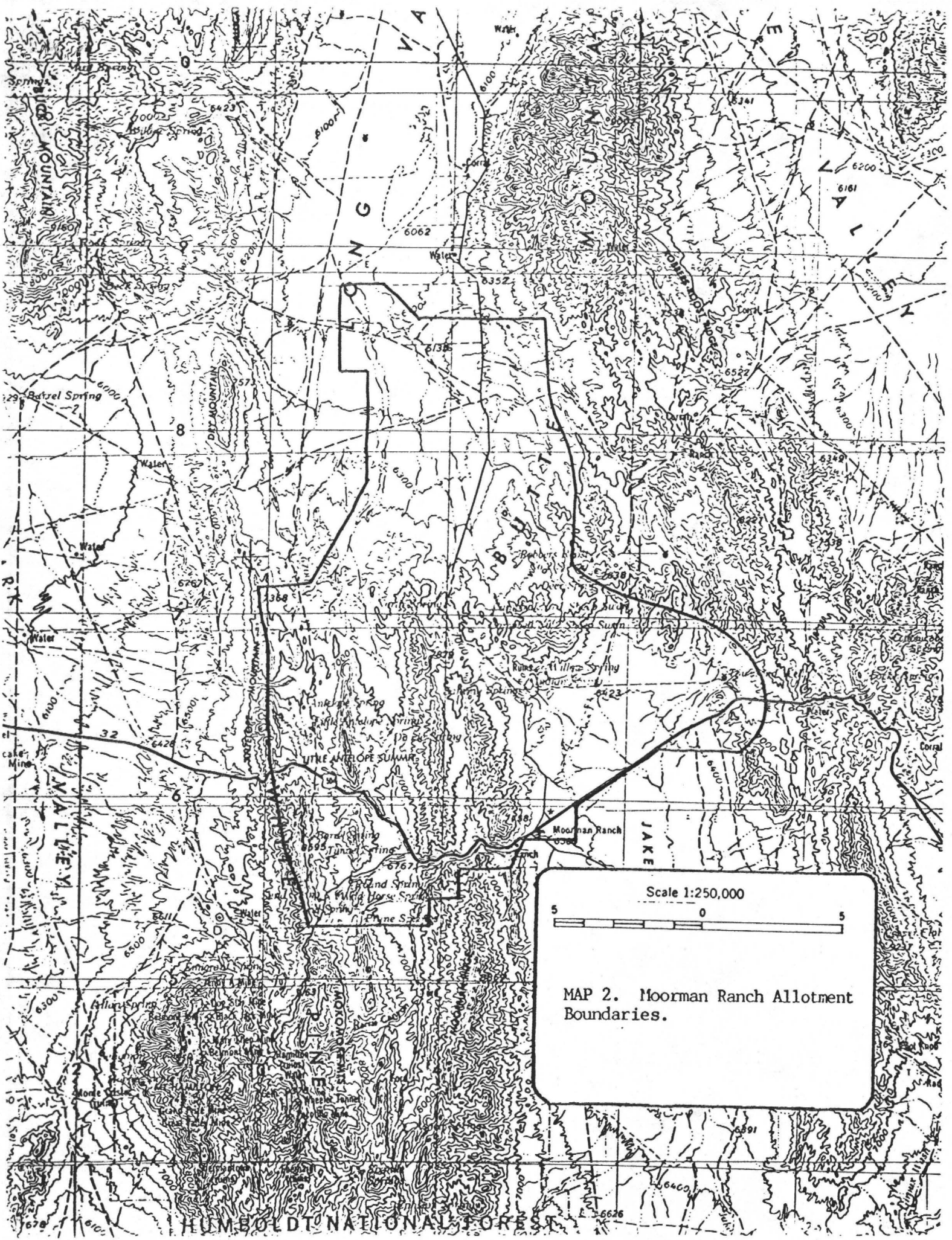
MAP 1. General Allotment Location



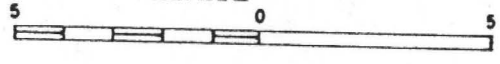
0 15.5 31
1" = approx. 15.5 miles

National Forest N.F.
Indian Reservation I.R.
Ruby Lake R.L.

