m 9/15/95

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:

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

4400.5 (NV-047)

SEP 15 1995

Dear Interested Public:

We appreciate your interest in being involved in the allotment evaluation consultation process. Enclosed for your information and review is the Ruby Valley 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 October 16, 1995, 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. If you have any questions, please contact Wendy Fuell of my staff at (702) 289-4865.

Sincerely,

Gene L. Drais, Manager
Egan Resource Area

1 Enclosure
1. Ruby Valley Allotment Evaluation

C. Wildlife Use

The RPS objective for this allotment is to provide forage and habitat for 100 AUM's of mule deer use. Since the publication of the RPS, the Nevada Division of Wildlife (NDOW) augmented the small number of pronghorn antelope inhabiting south Ruby Valley with an additional 48 animals in 1988. There are two documented sage grouse leks (strutting grounds) on the allotment. The two mile radius of two additional leks expands on to the allotment. Following is a breakdown of existing wildlife use on the allotment. The information provided was coordinated with Steve Foree, NDOW wildlife biologist.

Mule Deer

Yearlong use of the allotment is limited to approximately two miles of habitat attendant to a perennial water source. It is estimated that between 10-20 animals reside on the allotment on a yearlong basis, 45 AUM's.

Migratory deer make use of the allotment when trailing to the Maverick Range. In winters when excessive snow falls in the Ruby Mountains to the north, it is estimated that 200-300 mule deer will migrate through the allotment. The amount of time spent on the allotment in the fall/winter period and the spring return migration to the Ruby Mountains would be approximately 1 month total, approximately 63 AUM's.

Pronghorn Antelope

Since the augmentation of 48 pronghorn antelope in January 1988, approximately 30-40 animals will utilize habitats on the allotment at various times during the year, approximately 84 AUM's. Since the allotment lacks free water in the valley and much of the bajada portions, an antelope guzzler was installed to provide water for the animals. It is estimated that the resident pronghorns forage and water on the Ruby Valley National Wildlife Refuge much of the hotter summer months. In January or February of 1995, another pronghorn antelope augmentation is being proposed for the south end of Ruby Valley. The legal location of the augmentation is T.25N., R.58E. It is proposed to release an additional 50-80 animals in an attempt to create a more viable herd of antelope.

III. ALLOTMENT PROFILE

A. Description

The Ruby Valley Allotment is an "I" category allotment, consisting of 20,081 acres of federal land, with no private land in the allotment. The allotment is located in Northeast White Pine County and is bordered by the Ruby Valley National Wildlife Refuge to the west and the Elko county line to the north. Map 1 (Appendix A) illustrates the general location of the allotment within the Egan Resource Area and Map 2 (Appendix A) depicts approximate allotment boundaries. Adjacent allotments include Fort Ruby, Warm Springs, Maverick Springs and Horse Haven. The Elko District BLM manages approximately 3,000 acres of the allotment, above the north fence and extending to the Elko County line. The portion of the allotment administered by the Elko District is managed in conjunction with the Ruby 9 Allotment (Map 5, Appendix A). The allotment is fenced on the North and West side.

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) 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)

(c) 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)

(d) Wild Horses - Wild horses will be managed at a total of 700 animals within the Buck and Bald 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 horses identified in the ROD is no longer a valid Appropriate Management Level (AML). The Interior Board of Land Appeals (IBLA) 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 ecological balance and avoids deterioration of the range."

2. Rangeland Program Summary Objectives

(a) "Provide forage for up to 580 AUMs of livestock use."

(b) "Maintain or improve current ecological condition of native range."

(c) Maintain or enhance native vegetation with utilization not to exceed Nevada Rangeland Monitoring Handbook (NRMH) levels.

(d) Manage rangeland habitat and forage condition to support 120 AUMs for deer and 202 AUMs for antelope.

(e) "Maintain mule deer yearlong habitat in a good or better condition."

(f) "Protect sage grouse breeding complexes."

(g) Improve and maintain habitat condition of meadows and riparian areas from fair to good or better condition.

(h) Manage rangeland habitat to support wild horses as part of the Buck and Bald HMA by not exceeding allowable use levels on native species as recommended in the Nevada

Rangeland Monitoring Handbook (NRMH). Initially provide forage for up to 251 AUM's of wild horse use.*

*- The 700 horses identified in the ROD is no longer a valid Appropriate management Level (AML). The Interior Board of Land Appeals (IBLA) 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 ecological balance and avoids deterioration of the range."

IV. KEY SPECIES IDENTIFICATION

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

Upland - Grasses

- Indian ricegrass (Oryzopsis hymenoides) - ORHY
- Bottlebrush squirreltail (Sitanion hystrix) - SIHY

Shrubs

- Budsage (Artemesia spinescens) - ARSP
- Shadscale (Atriplex confertifolia) - ATCO
- Whitesage (Euratia lanata) - EULA

IV. 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 livestock, wild horses and wildlife.

B. Summary of Studies Data

Utilization pattern mapping was completed for the allotment in 1990, 1991, and 1993 (Appendix B). There is one key area (RV-2) on the allotment (Map 3, Appendix A). Ecological Status (condition) was read on the allotment in 1983 and 1989 at key area RV-2. Frequency (trend) transects were completed at key area RV-2 for the years 1983, 1989, and 1993. Licensed use will be used for all three years in the analysis as there was no actual use reported. Proper stocking levels will be based on monitoring information and calculated using the following formula:

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 shows 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 1 shows the yield indices for Ely for the analysis years (data for the Ruby Valley and Eureka stations were incomplete).

Table 1. Yield Indices, Ely Station

Year	Crop Yield	Precip. Index	Yield Index
1990	7.12	92%	90%
1991	7.75	100%	100%
1992	7.10	92%	90%
1993	9.60	124%	130%

3. Use Pattern Mapping

Use patterns were mapped for the allotment in May 1990, 1991, and 1993. Results by use class and percent of total usable acres mapped are shown in Table 2. Use pattern maps are included in Appendix B.