EGAN R.A.
ELY DISTRICT
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR



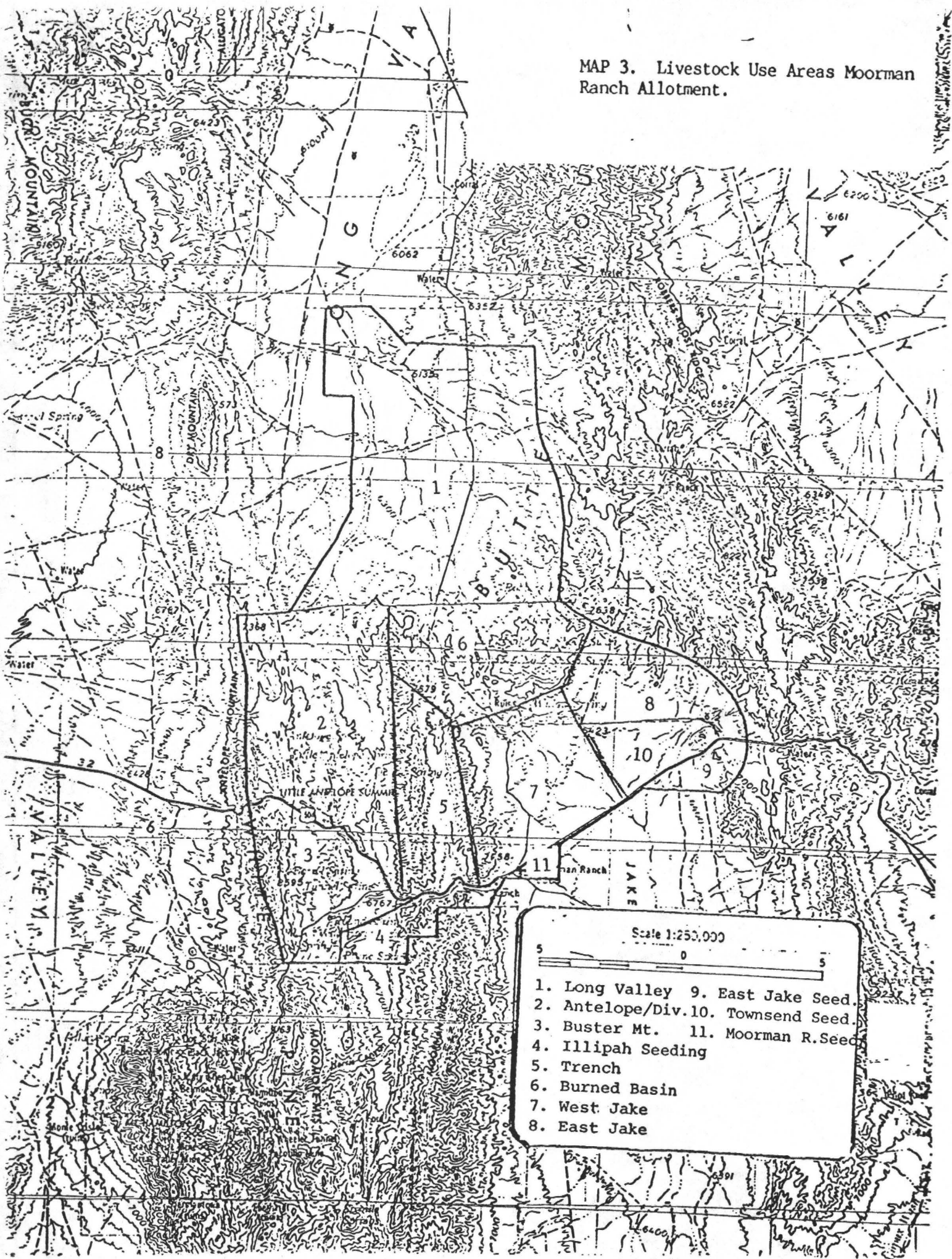
Scale 1:250,000



MAP 2. Moorman Ranch Allotment Boundaries.