Table 2. Utilization Mapping

Year	*Slight (0-21%)	Light (21-40%)	Moderate (41-60%)	Heavy (61-80%)	Severe (> 81%)
89/90	8276(47%)	4895(28%)	4303(24%)	322(1%)	
90/91	8727(49%)	2898(16%)	4040(23%)	2132(12%)	
92/93	11646(65%)	4703(27%)	1385(08%)	63(<01%)	

* Acres mapped as slight also include acres of no-use.

4. Ecological Status

Ecological status (condition) was read for key area RV-2 in 1983 and 1989. Results are shown in Table 3.

Table 3. Ecological Status

KEY AREA	LOCATION	RANGE SITE	ECOLOGICAL STATUS
RV-2	T26N R58E SEC. 35	028BY011NV	1983 MID SERAL 1989 MID SERAL

5. Trend

A frequency (trend) transect was established at key area RV-2 in 1983 (See Appendix, Map 3). The frequency was reread in 1989 and 1993; it indicates a downward trend for grasses at the 95% confidence interval.

6. Actual Use Data

Actual use data was based on licensed use for the years 1989/90, 1990/91, and 1992/93. Results are shown in Table 4.

Table 4. Actual Use Data

Year	#/Kind	Use Period	% Use	AUMs
89/90	103 c	12/6 - 2/28	100	288
90/91	85 c	3/1 - 3/31	100	87
	150 c	11/1 - 2/28	100	592
92/93	120 c	3/1 - 3/31	100	122
	32 c	11/1 - 1/9	100	74

Table 5. Actual Use Breakdown (AUMs)

Year	Cattle	Wild* Horses	Total AUMs
89/90	288	0	288
90/91	679	0	679
92/93	196	51	247

*Wild horse use in the winter of '92-93 is estimated to be for only three months based on historical use and the snow conditions of the winter, estimated by the wild horse specialist.

V. CONCLUSIONS

A. Land Use Plan Objectives

III. B. 1. (a) - Not Met.
Rationale: Ecological status (condition) shows that objectives are being met for at least portions of the allotment;however, long term objectives would not be met if short term use continues to exceed allowable levels.

III. B. 1. (b) - Met
Rationale: Although mule deer numbers have fluctuated with drought conditions, there is no indication from our monitoring data that indicates livestock or wild horse use has lead to a below reasonable number objective estimate of 120 AUMs of deer and 202 AUMs of antelope use.

III. B. 1. (c) - Not Met
Rationale: Allowable use levels have been exceeded on portions of the allotment grazed by livestock and wild horses.

III. B. 1. (d) - Not Met
Rationale: Allowable use levels have been exceeded on portions of the allotment grazed by livestock and wild horses.

B. Rangeland Program Summary Objectives

III. B. 2. (a) - Not Met.
Rationale: Studies show there are currently only 452 AUMs of forage available for livestock use.

III. B. 2. (b) - Not Met.
Rationale: Condition studies indicate that portions of the allotment are in satisfactory ecological condition; however, long term objectives would not be met if short term use continues to exceed allowable use.

III. B. 2. (c) - Not Met
Rationale: Allowable use levels have been exceeded on portions of the allotment grazed by wild horses and livestock.

III. B. 2. (d) - Met
Rationale: Although mule deer numbers have fluctuated with drought conditions, there is no evidence from our monitoring data that indicates that livestock or wild horse use has lead to a below reasonable number objective of 120 AUMs of deer use and 202 AUMs of antelope use.

III. B. 2. (e) - Met
Rationale: Based on cursory inspections by the Egan Resource Area Wildlife Biologist and established frequencies mule deer yearlong habitat is in good condition in the Ruby Valley Allotment.

III. B. 2. (f) - Met
Rationale: Big sagebrush sites within two miles of strutting grounds are being maintained in mid to late seral stages with a minimum of 30% shrub composition.

III. B. 2. (g) - Not Applicable
Rationale: the Rangeland Program Summary (RPS) made a mistake in identifying riparian objectives for this allotment, there are no significant riparian complexes on the allotment.

III. B. 2. (h) - Not Met
Rationale: Allowable use levels have been exceeded on portions of the allotment grazed by wild horses and livestock.

VI. TECHNICAL RECOMMENDATIONS

A. Resource Problems

The primary resource problem in this allotment is overuse of key species by cattle.

B. Solutions

1. Short Term Solutions

Recalculate the appropriate stocking level based on monitoring information using the following formula:

$$\frac{\text{Actual Use (AUMs)}}{\text{Measured Utilization*}} = \frac{\text{Desired Use (AUMs)}}{\text{Desired Utilization**}}$$

* From utilization pattern mapping, adjusted as per yield index.
**50% on winterfat

Stocking Rate Calculations

Year	Actual Use AUMs	Raw* Util.	Yield Index	Adjusted Util.(%)	Proper** Stocking Lvl
89/90	288	50%	.79	40%	360
90/91	679	70%	.90	63%	539
92/93	247	30%	.90	27%	457

The average proper stocking level is 452 AUMs. The new livestock preference will be divided among Farmers Home Administration (FHA) and Jack and Terry Bowers based on the percent of the original preference AUMs that each were allocated as follows:

Farmers Home Administration..... 599 AUMs (92%)

Jack and Terry Bowers..... 51 AUMs (08%)

Original Preference = 650 AUMs
New Preference = 452 AUMs

.92 x 452 = 416 AUMs for Farmers Home Administration
.08 x 452 = 36 AUMs for Jack and Terry Bowers

Wild horse use during the evaluation period only occurred during the one severe winter of '92-93. Therefore, it is recommended that AML be established at 0 because of the infrequent use of the area by wild horses. This does not exclude wild horse use within the allotment. If wild horse use does increase in the area, then future allotment evaluations will reflect that change and a new AML will be established.