HUMBOLDT NATIONAL FOREST

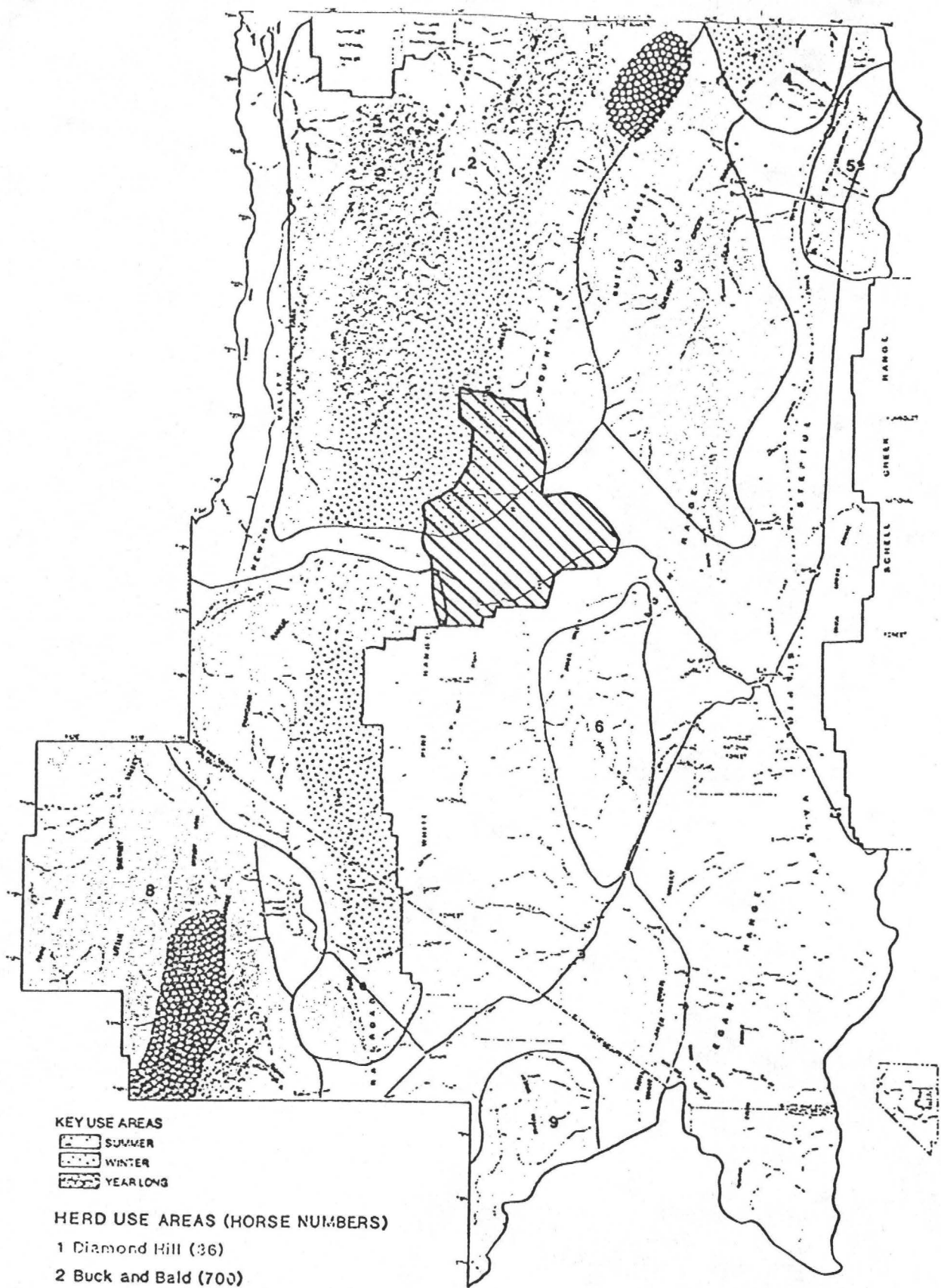
MAP 3. Livestock Use Areas Moorman Ranch Allotment.