2. Long Term Solutions

Regardless of which short term option or combination of options is chosen, the following long term solution(s) would be implemented:

(a) Evaluate possible options to supply additional permanent waters in the allotment.

3. Additional Monitoring Data Required

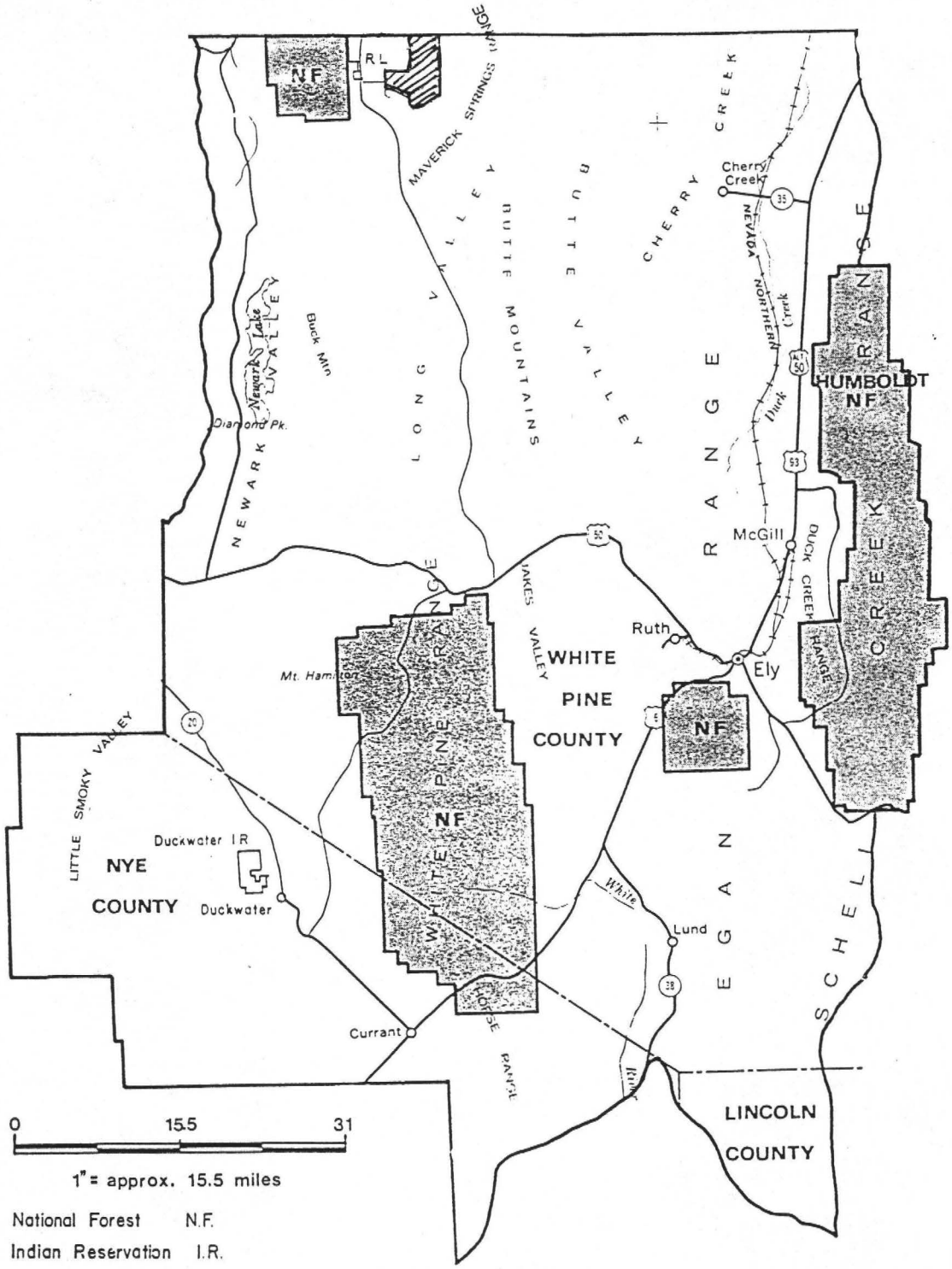
Continue to conduct utilization pattern mapping.

Continue to monitor livestock, wildlife and wild horse use.

Map ecological status for the allotment using recently completed third order soil survey and site information.

APPENDIX A

MAP 1. General Allotment Location



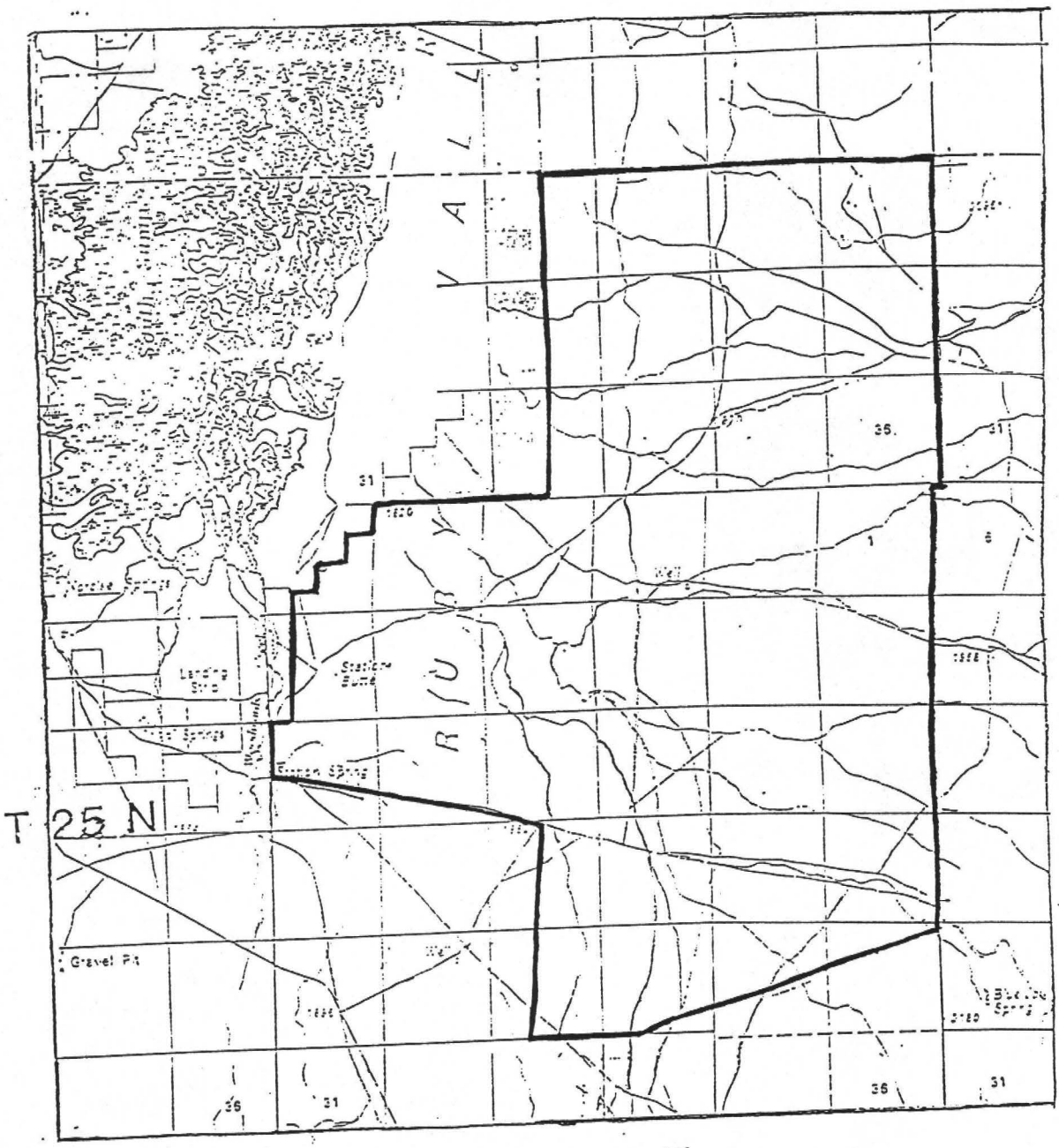
EGAN R.A.