Scale 1:250,000

5 0 5

1. Long Valley 9. East Jake Seed.
 2. Antelope/Div. 10. Townsend Seed.
 3. Buster Mt. 11. Moorman R. Seed.
 4. Illipah Seeding
 5. Trench
 6. Burned Basin
 7. West Jake
 8. East Jake



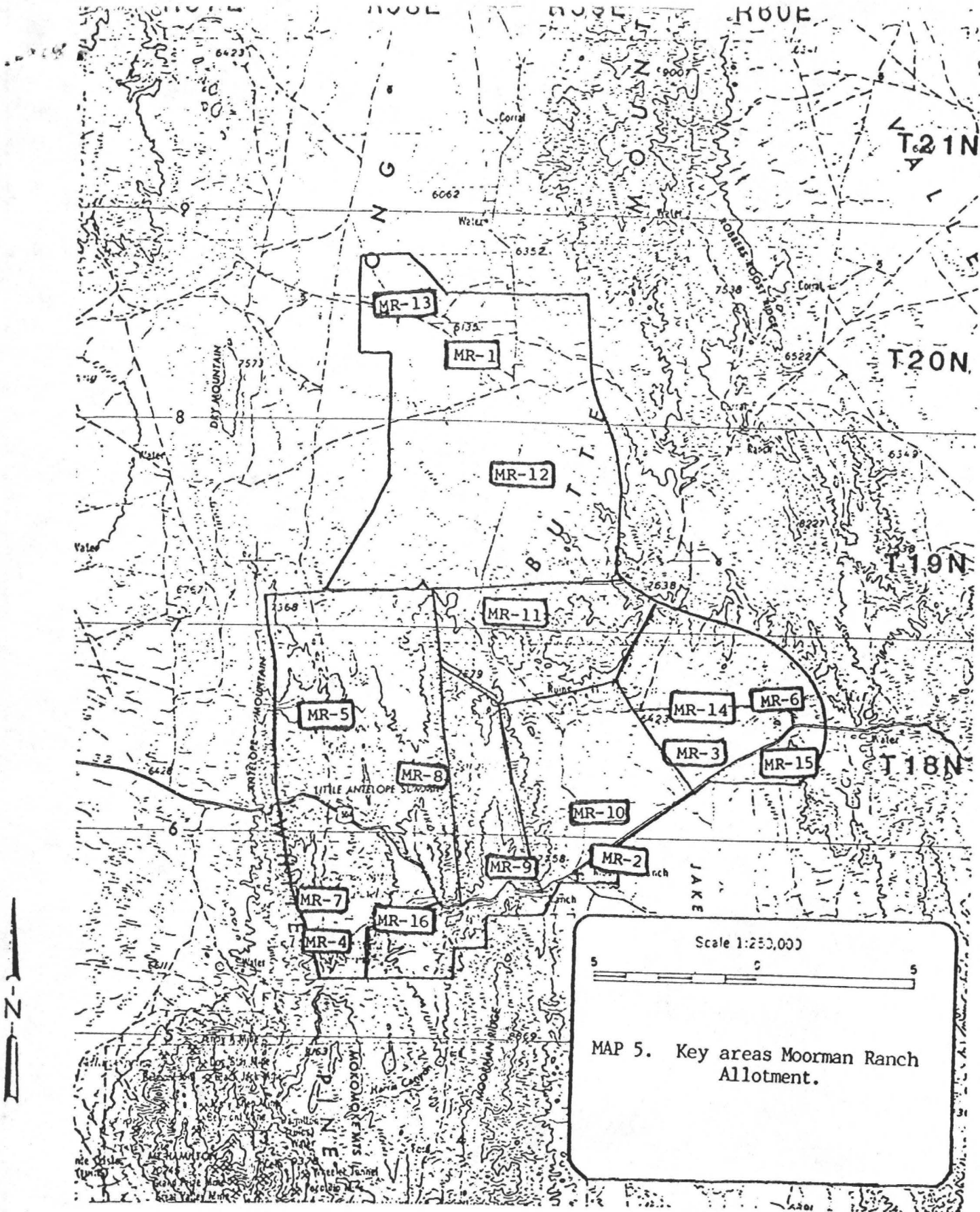
KEY USE AREAS

-  SUMMER
-  WINTER
-  YEARLONG

HERD USE AREAS (HORSE NUMBERS)

- 1 Diamond Hill (36)
- 2 Buck and Bald (700)
- 3 Butte (60)
- 4 Cherry Creek (11)
- 5 Antelope (14)
- 6 Jakes Wash (20)
- 7 Monte Cristo (96)
- 8 Sand Springs (494)
- 9 White River (20)

MAP 4. Moorman Ranch Allotment Boundaries in Relation to the Buck and Bald and Monte Cristo Wild Horse HMA's



Scale 1:250,000

MAP 5. Key areas Moorman Ranch Allotment.