ELY DISTRICT

BUREAU OF LAND MANAGEMENT

U. S. DEPARTMENT OF THE INTERIOR

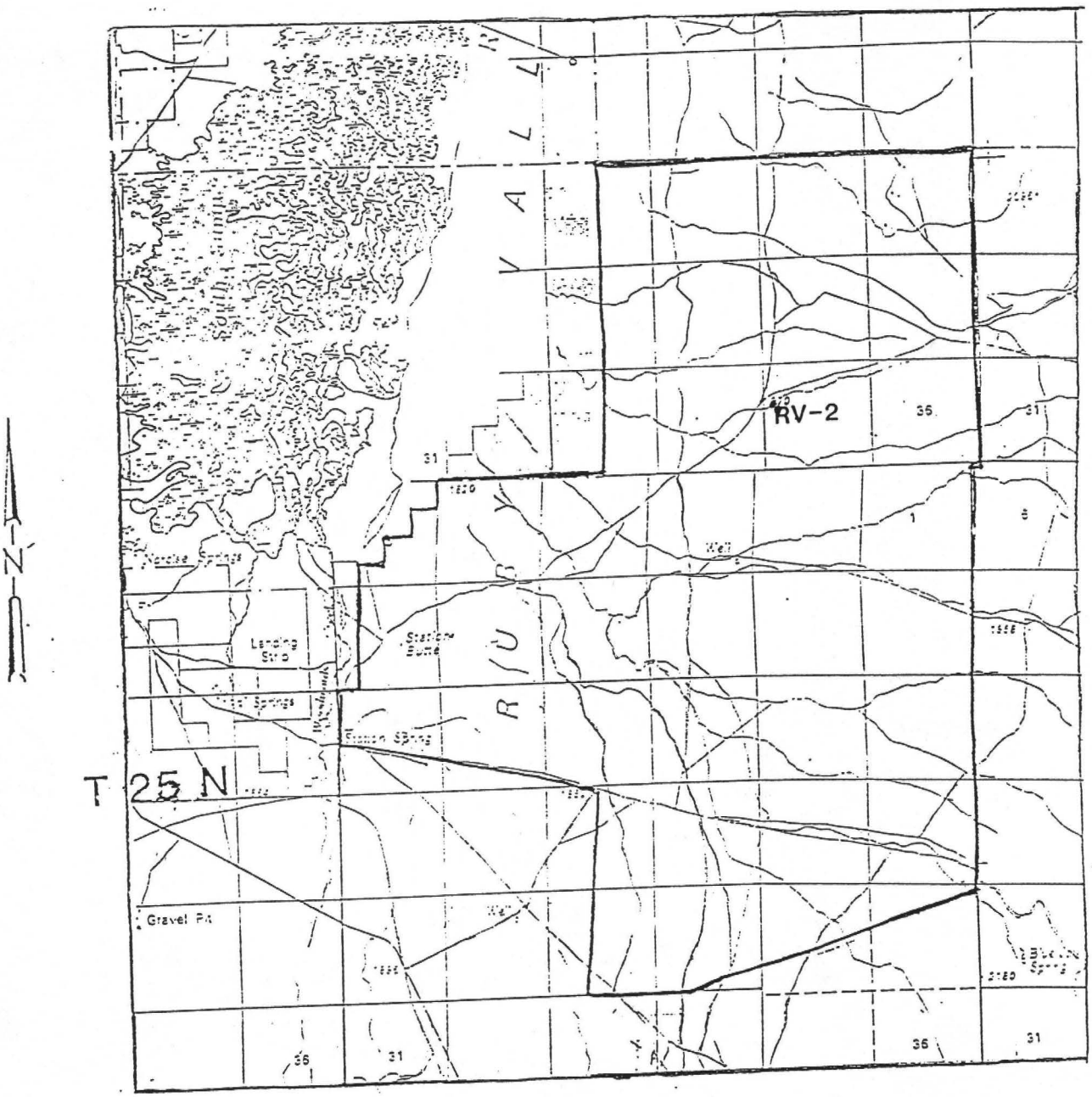
RUBY VALLEY ALLOTMENT



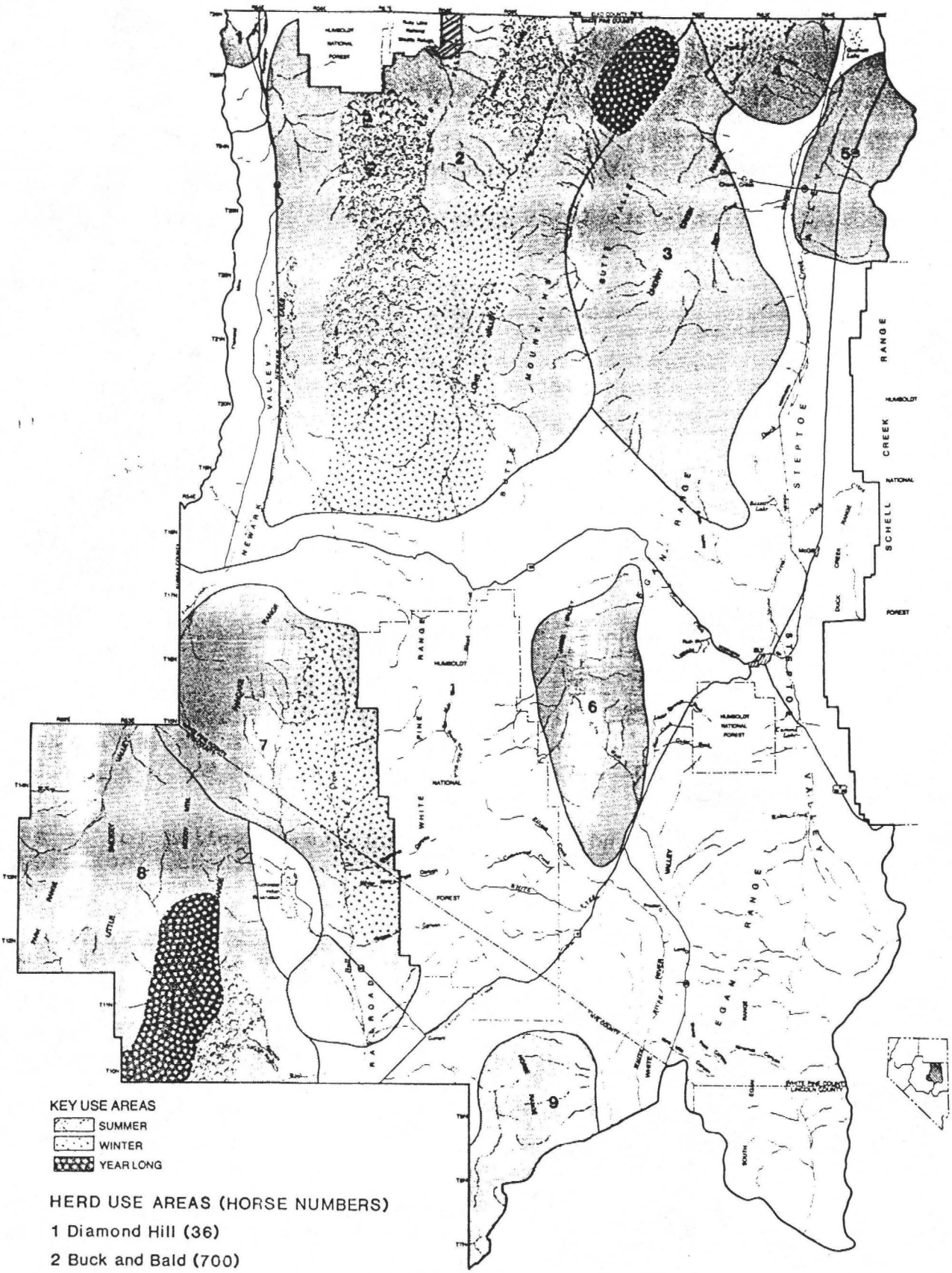
MAP 2

MAP 2. Ruby Valley Allotment Boundary.