MAP 6. Rotation schedule for the East Jake, Moorman Ranch and Townsend Seedings



SEASON OF USE

YEAR	5/1 - 6/15 9/1 - 10/31	5/1 - 6/15 9/1 - 10/31	4/15 - 6/15
1995	A	B	C
1996	B	C	A
1997	C	A	B

BOB MILLER
Governor

STATE OF NEVADA



*Buck + Bald
HMA*
✓

3/9/94
FAXED 3/10

CATHERINE BARCOMB
Executive Director

COMMISSIONERS

- Paula S. Askew, Chairperson
Carson City, Nevada
- Steven Fulstone, Vice Chairman
Smith Valley, Nevada
- Michael Jackson
Las Vegas, Nevada
- Dan Keiserman
Las Vegas, Nevada
- Dawn Lappin
Reno, Nevada

COMMISSION FOR THE
PRESERVATION OF WILD HORSES

50 Freeport Boulevard, No. 2
Sparks, Nevada 89431
(702) 359-8768

March 9, 1994

Gene L. Drais, Manager
BLM-Ely District Office
HC33 Box 33500
Ely, Nevada 89301-9408

Subject: Moorman Ranch Allotment Evaluation

Dear Mr. Drais,

Thank you for the opportunity to review and comment on the Moorman Ranch Allotment Evaluation.

The Commission has worked many years with the Bureau for management of the habitat that will benefit all users. We have, in the past supported removal of wild horses to protect the habitat when the decisions have been equitable. When monitoring the allotment the actual utilization is the result of "actual" cows and actual horses. The BLM doesn't monitor for preference so how can you expect to reduce from preference and make an actual difference in the deterioration of the allotment. For the past 23 years wild horses have continually been removed, paper cows have been removed, and then when the habitat doesn't improve the result is the removal of more horses and more paper cows. We can no longer support these removals and allow the horses to take the sole actual reductions when the end result is not the improvement of the habitat.

We have used your data for actual use by livestock and horses where they have overlapped, and taken actual utilization and computed the resulting carrying capacity. We've used actual utilization not your adjusted utilization figures. By removing paper cows and adjusting actual utilization to soften the damage figures and we cannot seem to understand how this will improve this already degraded allotment.

Again, we are not against the removal of wild horses when the decision is equitable and the end result is improvement of the habitat. Using actual use by livestock and wild horses, reductions from the percentage of demand, and actual utilization our carrying capacity figures are as follows:

- f. Antelope/Divide
 - Wild Horses.....77 AUMs
 - Livestock.....1451 AUMs

Gene L. Drais, Manager
March 9, 1994
Page 2

- h. Trench
 - Wild Horses.....52 AUMs
 - Livestock.....434 AUMs


- i. Burned Basin
 - Wild Horses.....47 AUMs
 - Livestock.....101 AUMs

- i. Long Valley
 - Wild Horses
 - a. Northeast Group.....69 AUMs
 - a. Southwest Group.....66 AUMs
 - b. Wild Horses.....43 AUMs
 - b. Livestock.....1243 AUMs

In conclusion, we believe the above carrying capacity for each of the areas will result in improved habitat for all users, livestock, wild horses, and wildlife. The data you have supplied in the AE has been presented and we expect the resulting Multiple Use Decision will be to remove horses using a full force and effect decision to protect the habitat from overuse. We would expect the same full force and effect Multiple Use Decision be issued to protect the habitat from livestock overuse. We look forward to working with you and the permittee on this decision to improve this "I" category allotment for all.

If you have any questions or would like to discuss this further, please don't hesitate to call.

Sincerely,



CATHERINE BARCOMB
Executive Director

W H O A

WILD HORSE ORGANIZED ASSISTANCE
P.O. BOX 555
RENO, NEVADA 89504



... a note from

Dawn Y. Lappin

March 9, 1994

Gene L. Drais, Manager
BLM-Ely District Office
HC33 Box 33500
Ely, Nevada 89301-9408

Subject: Moorman Ranch Allotment Evaluation

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Gene L. Drais, Manager
March 9, 1994
Page 2

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If you have any questions or would like to discuss this further, please don't hesitate to call.