RUBY VALLEY ALLOTMENT



MAP 3. Key Area Location

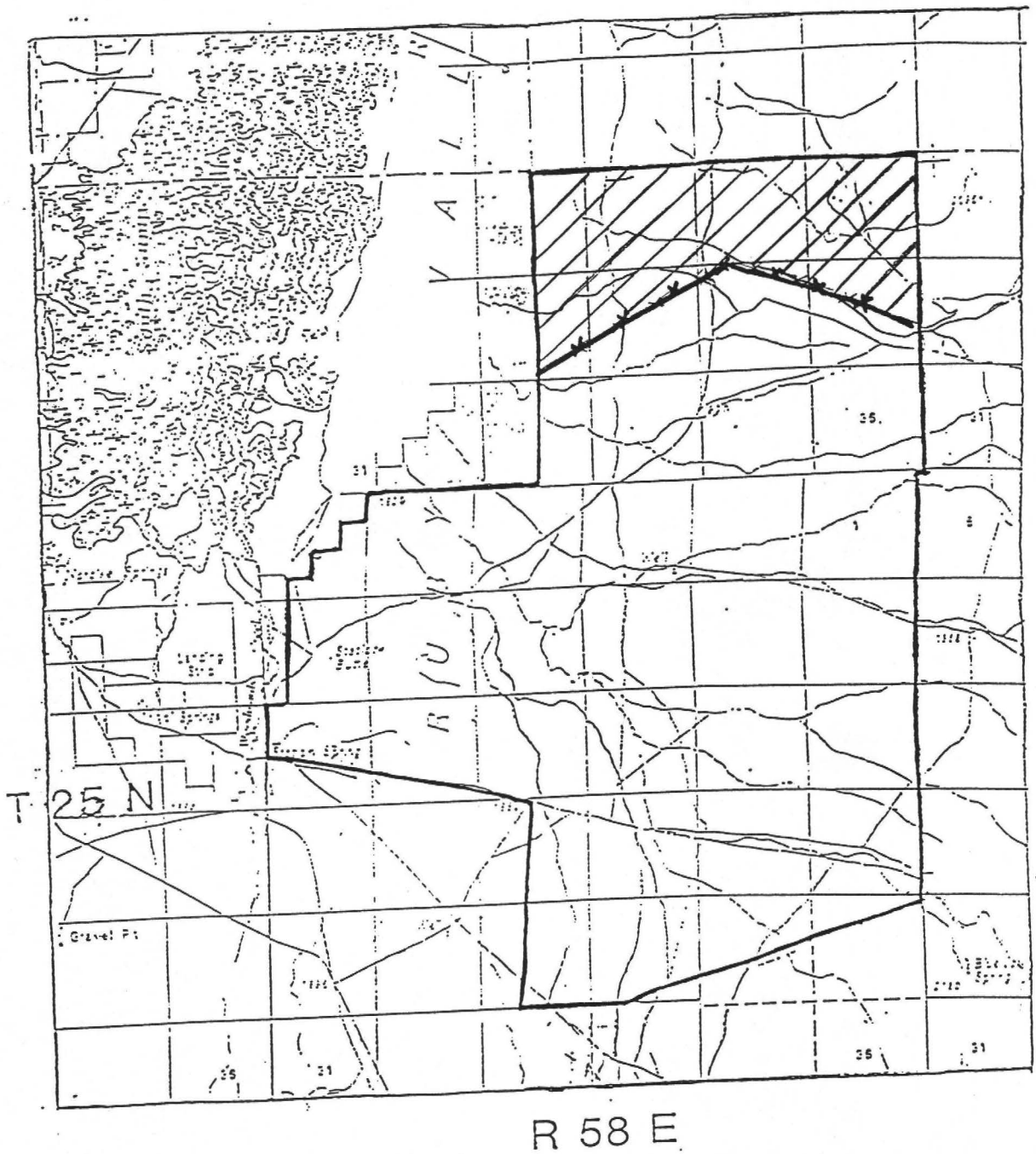


MAP 4. Ruby Valley Allotment in Relation to Buck and Bald HMA boundaries.

WILD HORSE HERD USE AREAS

1986

RUBY VALLEY ALLOTMENT



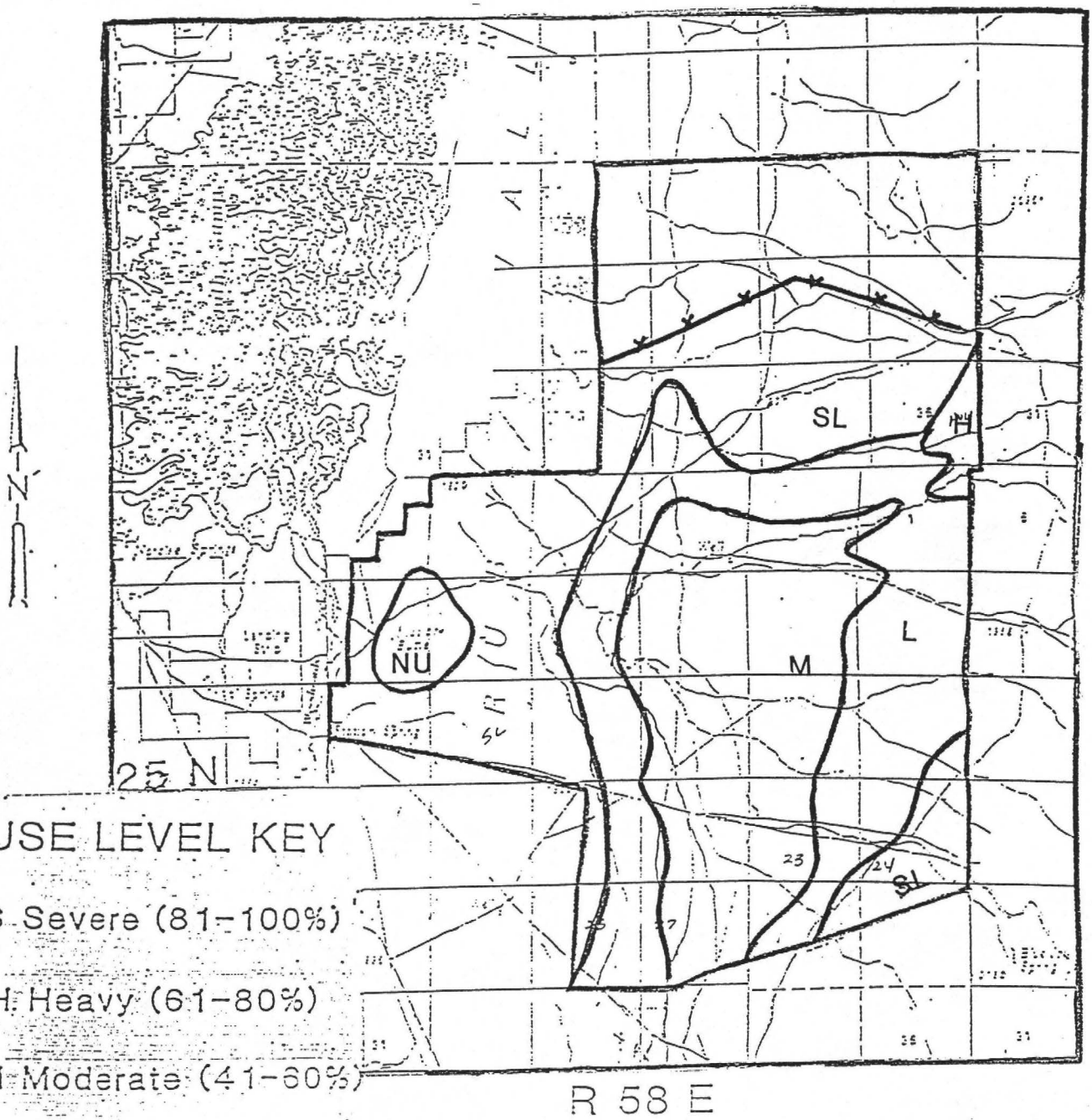
Map 5. Portion of Ruby Valley Allotment Managed by the Elko BLM.

APPENDIX B

RUBY VALLEY ALLOTMENT

UTILIZATION PATTERN MAPPING

(1990)



USE LEVEL KEY

S Severe (81-100%)

H Heavy (61-80%)

M Moderate (41-60%)

L Light (21-40%)

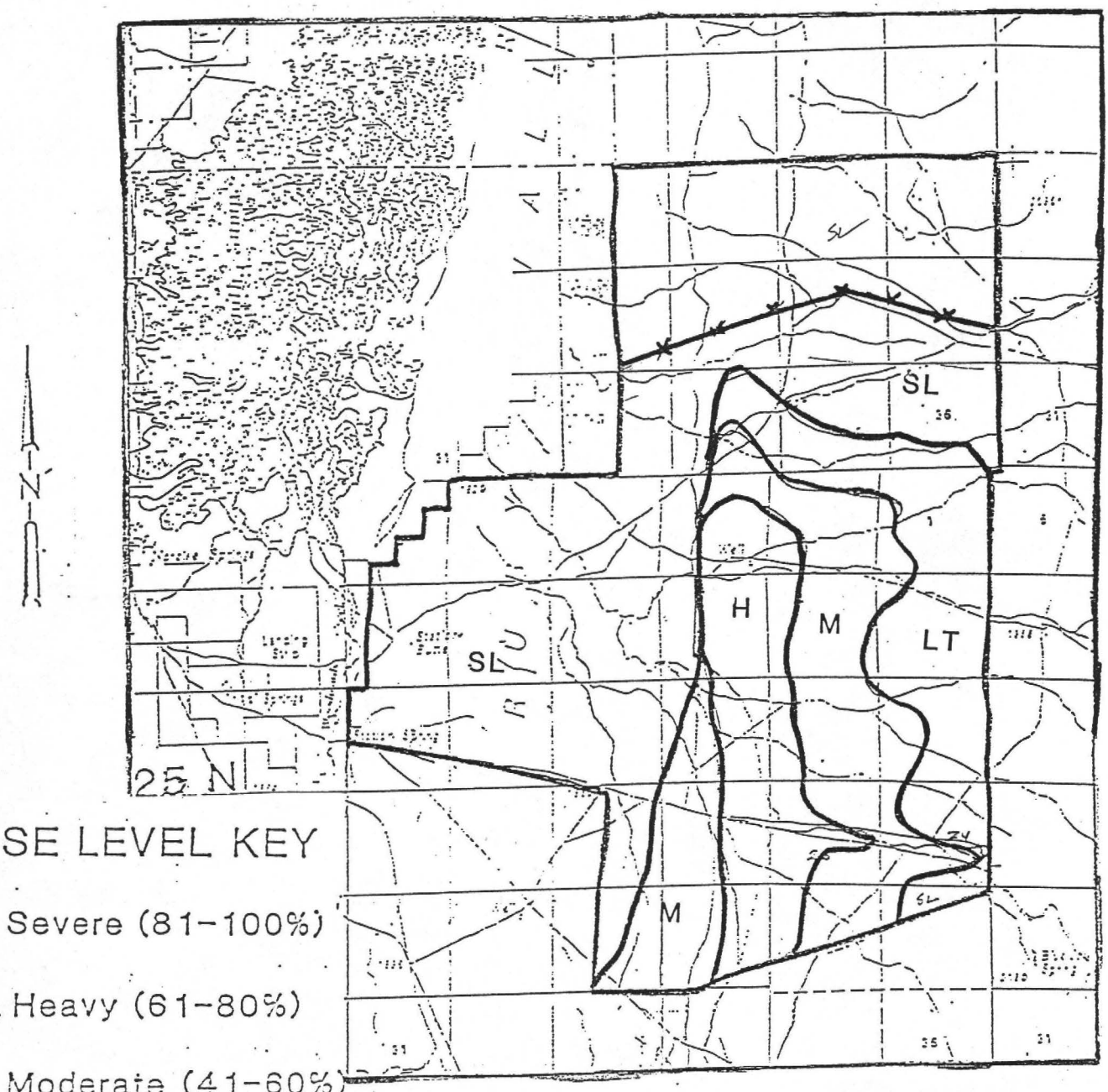
SL Slight (1-20%)