Sincerely,

DAWN Y. LAPPIN
Director

3/18/94



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

Ely District Office
HC 33 Box 33500
Ely, Nevada 89301-9408

IN REPLY REFER TO:

4700 (NV-047)

MAR 18 1994

Commission for the Preservation of Wild Horses and Burros
c/o Cathie Barcomb, Executive Director
50 Freeport Blvd., #2
Sparks, NV 89431

Dear Ms. Barcomb:

This letter is to again respond to some of your concerns that are repeated in your recent comment letters on the allotment evaluations and decisions. Your hectic schedules and that of my staff have not allowed contact by phone.

A repeated concern in your letters on Moorman Ranch Evaluation, Railroad Pass Evaluation, and the Warm Springs Proposed Decision is the reduction from preference for livestock and most recent census for wild horses. Your main concern is with the reduction from preference and not from actual use. This reduction from preference is not an option I have to change. Under 43 CFR 4110.3-2(c), "Where active use is reduced it shall be held in suspension or in nonuse for conservation/protection purposes, until the authorized officer determines that active use may resume." It is the Bureau's interpretation from the Washington and State Office level that "active use" specified in the CFR refers to active preference. Therefore, I have no option but to reduce from active preference.

In addition, the following are responses to individual allotment concerns.

Medicine Butte

Your concerns over the domestic horse permit within this allotment were taken into consideration when we prepared the Final Decision to allow this use to continue. The domestic horses will now only be allowed to graze within fenced seedings. The seedings are on the edge of the HMA and wild horses do not make use around the seedings, although they lie within the HMA boundary. The seedings were fenced prior to 1971 to preclude use by wild horses and were meant to be grazed only by livestock. In fact, wild horses have never grazed the seedings and allowing domestic horse use there will not create a conflict with wild horses.

Railroad Pass

Page 1, Wild Horse Use

We do use all available sightings, on the ground counts, and annual census to do the best we can at identifying the wild horses that use an allotment. Population modeling would not lend itself to this because modeling is only intended to track population growth and age structure. This type of data would not show movement and actual use information.

Page 3, Allotment Specific Objectives

The numbers established in the Record of Decision for livestock and wild horses were management levels that would meet management objectives. It has been the Bureau's intention, from that point on, to make any changes in stocking rates based on monitoring. This is what we are attempting to do.

Page 7, Carrying Capacity Computations

- 1) We have noted your concerns, along with other interests, that sheep use has not been included in the stocking rate calculations. Changes will be made to include them in the Management Action Selection Report and Final Decision.
- 2) The Bureau is required to take into account environmental factors in making grazing adjustments. The Ely District has adopted the Sneva Index as a valid tool to adjust for changes in moisture.
- 3) As discussed before, we are required to reduce from preference. We attempted to attribute the use to the offending animal based on 77% actual use by wild horses and 23% actual use by cattle. This would have resulted in reducing the wild horse population below 0 which was not an option.

We then attempted the reduction based on a needed 58% reduction overall. This resulted in the livestock operators being reduced 58%, while only making 23% of the actual use, and wild horses being reduced 42%, while making 77% of the actual use. We did not feel this was fair.

We then used our existing Land Use Plan proportion for AUMs of 84% for livestock and 16% for wild horses. This results in livestock receiving 84% of available AUMs and wild horses receive 16% of available AUMs. We felt this was the most fair method to both users.

Warm Springs

You mentioned that you could not determine how seasonal use by wild horses was figured into the calculations. I would direct you to page 17 of the allotment evaluation. This information was not included in the proposed decision because of the lengthy discussion needed.

We are sorry we have not been able to contact you by telephone to this point. Please feel free to call Joe Stratton Egan Resource Area Wild Horse Specialist, at 702-289-4865 if you have further questions or if you would like to set up a conference call to discuss your concerns in greater detail. We welcome your cooperation and input to our process.

Sincerely,



Gene L. Drais, Manager
Egan Resource Area