NU No Use

RUBY VALLEY ALLOTMENT

UTILIZATION PATTERN MAPPING

(1991)



USE LEVEL KEY

S Severe (81-100%)

H. Heavy (61-80%)

M Moderate (41-60%)

L Light (21-40%)

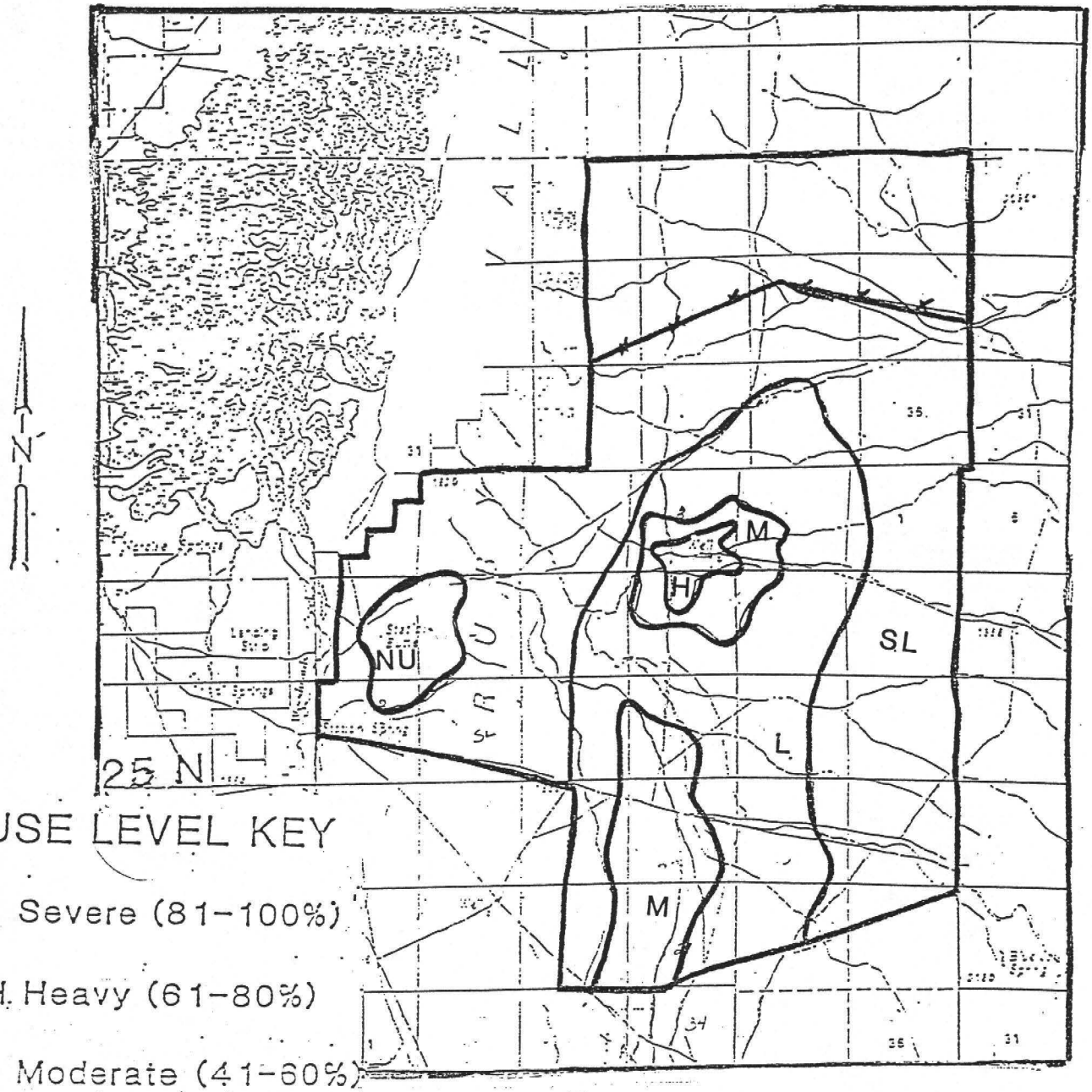
SL Slight (1-20%)

NU No Use

RUBY VALLEY ALLOTMENT

UTILIZATION PATTERN MAPPING

(1993)



USE LEVEL KEY

S Severe (81-100%)

H Heavy (61-80%)

M Moderate (41-60%)

L Light (21-40%)

SL Slight (1-20%)

NU No Use

2/14/96

BOB MILLER
Governor

STATE OF NEVADA

CATHERINE BARCOMB
Executive Director

COMMISSION FOR THE PRESERVATION OF WILD HORSES
255 W. Moana Lane
Suite 207A
Reno, Nevada 89509
(702) 688-2626

February 14,1996

Mr. Gene Drais
Egan Resource Area
Bureau of Land Management
HC 33 Box 33500
Ely, Nevada 89301-9408

Subject: Buck/Bald Herd - Ruby Valley Allotment

Dear Mr. Drais:

In review of our files, the Commission has found your request for comment on the Ruby Valley Allotment Evaluation Summary. We hope the comments will provide some input to the multiple use decision.

This allotment provides infrequent habitat for the Buck and Bald Wild Horse Herd. As observed in the winter of 1992-1993, severe winter conditions move wild horses to this allotment. It is conceivable that this may be critical winter range to wild horses during extreme climatic conditions.

It would be more appropriate to review all available data and assess the importance of the Ruby Valley Allotment to the survival of this herd, rather than designate the allotment as a no horse area.

We hope that this input will assist the District in protecting the integrity of this herd.

Sincerely,

Catherine Barcomb

CATHERINE BARCOMB
Executive Director